Summary of Newspaper Articles

Deseret Evening News – Salt Lake City, UT (last date searched 03/05/1943)

Headline:	<u>Utah, Mexico Rocked By Separate Quakes</u>
Date:	02/22/1943
Info Categories:	E, N
Headline:	<u>Little Danger Seen From Utah Earthquakes</u>
Date:	02/22/1943
Info Categories:	P, S
Headline:	Quake Widens Leaks In Roof, City Board Hears
Date:	02/24/1943
Info Categories:	B
Headline:	<u>Quake, Rationing, Highlight Past Week</u>
Date:	02/27/1943
Info Categories:	B, P

Magna Times – Magna, UT (last date searched 03/12/1943)

Headline:	Earthquake Brings Fears To Residents
Date:	02/26/1943
Info Categories:	E, P

Ogden Standard Examiner – Ogden, UT (last date searched 02/27/1943)

Headline:	Mild Quake Jars Utah In Early Morn; Mexico City Shaken For Five Minutes; Volcano Erupts
Date:	02/22/1943
Info Categories:	E, N
Headline: Date:	Utah Expert Allays S.L. 'Quake Fears 02/23/1943
Info Categories:	E, S

Salt Lake Telegram – Salt Lake City, UT (last date searched 03/03/1943)

Headline:	First Tremor Since 1934 Hits S.L. Area
Date:	02/22/1943
Info Categories:	E, N, S

Headline:	Wasatch Fault Behaves During Quake
Date:	02/23/1943
Info Categories:	S

Headline:Engineers Report Quake DamageDate:02/25/1943Info Categories:B

Salt Lake Tribune – Salt Lake City, UT (last date searched 03/01/1943)

Headline:	U' Geologist Allays S.L. Quake Fears
Date:	02/23/1943
Info Categories:	E, S

Headline:Quakes Start Roof LeaksDate:02/25/1943Info Categories:B

Information Categories

A -- Aid:

provide medical services, shelter, donations, loans, advice, encouragement, implement safety measures

B -- Building Damage:

structure itself plus windows and chimneys (typically damage visible from outside the building)

E -- Earthquake Description:

where, when, duration, direction, sound, motion, number and timing of aftershocks

G -- Geologic Effects:

changes at the Earth's surface, fault scarps, rockfalls, landslides, ground cracks, ground subsidence, sand boils, water spouts; effects on springs, lakes, wells

H -- Humor:

I -- Impact:

changes in daily routine; rumors; influx of reporters, politicians, cost in dollars

L -- Lifelines:

effects on transportation: roads, bridges, railroads, airports effects on communications: telephone, telegraph effects on power, gas, water, and sewer lines effects on dams

N -- Nonstructural Effects:

effects on plaster, furnishings (typically damage or rearrangement of furnishings visible inside a building)

P -- People:

effects on and responses to, during and after; deaths, injuries, near misses

R -- Recovery:

clean up, rebuild

S -- Scientific:

explanation of the day

UTAH, MEXICO ROCKED BY SEPARATE QUAKES

Earthquakes today originated in Utah and Mexico, it was reported by Prof. F. F. Hintze of the University of Utah geology department.

Five persons were killed in the Mexico City quake which collapsed a rooming house in a densely populated district before dawn.

The epicenter of the quake was estimated as 250 miles southwest of Mexico City in the Pacific Ocean. The shock was so great that seismological instruments there were knocked out of action, the Associated Press reported.

Salt Lake's tremors, of a vibrating rocking type, lasted for five minutes, beginning at 8:20.21 (MWT), 7:20.21 (MST).

The Utah earthquake was of purely local origin on the Wasatch fault or in the Oquirrh mountains near Bingham and Tooele. The shock probably occurred between 10 and 20 miles below the surface, and was separate from the Mexico shock, which occurred at 3:26.09 (MWT), Professor Hintze reported.

The Utah shock was felt in Ogden, marked at Bingham and "barely noticeable at Provo."

No damage was reported other than swinging chandeliers, rattling windows and cups. Professor Hintze's reports on the University of Utah seismograph were verified throughout the nation. The Mexican shocks registered twice with medium intensity, probably off the south-west coast of Mexico. It was reported to have lasted about two hours.

Only one severe earthquake has been felt in Utah since records have been kept. It was on March 12, 1934, at 8:05 a.m. The center was north of Great Salt Lake near Locomotive Springs.

At that time the vertical shock caused several cracks in the earth, one a mile long and 100 feet deep. Locomotive Springs dried up and nearly 50 mud volcanoes spouted in the giant crack. Water ran into, instead of out of, the springs.

When the second shock occurred, the springs increased 30 per cent in volume and eventually the flow of water became normal. Downtown buildings developed many cracks. Dishes were jarred from shelves, homes cracked and clocks stopped throughout the intermountain region.

[Deseret News; February 22, 1943]

LITTLE DANGER SEEN FROM UTAH EARTHQUAKES Recent Temblor Brings Search Into History Of Disturbances

By Dan S. McQuarrie

"Earthquake."

That's a word we whisper. No force commands the respect of an earthquake. This was shown here last Monday morning when people felt what the geologists called a "seismic tremor."

The police, weather bureau, fire department and the newspapers suddenly received an avalanche of telephone calls. Children shuddered. People talked of nothing else--not even the war.

In ancestral memory there is plenty of justification for the respect given to the "quakes." Earthquakes have been the cause of the truly great human disasters.

Little to Fear

There is little use to worry about earthquakes that may come. However, there is a good deal of consolation in the assertion of geologists that Utah has little to fear.

Only recently has the study of earthquakes been established as a science. Today, however, quakes have been taken apart, artificially created, intensity calibrated and speed of the spherical wave measured.

Most important--earthquakes have been typed. The Utah type is relatively harmless. Still Utah has experienced many tremors hard enough to stop the clocks.

This might as well be admitted. The late Will Rogers remarked after hearing for years that San Francisco had a fire:

"Yes, the fire that shook the houses down."

Have 73 Quakes

Records of the U. S. Geological Survey over a period of 72 years ending in 1932, disclose that in this period there were 73 quakes. During the last 20 years there have been earthquakes recorded at the Salt Lake Weather Bureau on only 10 days. Seven of these days came in 1934 and there was a real series of shocks on March 12 to 15 of that year.

At the epicenter, great trenches were torn in the ground near Locomotive Springs, 15 miles south of Kelton at the north end of Great Salt Lake. Fifty mud volcanoes were boiling for several days. The city was shaken. People were frightened away from the big buildings. The tremors continued for three days. There were noticeable quakes also on Jan. 30, April 2, 6 and 15 and on May 6, 1934.

Apparently these quakes made the necessary adjustment in the fault north of the lake for on that front quiet has since prevailed.

Great Destroyers

There are two types of earthquakes that are the great destroyers. Most disasters have resulted from quakes in the ocean and the disaster did not result from the spherical, elastic wave of the quake but from the great gravity wave on the surface of the sea. There are two kinds of waves, spherical, elastic waves like sound waves and waves of gravity seen when a rock is dropped into a pond.

The elastic wave is compression and expansion in an ever-expanding sphere and it is turned loose by any great shock, explosion or movement in the fundamental rock of a

region. Its speed depends on the density of the medium in which it travels. In a gravity wave in water, movement of the water is perpendicular while the wave travels outward from the disturbance.

"The Great Sea Wave" is formed as follows: The sudden upheaval of the sea bed caused by an earthquake lifts the whole mass of superincumbent water by a like extent and the falling of this wave as far below the surface as it had been above, generates a circular wave of gravity. These waves have been 100 miles in diameter to start with and hundreds of feet from crest to trough. The speed depends on the length of the wave and its period of vibration. Such a wave would not be marked by a ship on the ocean. Some have gone around the world. Of course since the same amount of water is involved the height of the wave continually decreases as it spreads. One was six inches high after traveling from China to San Francisco.

Inundates City

About half an hour after true earthquake waves shook Lisbon in 1775 the sea wave arrived dumping the ocean on the city and carrying it and a great stretch of sea coast with the inhabitants into oblivion.

The other type so dangerous is found in the region of intermittent volcanoes. The quakes that have devastated many parts of South America have generally come when the volcanoes have ceased erupting and they end when the volcano turns on again. As the volcano subsides, the lava cools down for many miles and then the pressure accumulates to the point where it can break out through this rock mass. In 1835 after an earthquake that devastated 600,000 square miles, the whole coast line of Chile and Patagonia was found elevated from two to 20 feet. Some guake.

However, Utah has no ocean to carry a great sea wave and there are no Cotopaxis nor Strombolis here.

Greatest Fault

Utah has, indeed, the greatest fault on the continent, that mighty perpendicular wall of the Wasatch. Always geologists wonder about this fault during earth tremors for a slip of that wall might send its shocks over the Rocky Mountains. However, the wall appears stable and sturdy as no quakes have been recorded on the fault.

If the Wasatch is stable now it will likely remain so. In the geological time table a day is marked by the duration of species of animal and plants. Things sometime must change but the day of the Wasatch may outlast our race on this green earth. The lofty Uintah Mountains, newest range and only one with an east-west axis in the Rockies, has grown across the path of the Green River. But these mountains never grew as fast as the river cut, for it passes down hill right through the range.

Geological time is on "our side" so far as a big quake out of the Wasatch is concerned. A study of Utah earthquakes was completed in 1932 by G. M. Carlston and Ralf R. Woolley, engineers of the geological survey.

Class Quakes

They classed 10 of 73 recorded quakes as "severe," that is they had intensity of between seven and nine on the seismograph scale.

The geological survey report says:

"There are apparently four active seismic areas within the state: The southwest corner, comprising St. George and vicinity; the west-central area, comprising Beaver and Elsinore and vicinities; the Great Salt Lake Valley area; and the Bear Lake Valley area.

The most severe shocks were recorded in the Beaver-Elsinore area."

Dates and locations of previous Utah quakes that have been hard enough to cause people to run out of doors follow: July 30, 1873, Beaver; Dec. 30, 1880, Kelton; April 20, 1891, St. George; Nov. 13, 1901, Beaver; Nov. 17, 1902, Gunlock; Oct. 6, 1909, Saltair; Jan. 20, 1910, Elsinore; May 23, 1910, Jordan River; Sept. 29, 1921, Elsinore; June 6, 1923, Newton.

[Deseret News; February 22, 1943]

QUAKE WIDENS LEAKS IN ROOF, CITY BOARD HEARS

Reverberations of last Monday's earthquake came before the city commission today. Commissioner Fred Tedesco, of the Parks and Public Buildings Department, obtained permission to authorize the city purchasing department to advertise for bids for repairing the city side of the roof of the City and County Building.

He submitted that leaks in the roof are "getting terrible," and that in the opinion of the building engineer the leaks are worse since the tremor Monday morning.

[Deseret News; February 24, 1943]

QUAKE, RATIONING, HIGHLIGHT PAST WEEK Summary For Service Men Tremor Does Little Damage

Earthquakes, rationing, income taxes, purchase of automobile licenses and a snow storm occupied the attention of Utahns during the past week.

Earthquakes originated in Utah and Mexico. The Mexico quake was reported to have taken five lives. Utah's only result seemed to be a new topic of conversation and "worse leaks" in the roof of the Salt Lake City and County Building.

[Deseret News; February 27, 1943]

EARTHQUAKE BRINGS FEARS TO RESIDENTS

Local residents were practically "shaken out of their beds, off their feet," Monday morning at 8:20 a.m. by a small earthquake. Although termed "small," the quake left many trembling and frightened people, who feared more severe ones might follow. The tremor seemed to come in two sections, with only a second's interval between the quakes. Authorities believe that the origin of the quake was on a fault at the north end of the Oquirrh mountains.

Residents could not recall a quake that caused such vibrations since 1934 in March. Some said their dishes rattled, while others momentarily believed it to be a blast. Men at mills and smelter did not notice it as much as townspeople, as they believed at first it was extra vibrations in the mill.

Magna and vicinity felt the worst shock, together with the Salt Lake valley. Dr. Hyrum Schneider, professor of geology at the University of Utah, stated that authorities are always concerned when local disturbances occur. He pointed out the menace of a slip on the Wasatch fault was revealed some years ago in displacement of serious proportions at the mouth of Little Cottonwood canyon.

[Magna Times; February 26, 1943]

MILD QUAKE JARS UTAH IN EARLY MORN Mexico City Shaken For Five Minutes; Volcano Erupts

Northern Utah was jarred by a light earthquake this morning.

A number of Ogdenites, who felt a strange quivering sensation under foot today and wondered if it were vibration from a passing truck--or perhaps an extra beat of the heart--or some unexplainable reaction, let it go with nary another thought. However, many noticed the quake and called the newspaper offices.

Salt Lake City and surrounding cities and towns felt the tremors which began about eight-twenty-five a.m., mountain war time, and continued for seven or eight seconds, said the Associated Press.

Sharp, Noticeable

The first movement was very light, but the tremors that followed were sharp and noticeable, said the Associated Press.

Paul R. Flint, who resided at Helena, Mont., during that city's prolonged 'quake epidemic a few years ago, said he felt this morning's tremors for 30 seconds.

100 Mile Limit

Dr. Hyrum Schneider, professor of geology at the University of Utah, said early reports indicated the shocks were not felt beyond 100 miles from Salt Lake City.

Dr. Schneider said the university seismograph began recording at eight-twenty-one a.m., and stopped six minutes later although the earthquake was only perceptible to office workers for a few seconds.

He described the movement as horizontal, announcing at the same time that an earthquake in the Mexico City area was recorded at two-twenty-six, mountain war time. Dr. Schneider said the Utah disturbance was more pronounced in some areas than others.

Clocks Stopped

Buildings in downtown Salt Lake City swayed slightly and clocks stopped but many workers failed to feel the shock. It was felt more sharply in the Oquirrhs, but authorities said there was no damage. At Camp Kearns, air force training center on the eastern base of the mountains, a chimney was knocked down. Provo residents also felt the shock.

One resident of Bingham telephoned a newspaper office to say he "thought my house was going to collapse," but nothing was damaged.

Last Quake in 1934

Utah's last recorded 'quake was in March, 1934. Damage was minor. Bingham, location of the famed Utah open-cut copper mines, was reported shaken by sharp movements of the earth but no damage was reported immediately.

ONE DEAD IN MEXICO

MEXICO CITY, Feb. 22 (UP)--One person was killed and at least four were injured early today in an earthquake which was felt throughout southwestern Mexico.

The quake began at three-twenty-one a.m., mountain war time, and lasted locally for five minutes, 44 seconds, government observatory officials said. It was the most severe felt here since April 15, 1941, when scores of persons were injured and property damage was heavy.

The sole victim of the tremblor in the capital was Mario Martinez, 44, a laborer whose house collapsed. The injured were residents of the same building.

Little other damage was reported in the city except for a few broken windows and cracks in old buildings.

Volcano Erupts

The observatory said the epicenter was about 240 miles southwest of Mexico City, apparently in Mochoacan state where a volcano erupted Saturday, sending a pillar of black smoke 2,000 feet into the air.

One hundred and fifty inhabitants of the village of Paritucuari, at the base of the mountain, were evacuated to the town of San Juan Parangaricutiro, two miles away. Huge cracks opened in the ground at Paritucuari, and authorities planned to evacuate more than 2,000 persons from San Juan Paranguirutiro, lest waves of lava pour down the mountainside.

[Ogden Standard-Examiner; February 22, 1943]

UTAH EXPERT ALLAYS S. L. 'QUAKE FEARS Tremor Had No Connection With Wasatch Range, Is Report

SALT LAKE CITY, Feb. 23 (AP)--Origin of the earthquake which shook Salt Lake City and nearby communities yesterday "was on a fault at the north end of the Oquirrh mountains," Dr. Hyrum Schneider, Deseret professor of geology at the University of Utah, believes.

The tremor had no connection with the Wasatch range fault, a huge earth break extending from north of Brigham City to Nephi.

Yesterday's quake was most pronounced along the west side of Salt Lake valley, was felt as far north as the southern portion of Morgan county, and south to Kearns. It apparently was centered along an east-west line for it was not felt in Ogden and Provo. "We are always concerned when we get local disturbances, such as this one was," Dr. Schneider said. They are studied, he said, for their possible effect on the Wasatch fault, where a slip could cause disastrous results in the heavily populated Salt Lake City, Ogden and Provo areas.

The quake was recorded at the Utah State Agricultural college seismograph at Logan. Dr. J. Stewart Williams, head of the geology department, fixed the origin at within 150 miles of Logan.

Mexico also experienced an earthquake Monday in which five persons were killed. [Ogden Standard-Examiner; February 23, 1943]

FIRST TEMBLOR SINCE 1934 HITS S. L. AREA Shocks Confined Principally Within Valley

Geologists Monday sought origin of a freakish quake at 8:20 a.m. that gave Salt Lake and vicinity its first "shaky feeling" since the severe shocks of March, 1934. The temblor, lasting several seconds, was confined almost entirely to Salt Lake valley,

although it was felt at Tooele and slightly in southern Morgan county.

Geologists said the source likely was either in the Wasatch fault east of the city or in the Oquirrh mountains on the west edge of the valley.

After studying seismograph records, Dr. Hyrum Schneider, Deseret professor of geology at the University of Utah, described the quake as local and added that it originated within a 100-mile radius.

Lasted Six Minutes

Exact time as recorded on the university seismograph was 8:20.21 a.m. Dr. Schneider said the actual disturbance lasted six minutes, but that it was felt only in the first minute. The machine earlier Monday recorded a severe shock apparently centering in Mexico, which was recorded by other seismographs in the country. He said he could not say whether that temblor had any relation to the one here.

A check at other points showed how the quake was confined to a local area. No shocks were reported at Farmington, Lehi, Provo and Price.

However, strong tremors were reported from Bingham and Magna, where frame homes were shaken. A Telegram correspondent at Bingham said "it felt like my house was being shaken down." A similar report came from Magna.

No Damage Reported

The quake was felt at the International Smelting and Refining company plant at Tooele and in Tooele city, but not at the near-by ordinance depot.

The quake was felt only slightly in Morgan county.

No damage was reported at any point.

The quake was recorded at the Utah State Agricultural college seismograph and Dr. J. Stewart Williams, head of the geology department, fixed the origin at within 150 miles of Logan.

An earlier quake Monday, at about 7:20 a.m., just strong enough to be perceptible, was felt by some residents.

Dr. Schneider said the localized nature of the quake was indicated by the type of record made on the seismograph. The lines were jagged and uneven in contrast to the even, stronger recording of the more distant quake.

One Direction Only

He explained the machine records distant quakes better than near-by ones because it is designed to make horizontal markings only. A local quake would be recorded by vertical markings which the machine does not make.

Professor F. F. Hintze of the university geology department said the source may have been in the Wasatch fault on the east or in faults in the Oquirrh range on the west. Further checks will be necessary to fix the origin, he added.

He said all indications were that the quake was local to Salt Lake valley, notably in the Bingham area.

The tremor was strong enough to sway office buildings and shake residences. Scores of telephone calls were received by The Salt Lake Tribune and Telegram.

Many residents called to report they definitely had felt a quake; others telephoned to ask if it "was really an earthquake."

The weather bureau station at the municipal airport reported feeling "quite a tremor about 8:20 a.m."

Several residents reported being awakened by the quake, which was preceded by a trembling, then went into a gentle, swaying motion that seemed to be from east to west. Paul R. Flint, 419 East Second South street, who resided in Helena, Mont., several years ago when that section of Montana was rocked by hundreds of separate shocks, said he counted 30 seconds during the shock Monday.

Quake Stops Clock

Other estimates ranged from six to ten seconds.

An electric clock at KSL stopped at 8:20.35 a.m., employees said.

Mrs. Marian French, 336 North Main street, said she knew "something unusual was happening" when a large dinner plate fell from a shelf in her home at the time of the earthquake.

"I was preparing breakfast when I felt the shock," she said.

So distinct was the earthquake where W. C. Howe, 923 Third avenue, lives, that he said he was "rocked" when he was shaving. "It felt like the whole house shook," he reported. The last quake felt in Salt Lake City was on March 12, 1934, with the first of a series of sharp temblors at 8:05 a.m. There were several recurrent shocks. Unlike Monday's quake, these were felt throughout northern Utah.

A slight quake was reported in Salt Lake City on January 30, 1934, but it was felt only in the [?] district.

[Salt Lake Telegram; February 22, 1943]

WASATCH FAULT BEHAVES DURING QUAKE

It wasn't the fault of the Wasatch fault, the geological problem child that skirts the east side of Salt Lake valley.

So it was disclosed Tuesday after Dr. Hyrum Schneider, Deseret professor of geology at the University of Utah, studied causes of a baby earthquake that rocked Salt Lake City and vicinity at 8:20 a.m. Monday.

Dr. Schneider, after studying reports from valley sections and seismograph records, said origin of the tremor apparently was in a fault at the north end of the Oquirrh mountains, on the west side of the valley.

He said geologists always are concerned over possibility of the Wasatch fault "acting up" when a quake occurs.

[Salt Lake Telegram; February 23, 1943]

ENGINEERS REPORT QUAKE DAMAGE

The Salt Lake city and county building didn't escape damage in Monday's earthquake, but it took a snowstorm to reveal that fact, Parks Commissioner Fred Tedesco said Thursday as he asked for authority to reroof the north wing of the structure. "It is the opinion of building engineers that the quake opened fissures in a valley of the roof causing drainage to flow into at least one upper floor office," Mr. Tedesco reported. The room which caught the deluge is occupied by City Judge Joseph G. Jeppson's court.

Authority requested was granted. [Salt Lake Telegram; February 25, 1943]

'U' GEOLOGIST ALLAYS S. L. QUAKE FEARS Wasatch Fault Absolved Of Monday Shock

Early fears that Salt Lake's baby earthquake Monday was the result of "acting up" exercises of the Wasatch range fault, which could lead to disastrous results, were dispelled late Monday afternoon by Dr. Hyrum Schneider, professor of geology at the University of Utah.

Monday's minor tremor shocked the University of Utah seismograph at 8:20:21 a.m., mountain war time, and while the shock was felt for about 30 seconds, vibrations continued for about six minutes, Dr. Schneider reported.

Dr. Schneider, pointing out that major displacements along the Wasatch fault must always be considered when a local tremor occurs, said that as a result of study of seismograph records and reports from observers in this area, he believed that "its origin was on a fault at the north end of the Oquirrh mountains," west of Salt Lake City.

1934 Quake Recalled

Not since 1934 has nature's giant hand given this city and vicinity a shock such as took place in the six-minute rocking and bumping felt here Monday morning. Severe tremors were felt in March, 1934.

Most Salt Lakers were up and about when the tremor gave the city its case of the "shakes," and geologists attempting to reach satisfactory conclusions on the origin and nature of the local disturbance found various accounts.

A woman tending a patient at Ninth avenue and J street described it as a "thud--as though someone had fallen out of bed--succeeded by a rumbling" which, however, did not cause anything in the house to shake.

Mistaken for Blast

Other observers in the city reported their houses shook, and dishes rattled or fell to the floor, and at Bingham some believed it to have been a mine blast. Grocers at Bingham said canned goods tumbled from shelves, but windows were intact.

The shock was felt at Tooele and the southern portion of Morgan county, but seemed to have been most pronounced, the university geologist said, on the west side of Salt Lake valley and at Kearns and Magna. Accounts received by him and at newspaper offices indicated the quake "line" ran east and west, and not north and south, for Ogden and Provo seemed to have been entirely unaffected.

"We are always concerned when we get local disturbances, such as this one was," Dr. Schneider said. He pointed out the menace of a slip on the Wasatch fault was revealed some years ago in displacement of serious proportions at the mouth of Little Cottonwood canyon.

Recorded at U S A C

The quake was recorded at the Utah State Agricultural college seismograph at Logan. Dr. J. Stewart Williams, head of the geology department, fixed the origin at within 150 miles of Logan.

Mexico also experienced an earthquake Monday in which five persons were killed. [Salt Lake Tribune; February 23, 1943]

QUAKES START ROOF LEAKS

Earthquake damage has aggravated defects in the city and county building to such an extent that reroofing is necessary immediately, Commissioner Fred Tedesco Wednesday informed the city commission.

He said reroofing was planned for next summer, but "in the past few days large leaks have taken place, and it is the opinion of the building engineer that these were caused by the earthquake Monday morning."

The courtroom of City Judge E. G. Foxley, on the fourth floor of the building, was damaged by roof leaks Tuesday afternoon.

The commission authorized the city purchasing agent to call for bids immediately for reroofing the city's portion of the structure.

[Salt Lake Tribune; February 25, 1943]