

GLO1517

Roosevelt Induced Seismicity Stations

<u>Sta</u>	<u>Lat.</u>	<u>Long.</u>	<u>Elev. (ft.)</u>
BVK	38° 28.16'	113° 04.14'	5394.2
MNU	38° 37.18'	112° 50.84'	5443.8
PCY	38° 20.24'	112° 54.25'	6336.8
MWA	38° 29.96'	112° 50.89'	6123.1
LWA	38° 29.32'	112° 51.73'	5970.1
DPL	38° 29.02'	112° 52.47'	5763.5
RHU	38° 28.34'	112° 50.94'	6139.7
CFE	38° 27.90'	112° 51.13'	6132.5
WLD	38° 27.63'	112° 51.88'	5874.9
CFU	38° 37.13'	112° 32.39'	6603.4

Stations as determined by transit

Survey Aug 17-21 1981 (C.S.M.)



1	2	3	4	5	6	7	8	9	10	11	12	13
BS	T	FS	4D	AE	SD	Y ₁	Y ₂	Azimuth Hx	Elev	COMM	Notes	
4.7' @ TPA PPM @ 56 76°F	@ SC 1412 1413	14110	2639.777	-21.515	2639.863	90 28 12	357 59 59	5731.0	5049.015		Pne north Azimuth T 3.5' above 1/4 cor to Tripod plate	
		@ BM FRR	4599.688	129.495	4601.525	88 23 32	298 47 34	5182.01			Turned Hx Counter Clockwise (CCW) to F BM stamped w/5258'	
	@ 1/4 14113	@ BM FRR	4599.492	-126.401	4601.215	91 34 45	317 23 26	5049.015			T 1.95' above BM New Hx setting	
		TP 1	960.978	52.927	962.426	86 50 53	164 48 35	5228.343			(CC) Hx check (new) - 1/4 14111	195 11 59
	WSD ⁵ BM FRR	TP1	960.951	-50.575	962.281	93 00 50	236 42 20	5182.01			New Hx Ref.	
		Sta. BVK	1728.125	161.586	1735.670	87 39 37	158 26 22	5394.171			@ Seismic Station BVK	Hx CC
PPM @ 72 88°F	@ SC 30/29 31/32	T	2256.878	134.200	2260.871	86 35 59	323 28 49	6438.0	6303.8		New Hx setting on ridge just west of PCY	
		@ PCY	228.787	33.031	231.160	81 47 05	67 16 28	6336.831			@ rd jet 5813' just N. of emergency Tower	
		1	8112.541	491.485	8127.320	93 28 34	270 09 20	5812.315			@ SC 30/29 31/32 for recheck	
		2	2256.909	134.141	2260.899	86 36 05	359 59 29	6437.941				
PPM @ 56 80°F	@ SC 21/22 28/27	T	3726.054	-222.915	3732.697	93 25 42	88 52 09	5180.0			no monument. pile of rocks & dirt on fence	
	SC 16/15 21/22	SC	3726.032	-222.948	3732.676	93 25 46	88 52 10				in rd jet HI 4.65'	
	with west dead	MNU	1769.508	117.994	1773.443	86 11 13	201 44 15				no monument pile of rocks & dirt station MNU Red w/ new Bent	
		SC1	3914.245	-145.858	3916.949	92 08 20	69 30 29				@ starting SC 21/22 28/27	
PPM @ 59 82°F	@ SC 21/22 28/27	T	3914.242	-145.833	3916.944	92 08 18	271 14 44	5180.0			Repeat of Above Series for MNU new ref.	
		SC	3726.065	-222.939	3732.709	93 25 48	88 51 37	5325.883			in rd jet HI 4.65'	
		MNU	1769.503	117.991	1773.438	86 11 17	290 29 24	5443.824				
		MNU	1769.513	118.089	1773.454	86 11 04	290 29 12					
		Repeat										
								(00 00 17)			check w/ starting Azimuth	

note: all Hx measured clockwise from reference bearing. Bearings Ref. X ()



Rad	1 BS	2 T	3 FS	4 HD	5 E	6 SD	7 Az	8 Azimuth Hx	9 Elev.	10 Comments	12	13
4.7'	1 @ SC 28.127 33.134			4153.815	-294.364	4164.203	94 03 32	222 22 16	5799	New Ref. Hx		
		PT1							6093.364	Top of Hill east of seismic		
		HI 4.67'	@ 1/4 mi 33.134	3394.546	-217.942	3401.518	93 40 47	320 38 29	5875.422	Rad 4.7+7" sitting on slope @ 1/4 mi		
			MWA	3065.144	29.582	3065.289	89 27 02	231 56 09	6122.946	@ Seismic sta MWA		
			TP1	4304.872	69.474	4305.440	89 04 50	240 02 48	6162.838	Top of small Hill Temp. Elev. 6161		
	PT1	TP1		4304.853	-69.065	4305.400	90 55 27	129 14 29	6093.364	TP1 @ N.S.G.S. Great "M.M. Wash" new Hx ref		
		HI 3.5'	MWA	1341.885	-39.226	1342.458	91 40 34	18 47 42	6123.203			
			TP2	4158.674	-112.990	4160.198	91 33 41	176 04 19	6049.439	@ Rd jet - elev 6057 on main rd		
			LWA	4371.018	-192.363	4375.229	92 31 30	227 10 52	5970.066	@ Seismic sta. LWA		
			TP3	NO distance available					353 22 00	Bad DRAC		
82°F	11 TP1	TP2		4158.724	112.820	4160.266	88 27 03	270 16 32	6162.858	New Ref. Hx		
67 PPM	12	HI 4.1'	TP3	3722.642	-92.429	3723.782	91 25 36	284 13 53	5957.589			
	13		LWA	3684.194	-79.920	3685.054	91 14 49	292 34 18	5970.098			
	14		TP4	6017.986	-124.961	6019.265	91 11 48	206 48 35	5925.057	@ SC 9/15 16/15		
	15	TP2	TP3	3723.035	91.422	3724.165	88 35 52	109 43 09	6049.439	New Ref. Hx		
	16	HI 4.39'	TP4	6349.440	-31.756	6349.596	90 17 38	67 40 48	5926.261	Clear shot - use for elev. on SE 9/15		
	17		TP5	6520.554	-66.094	6520.878	90 35 18	87 44 32	5891.923	Top of open strand fault		
	18		DPL	5542.143	-194.464	5547.461	93 08 48	141 07 46	5763.553	@ Seismic sta. DPL		
	19											
78°F	20	TP4	TP5	2248.651	32.39	2248.886	89 10 38	231 46 39	5925.659	New Hx Ref.		
64 PPM	21		WLD	3594.673	-18.362	3594.719	90 17 49	72 33 20	5874.907			
	22		DPL	5244.943	-129.732	5246.532	91 25 23	251 30 59	5763.537			
	23		R.H.H	5695.122	246.429	5700.485	87 31 45	351 31 27	6139.698			
	24		C.V.E	5083.597	239.276	5089.265	87 18 40	21 16 14	6132.545			
	25		TP3	6520.662	64.368	6520.990	89 26 32	284 20 22	5957.637			
	26		TP2	7380.181	156.287	7381.864	88 47 44	314 36 21	6049.556			
	27											
check above?	28	PI	TP1	4333.141	-119.377	4334.772	91 34 59	270 16 54	6275	Top of small Hill S. center see 29		
00 00 11	29	HI 4.55'	P2	2826.229	-146.116	2829.994	92 57 46	342 08 41	6248.261	@ Rd Jet.		
	30		C.F.U	6420.020	209.034	6423.454	88 08 34	281 55 20	6603.411	@ C.F.U Seismic sta		
	31		SC 14/20 30/29	114.577	-9.167	114.943	94 34 29	149 46 43	6385.21			
			P4 P5-	NO readings for reaction			Hx only		311 13 04 334 30 13	Top of Peak - good shot Top of small Hill		

	Lat.	Long								
ENR	38 28.00N112	51.50W	999.	1.0					0.0	0
PCY	38 20.07N112	54.15W20331.0	1 0.0		0.0	0.0	1 0.0		0.0	0
RHN	38 28.34N112	50.83W18901.0	1 0.0		0.0	0.0	1 0.0		0.0	0
CFU	38 37.13N112	32.32W20121.0	1 0.0		0.0	0.0	1 0.0		0.0	0
MNO	38 37.19N112	50.84W16641.0	1 0.0		0.0	0.0	1 0.0		0.0	0
BAP	38 31.59N112	47.70W23871.0	1 0.0		0.0	0.0	1 0.0		0.0	0
BVK	38 28.22N113	04.29W17071.0	1 0.0		0.0	0.0	1 0.0		0.0	0
WLD	38 27.61N112	51.83W18041.0	1 0.0		0.0	0.0	1 0.0		0.0	0
CVE	38 27.89N112	51.08W18901.0	1 0.0		0.0	0.0	1 0.0		0.0	0
LPL	38 28.98N112	52.42W17661.0	1 0.0		0.0	0.0	1 0.0		0.0	0
LWA	38 29.32N112	51.71W18171.0	1 0.0		0.0	0.0	1 0.0		0.0	0
MWA	38 30.10N112	50.73W18781.0	1 0.0		0.0	0.0	1 0.0		0.0	0
FSU	39 43.35N113	23.48W14871.0	1 0.0		0.0	0.0	1 0.0		0.0	0
SGU	39 10.97N111	38.60W23651.0	1 0.0		0.0	0.0	1 0.0		0.0	0
MSU	38 30.80N112	10.45W21411.0	1 0.0		0.0	0.0	1 0.0		0.0	0
WCU	38 57.88N112	05.40W27141.0	1 0.0		0.0	0.0	1 0.0		0.0	0
RMI	42 04.48N113	20.94W19001.0	1 0.0		0.0	0.0	1 0.0		0.0	0
JSM	42 07.84N113	22.98W20001.0	1 0.0		0.0	0.0	1 0.0		0.0	0
NWR	42 05.96N113	26.29W21001.0	1 0.0		0.0	0.0	1 0.0		0.0	0

*
*
*
*
*
*
*
*

EARTH SCIENCE LABORATORY
UNIVERSITY OF UTAH RESEARCH INSTITUTE

ROAD LOG TO PCY
10-AUG-81
S.L.OLSEN and K.D.HOLBROOK

- 0.0 Take highway 21 south out of Milford to mile marker 78 make a left (east) turn on to pass road. There is a sign showing pass rd.This rd will turn to dirt after a short distance.
- 1.4 continue main road left
- 2.0 note red and white tower on the right continue
- 5.4 Take right fork note sign to Beaver and microwave towers on the right.
- 6.4 take right fork
- 6.6 road joins from the right
- 7.8 at cattle guard turn off main road to the right and follow the fence road south (put in 4 wheel drive).This road is rough with alot of ups and downs .DO NOT ATTEMPT without four wheel drive.
- 8.0 at this point road deverts to the right from the fence.
- 8.2 crossroad-continue south bound
- 8.4 top of a hill-stop.The site is to the east roughly 20 yd.s from road. There is evidence of vehicles pulling off the road.

*
*
*
*
*
*
*
*

EARTH SCIENCE LABORATORY
UNIVERSITY OF UTAH RESEARCH INSTITUTE

ROAD LOG to BVK
10-AUG-81
S.L.OLSEN and K.D.HOLBROOK

- 0.0 starting point DOT garage north of Milford on Utah Highway 257
- 3.6 turn left (West) at cattle crossing warning
- 4.2 take left fork (gravel pit)
- 4.4 cattle guard continue due west toward copper mine on mountains
- 6.3 cross road-yield sign turn right (North)
- 7.7 turn off main road to the left -dirt trail-
- 7.8 road fades
- 8.1 fork (somewhat obscure) take right road
- 8.2 at this point look for antenna on mountain
- 8.3 park and walk up hill to the west

 *
 * EARTH SCIENCE LABORATORY
 * UNIVERSITY OF UTAH RESEARCH INSTITUTE
 *
 * ROAD LOG to OPL and LMA
 * 10-AUG-81
 * S.L.OLSEN and K.D.HOLBROOK
 *

- 0.0 starting point DOT garage north of Milford on Utah Highway 257
- 3.9 sign Opal at Milford turn right (East) toward Mineral Mountains.
- 5.2 Rail road crossing.
- 6.7 Fork in road; take right road sign:"Anelope point, Hiway 91".
- 10.9 Small road to the left (North-East) gray wrecked car on the right says you have missed the turnoff
- 11.9 Phillips Geothermal Well 9-1 (LASL well c/t2). Look for road on West side of well pad
- 12.1 Fork take right road--antenna is in view to the West. (100 yards) This is station OPL

 *
 * EARTH SCIENCE LABORATORY
 * UNIVERSITY OF UTAH RESEARCH INSTITUTE
 *
 * ROAD LOG TO LWA
 * 10-AUG-81
 * S.L.OLSEN and K.D.HOLBROOK
 *

- Return to Phillips well 9-1 refered to in OPL directions
- 0.0 Take the road on the North side on the pad.
- 0.5 Small obscure road to the left'. (Not the main road)
- 0.7 Park Station is well hidden in the trees about 50 yards to the North-North-East.

*
*
*
*
*
*
*
*

EARTH SCIENCE LABORATORY
UNIVERSITY OF UTAH RESEARCH INSTITUTE
ROAD LOG TO BAILEY PEAK RADIO RELAY FOR CFU
10-AUG-81
S.L.OLSEN and K.D.HOLBROOK

- 0.0 North on Utah Highway 257 from Department of Transportation Garage.
- 3.9 Turn off to the right - East bound dirt road. Sign that reads Opal at Milford.
- 5.2 Railroad crossing.
- 6.7 Fork - turn to the right Sign : "Anelope point, Hiway 91".
REF 1
- 10.9 Small road to left. Gray wreckage on right 200 yards
REF 2
- 11.6 Yield sign for joining road.
REF 3
- 11.8 cattle guard.
- 13. Cross Roads - continue straight.
REF 4
- 14.1 Cattle Guard
- 15.2 Fork - Turn left.
- 16.3 Fork - Turn left.
Steep road with hairpin curves.
- 17.2 Fork - turn left. Small substation.
- 18.9 Fork - turn left
- 20.0 White house on top of a hill.
This is a U.P. and L microwave relay station. our equipment is in a 55 gallon drum buried on the west side of the building.

*
*
*
*
*
*
*
*

EARTH SCIENCE LABORATORY
UNIVERSITY OF UTAH RESEARCH INSTITUTE

ROAD LOG TO RHU
10-AUG-81
S.L.OLSEN and K.D.HOLBROOK

- 0.0 Refer to the crossroads at mile 13 of Bailey Peak road log. Turn right. (south)
- 0.3 Fork - go straight.
- 0.7 Fork - turn right.
- 0.8 Fork - Left off of main road.
- 0.9 Turn left.
- 0.95 Turn off to right on to cow trail.
- 1.0 Stop. Truck should be facing East and the station should be to the South.

*
* EARTH SCIENCE LABORATORY
* UNIVERSITY OF UTAH RESEARCH INSTITUTE
*
* ROAD LOG TO CVE
* 10-AUG-81
* S.L.OLSEN and K.D.HOLBROOK
*

- 0.0 Refer to the crossroads at mile 13 of Bailey Peak road log.
Turn right (south bound).
- .3 Fork go straight.
- .7 Fork turn right.
- .8 Fork go right.
- 1.4 Crossroads go straight on main road to the south.
- 1.45 Park and look for station to the southeast.

*
* EARTH SCIENCE LABORATORY
* UNIVERSITY OF UTAH RESEARCH INSTITUTE
*
* ROAD LOG TO WLD
* 10-AUG-81
* S.L.OLSEN and K.D.HOLBROOK
*

- 0.0 Refer to Yield sign sign mile 11.6 on Bailey Peak road log.
Take right off of the Main road at the yield sign.
- .9 Cross opal mine on right.
- 1.0 Fork - go straight.
- 1.5 Fork - go straight.
- 1.55 Fork - go right.
- 1.8 Stop and pull off. Facing South site will be to the East
75 yards.

*
*
*
*
*
*
*
*

EARTH SCIENCE LABORATORY
UNIVERSITY OF UTAH RESEARCH INSTITUTE

ROAD LOG TO MWA
10-AUG-81
S.L.OLSEN and K.D.HOLBROOK

- 0.0 Crossroads - refer to Bailey Peak road log mile 13.
Turn left - North bound.
- 0.6 Cattle guard - well site on right.
- 0.7 Well 53-4 go Straight.
- 0.8 Fork - straight.
- 1.0 Fork - go right.
- 1.2 Stop. Station to the East 50 yards up the hill.

*
*
*
*
*
*
*
*

EARTH SCIENCE LABORATORY
UNIVERSITY OF UTAH RESEARCH INSTITUTE

ROAD LOG TO MNU
10-AUG-81
S.L.OLSEN and K.D.HOLBROOK

- 0.0 Refer to Fork mile 6.7 Bailey Peak Road log. Turn left following the sign to Anelope point and Hiway 91.

NOTE due to the route taken, the milage between the fork listed above and the fork listed below is not accurately known but the distance is about 6 miles.

- 0.0 Fork sign go straight.
- 13.0 Cattle guard at farm.
- 13.6 Sign go Cove Fort - Right turn.
- 15.6 Fork - take right turn toward fence.
- 15.9 Gate. Be sure to close.
- 16.5 Crossroads - turn right. Look for old shack on the East.
- 16.7 Turn left off main road park near the old shack. the station is located about 100 yards to the south at a slightly higher elevation.

 *
 * EARTH SCIENCE LABORATORY
 * UNIVERSITY OF UTAH RESEARCH INSTITUTE
 *
 * ROAD LOG TO CFU
 * 10-AUG-81
 * S.L.OLSEN and K.D.HOLBROOK
 *

- 0.0 Cove Fort exit I15 to Cove Fort Utah State Route 161.
- 2.0 Junction - turn left on to not so good paved road. Department of Transportation Guardage on left - Texaco Station on right.
- 59.3 3.2 Pavement ends.
- 59.9 3.7 turn left cattle guard North bound.
- 60.2 4.1 fork - go right.
- .5 4.3 Fork - go right.
- .7 4.6 Fork - go left - note large pit. with piles of white stuff in it.
- 4.65 Fork - go left (still by pits).
- 5.7 crossroad - go left.
- 6.0 Turn off road to the right - follow foot trail up ridge.
- 7.5 Stop. top hill facing north tx to East - Jug to the west.

FILE NAME SERDLG.DOC

 *
 * EARTH SCIENCE LABORATORY
 * UNIVERSITY OF UTAH RESEARCH INSTITUTE
 *
 * ROAD LOG TO PCY
 * 10-AUG-81
 * S.L.OLSEN and K.D.HOLBROOK
 *

- 0.0 Take highway 21 south out of Milford to mile marker 78 make a left (east) turn on to pass road. There is a sign showing pass rd. This rd will turn to dirt after a short distance.
- 1.4 continue main road left
- 2.0 note red and white tower on the right continue
- 5.4 Take right fork note sign to Beaver and microwave towers on the right.

- 6.4 take right fork
- 6.6 road joins from the right
- 7.8 at cattle guard turn off main road to the right and follow the fence road south (put in 4 wheel drive). This road is rough with alot of ups and downs .DO NOT ATTEMPT without four wheel drive.
- 8.0 at this point road deverts to the right from the fence.
- 8.2 crossroad-continue south bound
- 8.4 top of a hill-stop. The site is to the east roughly 20 yd.s from road. There is evidence of vehicles pulling off the road.