

LAKE MEAD SEISMOLOGICAL STATIONS
INSTRUMENTAL REPORT
LOCAL EARTHQUAKES
January, February, March, 1949

The stations at Boulder City and Pierce Ferry operated on routine schedule throughout January, February and March, 1949.

In the following report symbol I represents shocks with small trace amplitudes, II represents a fairly well recorded shock, III represents large trace amplitudes. Barely recorded shocks are marked "Trace". Local shocks are less than 70 miles from the station.

This report covers only such earthquakes that are of local interest; namely the listing and location when possible of all local shocks. Data on distant earthquakes and on regional shocks will be included in the Bulletins of the U. S. Coast and Geodetic Survey, which are issued quarterly.

Epicenters were located in the Lake Mead region as follows:

<u>No.</u>	<u>Date</u>	<u>G. C. T.</u>	<u>Location of Epicenters</u>
1	1-7-49	03:37:04.5	3 miles SW of Hoover Dam
1a	1-7-49	15:11:12.5	1.5 miles SW of Hoover Dam
2	3-15-49	23:04:13.0	3½ miles WNW of Hoover Dam

The following shocks were reported felt in the Lake Mead region: Roman numerals are intensity grades as estimated by the Modified Mercalli Scale of 1931. (Abridged)

<u>No.</u>	<u>Date</u>	<u>G. C. T.</u>	<u>Intensity and Description</u>
1	1-7-49	03:37:05	IV at Boulder City and Hoover Dam. Felt by many. Rattled windows.
1a	1-7-49	04:04:28	II at Boulder City. Felt by few.
	1-7-49	15:11:32	IV at Boulder City. Felt by many. Rattled windows.
	1-10-49	15:08:30	II at Boulder City. Felt by few.
	2-4-49	10:30:45	III at Boulder City and Hoover Dam. Felt by several.
	2-6-49	15:56:17	II at Hoover Dam. Felt by few.

LAKE MEAD SEISMOLOGICAL STATIONS

Bureau of Reclamation, National Park Service
and Coast and Geodetic Survey

MONTH OF *January*

19 *49*

(1)

Time used is

607

BOULDER CITY

OVERTON

PIERCE FERRY

No.	Date	Phase	Time			Period	Trace Amplitude			Phase	Time			Period	Trace Amplitude			Phase	Time			Period	Trace Amplitude		
			h	m	s	T	E	N	Z		h	m	s	T	E	N	Z		h	m	s	T	E	N	Z
1		2	Traces - 5 m1								STATION DOWN														
1		1P 1S	05	11	07.0																				
			08.2																						
			1 Local - 3.5 mi																						
2 - 3		2	Traces - 5 m1																						
3 - 4		1	Trace - 5 m1																						
3		1P 1S	20	49	30.0																				
			30.8																						
			1 Local - 1.5 mi																						
5		1P 1S	23	01	42.2																				
			43.0																						
			1 Local - 1.5 mi																						
5 - 6		1	Trace - 5 m1																						
6 - 7		11	Traces - 5 m1																						
(1) 7		1P 1S	03	37	04.5																				
			05.7																						
			11 Local - 3.8 mi																						
(1) 7		1P 1S	15	11	12.5																				
			13.8																						
			1 Local - 4.2 mi																						
7 - 8		7	Traces - 5 m1																						
8		1P 1S	02	19	26.1																				
			27.5																						
			1 Local - 5 m1																						

EPICENTER NO. 1
3 miles SW of Hoover Dam

EPICENTER NO. 1A
1.5 mi SW of Hoover Dam

e(P) 02 19 36
45

2.

PIERCE FERRY

Date	Phase	Time			Period T	Trace Amplitude		
		h	m	s		E	N	Z
8	LP 1(s)	16	26	53.0				
		27	02.7					
		Weak Trace						
8	LP IS	17	50	40				
		I Local - 2 mi						
8 - 9	h	Traces - 5 mi						
10 - 11	2	Traces - 5 mi						
10	LP IS	15	08	29.5				
		I Local						
13 - 14	2	Traces - 5 mi						
17 - 18	h	Traces - 5 mi						
18	LP IS	18	55	49.1				
		I Local - 2 mi						
18	LP IS	22	10	30.0				
		I Local - 3.5 mi						
20 - 21	2	Traces - 5 mi						
31	1	Trace - 5 mi						
31	LP IS	02	05	50.3				
		I Local						

Inter
No. 3
Date

Date	Phase	Time			Period T	Trace Amplitude		
		h	m	s		E	N	Z
	LP IS	16	26	59.0				
		27	09.6					
		I Local						

+5 +12 +

LAKE MEAD SEISMOLOGICAL STATIONS

Bureau of Reclamation, National Park Service
and Coast and Geodetic Survey

MONTH OF

Time used is

February
1967

19 49

7

BOULDER CITY

OVERTON

PIERCE FERRY

 International Geophysics Center												
Date	Phase	Time h m s	Period T	Trace Amplitude			Phase	Time h m s	Period T	Trace Amplitude		
				E	N	Z				E	N	Z
1	1	Trace - 5 ml										
1	eP 1S	00 17 03.2 05.0						a(P) 1S	00 17 11.5 20.0			
2 - 3	3	Traces - 5 ml						Not operating Feb. 2 - 9				
2	1P 1S	19 24 52.0 52.9										
4	1P 1S	10 30 45.8 47.2		+13	-20	-						
6	1P 1S	04 39 53.5 55.9										
6	1P 1S	15 56 17.0 18.3		+60	+70	-						
8 - 9	3	Traces - 5 ml										
10 - 11	2	Traces - 5 ml										
15	1P 1S	06 14 19.0 20.1										
17	eP	Trace - 3 ml 12 55 02.4										
19								1P 1S	01 29 25.2 26.3	-	-	-
									I Local - 2.5 ml SW			

Bureau of Reclamation, National Park Service
and Coast and Geodetic Survey

24

PIERCE FERRY

[illegible]

LAKE MEAD SEISMOLOGICAL STATIONS
Bureau of Reclamation, National Park Service
and Coast and Geodetic Survey

MONTH OF March 19 49 5.
Time used is 007

BOULDER CITY

OVERTON

PIERCE FERRY

No. Date	Phase	Time			Period T	Trace Amplitude			Phase	Time			Period T	Trace Amplitude			Phase	Time			Period T	Trace Amplitude		
		h	m	s		E	N	Z		h	m	s		E	N	Z		h	m	s		E	N	Z
14	1P 18	20	10	05.4		-20	+70	+																
				06.1																				
				Trace - 1 ml SS																				
15	1P 18	23	04	13.0		+40	+50	-										1P 1(5)	23	04	23.2			
(2)				14.5																				
				1 local - 4 ml SS																				
17		04	48																					
				Trace - 5 ml																				
19		00	09																					
				Trace - 5 ml																				
24		06	55																					
				Trace - 3 ml																				
25	2																							
				Traces - 8 ml																				
30	5																							
				Traces - 2 ml																				

EXPIRATION NO. 2
3 1/2 ml VNA of Hoover Dam

1P
1(5)
23 04 23.2
14.5 ml V

LAKE MEAD SEISMOLOGICAL STATIONS
INSTRUMENTAL REPORT
LOCAL EARTHQUAKES
April, May, June, 1949

The stations at Boulder City, Overton and Pierce Ferry operated on routine schedule throughout April, May and June 1949.

In the following report symbol I represents shocks with small trace amplitudes, II represents a fairly well recorded shock, III represents large trace amplitudes. Barely recorded shocks are marked "Trace". Local shocks are less than 70 miles from the station.

This report covers only such earthquakes that are of local interest; namely the listing and location when possible of all local shocks. Data on distant earthquakes and on regional shocks will be included in the Bulletins of the U. S. Coast and Geodetic Survey, which are issued quarterly.

Epicenters were located in the Lake Mead region as follows:

<u>No.</u>	<u>Date</u>	<u>G. C. T.</u>	<u>Location of Epicenters</u>
3	4-10-49	23:45:46.6	6 miles NW of Hoover Dam
4	4-12-49	23:48:39.0	7 miles W of Hoover Dam
5	4-16-49	01:19:11.6	55 miles NE of Hoover Dam
6	5-4-49	16:19:46.5	4 miles SSW of Hoover Dam
7	5-22-49	11:05:44.4	4 miles S of Hoover Dam
8	5-24-49	06:45:49.5	2 miles S of Hoover Dam
9	5-24-49	06:46:11.3	Same as No. 8

The following shocks were reported felt in the Lake Mead region: Roman numerals are intensity grades as estimated by the Modified Mercalli Scale of 1931. (Abridged)

<u>No.</u>	<u>Date</u>	<u>G. C. T.</u>	<u>Intensity and Description</u>
3	4-10-49	23:45:46	II at Boulder City. Felt by few.
	4-14-49	05:15:58	V at Boulder City. Felt by many. Rattled windows. Shifted small objects.
6	5-4-49	16:19:47	V at Boulder City and Hoover Dam. Felt by many. Rattled windows; shifted small objects.
	5-11-49	05:30:19	IV at Boulder City. Felt by several. Frame creaked.
7	5-22-49	11:05:45	IV at Boulder City. Felt by several. Awakened few.
	5-24-49	10:45:49	IV at Boulder City. Felt by many. Rattled windows.
	5-24-49	10:46:12	IV at Boulder City. Felt by many. Rattled windows.

LAKE MEAD SEISMOLOGICAL STATIONS
Bureau of Reclamation, National Park Service
and Coast and Geodetic Survey

MONTH OF April 19 49
Time used is 0007

PIERCE FERRY

BOULDER CITY

OVERTON

No. Date	Phase	Time h m s	Period T	Trace Amplitude			Phase	Time h m s	Period T	Trace Amplitude			Phase	Time h m s	Period T	Trace Amplitude		
				E	N	Z				E	N	Z				E	N	Z
1																		
2	3	Traces - 3 ml																
4		11 23 Trace - 3 ml																
5		01 43 Trace - 5 ml																
10	4	Traces - 3 ml																
10	1P 1S	23 45 46.6 47.7 III Local - 3 1/2 ml NW		+200-220 +			1(s) 23 46 04.1 Rest obscured 47 ml S SPICHERMAN NO. 3 6 mi NW of Hoover Dam						1P 1S	23 45 57.8 46 06.6 47 ml W				
11	2	Traces - 3 ml																
12	4	Traces - 3 ml																
12	1P 1S	23 48 39.0 40.0 II Local - 2 1/2 ml NW		+160-250 -			Not recording SPICHERMAN NO. 4 7 mi W of Hoover Dam											
13	1P 1S	02 05 26.8 29.0 I Local - 9.2 ml NE		+50+100 -									1P 1S	(00) 50 04.0 12.6 Trace - 45 ml				

LAKE MEAD SEISMOLOGICAL STATIONS
Bureau of Reclamation, National Park Service
and Coast and Geodetic Survey

MONTH OF April & May 19 49 2.
Time used is GCT

BOULDER CITY

OVERTON

PIERCE FERRY

Date	Phase	Time			Period T	Trace Amplitude			Phase	Time			Period T	Trace Amplitude			Phase	Time			Period T	Trace Amplitude		
		h	m	s		E	N	Z		h	m	s		E	N	Z		h	m	s		E	N	Z
13	2	Traces - 3 ml																						
14		02	21																					
		Trace - 8 ml																						
14	1P 1S	05	15	57.8																				
		58.8																						
		11 Local - 3 1/2 ml SE																						
16	ep el	01	19	11.6																				
(5)		23.1																						
		Trace - 60 ml NE																						
24		07	42																					
		Trace - 3 ml																						
27																								
May																								
2	1P 1S	16	31	16.0																				
		16.7																						
		1 Local - 1 ml SE																						
4	1P 1SW 1SE	16	19	46.5																				
(6)		47.3																						
		47.8																						
		11 Local - 4 ml SE																						
4		Traces - 3 ml																						

Light out - epicenter without
Overton
Hoover Dam
S-P = 1.2 sec = 4 min
EPICENTER NO. 6
4 ml SW of Hoover Dam

ep 16 19 57.2
1SW 20 05.5
1SE 44 ml SW
06.1

22 15
Trace - 25 ml

ep 01 19 02.9
1S 07.9
1 Local - 25 ml NE

Not recording

Bureau of Reclamation, National Park Service
and Coast and Geodetic Survey

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PIERCE FERRY

[illegible]

• 47 •

[illegible]

LAKE MEAD SEISMOLOGICAL STATIONS

Bureau of Reclamation, National Park Service
and Coast and Geodetic Survey

MONTH OF

Time used is

BOULDER CITY

OVERTON

PIERCE FERRY

[illegible]

LAKE MEAD SEISMOLOGICAL STATIONS
INSTRUMENTAL REPORT
LOCAL EARTHQUAKES
July, August, September, 1949

The stations at Boulder City, Overton and Pierce Ferry operated on routine schedule throughout July, August and September, 1949.

In the following report symbol I represents shocks with small trace amplitudes, II represents a fairly well recorded shock, III represents large trace amplitudes. Barely recorded shocks are marked "Trace". Local shocks are less than 70 miles from the station.

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<u>No.</u>	<u>Date</u>	<u>G. C. T.</u>	<u>Location of Epicenters</u>
10	7-22-49	09:38:39.5	3 miles SW of Hoover Dam
11	7-24-49	04:51:59.0	3½ miles SW of Hoover Dam
12	8-2-49	11:46:41.0	5½ miles SW of Hoover Dam
13	8-2-49	13:29:25.5	Same as No. 12
14	8-3-49	07:00:14.1	7.2 miles SSW of Hoover Dam
15	8-5-49	22:55:12.7	8 miles NW of Hoover Dam
16	8-6-49	22:03:09.0	5½ miles NE of Hoover Dam
17	8-7-49	05:24:16.8	Same as No. 16
18	8-7-49	22:51:08.0	5½ miles NNE of Hoover Dam
19	8-8-49	11:12:12.3	4 miles SW of Hoover Dam
20	8-11-49	09:22:25.6	5 miles SW of Hoover Dam
21	8-16-49	21:41:24.6	5.8 miles SSW of Hoover Dam
22	8-22-49	06:36:18.5	6.9 miles SW of Hoover Dam
23	8-22-49	05:44:58.7	6.3 miles SW of Hoover Dam
24	9-15-49	00:34:21.0	7 miles W of Hoover

The following shocks were reported felt in the Lake Mead region: Roman numerals are intensity grades as estimated by the Modified Mercalli Scale of 1931. (Abridged)

<u>No.</u>	<u>Date</u>	<u>G. C. T.</u>	<u>Intensity and Description</u>
	7-14-49	03:31:53	III at Boulder City and Hoover Dam. Felt by several.
	7-20-49	05:02:41	II Felt by few at Boulder City.
	7-20-49	08:09:14	II at Boulder City. Felt by few.
	7-20-49	20:37:58	III at Boulder City. Felt by several.

<u>No.</u>	<u>Date</u>	<u>G. C. T.</u>	<u>Intensity and Description</u>
	7-20-49	20:44:56	III at Boulder City. Felt by several.
	7-20-49	20:55:52	III at Boulder City. Felt by several.
	7-21-49	07:09:08	Felt by few at Boulder City.
	7-21-49	19:42:17	II at Boulder City and Hoover Dam. Felt by few.
10	7-22-49	09:34:40	IV at Boulder City and Hoover Dam. Felt by many; awakened few.
	7-23-49	04:29:08	III at Boulder City. Felt by several.
11	7-24-49	04:51:59	II at Boulder City. Felt by few.
	7-29-49	08:14:06	II at Boulder City. Felt by few.
12	8-2-49	11:46:41	III at Boulder City and Hoover Dam. Felt by several.
19	8-8-49	11:12:13	IV at Boulder City. Felt by few; frightened few.
20	8-11-49	09:22:26	III at Boulder City and Hoover Dam. Felt by several.
	8-17-49	02:55:54	II at Boulder City. Felt by few.
21	8-17-49	21:41:24	IV at Boulder City. Felt by many.
22	8-22-49	06:10:50	II at Boulder City. Felt by few.
23	8-22-49	05:44:59	IV at Boulder City and Hoover Dam. Felt by many. Rattled windows.

CONFIDENTIAL - NOT FOR PUBLICATION

PIERCE FERRY

Phase	Time
h	m

[illegible]

LAKE MEAD SEISMOLOGICAL STATIONS
Bureau of Reclamation, National Park Service
and Coast and Geodetic Survey

MONTH OF **JULY** 19 **49**
Time used is **OCT** 2.

BOULDER CITY

OVERTON

PIERCE FERRY

No. Date	Phase	Time			Period T	Trace Amplitude			Phase	Time			Period T	Trace Amplitude			Phase	Time			Period T	Trace Amplitude		
		h	m	s		E	N	Z		h	m	s		E	N	Z		h	m	s		E	N	Z
20	1P 1S	05	02	40.0 41.0		+	-	-																
		I Local - 2 1/4 mi SW																						
20	4	Traces - 2 mi																						
20	1P 1S	11	10	46.6 47.6		+	-	-																
		I Local - 2 1/4 mi SW																						
20	2	Traces - 2 mi																						
20	1P 1S	20	43	57.1 58.1		+20	-30																	
		I Local - 2 1/4 mi SW																						
21	5	Traces - 2 1/4 mi																						
21	1P 1S	19	42	17.3 18.3		-	-	+		11	19	42	40.0											
		I Local																						
22	2	Traces - 2 1/4 mi																						
22 (10)	1P 1S	09	38	39.5 40.7		-50	-	+		1P 1S	09	38	47.8 57.6											
		III Local - 1 mi SW																						
23	4	Traces - 3 mi																						
23		OH 29																						
		Trace - 3 mi																						
24 - 24	6	Traces																						

42. mi S
EPICENTRE NO. 10
3 mi SW of Hoover Dam

LAKE MEAD SEISMOLOGICAL STATIONS
Bureau of Reclamation, National Park Service
and Coast and Geodetic Survey

MONTH OF July & August 1949
Time used is OCT 3.

BOULDER CITY

OVERTON

PIERCE FERRY

No. Date	Phase	Time			Period T	Trace Amplitude			Phase	Time			Period T	Trace Amplitude			Phase	Time			Period T	Trace Amplitude			
		h	m	s		E	N	Z		h	m	s		E	N	Z		h	m	s		E	N	Z	
(11) 24	1P 1S	04	51	59.0		+20	+20	-	1P 1S	04	52	09.1					e(P) 1S	04	52	09.0					
			52	00.0							42 1/2 mi S EPICENTER NO. 11 3 1/2 mi SW of Hoover Dam								17.8						
24 - 25	3	Traces - 2 mi																							
25		22	14																						
		Trace - 3 mi																							
29		08	14																						
		Trace - 3 mi																							
August																									
(12) 2	1P 1S	11	46	41.0		+5	+30	-	1P 1S	11	46	51.0					1P 1S	11	46	51.9					
			42.0								47	00.0							47	00.6					
		11 Local - 2 1/2 mi SW								4 1/2 mi SW EPICENTER NO. 12 5 1/2 mi SW of Hoover Dam								4 5 1/2 mi SW							
2	1P 1S	11	53	44.4		+18	+12	-	1P 1S	11	53	55.2					1P 1S	11	53	55.2					
		1 Local								Trace								5 1/4 04.0							
2	5	Traces - 5 mi							1	09	39.8								09	39.8					
		Traces - 5 mi								Trace - 8 mi															
(13) 2	1P 1S	13	29	25.5					e(P) 1S	13	29	36.4							13	29	36.4				
			26.6								45.0									45.0					
		1 Local - 2 1/2 mi SW								4 5 1/2 mi SW															
2 - 3	5	Traces - 5 mi																							

EPICENTER NO. 13
Same as No. 12

M=1073

International
Seismological
Centre

LAKE MEAD SEISMOLOGICAL STATIONS

Bureau of Reclamation, National Park Service
and Coast and Geodetic Survey

MONTH OF

August
602

1949

4.

Time used is

BOULDER CITY

OVERTON

PIERCE FERRY

No. Date	Phase	Time			Period T	Trace Amplitude			Phase	Time			Period T	Trace Amplitude			Phase	Time			Period T	Trace Amplitude		
		h	m	s		E	N	Z		h	m	s		E	N	Z		h	m	s		E	N	Z
(14) 3	1P 1S	07	00	14.1 15.4		+8	-1	-	1P 1S	07	00	26.0 35.7					1P 1S	07	00	24.8 33.7				
	1 Local - 4 mi SE							46 mi S EPICENTER NO. 14 7.2 mi SW of Hoover Dam h = 13 km.							46 1/2 mi SW									
5	1P	03	07.8			+5	+3	-										03	08					
5		1 Local - 5 mi NNE																Trace						
		15	10															15	10					
		Trace																Trace						
(15) 5	1P 1S	22	55	12.7 15.7		+21	+26	-	1P 1(S)	22	55	17.2 25.7					1P 1S	22	55	19.0 26.7				
	1 Local - 12 mi NE								32 mi SW EPICENTER NO. 15 8 mi NW of Hoover Dam							39 mi W								
(16) 6	1P 1S	22	03	09.0 11.8		+15	+30	-	1P e	22	03	14.5 20.9					1P 1S	22	03	15.7 23.2				
	1 Local - 12.7 mi NNE								34 1/2 mi EPICENTER NO. 16 5 1/2 mi NW of Hoover Dam							39 mi W								
6	1P 1S	23	25	27.3 28.3		+15	-12	-									1P 1S	23	25	38.9 46.7				
	1 Local - 3 mi SE																							
(17) 7	1P 1S	05	24	16.8 19.6		+24	+35	-	1P 1S	05	24	22.3 28.3					1P 1S	05	24	23.3 31.0				
	1 Local - 12.7 mi NNE								34.5 mi EPICENTER NO. 17 Same as No. 16							39 mi W								
7 - 8	19	Traces - 5 mi																Traces - 5 mi						

5.

Time used is

PIERCE FERRY

[illegible]

6.

Time used is

PIERCE FERRY

No.	Date	Phase	Time h m s	Period T	Trace Amplitude				
					E	N	Z		
8		IP IS	12 50 37.6 40.2 Trace - 10 ml						
8 - 9		J	Traces - 5 ml						
9		IP IS	19 49 26.8 29.9 Trace - 10 ml						
10		IP IS	04 35 27.2 30.3 Trace - 10 ml						
10 - 11		H	Traces - 5 ml						
11 (20)		IP IS	09 22 25.6 26.7 1 Local - 3 ml						
11 - 12		6	Traces - 5 ml						
12		IP IS	13 48 05.7 08.5 1 Local - 1 1/4 ml						
12 - 13		1	Trace - 5 ml						
15 - 16		5	Traces - 5 ml						
16		IP(P) I(S)	17 19 20.7 30.0 Trace						

No.
Date

IP(P) 09 22 35.6
IP(S) 48.5
EPICENTER NO. 20
5 ml SW of HOWER DAM

IP
IS

09 22 35.6
48.5
45 ml

1
04 35 41.3

IP
IS

13 48 05.7
08.5
Trace

1
09 22 36.3
45.0

LAKE MEAD SEISMOLOGICAL STATIONS

Bureau of Reclamation, National Park Service
and Coast and Geodetic Survey

MONTH OF August

19 49

7.

Time used is 007

International
Seismological
Centre

BOULDER CITY

OVERTON

PIERCE FERRY

No. Date	Phase	Time			Period T	Trace Amplitude			Phase	Time			Period T	Trace Amplitude			Phase	Time			Period T	Trace Amplitude		
		h	m	s		E	N	Z		h	m	s		E	N	Z		h	m	s		E	N	Z
16 (21)	1P 1S	21	41	24.6 25.7		+230	-168	-	1P 1S	21	42	35.2 45.0					1P 1S	21	41	35.5 44.0				
		III Local - 3 mi								II Local 44.8 mi PIERCE FERRY NO. 21 5.8 mi SSW of Hoover Dam								II Local - 46 mi						
16 - 17	8	Traces - 5 mi																						
17	1P 1S	02	54	53.8 55.0					eP 1(S)	02	55	04.0 13.0												
		II Local - 6 mi								Trace														
17 - 18	1	Trace - 5 mi																						
18 - 19	2	Traces - 5 mi																						
18	1P 1P 1S 1S	19	15	05 05.8 22.1 22.6		-14 +68	-11 +52	+	1P 1(S)	19	14 15	58.9 09.6					1P 1S	19	14 15	54.1 01.8		-62 -212	+	
		III Regional - 80 mi SW								III Local - 37 mi SW								III Local - 36 mi SW						
19 - 20	1	Trace - 5 mi																						
20 - 21	1	Trace - 5 mi																						
22 (23)	1P 1S	05	44	58.7 59.8		+60	-28	-	1(P) 1(S)	05	45	09.4 21.6					1P 1S	05	45	09.6 18.6				
		I Local - 3 mi SW								45.5 mi PIERCE FERRY NO. 23 6.3 mi SW of Hoover Dam								46.3 mi						
22 (22)	1P 1S	06	36	18.5 19.6		+28	-25	-	eP eS	06	36	29.4 41.5					eP eS	06	36	29.7 39.0				
		II Local - 3 mi								46 mi PIERCE FERRY NO. 22 6.9 mi SW of Hoover Dam								47.2 mi						

067

PIERCE FERRY

Date	Phase	Time h m s	Period T	Trace Amplitude			Phase	Time h m s	Period T	Trace Amplitude			Phase	Time h m s	Period T	Trace Amplitude		
				E	N	Z				E	N	Z				E	N	Z
22	1P 1S	07 24 20.3 21.2		+20	+	-							0(5)07 24 45					
22	1P 1S	07 29 07.3 07.8		+10	+15	-							Trace					
22	1P 1S	10 41 51.1 52.4		+12	+12	-							Trace					
22	1P 1S	15 30 40.9 42.0		?	?	-5							Trace					
22	1P 1S	17 55 39.3 40.5		+2	(+7)	-							Trace					
24	1(P) 1S	01 16 13.8 15.0																
24	1P	02 18 42.6																
25													Traces - 5 m					
26													Trace					
28													Trace					
28	1	22 15 00.7											Trace					

LAKE MEAD SEISMOLOGICAL STATIONS
Bureau of Reclamation, National Park Service
and Coast and Geodetic Survey

MONTH OF August & 19 49
Time used is 007 September 9.

BOULDER CITY

OVERTON

PIERCE FERRY

No. Date	Phase	Time			Period T	Trace Amplitude			Phase	Time			Period T	Trace Amplitude			Phase	Time			Period T	Trace Amplitude		
		h	m	s		E	N	Z		h	m	s		E	N	Z		h	m	s		E	N	Z
31	1P 1S	09	10	33.5 34.5																				
		Trace																						
7	1P 1S	16	49	37.5 38.6		-2	+5	+																
		Trace - 5 ml			SK																			
8	1P 1S	08	01	24.5 25.6		-10	+10	+																
		Trace - 5 ml			SK																			
8		18	30																					
		Trace - 5 ml																						
11		22	45																					
		Trace - 5 ml																						
12		00	25																					
		Trace - 5 ml																						
15 (24)	1P 1S	00	34	21.0 22.0		-50	+100	-	1S	00	34	40.5												
		Trace - 5 ml																						
		Trace - 5 ml																						
15		10	43																					
		Trace - 5 ml																						
15		11	27																					
		Trace - 5 ml																						
15 - 16		Traces - 3 ml																						

43 ml SW
EPICENTER NO. 24
7 ml W of Hoover Dam
ca 15 km. deep

LAKE MEAD SEISMOLOGICAL STATIONS
Bureau of Reclamation, National Park Service
and Coast and Geodetic Survey

MONTH OF September 19 49 10.
Time used is 007

OVERTON

PIERCE FERRY

No. Date	Phase	Time			Period T	Trace Amplitude			Phase	Time			Period T	Trace Amplitude			Phase	Time			Period T	Trace Amplitude		
		h	m	s		E	N	Z		h	m	s		E	N	Z		h	m	s		E	N	Z
16	1P 1S	10	58	32.4		-20	+20	+									e	10	58.5					
		I Local - 3 m1 58																Trace						
18		19	34														eP	19	34	12				
		Trace																						
25																	e	08	02					
																		Trace						
26 - 27	3	Traces - 5 m1																						
30		05	44																					
		Trace - 5 m1																						

LAKE MEAD SEISMOLOGICAL STATION
INSTRUMENTAL REPORT
LOCAL EARTHQUAKES
October, November, December, 1949

The stations at Boulder City, Overton and Pierce Ferry operated on routine schedule throughout October, November and December, 1949.

In the following report symbol I represents shocks with small trace amplitudes, II represents a fairly well recorded shock, III represents large trace amplitudes. Barely recorded shocks are marked "Trace". Local shocks are less than 70 miles from the station.

This report covers only such earthquakes that are of local interest; namely the listing and location when possible of all local shocks. Data on distant earthquakes and on regional shocks will be included in the Bulletins of the U. S. Coast and Geodetic Survey, which are issued quarterly.

Epicenters were located in the Lake Mead region as follows:

<u>No.</u>	<u>Date</u>	<u>G. C. T.</u>	<u>Location of Epicenters</u>
25	10-8-49	05:34:23.6	5½ miles N of Hoover Dam
26	10-8-49	06:47:05.2	Same as No. 25
27	10-8-49	07:28:38.5	Same as No. 25
28	10-27-49	11:58:51.1	7½ miles NNW of Hoover Dam
29	11-16-49	18:25:10.0	6 miles W of Hoover Dam

The following shocks were reported felt in the Lake Mead region: Roman numerals are intensity grades as estimated by the Modified Mercalli Scale of 1931. (Abridged)

<u>No.</u>	<u>Date</u>	<u>G. C. T.</u>	<u>Intensity and Description</u>
25	10-8-49	05:34:31	IV Felt at Boulder City by several
26	10-8-49	06:47:13	IV at Boulder City. Felt by several; rattled windows.
27	10-8-49	07:28:46	IV at Boulder City. Felt by several; rattled windows.
	12-12-49	01:13:06	I at Boulder City. Felt by one.

CONFIDENTIAL - NOT FOR PUBLICATION

M-1073

International
Seismological
Centre

LAKE MEAD SEISMOLOGICAL STATIONS

Bureau of Reclamation, National Park Service
and Coast and Geodetic SurveyMONTH OF **October**19 **49**

1.

Time used is **007**

BOULDER CITY

OVERTON

PIERCE FERRY

No. Date	Phase	Time h m s	Period T	Trace Amplitude			Phase	Time h m s	Period T	Trace Amplitude			Phase	Time h m s	Period T	Trace Amplitude		
				E	N	Z				E	N	Z				E	N	Z
7-8	10	Traces - 5 ml																
8 (25)	1P 1S	05 34 23.6 25.8 1 Local - 9 ml NNE		+80	+90	-							1P 1S	05 34 31.9 39.6 41 ml W				
8 (26)	1P 1S	06 47 05.2 07.4 1 Local - 9 ml NNE		+100	+150	-	1	06 47 18.2 34 ml S EPICENTER NO. 25 Same as No. 25 5 1/2 ml W of Hoover Dam					1P 1S	06 47 13.5 21.1 41 ml W				
8 (27)	1P 1S	07 28 38.5 40.7 1 Local - 9 ml NNE		+80	+90	-							1P 1S	07 28 46.5 54.2 41 ml W				
8		21 04 Trace - 9 ml																
9	1P 1S	06 49 25.8 26.4 1 Local - 1 ml NNE		+10	+10	-							1(L) Trace	06 49 42				
9		11 15 Trace - 9 ml																
23														04 08 Trace				
23 - 24	5	Traces - 5 ml																
26 - 27	5	Traces - 10 ml																

EPICENTER NO. 21
Same as No. 25EPICENTER NO. 26
Same as No. 25EPICENTER NO. 25
5 1/2 ml W of Hoover Dam

LAKE MEAD SEISMOLOGICAL STATIONS
Bureau of Reclamation, National Park Service
and Coast and Geodetic Survey

BOULDER CITY

PIERCE FERRY

MONTH OF October and November 19 49 2.
Time used is 001

No. Date	Phase	Time h m s	Period T	Trace Amplitude			Phase	Time h m s	Period T	Trace Amplitude			Phase	Time h m s	Period T	Trace Amplitude		
				E	N	Z				E	N	Z				E	N	Z
27 (28)	1P 1S	11 58 51.1 53.3 IX Local - 9		+100	+150	-	1P 1S	11 58 51.1 59 05.8 35 m1 S EPICENTRE NO. 28 7 1/2 m1 NW of Hoover Dam					1P 1S	11 59 00.0 08.0 43.5 m1 W				
28		03 55 Trace - 10 m1												06 40 22 55 Traces				
29																		
<u>November</u>																		
2		18 56 Trace - 5 m1						18 02 Trace - 5 m1										
2																		
3	1P 1(S)	22 32 15.9 24.0 I Local - 32 ca 10 m1 W of Las Vegas	-1	+	-		1	22 32 18 40 m1 SW					1P 1S	22 32 22.5 33.5 58.5 m1 W	+	+	+	
4		04 25 Trace - 5 m1																
7		01 54 Trace - 3 m1																
9		08 23 Trace - 3 m1												08 37 Trace - 10 m1				

Bureau of Reclamation, National Park Service
and Coast and Geodetic Survey

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PIERCE FERRY

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Bureau of Reclamation, National Park Service
and Coast and Geodetic Survey

Time used is

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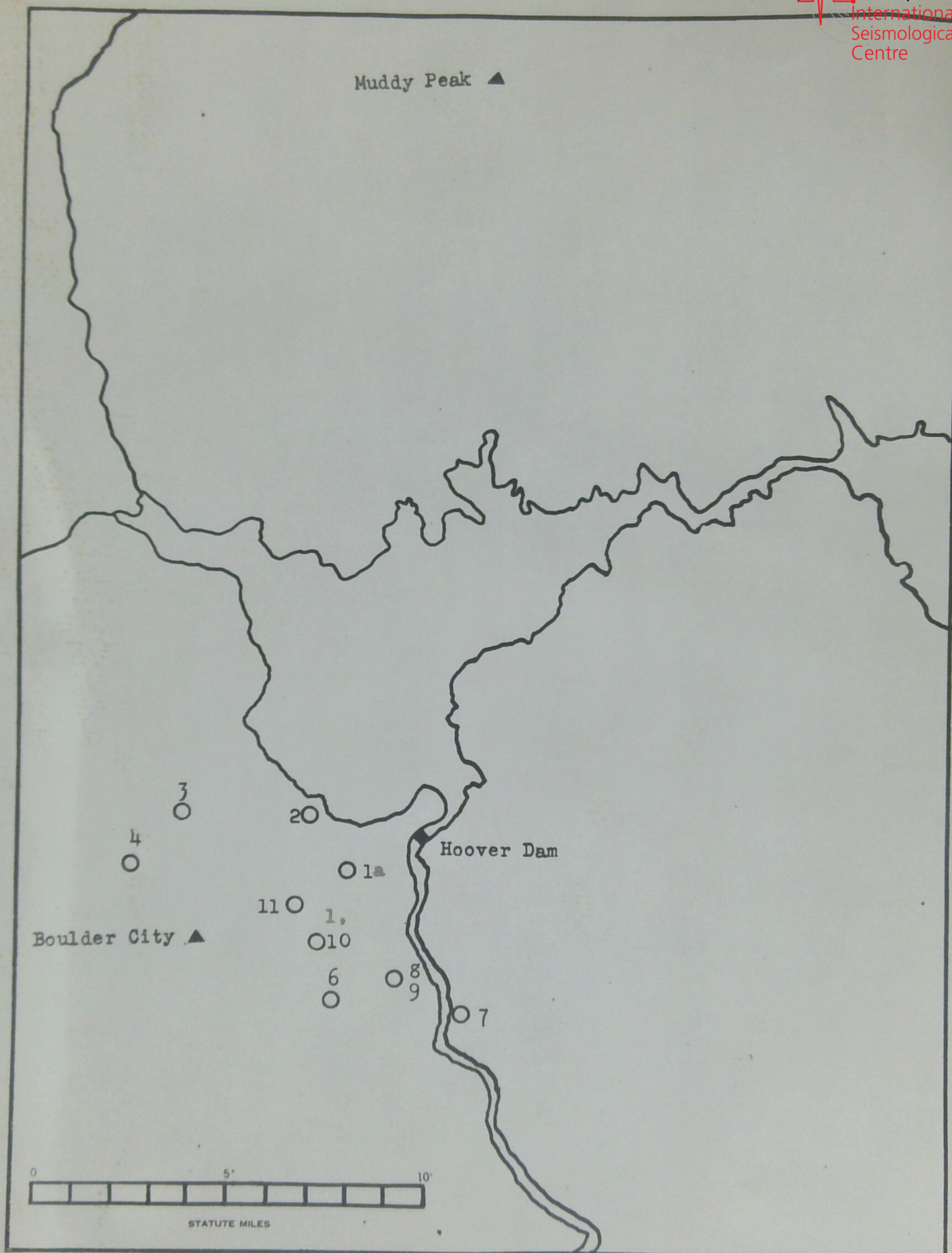


BOULDER CITY

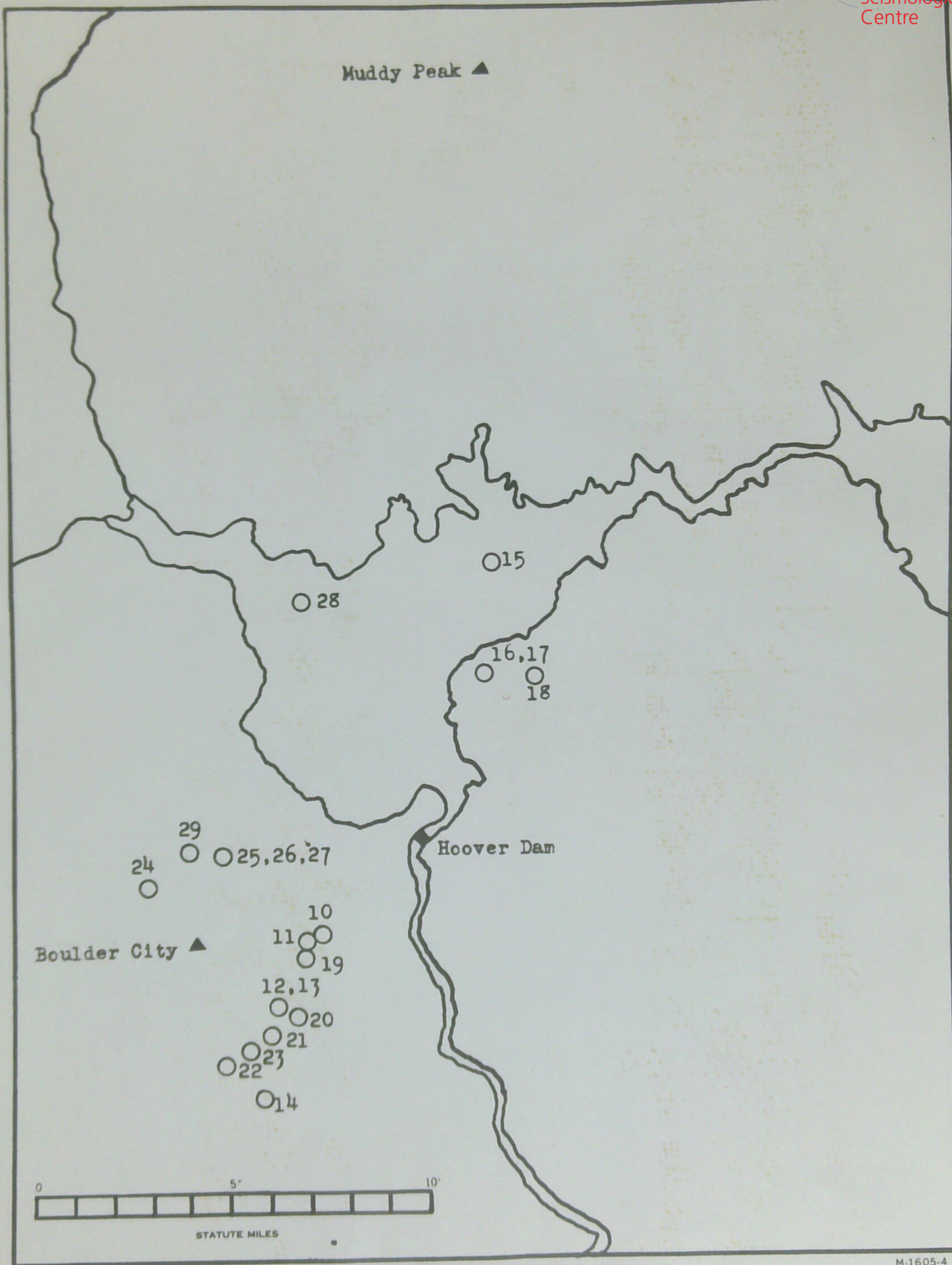
OVERTON

PIERCE FERRY

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TENTATIVE EPICENTERS - JANUARY - JULY 1949



TENTATIVE EPICENTERS - AUGUST - DECEMBER 49