VOLCANIC AND SEISMIC ACTIVITY AT MOUNT ST. HELENS - 1982
U.S. Geological Survey and University of Washington
Vancouver and Seattle, Washington

Formal statements released in 1982
Compiled by Bobbie Myers, 2005

1982

January –

February –

March – *includes Volcano Advisories and Alerts and March 19 eruption (dome-building, lahar, and small explosion)*

April – *includes eruption updates*

May – *includes Volcano Advisories and Alerts and May 14 dome-building eruption*

June –

July – *includes Extended Outlook Advisory*

August – *includes Volcano Advisories and Alerts and August 18 dome-building eruption*

September –

October –

November –

December –

JANUARY 1982

VOLCANIC AND SEISMIC ACTIVITY AT MOUNT ST. HELENS
U.S. Geological Survey and University of Washington
Vancouver and Seattle, Washington

Report at 9:00 a.m., Monday, January 4, 1982

Snow storms prevented crews from reaching the mountain over the weekend. University of Washington/USGS reports background seismicity.

Report at 9:00 a.m., Tuesday, January 5, 1982

Continued snow in Vancouver and around Mount St. Helens prevented USGS field crews from reaching the mountain yesterday, January 4, 1982.
University of Washington/USGS reports seismicity at background levels.

Report at 9:00 a.m., Wednesday, January 6, 1982

University of Washington reports background seismicity.
Inclement weather and continued snow in Portland-Vancouver area and around Mount St. Helens prevented USGS crews from reaching the mountain yesterday, January 5, 1982.
Clearing in the evening allowed night fixed-wing observation of incandescent areas on the dome. Incandescence has remained essentially unchanged over the past month.

Report at 9:00 a.m., Thursday, January 7, 1982

University of Washington/USGS reports background seismicity.
Clear, cold weather conditions continued yesterday allowing deformation and maintenance crews to work in the crater.

Report at 9:00 a.m., Friday, January 8, 1982

Clear, cold weather continued to allow hydrologists and geologists to work in and around Mount St. Helens, Thursday, January 7, 1982.
University of Washington/USGS reports seismicity remains at background levels.
Snow depth at "Deep Throat" station, elevation 5720 feet, within the crater is reported to

be 280 cm.

Report at 9:00 a.m., Monday, January 11, 1982

Cold clear conditions allowed crews to continue work in the crater Friday, January 8. Deformation measurements indicate the mountain is stable at this time. University of Washington reports background seismicity.

Report at 9:00 a.m., Tuesday, January 12, 1982

University of Washington/USGS reports background seismicity. Low clouds and freezing rain precluded field work at Mount St. Helens yesterday, January 11.

Report at 9:00 a.m., Wednesday, January 13 1982.

Weather prevented crews from working around the mountain Tuesday the 12th. University of Washington reports background in seismicity.

Report at 9:00 a.m., Thursday, January 14 1982

Low clouds and fog continued to preclude field work at Mount St. Helens yesterday, January 13. University of Washington/USGS reports background seismicity
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Report at 9:00 a.m., Friday, January 15, 1982

Low clouds and fog continued to hamper efforts by U.S. Geological Survey Geologists from performing monitoring activities on Mount St. Helens, January 14, 1982. U.S. Geological Survey hydrologists did manage to access Coldwater Lake to monitor rain gages and wells in the debris flow dam.

University of Washington/USGS reports seismicity remains at background levels.

Report at 11:00 a.m., Monday, January 18, 1982

Over the weekend, a few small earthquakes at Mount St. Helens were recorded. The first

of these was at 11:16 pm on Saturday, January 16; it had a Richter magnitude of about 1. Several additional smaller earthquakes were recorded on Sunday. Other low amplitude seismic signals are interpreted to being related to the stormy, freezing weather. As of Monday morning, seismicity has returned to background levels. The poor weather prevented any access or viewing of the volcano over the weekend.

Report at 8:00 a.m., Tuesday, January 19, 1982

A break in weather allowed crews to work at Mount St. Helens yesterday, January 18. Deformation measurements indicate the mountain is stable at this time. Night observers reported only slight change in incandescence since last observations on January 5.

University of Washington/USGS reports seismicity at background levels.

Report at 8:00 a.m., Wednesday, January 21, 1982

Returning inclement weather on Tuesday, January 20, prevented USGS geologists from performing monitoring activities on Mount St. Helens. USGS hydrologists were able to continue monitoring the lower drainages around Mount St. Helens.

University of Washington/USGS reports seismicity remains at background levels. .

Report at 9:00 a.m., Thursday, January 21, 1982

Weather conditions were marginal enough to allow hydrologists access to drainages around Mount St. Helens for Wednesday, 20 January 1982. Geologists made an unsuccessful attempt to get into the crater.

University of Washington/USGS reports seismicity is at background levels.

Report at 9:00 a.m., Friday, January 22, 1982

Weather continues to prevent geologists from on-site monitoring at Mount St. Helens on Thursday, January 21, 1982.

University of Washington/USGS reports seismicity at background levels.

Report at 9:00 a.m., Monday, January 25, 1982

Inclement weather remains a problem, precluding access to Mount St. Helens by

geologists for on-site monitoring, over the weekend, January 23-24, 1982.

Intense rain and snowmelt over the weekend swelled all streams draining Mount St. Helens to flood stages. Peak discharges on Sunday were nearly two times larger than at any time since the 1980 cataclysmic eruption. In close to the mountain extensive erosion severely damaged roads and bridges. Potentially unstable earthen impoundments for Spirit, South Castle, Coldwater, and Jackson Lakes remain intact. Only minimal local flooding occurred along the lower Cowlitz River, even though the peak discharge of 64,000 cfs exceeded the channel design capacity of 55,000 cfs. Streams are now receding, but additional rain is forecast for today.

University of Washington/USGS reports seismicity remains at background levels.

Report at 9:00 a.m., Tuesday, January 26, 1982

High winds prevented access to the crater yesterday, January 25th.

Water Resources crews continued to monitor stream flow.

Airborne observers reported an avalanche on Shoestring Glacier. The avalanche appeared to have originated high on the Shoestring, it traveled down the Shoestring channel and continued 1-1/2 miles onto the Muddy fan.

University of Washington/USGS reports background seismicity.

Report at 9:00 a.m., Wednesday, January 27, 1982

Water Resources crews continued monitoring stream gages around the mountain. High winds and rain prevented crews from reaching the crater.

University of Washington/USGS reports background seismicity.

Report at 9:00 a.m., Thursday, January 28, 1982 – *missing*

Report at 9:00 a.m., Friday, January 29, 1982

Continuing poor weather conditions prevented geologists from performing on-site monitoring at Mount St. Helens, Thursday, January 28, 1982.

Hydrologists were able to access most drainages around the mountain.

University of Washington/USGS reports that seismicity at Mount St. Helens remains at background levels.

FEBRUARY 1982

VOLCANIC AND SEISMIC ACTIVITY AT MOUNT ST. HELENS
U.S. Geological Survey and University of Washington
Vancouver and Seattle, Washington

Report at 9:00 a.m., Monday, February 1, 1982

Low clouds and rain/snow continue at Mount St. Helens. Water Resources crews were able to work at gaging stations around the mountain, however geologists were unable to reach the crater.

University of Washington/USGS reports background seismicity.

Report at 9:00 a.m., Tuesday, February 2, 1982

University of Washington/USGS reports background seismicity.

Weather conditions continue to preclude access to the crater.

Report at 9:00 a.m., Wednesday, February 3, 1982

University of Washington/USGS reports background seismicity.

Weather conditions continued to preclude access to the crater yesterday, February 2, 1982. A break in weather may allow field work for the later part of this week.

Report at 9:00 a.m., Thursday-Friday, February 4-5, 1982 – *missing*

Report at 9:00 a.m., Monday, February 8, 1982

Seismic activity at Mount St. Helens continues at background levels.

Deformation measurements in the crater and on the outer flanks indicate the mountain is stable at this time.

Report at 9:00 a.m., Tuesday, February 9, 1982

Clear weather at Mount St. Helens yesterday February 8 allowed crews to continue monitoring and equipment maintenance activities. University of Washington/USGS reports background seismicity. At 1148 PST a small earthquake occurred at Elk Lake.

Report at 9:00 a.m., Wednesday, February 10, 1982

University of Washington/USGS reports background seismicity.

Fair weather permitted crews to work in the crater today.

Water Resources crews were able to continue monitoring activities at Spirit Lake, South Fork Toutle River, Toutle River, Pine Creek, and Muddy River today.

Report at 9:00 a.m., Thursday, February 11, 1982

Continued good weather allowed crews to perform monitoring and maintenance activities in the crater of Mount St. Helens and its drainages yesterday, 10 February 1982.

University of Washington/USGS reports seismicity at background levels.

Report at 9:00 a.m., Friday, February 12, 1982

Rain and snow precluded access to all but the lower elevations around Mount St. Helens yesterday, February 11.

University of Washington/USGS reports background seismicity.

Report at 9:00 a.m., Tuesday, February 16, 1982

University of Washington/USGS reports background seismicity at Mt. St. Helens over the weekend. Geologists were unable to reach monitoring sites due to weather conditions; however, hydrologists worked through the weekend monitoring stream flow.

Persistent low intensity rain, coupled with snowmelt, led to moderately high stream discharge around Mount St. Helens during the period February 13-15. During the night of February 13/14, water-stage recorders at North Fork Toutle River at Kid Valley, Toutle River at Tower Road, and Toutle River at Highway 99, registered a precipitous rise in water similar to that observed following earlier flood surges associated with failure of unstable ponds on the debris avalanche. River stage at Kid Valley and Tower rose more than 2.65 ft in less than 10 minutes; preliminary hydrograph analysis suggests that the surge volume was about 700 acre-ft. Aerial reconnaissance suggests that the most likely source was an unnamed pond on the north side of the debris avalanche near the Cowlitz County-Skamania County line. The surge did not visibly damage the North Fork debris retention structure, but did destroy the road approaches to a

bridge immediately downstream from that structure.

Report at 9:00 a.m., Wednesday, February17, 1982 – *missing*

Report at 9:00 a.m., Thursday, February 18, 1982

Winter storms continue to preclude field work at higher elevations at Mount St. Helens.
University of Washington/USGS reports background seismicity.

Report at 9:00 a.m., Friday, February 19, 1982

Inclement weather continues to hamper access to Mount St. Helens for on-site monitoring of volcanic activity February 18, 1982.
University of Washington/USGS reports seismicity remains at backgrounds levels.
Hydrologist from Water Resources division have maintained a watchful eye on flooding potentials in drainages around Mount St. Helens.

Report at 9:00 a.m., Monday, February 22, 1982

A break in the weather allowed geologists to enter the crater of Mount St. Helens on February 21, 1982.
University of Washington/USGS reports background seismicity.
Over the weekend flooding caused higher stages than January 23-24, 1982. Massive erosion took place on the debris/avalanche deposits north and west of Mount St. Helens, including failure of the north spillway of N-l, sediment retention structure.
The North Toutle river breached the natural levee impounding Jackson lake. Flooding over the weekend caused major shifts in stream rating curves, data analysis now in progress.

Report at 9:00 a.m., Wednesday, February 24, 1982

Intemperate weather continued to prevent access to Mount St. Helens for on-site monitoring of volcanic activity February 22 and 23. University of Washington/USGS reports seismicity remains at background levels.
Hydrologists from Water Resources Division continue to monitor drainages around Mount St. Helens.

Report at 9:00 a.m., Thursday, February 25, 1982

University of Washington/USGS reports background seismicity at Mount St. Helens. Clear skies yesterday, February 24th, permitted on-site monitoring within the crater. Clear weather is expected to continue for several days.

Report at 9:00 a.m., Friday, February 26, 1982

Seismic activity at Mount St. Helens picked up slightly between 11 a.m. and 3 p.m. yesterday, February 25. Although the activity has decreased, it has not returned to background level.

Crews in the field did not observe any changes during the period of increased activity. Night observers reported no significant changes in incandescence.

MARCH 1982

VOLCANIC AND SEISMIC ACTIVITY AT MOUNT ST. HELENS
U.S. Geological Survey and University of Washington
Vancouver and Seattle, Washington

Report at 9:00 a.m., Monday, March 1, 1982

Seismic activity continued at low level at Mount St. Helens over the weekend.

A break in weather allowed crews to work in the crater Saturday afternoon. Water Resources crews continued monitoring stream flow and sediment around the mountain.

Report at 9:00 a.m., Tuesday, March 2, 1982

Low clouds and rain precluded access to Mount St. Helens yesterday, March 1. University of Washington/USGS reported continued low-level seismic activity at the mountain.

At 0940 PST a 4.1 earthquake occurred at Elk Lake. Small aftershocks continue to occur.

Report at 9:00 a.m., Wednesday, March 3, 1982

University of Washington/USGS reports occasional small earthquakes are continuing under Mount St. Helens.

Weather conditions have prevented crews from working at the mountain for the past five days.

Report at 9:00 a.m., Thursday, March 4, 1982

Seismicity at Mt. St. Helens increased around February 21 and remains at a slightly elevated level. Approximately 100 earthquakes that occurred during this period have been studied carefully. These earthquakes fall into two groups: 1) 'deep', very small earthquakes at 6 to 11 km depth, and 2) shallow, somewhat larger (magnitude 1 or less) earthquakes located at 4 km up to the surface. There is a pronounced lack of seismicity at a depth of 4 to 6 km. Deep earthquakes were last recorded following some of the eruptions of 1980.

Poor weather during the past week has hampered observations and monitoring on the mountain itself, however, measurements made last weekend show only slow ground deformation in the immediate vicinity of the dome, and no significant increase in gas emissions. Additional field data will help us to evaluate whether this change in seismicity has any implication for future volcanic activity.

Report at 9:00 a.m., Friday, March 5, 1982

Earthquake activity beneath Mount St. Helens has shown a change during the past three weeks. The first deep earthquake since the November 1981 dome-building eruption occurred on February 8. Since then, the number of deep earthquakes has increased to about 5 per day. These earthquakes locate at 5 to 12 km depth. The magnitudes of these events are less than magnitude zero. While very small, these earthquakes constitute the most significant deep earthquake activity at Mount St. Helens since the end of explosive activity in 1980. Generally, deep earthquakes at Mount St. Helens have followed, rather than preceded eruptions.

Shallow volcanic earthquakes are also occurring more frequently than in early February. Since February 24, an average of 10 shallow earthquakes per day have been occurring. The seismicity is not yet at a high enough rate to suggest an impending eruption.

Poor weather during the past week has hampered observations and monitoring on the mountain itself, however, measurements made last weekend show only slow ground deformation in the immediate vicinity of the dome. Gas emissions were measured on March 4 and they continue to be at a very low rate. Additional field data will help us to evaluate whether this change in seismicity has any implication for future volcanic activity.

The following Extended Outlook Advisory was issued at 9:00 a.m., PST on March 5, 1982.

Seismicity at Mount. St. Helens increased around February 21 and has remained at a level somewhat above background since that time. Approximately 100 earthquakes that occurred during this period have been located. These earthquakes fall into two groups: 1) a 'deep' group of very small earthquakes with centers at 6 to 11 km depth, and 2) a shallow group of somewhat larger (magnitude 1 or less) earthquakes located at 3-4 km up to the surface. There is a pronounce lack of seismicity at a depth of 4-6 km.

Although poor weather during the past week has hampered observations and monitoring on the mountain itself, measurements made last week show only slow ground deformation in the immediate vicinity of the dome, and no significant increase in gas emissions.

Another update will be issued when more data is available from field measurements.

Report at 9:00 a.m., Monday, March 8, 1982

University of Washington/USGS reports that shallow and deep earth quakes at Mount St. Helens are continuing at essentially the same rate as last week.

Unusually clear weather has allowed crews to work at the mountain since Friday. Gas

emissions measured over the weekend are low. Ground deformation continues at a slow rate.

Report at 9:00 a.m., Tuesday, March 9, 1982

University of Washington/USGS reports continued low level seismicity yesterday, March 8. Weather conditions at the mountain forced crews to cut short their field work. Rain and low clouds may prevent access to the mountain today.

Report at 9:00 a.m., Wednesday, March 10, 1982

Weather precluded access to the crater yesterday, March 9.

University of Washington/USGS reports continued deep and shallow earthquakes at Mount St. Helens. The actual number of deep and shallow earthquakes fluctuates from day to day; however, the overall seismicity remains at low level.

Report at 9:00 a.m., Thursday, March 11, 1982

Geologists were able to perform on-site monitoring in the crater of Mount St. Helens, March 10, 1982.

Rates of ground deformation at crater stations have increased over the past two weeks.

University of Washington/USGS reports continued deep and shallow earthquakes at Mount St. Helens. The overall seismicity remains at low level.

Report at 8:00 a.m., Friday, March 12, 1982

At 08:00 today, March 12 the following extended outlook advisory was issued:

Seismicity beneath Mount St. Helens continues at elevated levels, but individual earthquakes are of low magnitude. Earthquakes have been occurring in 1-2 day long episodes separated by 1-2 day intervals of decreased activity. The earthquakes are occurring between the surface and a depth of about 6 miles. Rates of ground deformation in the crater area have increased during the last two weeks, and they are similar to patterns observed before previous dome building eruptions.

Based on rates of deformation, an eruption is likely within the next 3 weeks. Deformation is confined to the crater area, suggesting that renewed dome growth will occur. The current seismic patterns differ from any observed before 1980-81 eruptions, however, and raise the possibility of more hazardous variations in eruptive behavior. If there were to be any pyroclastic flows, from either an explosive eruption or collapse of the steep north face of the dome, the

possibility of rapid snowmelt would be a concern.

Weather has precluded access to the crater for the past few days, however crews and helicopters are on standby should the weather break.

Report at 8:00 a.m., Monday, March 15, 1982

Weather conditions were poor over the weekend keeping geologists on standby. Clearing, weather for Monday morning, 15 March, has allowed crews to perform on-site monitoring.

Operations include deformation of the crater and dome area, stream monitoring, snow surveys, and maintenance of seismic equipment.

University of Washington/USGS seismicity over the weekend returned to a decreased level of activity. Activity showed a slight increase Sunday evening with one recorded deep quake. Seismicity returned to a more active level Monday morning.

The following Volcano Advisory was issued at 7:00 p.m., PST on March 15, 1982.

> *Accelerating rates of ground deformation in the crater of Mount St. Helens suggest that an eruption, most likely of the dome-building type, will probably begin within 1 to 5 days. Deep earthquakes have almost ceased, and shallow earthquakes continue at a moderate rate. A further increase in shallow seismicity is likely before the eruption starts.*

Report at 8:00 a.m., Tuesday, March 16, 1982

Geologists and hydrologists from the Geological Survey performed on-site monitoring in and around Mount St. Helens March 15, 1982.

Measurements showed accelerated rates of ground deformation on thrusts and cracks in the crater.

University of Washington/USGS reports seismicity remains at a slight increase over the weekend's activity. Shallow earthquakes continue at a moderate rate (see Mount St. Helens Advisory, 7:00 p.m., March 15, 1982).

Report at 8:00 a.m., Wednesday, March 17, 1982

Good weather permitted on-site monitoring in and around Mount St. Helens by geologists and hydrologists of the U.S. Geological Survey.

Measurements showed continued acceleration of ground deformation localized around the

lava dome.

Overflights of the volcano over the last two days have shown an increase in the number of incandescent areas on the dome.

University of Washington/USGS reports seismicity remains at a moderate rate.

Report at 8:00 a.m., Thursday, March 18, 1982

Continued good weather enabled monitoring to be carried out in the crater of Mount St. Helens for the 3rd day in a row.

Measurements performed by geologists from the U.S. Geological Survey continued to document accelerating ground deformation rates.

Airborne gas monitoring around the volcano during the past several days has shown that a moderate increase in the rate of S02 emissions has occurred.

The University of Washington/USGS seismic lab reports a slight increase in the level of seismicity over that of yesterday, but it still can be described as a moderate level.

Report at 9:00 a.m., Friday, March 19, 1982

Continuing good weather enabled monitoring to be carried out in the crater of Mount St. Helens on Thursday, March 18, 1982.

Night overflights, Thursday evening showed incandescence continues on the dome in the crater.

An alert was issued by the U.S. Geological Survey and University of Washington Geophysics Program at 9:00 a.m., March 19, 1982 as follows:

Mount St. Helens — March 19, 1982
Eruption Alert — 9:00 A.M.

Seismicity at Mount St. Helens has increased significantly during the past day. This indicates than an eruption will begin soon, probably within the next 24 hours. The character of both the seismicity and deformation in the crater area indicate that the most likely type of activity is dome growth.

U.S. Geological Survey, Vancouver, WA, and
University of Washington, Geophysics Program, Seattle, WA

The following Volcano Alert Update was issued at 8:25 p.m., PST on March 19, 1982.

> *The eruption has subsided for the time being and an ash plume is blowing to the SSE, S, with a lesser amount to the SSW. The size of the eruption and the amount of ash appear to be like those of the summer 1980.*

The following Eruption Update was issued at 9:00 a.m., PST on March 21, 1982.

There is a new lobe being added to the SE side of the lava dome in the crater of Mount St. Helens. The new extrusion began during the night. Seismicity and tilt are now following patterns observed during other recent periods of dome growth.

Report at 12:00 noon, Monday, March 22, 1982

Eruption alert was issued at 9 a.m. on Friday, March 19, stating that an eruption was expected within 24 hours.

-Increasing seismic activity throughout the day, with intermittent harmonic tremor starting at about 2:38 p.m. (onset of main tremor).

-About 5 p.m. University of Washington noted another increase in seismicity, and said that an eruption could occur at any time.

-About 7 p.m. the sense of tilt from Roach tiltmeter reversed

7:27:42 p.m. ERUPTION

-two seismic pulses, the second (about 3 minutes later) larger than the first

-telemetry from the crater stopped approximately 3 minutes after initial event

-main seismic event continued for about 20-25 minutes before starting to decline

-7:33 p.m. ash cloud reached maximum height of 45,000 ft.; 17 minutes later the tops had dropped to 35,000 ft. These reports are from National Weather Service radar, Portland airport

-Flash flood warning issued for the Toutle River

-Evacuation of 50 people from areas along the Toutle; 25 people from a small community on Swift Reservoir

-About 8:10 p.m. seismicity dropped to a low level, and continued at a low level throughout the night

-8:25 p.m. statement issued stating that the eruption had subsided, the plume was blowing

toward the south and was dispersing

-Reports of light ash from surrounding areas

-By 9:00 p.m., mudflows were reported to have reached the debris dam above Camp Baker by the Army Corps of Engineers

Mudflows crested at 10:30 p.m. Kid Valley
1:15 a.m. Tower Bridge
(crested at 12 ft. above normal)

No flooding reported

-Also by 9 p.m., A USGS crew on a fixed-wing observation flight reported that a deposit from the south part of the crater flowed northward around both sides of the dome, joined north of Roach and traveled out the amphitheater to the pumice plain. At this point the flow bifurcated, with one lobe in the direction of Spirit Lake and the second down the Toutle.

-The south wall was reported to be dark (either from snow melt or ash cover)

-Incandescence reported from the south part of the dome; the dome appeared to be intact, although it was largely obscured by dense fume

-1:35 a.m. Saturday, eruption type seismic pulse begins, plume to 18,000 ft. with a duration of about 3 min. The plume dissipated rapidly, light ashfall

-Seismic pulse declined in a few minutes

Saturday, March 20

Field reports:

Crater - a blast had been directed to the south. A cold avalanche deposit of ice, debris from the crater wall, and some pumiceous dacite traveled north around both sides of the dome. This was followed by a mudflow, which cut deep channels in the avalanche deposit and older deposits, and continued to flow to the north.

Initial investigation of mudflow deposits in the valley of the North Toutle show evidence of 2 mudflow events, the second with a lighter color than the first.

Roach tiltmeter bought back on line at 2 p.m. The record was initially flat, but started to show inflation at 5 p.m. which continued until about 8:15 p.m., when it turned around and started to deflate. This coincided with the appearance of tremor on the seismic records. Tremor lasted until about 11:30 p.m.

Sunday, March 21

A new lobe was seen on the SE side of the lava dome early Sunday morning during a pre-

dawn observation flight. It is assumed that the beginning of extrusion was associated with the tremor event and tilt changes of Saturday evening. This was consistent with the presence of rockfall signals on the seismic records.

Field crew confirmed the presence of a new lava lobe on Sunday morning.

SO_2 emission rates had doubled on Friday over levels earlier in the week and returned to the former level on Saturday. SO_2 emission rates peaked on Sunday and have been declining since then.

Dome growth is continuing at this time

Report at 10:00 a.m., Tuesday, March 23, 1982

Reports from the field yesterday March 22nd indicate that the dome is still growing. The new lobe extends south from the top of the composite dome almost to the south crater floor. Hot rocks continue to cascade off the lobe as it grows.

Seismic activity is at a low level.

Downwind tephra studies are in progress. Initial findings show ashfall was greatest to the southeast. 1-1/2 inches were reported at Northwoods about 12 miles from the mountain.

Crews will continue observations and measurements as long as the good weather holds.

Report at 08:30 a.m., Wednesday, March 24, 1982

Good weather yesterday, 23 March enabled scientists to continue their observations and measurements on the new dome lobe, the mudflow and the tephra deposits.

Initial measurements on the new lobe show it to be approximately 206.3 meters above the base of the October 1980 lobe and at an elevation of about 2119.7 meters (6953 ft). It stands about 25.6 meters above the top of the Oct.-Nov. 1981 lobe.

Seismic activity continues to be low. Crews are back out in the field today.

The following Eruption Update was issued at 5:30 p.m., PST on March 24, 1982.

> *Growth of the new dome lobe has slowed significantly over the past 2 days, but rates of deformation on the north side of the dome have increased over the same period. Until additional measurements are made, it would be premature to declare this eruption over. Seismometers are recording decreasing numbers of avalanches as growth of the new lobe slows.*

Report at 08:30 a.m., Thursday, March 25, 1982

Seismic activity at Mount St. Helens was low level yesterday March 24.

Crews continue to monitor the mountain. Growth of the new lobe has slowed significantly; however, rates of deformation on the north side of the dome have increased. Crews reported numerous small rockfalls and several minor tephra-laden gas emissions yesterday.

Report at 08:30 a.m., Friday, March 26, 1982

Seismic activity at Mount St. Helens continues at a low level.

Yesterday's (March 25) measurements indicate that growth of the new lobe has essentially stopped. Deformation of the east and north sides of the dome continues.

Report at 09:30 a.m., Monday, March 29, 1982

Seismic activity at Mount St. Helens is at low level. Storms precluded field work over the weekend.

Report at 09:00 a.m., Tuesday, March 30, 1982

Winter storms continue around Mount St. Helens. An instrumentation crew was able to reach the mountain yesterday afternoon to work on telemetry problems. Weather did not clear early enough in the crater for geologists to continue measurements of the new lobe.

The seismic record indicates that avalanching off the dome has almost stopped. Several "gas emission" signals were received, however visual confirmation was impossible due to cloud cover.

Crews are attempting to reach the mountain this morning.

Report at 09:00 a.m., Wednesday, March 31, 1982

High winds yesterday March 30 prevented geologists from flying into the crater to continue deformation measurements. University of Washington/USGS reports seismicity is continuing at low level.

APRIL 1982

VOLCANIC AND SEISMIC ACTIVITY AT MOUNT ST. HELENS
U.S. Geological Survey and University of Washington
Vancouver and Seattle, Washington

Report at 09:00 a.m., Thursday, April 1**,** 1982

Unfavorable weather conditions prevented geologists from flying into the crater. However, ground crews were able to continue monitoring stream gages in the valleys around Mount St. Helens.

University of Washington/USGS reports seismicity is continuing at low level.

Report at 09:00 a.m., Friday, April 2, 1982

Seismic activity continues at low level at Mount St. Helens.

Crews were able to work at lower elevations around the mountain yesterday April 1. Occasional breaks in the clouds and steam provided geologists on the pumice plain with brief glimpses of the dome; however, blowing snow and turbulence prevented helicopters from flying beyond the steps into the crater.

Rain/snow storms are expected to continue through the weekend.

The following Eruption Update was issued at 9:55 p.m., PST on April 4, 1982.

Seismicity is continuing at a moderate to high level, and some eruptive activity appears to be continuing. Clouds prevent visual observations.

The following Eruption Update was issued at 1:00 a.m., PST on April 5, 1982.

Seismicity still continues at moderate to high levels. Fluctuations in seismicity correspond to pulses of gas and ash, the larges of which began at 12:37 AM and rose to a maximum of about 32,000 feet.

There does not appear to be much ash in the plume but minor ashfall was reported earlier tonight at Packwood. No increases have been reported in river levels.

Report at 12:00 noon, Monday, April 5, 1982

Two explosive events occurred last night at Mount St. Helens. The first began at 8:52 p.m. and by 9:00 p.m. the eruptive plume had reached a height of 28,000 feet. A low frequency earthquake occurred at 12:35 a.m., and the second eruptive pulse began shortly thereafter, reaching a height of 32,000 feet. Intermittent explosive bursts of lesser energy have occurred between the major explosions and continue at the present time. Additional explosive activity of this relatively small scale is likely.

This activity is a continuation of the eruption that began on March 19. Two explosive events on March 19 and 20 were followed by new lava being quietly added to the dome within the crater: Dome growth was continuing as of March 25, and deformation rates in the crater were continuing at rates comparable to those previously observed before dome growth. Poor weather prevented further measurements after that date, but the eruption alert continued in force based on the last available information. Seismicity continued at low levels, with occasional avalanche signals and seismic (gas and ash?) bursts.

Several small earthquakes occurred on the afternoon of April 4, and field crews observed that a major rock fall from the north flank of the dome had occurred, covering an area more than 100 yards in diameter. Small to moderate rock falls from the dome were continuing, some of which were seismically recorded.

Seismicity increased between 2 and 3 p.m., and again about 6 p.m. By 8 p.m. the level of seismicity, suggested the possibility of increasing volcanic activity. At 8:52 p.m. strong tremor began abruptly, and shortly thereafter the National Weather Service radar at Portland International Airport reported a rising eruption plume that reached 28,000 feet at 9:00 p.m. The plume drifted northeastward and dissipated quickly, suggesting rather low ash content. Light ashfall was reported later at Packwood, about 40 miles to the northeast.

A low frequency earthquake was recorded at 12:35 a.m., and at about 12:39 a.m. strong tremor resumed. The Weather Service radar recorded a maximum eruption plume height of 32,000 feet. Geological Survey observers in a fixed-wing aircraft saw the lightning-charged cloud rise and quickly dissipate. After the event they observed strong incandescence from the northwest side of the dome.

One of the two pulses produced a dark ribbon of mudflow extending down to Pumice Pond. No increases were reported in river levels. High winds are preventing inspection of new deposits in the amphitheater.

After this second pulse seismicity dropped to low levels, but then moderate- to high-level tremor resumed at about 2 a.m. and continues as of this time. The tremor is probably at shallow depths, being recorded only by the two stations on the volcano itself. Further explosive activity is possible, most likely similar in character and strength to the events of March 19-20 and of last night and today.

The following Eruption Update was issued at 6:30 p.m., PST on April 5, 1982.

> *Seismicity is continuing at a moderate to high level. The status of the volcano remains unchanged since the previous advisory (1 AM, 4/5/82). Some additional dome-growth and/or small-scale explosive activity is likely; larger explosive activity is less likely but cannot be ruled out.*

The following Eruption Update was issued at 9:15 a.m., PST on April 6, 1982.

Another new lobe is being added to the dome. This reduces the immediate likelihood of larger explosive activity, but small, intermittent gas and ash pulses may continue to occur.

Report at 9:30 a.m., Tuesday, April 6, 1982

Crews were able to reach the mountain yesterday April 5, however steam and high winds hampered observation flights into the crater. The north face of the dome appears to be collapsing, forming a large talus apron extending several hundred meters to the north.

A fixed-wing flight early this morning reported possible new dome growth high on the northside of the dome. Geologists in a helicopter confirmed the growth of a new lobe at 9:15 this morning April 6.

Seismic activity continues at a moderate level.

Report at 8:00 a.m., Wednesday, April 7, 1982

Seismic activity continued at a moderate level yesterday April 6. Observations by field crews allowed detailed documentation of the seismic record. Most of the recorded signals were associated with observed rock avalanches off the new lobe on the dome. These avalanches varied from single rocks tumbling off the lobe to large slabs peeling off the oversteepened northside and crashing to the crater floor.

Observers on the early morning fixed-wing and helicopter flights today, April 7, reported continued growth of the new lobe. Crews will continue observations and deformation measurements today.

Report at 10:30 a.m., Thursday, April 8**,** 1982

Seismicity continued at low to moderate levels, April 7, 1982. Geologists were able to perform on-site monitoring within the crater. The new dome continues to produce large rockfalls which can be detected on seismographs.

Report at 10:30 a.m., Friday, April 9, 1982

University of Washington reports seismicity continued at low to moderate levels yesterday, April 8.

The new lobe continues to grow, but at a reduced rate. Rock avalanches associated with dome growth have also slowed, allowing geologists to re-establish stations near the dome.

Report at 09:45 a.m., Monday, April 12, 1982

Seismic activity at Mount St. Helens continued at low to moderate levels over the weekend.

Deformation measurements Saturday indicated a greatly reduced rate of dome movement.

Report at 09:15 a.m., Tuesday, April 13, 1982

University of Washington/USGS reports seismic activity is at a low level. Field crews were unable to reach the mountain due to high winds and rain yesterday, April 12.

At 3:15 p.m. on April 12 the following Eruption Update was released:

Mount St. Helens — April 12, 1982
Eruption Update — 3:15 PM

Seismicity, deformation and gas emission at St. Helens have returned to low levels, indicating that the eruption that began 3/19/82 is over.

U.S.G.S Vancouver, WA
U.W. Geophysics Program, Seattle, WA

Report at 09:15 a.m., Wednesday, April 14, 1982

University of Washington/USGS reports continued low-levels seismicity. Winter storms continue to preclude field work at higher elevations, however, USGS hydrologists continue to monitor drainages around Mount St. Helens.

Report at 10:30 a.m., Thursday, April 15, 1982

Winter weather continues to preclude field operations at higher elevations around the mountain; however, hydrologists are able to work in lower drainages monitoring stream flow.

University of Washington/USGS reports seismicity continues at a low level.

Report at 9:00 a.m., Monday, April 19, 1982

University of Washington/USGS reported low-level seismic activity over the weekend. Rain and snow prevented field crews from working around the mountain. Clear skies which are expected to last the next few days enable geologists to continue field work on Mount St. Helens.

No daily update was issued on Friday, 16 April 1982.

Report at 9:45 a.m., Tuesday, April 20, 1982

Low level seismic activity continues at Mount St. Helens. Ground crews in the crater reported occasional rockfalls off the new lobe yesterday April 19.

Report at 9:30 a.m., Wednesday, April 21, 1982

University of Washington/USGS reports continued low-level seismic activity. Wind gusts to 60+ mph prevented fieldwork yesterday April 20. High winds are expected to continue today.

Report at 9:45 a.m., Thursday, April 22, 1982

High winds at Mount St. Helens continued to prevent hydrologists from installing two new gage houses on the North Toutle.

Seismic activity continued at low level with occasional rockfall activity. At 1410 PST yesterday April 21, a small tephra-laden gas emission occurred. Crews in the crater reported hearing and feeling it before actually observing the plume rising from the dome.

The plume rose to about 1000 feet above the rim. High winds blew it northward depositing a fine dusting of ash on the North end of the crater.

Report at 9:00 a.m., Friday, April 23, 1982

University of Washington/USGS reports low-level seismic activity yesterday April 22. At 1653 PST crews observed a small tephra-laden gas emission. The plume rose only a few hundred feet above the rim.

Excellent weather yesterday allowed crews to install instrumentation sites in the crater and new gage houses on the Toutle River.

Report at 9:00 a.m., Monday, April 26, 1982

Clear weather over the weekend allowed crews to continue instrument installation and monitoring activities at Mount St. Helens.

Seismic activity remained at low level. Several gas emissions with plumes 100 to 1000 feet above the rim occurred on Friday and Saturday. The emission at 1401 PST Friday April 23 contained minor amounts of ash.

Report at 9:00 a.m., Tuesday, April 27, 1982 – *missing*

Report at 9:00 a.m., Wednesday, April 28, 1982

Low level seismic activity continued at Mount St. Helens.

Crews in the crater reported several heard and felt earthquakes. Several of these quakes were associated with a gas emission at 1409 PDT. The plume from this emission rose about 2000 ft. above the rim.

Report at 9:00 a.m., Thursday, April 29, 1982 – *missing*

Report at 9:00 a.m., Friday, April 30, 1982

Crews working in the crater yesterday, April 29, reported occasional heard and felt earthquakes. A series of small heard and felt quakes which began at 1303 PDT was followed by emission of a dirty plume. Seismic activity is still low level.

MAY 1982

VOLCANIC AND SEISMIC ACTIVITY AT MOUNT ST. HELENS
U.S. Geological Survey and University of Washington
Vancouver and Seattle, Washington

Report at 9:00 a.m., Tuesday, May 4, 1982

University of Washington/USGS reported continued low-level seismic activity at Mount St. Helens.

Bad weather prevented geologists from doing fieldwork in the crater over the weekend and yesterday, May 3, however Water Resources hydrologists were able to continue gage construction at Spirit Lake.

There was no update issued May 3.

Report at 9:00 a.m., Wednesday, May 5, 1982

University of Washington/USGS reported continued low-level seismic activity at Mount St. Helens.

Clear weather on May 4 allowed crews to continue instrument installation and monitoring activities at Mount St. Helens.

Report at 9:30 a.m., Thursday, May 6, 1982

Low-level seismic activity continued at Mount St. Helens yesterday, May 5.

Field crews and/or instrumentation record l or 2 small gas emission(s) per day.

Report at 9:30 a.m**.,** Friday, May 7, 1982

Low-level seismic activity, continues at Mount St**.** Helens. Crews in the crater yesterday, May 6, reported several heard and felt earthquakes.

A gas emission containing minor amounts of ash, was associated with heard and felt quakes at 1405 PDT.

Report at 9:30 a.m., Monday, May 10, 1982

Seismicity at Mount St. Helens was low level over the weekend. Low Clouds and rain precluded access to the crater, however, Water Resources Division crews were able to work in drainages around the mountain.

Report at 11:30 a.m., Tuesday, May 11, 1982

Low Clouds and rain precluded access to the crater, however, Water Resources Division crews were able to work in drainages around The mountain. Seismicity at Mount St. Helens was low level over the weekend.

Report at 08:00 a.m., Wednesday, May 12, 1982

Seismicity has increased at Mount St. Helens. Crews working in the crater, reported dozens of small felt earthquakes yesterday, May 11.

Based on increases in seismicity and changes in deformation the following extended outlook advisory was issued at 10 p.m.

Mount St. Helens — May 11, 1982
Extended Outlook Advisory — 10:00 PM

Shallow earthquakes and deformation in the crater area are increasing as they have before previous-, eruptions. Seismicity has been increasing gradually for the last two days, and the dome has been swelling at rates like those observed within a week of recent eruptions. An eruption is likely to begin within the next week, possibly within the next few days. From the signs thus far, the eruption will probably include dome growth, with or without some explosive activity.

U.S.G.S Vancouver, WA
U.W. Geophysics Program, Seattle, WA

Report at 09:30 a.m., Thursday, May 13, 1982

Measurements made yesterday, May 12, indicate the dome is continuing to swell. Crews in the crater felt dozens of small earthquakes. Most of these quakes were reported by crews on the west crater floor, however many quakes were also felt east and north of the dome.

Crews working on the west crater floor this morning are reporting almost continuous felt earthquakes and an increase in rockfall off the dome.

Report at 10:00 a.m., Friday, May 14, 1982

Seismicity at Mount St. Helens increased. Yesterday May 13, the following eruption alert and update were released.

Mount St. Helens May 13, 1982
Eruption Alert 10:40 PM

Shallow volcanic earthquakes that warn of eruptions are becoming more numerous. Rates of deformation of the dome and crater floor have more than doubled today. On this basis, we predict that the eruption will begin within the next 36 hours, possibly within the next 12 hours. As noted in the extended outlook advisory, we expect that the eruption will consist primarily of dome growth, with or without minor explosive activity.

U.S. Geological Survey, Vancouver, WA
University of Washington Geophysics Program Seattle, WA

Mount St. Helens May 14, 1982
Eruption Update 5:30 AM

Geologists on an early morning flight report that the expected eruption has begun. Incandescent avalanches are occurring on the NE side of the dome, probably indicating new dome growth. A steam plume containing a small amount of dust from the avalanches is rising above the crater rim and is drifting a short distance off to the NE.

U.S. Geological Survey, Vancouver, WA
Univ. of Washington Geophysics Program, Seattle, WA

Crews are at Sugar Bowl this morning watching the avalanches. Update will continue as soon as we get more information.

Report at 9:00 a.m., Monday, May 17, 1982

The dome-building eruption which began on May 14 is still in progress. A new lobe is growing on the north-northwest side of the composite dome. Rockfall activity has slowed considerably and seismic activity is now low-level.

Report at 9:00 a.m., Wednesday, May 19, 1982

University of Washington/USGS reports low level seismicity at Mount St. Helens. Rockfalls off the new lobe have slowed considerably. However, until more deformation

measurements can be made in the crater, the eruption advisory and updates remain in effect. Rain and low clouds have prevented these measurements since Saturday. Good weather today has allowed USGS crews to enter the crater.

Report at 9:00 a.m., Thursday, May 20, 1982

University of Washington/USGS report low-level seismicity. Measurements made yesterday, May 19 indicate rates of movement in the dome have slowed significantly. These measurements will be repeated today. At this time the eruption advisories remain in effect.

Report at 9:30 a.m., Friday, May 21, 1982

Based on information collected by field crews over the last few days the following eruption update was issued yesterday afternoon.

Mount St. Helens May 20, 1982
Eruption Update 3:25 PM

Seismicity, deformation and gas emissions at St. Helens have returned to low levels, indicating that the eruption that began 5/14/02 is over.

U.S.G.S. Vancouver, WA
U.W. Geophysics Program Seattle, WA

Rockfalls off the dome continue to be observed and recorded. Several small gas emissions with dirty plumes to 11,000 ft. occurred yesterday morning. Crews are in the field again today.

Report at 9:30 a.m., Monday, May 24, 1982

Seismic activity continues at low level at Mount St. Helens. Most recorded signals are associated with rockfall off the dome. Several small gas emissions have been occurring each day (usually with plumes to 10,000 to 12,000 feet).

Report at 9:00 a.m., Wednesday, May 26, 1982

No update was issued Tuesday, May 25, 1982
Seismic activity at Mount St. Helens remains at low levels for Tuesday, May 25, 1982.
USGS crews monitored fumarolic gases and temperatures in the crater,

One gas event took place at approximately 4:57 PDT producing a plume which may have reached 15,000 feet. The associated seismic signal lasted 15 minutes.

Report at 12:00 a.m., Thursday, May 27, 1982

Seismic activity at Mount St. Helens remained at low levels for Wednesday, May 26, 1982.

USGS crews were able to perform on-site crater monitoring for half the day before weather prevented further measurements.

Hydrologists continue to monitor changes in stream channels around the mountain.

Report at 13:30 p.m., Friday, May 28, 1982

Seismic activity at Mount St. Helens remained at low levels for Thursday, May 27.

Weather prevented geologists from entering the crater. Hydrologists were able to work along the North Toutle River.

Late this morning, May 28, the weather cleared. A gas emission containing some ash occurred again today shortly after crews entered the crater. This emission was similar to those occurring once or twice a day over the past few weeks.

JUNE 1982

VOLCANIC AND SEISMIC ACTIVITY AT MOUNT ST. HELENS
U.S. Geological Survey and University of Washington
Vancouver and Seattle, Washington

Report at 9:00 a.m., Tuesday, June 1, 1982

Seismicity remained at low level over the holiday weekend. Gas bursts continue to occur at a rate of one or two per day. The associated plumes usually rise to between 10,000 and 14,000 feet and sometimes contain minor amounts of ash. These events are followed by 5 to 15 minutes of tremor.

Report at 9:00 a.m., Wednesday, June 2, 1982

Poor weather conditions prevented geologists from working at Mount St. Helens yesterday, June 1st.

Seismic activity remains at low leve1s for Tuesday and early Wednesday morning.

Report at 9:00 a.m., Thursday, June 3, 1982

Weather precluded field work at Mount St. Helens. University of Washington/USGS report low level seismicity.

Report at 9:00 a.m., Friday, June 4, 1982

Inclement weather continues at Mount St. Helens preventing access into the crater. The University of Washington/USGS reports low level seismicity. USGS hydrologists continue to monitor drainages around the mountain.

Report at 8:30 a.m.. Monday, June 7, 1982

USGS/University of Washington reports low level seismicity. Several gas emission events occurred over the weekend, however weather prevented observation of these events. Two events Sunday night/Monday produced plumes to 18,000 feet and 12,000 feet according to Portland Weather Service Radar.

Weather precluded access to the mountain over the weekend.

Report at 9:00 a.m., Tuesday, June 8, 1982

University of Washington/USGS reports continued low level seismic activity. Low level tremors associated with degassing activity occurred yesterday morning after small gas bursts, and continued through early afternoon. A few hours of intermittent tremors also occurred late last nite associated with another small gas burst.

Crews were able to work in the crater doing instrument and site maintenance and making various deformation measurements yesterday. Measurements on the crater floor indicate very little ground deformation is occurring at this time.

Report at 9:00 a.m., Wednesday, June 9, 1982

University of Washington/USGS reports continued low level seismic activity. Again, low-level tremor associated with degassing activity occurred yesterday, Tuesday, 8th of June. Two degassing events took place Tuesday one at 09:49 a.m. and another Tuesday evening at 19:59 p.m., producing steam plumes visible above the crater rim.

Weather remained stable allowing crews into the crater for deformation measurements.

Report at 9:00 a.m., Thursday, June 10, 1982

University of Washington/USGS reports continued low level seismic activity, and occasionally low level harmonic tremor associated with degassing events. One such event occurred at 1316 which sent a steam plume to 19,000 ft.

Weather remained clear allowing crews into crater for deformation and gravity studies.

Report at 9:00 a.m., Monday, June 14, 1982

Rain and clouds precluded field work over the weekend. University of Washington/USGS reported continuing low level seismicity. Five gas emission events occurred between Friday afternoon and early Monday morning.

No update was issued Friday, June 11, 1982.

Report at 9:00 a.m., Tuesday June 15, 1982

Weather precluded access to the field yesterday, June 14, 1982.

University of Washington/USGS reports continued low level seismicity. Three small gas emissions occurred yesterday. Minor amounts of ash associated with these events were reported falling at Cougar and Swift

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Report at 9:30 a.m., Wednesday, June 16, 1982

Good weather allowed crews into the crater for fieldwork yesterday.

University of Washington/USGS reports seismicity at low-levels. Small gas emission events are being recorded daily. The last such event occurred at about 11:50 PM June 15.

Report at 9:00 a.m., Thursday, June 17, 1982

University of Washington/USGS reported low level seismic activity at Mount St. Helens yesterday, June 16. At 12:01 PDT another gas emission event occurred. The plume rose to 20,000 feet and lightly dusted the southeast flank of the mountain with ash.

Deformation measurements on the crater floor indicate very little ground deformation is occurring at this time.

Report at 9:30 a.m., Friday, June 18, 1982

University of Washington/USGS reports continued low level seismic activity. Small gas emission events continue to occur daily.

The most recent event was at 0621 this morning June 18. The plume rose to 12,000 feet.

Report at 9:30 a.m., Monday, June 21, 1982

University of Washington/USGS reported low-level seismicity at Mount St. Helens over the weekend. Gas emission events continue to occur. The events during the weekend were lower amplitude than those the previous week, however, the visible plumes were larger, possibly due to ideal wind conditions.

Report at 10:00 a.m., Tuesday, June 22, 1982

Small daily gas emissions are continuing at Mount St. Helens. Seismicity and deformation remain at low level.

Report at 9:00 a.m., Wednesday, June 23, 1982

University of Washington/USGS report low-level seismicity at Mount St. Helens for Tuesday, June 22. Gas emission events and related seismic activity have not occurred within the last hours.

Good weather is allowing crews complete access to the mountain.

Report at 10:00 a.m., Thursday, June 24, 1982

University of Washington/USGS report low-level seismicity at Mount St. Helens for Wednesday June 23.

The gas emission events, which had been occurring at least once a day for the past month, have not occurred for 55 hours.

Good weather has allowed crews complete access to the mountain.

Report at 9:30 a.m., Friday, June 25, 1982

Seismicity and deformation remain at low levels at Mount St. Helens. Excellent weather is permitting monitoring activity at all sites.

Report at 9:00 a.m., Monday, June 28, 1982

University of Washington/USGS reports seismic activity was low level over the weekend. Monitoring crews worked in the crater Friday and took the weekend off.

Report at 9:00 a.m., Tuesday, June 29, 1982

University of Washington/USGS reports seismic activity has returned to background level. The mountain has been shrouded in clouds for the past few days.

Report at 9:30 a.m., Wednesday, June 30, 1982

University of Washington/USGS reports seismicity is at background level. Inclement weather continues to preclude access to the Mountain.

JULY 1982

VOLCANIC AND SEISMIC ACTIVITY AT MOUNT ST. HELENS
U.S. Geological Survey and University of Washington
Vancouver and Seattle, Washington

Report at 11:00 a.m., Thursday, July 1, 1982

University of Washington/USGS reports seismicity at background level. Inclement weather prevented access to the crater yesterday, June 30th.

Improvement of weather allowing crews to continue on-sight monitoring within crater today.

Report at 10:30 a.m., Friday, July 2, 1982

Weather precluded access to all but lower-level elevation on Mount St. Helens yesterday, July 1.

University of Washington/USGS reports background seismicity.

Report at 9:00 a.m., Tuesday, July 6, 1982

University of Washington/USGS reports background seismicity. USGS crews took July 4th weekend off'.

Report at 10:00 a.m., Wednesday, July 7, 1982

University of Washington/USGS reports background seismicity. Weather permitted crews access into the crater for on-site monitoring yesterday, Tuesday, July 6.

Report at 11:00 a.m., Thursday, July 8, 1982

University of Washington/USGS reports seismicity remains at background levels. No earthquake activity reported.

Report at 9:30 a.m., Monday, July 12, 1982

Seismic activity at Mount St. Helens remained at background level over the weekend. Crews working in the crater on Thursday reported hearing several earthquakes. Crews, Friday reported hearing and feeling many small earthquakes.

Excellent weather continues allowing crews access to the field again today, July 12.

No update was issued Friday, July 9, 1982.

Report at 9:30 a.m., Tuesday, July 13, 1982

Crews working in the crater yesterday, July 12, reported more small (heard and felt) earthquakes. Overall seismicity remains at background level.

Report at 9:00 a.m., Thursday, July 15, 1982—*missing*

Report at 10:30 a.m., Friday, July 16, 1982

USGS/University of Washington reports background seismicity. Weather precluded access to all but the lower elevations around the mountain yesterday, July 15.

Report at 9:00 a.m.. Monday, July 19, 1982

University of Washington/USGS report seismicity continues at background levels. Rates of ground deformation have begun slowly increasing.

WILDLIFE:

Friday a small brown mouse was spotted scurrying around on the southwest crater floor.

Report at 9:30 a.m., Tuesday, July 20, 1982

University of Washington/USGS reports background seismic activity. Crews were able to do deformation and site maintenance, yesterday, July 19, 1982.

Report at 10:30 a.m., Wednesday, July 21, 1982

University of Washington/USGS reports background seismic activity. Crews were able to continue on-site monitoring and routine instrument maintenance yesterday, July 20

Report at 09:00 a.m., Thursday, July 22, 1982

University of Washington/USGS reports seismic activity remains at background levels. Routine on-site monitoring by field crew continued throughout the day, Wednesday, July 21.

Report at 09:30 a.m., Friday, July 23, 1982

Seismicity remains at background level. Excellent weather continues to allow crews access to the mountain for research and monitoring.

Report at 9:00 a.m., Monday, July 26, 1982

University of Washington/USGS reports continued background seismicity. Crews did not work over the weekend. Fog is keeping helicopters on the ground this morning.

Report at 11:30 a.m., Tuesday, July 27, 1982

University of Washington/USGS reports seismicity continuing at background level. Crews were able to work around MSH, however, high winds prevented access for field work in the crater yesterday, July 26, 1982.

Report at 11:00 a.m. Wednesday, July, 28, 1982

University of Washington/USGS reports continued background seismicity.
Field crews were able to continue work around the mountain yesterday, July 27, 1982. Fog and thunder showers near Mount St. Helens have kept helicopters on the ground this morning.

Report at 09:00 a.m., Thursday, July 29. 1982

University of Washington/USGS reports continued background seismicity. Fog and low clouds kept the helicopters; at Pearson Air Park, yesterday, July 28, 1982. However, ground crews were able to do their work around the mountain.

Report at 13:30 p.m., Friday, July 30, 1982

Low clouds and occasional thunder showers continue to limit field work at Mount St. Helens. Deformation crews were able to work in the crater for a few hours yesterday afternoon.

Today July 30, at 1:00 p.m., the following extended outlook advisory was issued.

Mount St. Helens — July 30, 1982
Extended Outlook Advisory — 1:00 P.M., PDT

Seismicity and rates of deformation of the dome and crater floor have increased over the past week. These increases are similar to those observed before recent eruptions. If current trends continue, an eruption will probably begin within the next three weeks. We predict that the eruption will consist primarily of dome growth, but, as with all dome growth, minor explosive activity is also possible.

U.S. Geological Survey, Vancouver, WA
Univ. of Washington Geophysics Program, Seattle, WA

AUGUST 1982

VOLCANIC AND SEISMIC ACTIVITY AT MOUNT ST. HELENS
U.S. Geological Survey and University of Washington
Vancouver and Seattle, Washington

Report at 8:30 a.m., Monday, August 2, 1982

University of Washington/USGS reports low-level seismicity. Deformation crews were able to work in the crater for a few hours on Saturday, July 31. Measurements indicate that rates of ground deformation are continuing to accelerate.

The extended outlook advisory issued on Friday, July 30, 1982 remains in effect.

Report at 10:00 a.m., Tuesday, August 3, 1982

Weather continues to preclude access to the crater. Seismic activity remains at low level.

The extended outlook advisory issued on Friday, July 30, 1982 remains in effect.

Report at 11:30 a.m., Wednesday, August 4, 1982

University of Washington/USGS reports seismicity continuing at low level.

Crews were able to continue on-site monitoring in the crater yesterday, August 3, 1982 and have returned to collect more data today.

The extended outlook advisory issued on Friday, July 30, 1982 remains in effect.

Report at 10:30 a.m., Thursday, August, 5, 1982

Clear weather gave the crews access to the crater yesterday, August 4, 1982. Continuing good weather permitted crews into the crater for continued on-site monitoring. Seismic activity remains at low level.

The extended outlook advisory issued on Friday July 30, 1982 remains in effect.

Report at 11:00 a.m., Friday, August 6, 1982

Clear weather continued yesterday, August 5. 1982. Seismic activity remains at low level.

The extended outlook advisory issued on Friday, July 30, 1982 remains in effect.

Report at 11:50 a.m.. Monday, August 9, 1982

University of Washington/USGS reports continued low level seismicity.
Crews continued monitoring on Friday, August 6th.
The extended outlook advisory issued on Friday, July 30, remains in effect.

Report at 09:00 a.m. Tuesday, August 10, 1982

Weather precluded access to the crater yesterday, August 9, 1982. Seismicity remains at low level.
The extended outlook advisory issued on Friday, July 30, 1982 remains in effect.

Report at 9:00 a.m., Wednesday, August 11, 1982

Weather again prevented access to crater, Tuesday August 10, 1982. Seismicity remains at low level.
The extended outlook advisory issued on Friday, July 30, 1982 remains in effect.

Report at 11:50 a.m., Thursday, August 12, 1982

Weather again prevented access to crater Wednesday, August 11 1982. Seismicity remains at low level.
The extended outlook advisory issued on Friday, July 30, 1982,.remains in effect.

Report at 11:30 a.m.. Friday, August 13, 1982

University of Washington/USGS continued low-level seismicity. Breaks in clouds allowed access to the crater yesterday August 12, 1982. Rates of ground deformation are continuing to accelerate.
The extended outlook advisory issued on Friday, July 30, 1982, remains in effect.

Report at 11:30 a.m., Monday August 16, 1982

University of Washington/USGS reported seismicity was low to moderate levels over the weekend of August 15-15, 1982. Crews worked over the weekend to bring deformation data up to date. Rates of ground deformation continued to accelerate.

Due to the increase in activity at Mount St. Helens an updated advisory has been issued.

Mount St. Helens 8/16/82
Volcano Advisory 11:30 AM, PDT

Seismicity and deformation in the crater are now accelerating. We predict that an eruption will begin within the next 4 days, possibly within the next 2 days. We anticipate that the eruption will consist primarily of dome growth, but as with all dome growth, minor explosive activity is also possible.

U.S. Geological Survey, Vancouver, WA
Univ. of Washington Geophysics Program, Seattle, WA

Report at 09:00 a.m., Tuesday, August 17, 1982

University of Washington/USGS reports seismicity continues to increase, along with deformation measurements from the crater of Mount St. Helens, Monday, August 16, 1982.

Tuesday morning an eruption alert was issued:

Mount St. Helens August 17, 1982
Eruption Alert 6:55 AM PDT

Seismicity and rates of deformation in the crater have accelerated sharply within the last 24 hours following a pattern observed shortly before other recent eruptions. Based on this comparison, the expected eruption will probably begin within the nest 24 hours.

U.S. Geological Survey, Vancouver, WA
University of Washington Geophysics Program, Seattle, WA

Report at 1:00 p.m., Wednesday, August 18, 1982

University of Washington/USGS reports high level seismicity. Field crews were able to do on-site monitoring in the crater and around the mountain yesterday, August 17, 1982

The following eruption alert was issued this morning:

Mount St. Helens August 18, 1982
Eruption Alert Update 7:45 AM, PDT

Seismicity and deformation of the dome and crater floor remain high, but are following a slightly different pattern than previously observed. The west and southwest sides of the dome were growing upward and outward at rates of about 10 meters/day by yesterday afternoon, and

numerous rockfalls from that part of the dome indicate that this expansion of the dome is continuing. In a technical sense the eruption has begun; because the dome is already growing internally—a phenomenon called endogenous dome growth. On the other hand, we have not seen any discrete event yet, for example an explosion, a change in the character of the deformation or seismicity, or an increase in gas emissions, that in other recent eruptions has signaled the onset of the main part of those eruptions. Since the seismicity and deformation are continuing at high levels, we still expect lava to eventually work its way through the dome and to be extruded as a new lobe—the phenomenon called exogenous dome growth that has occurred in all of the other recent eruptions. One can think of the dome as a berry pie in the oven—the pie is expanding, and eventually the crust will break and a delicious ooze will appear on the surface.

U.S. Geological Survey, Vancouver, WA
University of Washington Geophysics Program, Seattle, WA

Report at 10:30 a.m., Thursday, August 19, 1982

University of Washington/USGS reports moderate (as of 1025 AM on Thursday, August 19) level seismicity. Field crews were able to do some work in and out of the crater yesterday, Wednesday, August 18.

The following update was issued at 7:15 PM PDTt on Wednesday, Aug. 18:

Mount St. Helens — August 18, 1982
Eruption Alert Update — 7:15 PM, PDT

Lava finally broke through the top of the dome this morning and a new lobe is flowing slowly onto the western and southern sides of the dome. This extrusion is accompanied by many rock falls, and dust from these rock falls often rises above the crater rim. The current activity is like that of other recent episodes of dome growth.

U.S. Geological Survey, Vancouver, WA
University of Washington Geophysics program, Seattle, WA

Report at 09:30 a.m., Friday, August 20, 1982

University of Washington/USGS reports seismicity has started to return to lower levels. Activity on Thursday at Mount St. Helens consisted of continued growth of the new lobe and almost continuous rockfall activity off the dome. Gas emissions have started to decrease from a peak on August 18th, (500 tons/day), but have yet to reach pre-eruption, background levels.

Early reports from crews in the field this morning, August 20, 1982, report that vertical measurements of the dome show that it is continuing to grow.

Report at 09:00 p.m., Monday, August 23, 1982

University of Washington/USGS reports seismicity was at low levels over the weekend with occasional rockfalls reported off the dome.

Deformation measurements reported on the weekend indicate dome growth has started to slow down.

Gas measurements have returned to low levels.

Report at 10:30 a.m., Tuesday, August 24, 1982

University of Washington/USGS reports that seismicity has remained at low levels for the passed three days.

An eruption update was issued on Monday, August 23, 1982:

Mount St. Helens — August 23, 1982
Eruption update — 8:45 PM

Deformation and gas emissions have returned to their background level, so this eruption is essentially over. Minor sagging new lobe may continue for a few days, accompanied by occasional rockfalls and dust plumes.

U.S. Geological Survey, Vancouver, WA
University of Washington, Geophysics Program, Seattle, WA

New data on the August lobe:

Elevation of top of August lobe (ASL)	= 2119.5 m
Elevation of South rim of Crater	= 2590. m
Height above base of October 1980 lobe	= 206. m
Increase of height of about	= 13. m
Volume of new lobe	approx 1.8×10^6 m^3

Report at 08:00 a.m., Wednesday, August 25, 1982

University of Washington/USGS reports continued low-level seismicity.

Field crews performed on-site monitoring around the mountain yesterday, August 24, 1982. Construction of an instrument site on the Shoestring continued also.

Report at 09:00 a.m., Thursday, August 26,1982

University of Washington/USGS reports seismicity remained at low level yesterday, August 25, 1982. Crews continued field work at Spirit Lake drill site.

Report at 09:00 a.m., Friday, August 27, 1982

University of Washington/USGS reports low-level seismicity. Small rock avalanches from the new lobe are continuing. Rockfalls from the crater walls are almost continuous and are creating a dust plume to just above the crater rim.

Report at 09:00 a.m., Tuesday, August 31, 1982

University of Washington/USGS reports low-level seismicity. Most signals appear to be avalanches.

Crews continued to log drill cores at COE drill-sites at Spirit Lake.

Weather should permit access into the field today.

SEPTEMBER 1982

VOLCANIC AND SEISMIC ACTIVITY AT MOUNT ST. HELENS
U.S. Geological Survey and University of Washington
Vancouver and Seattle, Washington

Report at 11:30 a.m., Wednesday, September 1, 1982

University of Washington/USGS reports low-level seismicity for Tuesday, August 31, 1982
Geologic Division crews performed on-site monitoring in the crater.
Water Resource Division crews continued field work at the Spirit Lake avalanche blockage and Corps of Engineers drill sites.

Report at 12:00 p.m., Thursday, September 2, 1982

University of Washington/USGS reports low-level seismicity for Wednesday, September 1, 1982.
Water Resources Division crews continued field work at the Spirit Lake avalanche blockage and Corps of Engineer drill sites.
Geologic Division crews performed on-site monitoring in the crater.

Report at 10:30 a.m., Friday, September 3, 1982

University of Washington/USGS reports low-level seismicity for Thursday, September 2, 1982.

Report at 10:00 a.m., Tuesday, September 7, 1982

University of Washington/USGS reports seismicity has returned to background level.
Crews continued work at the Spirit Lake drill site over the three day weekend.

Report at 10:30 a.m., Wednesday, September 8, 1982

University of Washington/USGS reports seismicity remains at background levels.
Crews continued to log drill holes at the Spirit Lake drill sites, and crews performed on-site monitoring within the crater of Mount St. Helens, September 7, 1982.

Report at 11:20 a.m., Thursday, September 9, 1982

University of Washington/USGS reports seismicity remains at background levels.

Bad weather has not allowed field crews to perform any on-site monitoring today. U.S. Army Corps of Engineers is continuing to log drill holes at the Spirit Lake drill sites.

Report at 10:30 a.m., Monday, September 13, 1982

University of Washington/USGS reports background seismicity. Spirit Lake drill crews worked Friday, September 10, 1982 and will be taking Saturday - Tuesday off.

Crews were unable to reach the crater due to low clouds.

Report at 09:00 a.m., Tuesday, September 14, 1982

USGS/University of Washington reports continued background seismicity. Excellent weather conditions allowed Water Resource and Geologic Division crews to work at sites around the mountain.

Report at 10:00 a.m., Wednesday, September 15, 1982

University of Washington/USGS reports continued background seismicity for Mount St. Helens on September 14, 1982.

Excellent weather continues to allow Water Resources and Geologic Division crews to work at sites around the mountain.

Deformation measurements from the dome show no change from last measurements (September 10,1982).

Report at 12:30 p.m., Thursday, September 16, 1982

University of Washington/USGS reports continued background seismicity for Mount St. Helens on Wednesday, September 15, 1982.

Water Resources crews were out at the Spirit Lake drill site, and at various surveying spots around the mountain.

Report at 10:40 p.m. Friday, September 17, 1982

University of Washington/USGS reports continued background seismicity for Mount St. Helens on Wednesday, September 15, 1982.

Water Resources crews were out at the Spirit Lake drill site, and at various surveying spots around the mountain.

Report at 1:25 p.m., Monday, September 20, 1982

University of Washington/USGS reports continued background seismicity for Mount St. Helens on Monday, September 20, 1982.

Water Resources crews were out at the Spirit Lake drill site, and at various surveying spots around the mountain.

Report at 10:00 a.m., Tuesday, September 21, 1982

University of Washington/USGS reports continued background seismicity for Mount St. Helens.

Bad weather prevented access into the field yesterday, September 20, 1982.

Report at 11:42 a.m., Wednesday, September 22, 1982

University of Washington/USGS reports continued background seismicity for Mount St. Helens September 21, 1982.

Good weather permitted crews access to the mountain and monitoring sites.

Report at 11:38 a.m., Thursday, September 23, 1982

University of Washington/USGS reports continued background seismicity for Mount St. Helens September 22, 1982.

Good weather permitted crews access to the mountain and monitoring sites. The data is still being worked up.

Report at 2:20 p.m., Friday, September 24, 1982

University of Washington/USGS reports continued background seismicity for Mount St. Helens September 24, 1982. Deformation is also at background levels.

Report at 09:30 a.m., Monday, September 27, 1982

University of Washington/USGS reports seismicity at Mount St. Helens remained at background levels over the weekend, September 25-26, 1982.

Report at 10:00 a.m., Tuesday, September 28, 1982

University of Washington/USGS reports seismicity remains at background levels.

Report at 09:30 a.m., Wednesday, September 29, 1982

University of Washington/USGS reports seismicity remains at background levels, Tuesday, September 28, 1982.

Poor weather prevented crews from performing deformation measurements on Tuesday.

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no update was issued on September 30, 1982

OCTOBER 1982

VOLCANIC AND SEISMIC ACTIVITY AT MOUNT ST. HELENS
U.S. Geological Survey and University of Washington
Vancouver and Seattle, Washington

Report at 11:00 a.m., Friday, October 1, 1982

University of Washington/USGS reports seismicity remains at background levels, both Wednesday and Thursday. (No update was issued on Thursday, September 30, 1982.)

Early morning fog delayed departures; however, crews were able to work at Spirit Lake and in the crater.

Deformation rates remain at background level.

Report at 09:45 a.m., Tuesday, October 5, 1982

University of Washington/USGS reports seismicity remained at background levels.

Crews worked at Spirit Lake drill-sites Saturday and yesterday, Monday, October 4, 1982.

Report at 11:00 a.m., Wednesday, October 6, 1982

University of Washington/USGS reports seismicity remains at background levels.

Crews worked at Spirit Lake drill-sites Tuesday, October 5, 1982. Crater crews were able to perform deformation measurements.

Report at 10:30 a.m., Thursday, October 7, 1982

University of Washington/USGS reports seismicity remains at background levels.

Inclement weather yesterday, Wednesday, confined field work to hydrologic studies on the south side of the mountain.

Report at 09:30 a.m., Friday, October 8, 1982

USGS/University of Washington reports background seismicity. Clouds and rain precluded field work yesterday, October 7, 1982, at all sites except those at lower elevations on the North Toutle and Pumice Plain.

Report at 9:20 a.m., Tuesday, October 12, 1982

Seismicity remains at background levels. Crews took the three day weekend off.

Report at 10:00 a.m., Wednesday, October 13, 1982

University of Washington/USGS reports seismicity remains at background levels. Rockfall activity has increased over the past week.

Weather has permitted easy access to the mountain and surrounding terrain. Geologists have performed on-site monitoring in the crater and hydrologists continue to monitor drilling at the Spirit Lake blockage and construction on early warning stations on the Spirit Lake blockage.

Report at 9:45 a.m., Thursday, October 14, 1982

Deformation within the crater remains at background levels. Seismicity also remains at background levels; however a slight increase in the number of small earthquakes in the vicinity of Mt. St. Helens has been noted. A Geologic Division crew is continuing its geophysics study in the crater; Water Resources Division crews are working on the Spirit Lake gaging sites and elsewhere around the mountain.

Report at 11:00 a.m., Friday, October 15, 1982

Excellent weather yesterday, October 14, 1982 allowed crews access to all sites. Seismicity and deformation remains at background levels.

Report at 9:30 a.m., Monday, October 18, 1982

University of Washington/USGS reports seismicity remained at background levels over the weekend. Monitoring crews took the weekend off.

Report at 9:00 a.m., Tuesday, October 19, 1982

University of Washington/USGS reports seismicity remains at background levels for

Monday, October, 18, 1982. Good weather permitted Geologists to work within the crater and Hydrologists continue to prepare gage sites for the Spirit Lake warning system.

Report at 8:00 a.m., Wednesday, October 20, 1982

University of Washington/USGS reports seismicity at background levels for Tuesday, October 19.

Weather permitted access to the crater and surrounding areas yesterday. Geologists performed on-site monitoring in the crater and WRD field crews worked on the construction of gaging stations at the Spirit Lake blockage and other locations surrounding Mount St. Helens yesterday.

Report at 8:30 a.m., Thursday, October 21, 1982

University of Washington/USGS reports seismicity at background levels for Wednesday, October 20.

Weather permitted access to the crater and surrounding areas yesterday. Geologists performed on-site monitoring in the crater and WRD field crews worked on the construction of gaging stations at the Spirit Lake blockage and other locations surrounding Mount St. Helens yesterday.

No updates were issued on October 22-25, 1982

Report at 10:30 a.m., Tuesday, October 26, 1982

Low clouds and rain at Mount St. Helens have prevented access to all but the lower elevations around the mountain since Friday, October 22.

University of Washington/USGS reports seismicity remains at background levels.

Report at 11:00 a.m., Wednesday, October 27, 1982

Low clouds and rain at Mount St. Helens have prevented access to all but the lower elevations around the mountain since Friday, October 22. WRD field crews worked on the gaging stations at the Spirit Lake blockage.

University of Washington/USGS reports seismicity remains at background levels.

Report at 09:30 a.m., Thursday, October 28, 1982

Low clouds and rain at Mount St. Helens have prevented access to all but the lower elevations around the mountain, Wednesday, October 27. WRD field crews worked on the gaging stations at the Spirit Lake blockage.

University of Washington/USGS reports seismicity remains at background levels.

No updates were issued on October 29-31, 1982

NOVEMBER 1982

VOLCANIC AND SEISMIC ACTIVITY AT MOUNT ST. HELENS
U.S. Geological Survey and University of Washington
Vancouver and Seattle, Washington

Report at 09:00 a.m., Monday, November 1, 1982

Seismicity and deformation remain at background levels.

Report at 10:00 a.m., Tuesday, November 2, 1982

Seismicity, deformation, and gas remain at background levels.

Report at 09:00 a.m., Wednesday, November 3, 1982

Seismicity, deformation, and gas remain at background levels for Tuesday, November 2, 1982.

Report at 09:00 a.m., Thursday, November 4, 1982

Seismicity, deformation, and gas remain at background levels for Wednesday, November 3, 1982. WRD crews continue to monitor Spirit Lake COE drill site.

Report at 11:43 a.m., Friday, November 5, 1982

Seismicity, deformation, and gas remain at background levels for Thursday, November 4, 1982.

Report at 1:50 p.m., Monday, November 8, 1982

Seismicity, deformation, and gas remain at background levels for Friday, November 8, 1982. Crews worked all weekend installing an early warning site at Spirit Lake.

Report at 12:55 p.m., Tuesday, November 9, 1982

Seismicity, deformation, and gas remain at background levels. Excellent weather allowed crews access to all sites yesterday, November 8, 1982.

Report at 09:00 a.m., Wednesday, November 10, 1982

Seismicity, deformation, and gas remain at background levels. Excellent weather allowed crews access to all sites yesterday, November 9, 1982.

Report at 09:00 a.m., Friday, November 12, 1982

Seismicity, deformation, and gas remain at background levels. The crews took November 11, 1982 off.

Report at 09:00 a.m., Monday, November 15, 1982

Seismicity, deformation, and gas remained at background levels over the weekend.

Report at 09:00 AM, Tuesday, November 16, 1982

Seismicity, remained at background levels for Monday, November, 15, 1982. Inclement weather prevented crews from going to the crater.

Report at 09:00 a.m., Wednesday, November 17, 1982

University of Washington/USGS reports seismicity remaining at background levels, November 16, 1982. Poor weather conditions prevented field work in the crater and Spirit Lake area yesterday.

Report at 11:00 a.m., Thursday, November 18, 1982

University of Washington/USGS reports seismicity remaining at background levels, November 17, 1982. Poor weather conditions prevented field work in the crater and Spirit Lake area yesterday.

Report at 11:00 a.m., Friday, November 19, 1982

University of Washington/USGS reports seismicity remaining at background levels, November 18, 1982. Poor weather conditions again prevented field work in the crater and Spirit Lake area yesterday.

Report at 09:00 a.m., Monday, November 22, 1982

Seismicity, deformation, and gas remained at background levels over the weekend.

Report at 02:00 p.m., Tuesday, November 23, 1982

Seismicity, deformation, and gas remained at background levels yesterday, November 22, 1982.

Report at 11:00 a.m., Wednesday, November 24, 1982

Seismicity, deformation, and gas remained at background levels yesterday, November 23, 1982.

Report at 11:30 a.m.. Friday, November 26, 1982

Seismicity, deformation, and gas remained at background levels November 24-25, 1982. There was no field work on Thursday, Thanksgiving Day.

Report at 09:00 a.m., Monday, November 29, 1982

Seismicity, deformation, and gas remained at background levels over the weekend.

Report at 09:00 a.m., Tuesday, November 30, 1982

Seismicity, deformation, and gas remained at background levels for Monday, November 29, 1982.

DECEMBER 1982

VOLCANIC AND SEISMIC ACTIVITY AT MOUNT ST. HELENS
U.S. Geological Survey and University of Washington
Vancouver and Seattle, Washington

Report at 08:00 a.m., Wednesday, December 01, 1982

Seismicity, deformation, and gas remained at background levels for Tuesday, November 30, 1982.

Report at 09:00 a.m., Thursday, December 02, 1982

Seismicity, deformation, and gas remained at background levels for Wednesday, December 1, 1982.

Report at 09:00 a.m., Monday, December 06, 1982

Water Resources Division crews were in the field Friday, Saturday and Sunday monitoring high water caused by last week's storms.

A break in the weather Saturday allowed Geologic Division crews to reach sites in the crater. Seismicity, deformation and gas remain at background level.

Report at 8:25 a.m., Tuesday, December 7, 1982

Rain and snow prevented crews from working at higher elevations around the mountain.
Seismicity, deformation and gas remain at background levels.

Report at 13:00 a.m., Wednesday, December 8, 1982

Clear weather allowed crews to reach sites within the crater yesterday, 7 December.
Seismicity, deformation and gas remain at background levels.

Report at 10:00 a.m., Thursday, December 9, 1982

Seismicity, deformation and gas remained at background levels for Wednesday, December 8, 1982.

Report at 9:30 a.m., Monday, December 13, 1982

Seismicity, deformation and gas remained at background levels for Friday, December 9, 1982. WRD crews continued work on East Spirit Lake early warning sites.

Report at 10:05, Tuesday, December 14, 1982

Due to inclement weather crews did not gain access to the mountain yesterday, December 13. Seismicity, gas and deformation remained at background levels.

Report at 2:00, Wednesday, December 15, 1982

Due to inclement weather crews did not gain access to the mountain yesterday, December 14. Seismicity, gas and deformation remained at background levels.

Report at 10:45 a.m., Thursday, December 16, 1982

Seismicity, gas and deformation remained at background levels. WRD crews continued final work on the Spirit Lake early warning site. Heavy rains kept all other crews in the office.

Report at 10:00 a.m., Friday, December 17, 1982

Seismicity, gas and deformation remained at background levels Thursday, December 16. WRD crews repaired gages at one of the Spirit Lake early warning sites. Heavy rains kept other crews in the office.

Report at 9:45 a.m., Monday, December 20, 1982

Seismicity remained at background levels. Rains continued over the weekend, but high

waters from Thursday's storm have receded.

Report at 10:25 a.m., Thursday, December 23, 1982

Seismicity remains at background levels. Stormy weather has once again prevented crews from making field observations.

Report at 10:40 a.m., Tuesday, December 28, 1982

Seismicity, gas and deformation are at background levels. GD crews performed maintenance on radio and seismic systems affected by December storms. WRD crews performed maintenance on Spirit Lake emergency systems Monday, December 27, 1982.

Report at 10:00 a.m., Thursday, December 30, 1982

Seismicity, gas and deformation are at background levels.
