DESCRIPTION OF BENCH MAR

Designation 8865 B 1977 State California County Humboldt
Nearest town Arceta County Humboldt Chief of party R.A. Morris
Distance and direction from nearest town 3.9 miles west Leveling date Sept. 1977
Character of mark Std NOS disc on top of copper rod Stamping 8865 B 1977
Established by NOS
Detailed description Section ,T ,R

28 ft. 5 in. SE of fire hydrant that is on the R.H. Emerson & Sc lumber yard, 56 ft. NW of the centerline of Samoa Rd., 55 ft. from the support pole for a telephone pole that is the forth pole that is west of the Samoa Rd. Bridge over Mad River on the NW side of the railroad tracks.

120 ft. ENE of E gate post of western gate at R.H. Emerson & Son.

NOAA FORM 76-75 (9-71) *U S GOVERNMENT PRINTING OFFICE:1975-665-083 U. S. DEPARTMENT OF COMMER NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATI NATIONAL OCEAN SURV

	Date			Above zero of Tide Staff	Above B. M. J735 Reset	Remarks
Established by	Year	Month	Day	Feet	Feet	
R.G. Morris	1977	Sept	14	14.032	-5.438	Rod stop @ 14.800
Recovered by						
R.A. Morris	1978	April	3	14.022	-5.432	Six-month levels
R.A. Morris	1978	July	22	12.165	-5.436	New installation. Rod stop @ 15.972
R.A. Morris	1978	Oct	7	12.182	-5.431	Rod stop @ 15.980
R.A. Morris	1979	April	20	12.167	-5.437	Rod stop @ 15.980
R. Edwing	1980	Feb.	13	12.165	-5.435	Removal. Rod stop @ 15.970'

-5.435

DESCRIPTION OF BENCH MARK

Designation 8865 C 1977
Nearest town Arceta
Distance and direction from nearest town 3.9 miles west
Character of mark Std. NOS disc on top of copper rod
Established by NOS
Detailed description

State California
County Humboldt

County Humboldt
Chief of party RA Morris
Leveling date Sept. 1977
Stamping 8865 C 1977

Section ,T ,R

55 ft. N from centerline of Samoa Rd., 41 ft. 6 in. from RR signal crossing, 197 ft. west of power tower that is in the lumber yard of RH Emerson & Son. This is the same tower on which is BM W 1091 1967.

Amend description as follows: (Delete Original Measurements)
0.25 mi W. of W. end of Samoa Rd. bridge over Mad River Slough
197 ft. W. of BM W 1091, 55 ft. N. from ℄ of Samoa Rd.
49 ft. NW. of crossing signal control box at "CROSSING No. 5G29
26 ft. S. of SW. corner of concrete truck scale
19 ft. NNE of center of RR siding switch
4 ft. S. of picket fence

R. A. Morris 10/7/78

NOAA FORM 76-75
(9-71)

*U S GOVERNMENT PRINTING OFFICE:1975-665-083

U. S. DEPARTMENT OF COMMER
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATI
NATIONAL OCEAN SURV

	Date			Above zero of Tide Staff	Above B. M. 135 RESET	Remarks
Established by	Year	Month	Day	Feet	Feet	
R.A. Morris	1977	Sept	14	14.840	-4.630	-4.626
Recovered by						
R.A. Morris	1978	Oct	7	12.990	-4.623	
R. Edwing	1980	Feb.	13	12.974	-4.626	

DESCRIPTION OF BENCH MARK

Designation 8865 E 1977 State California County Humboldt
Nearest town Arceta County Humboldt Chief of party R.A. Morris
Distance and direction from nearest town 3.9 miles west Leveling date Sept. 1977
Character of mark Std deep rod disc on top of copper rod Stamping 8865 E 1977
Established by NOS
Detailed description Section ,T ,R

329 ft. 6 in. SW of J 735,55 ft. NW of the centerline of Samoa road, 85 ft. W of the second telephone pole that is south of Samoa RD. Bridge over Mad River on NW side of the railroad tracks The rod was driven 64 ft. to refusal.

NOAA FORM 76-75 (9-71) *U S GOVERNMENT PRINTING OFFICE:1975-665-083 U. S. DEPARTMENT OF COMMERC NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATIC NATIONAL OCEAN SURVE

	Date			Above zero of Tide Staff	Above B. M. J735 RESET	Remarks
Established by	Year	Month	Day	Feet	Feet	
R.A. Morris	1977	Sept	14	14.719	-4.751	
Recovered by						
R.A. Morris	1978	April	3	14.707	-4.747	-4.748
R.A. Morris	1978	July	22	12.854	-4.747	New installation
R.A. Morris	1978	Oct.	7	12.868	-4.745	
R.A. Morris	1979	April	20	12.852	-4.752	
R. Edwing	1980	Feb.	13	12.853	-4.747	

NOAA FORM 77-45
(1-73)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

TIDAL BENCH MARKS

B. M. J735 (RESET 1970) at Mad River, Arcata Bay, Calif 941-8865

The bench mark is a standard C&GS bench mark disk 3.9 miles west along the Arcata-Sanoa Road from the City Park at Arcata, set flush in the top of the southwest concrete pier on the west end of the bridge (Mad River Slough Bridge)

11.656 ft above NGVD (1968 adj)

	Date			Above zero of Tide Staff	Above B. M. ------	Remarks
Established by	Year	Month	Day	Feet	Feet	
Recovered by						
R.A. Morris	1977	Sept	14	19.470	19.462	
R.A. Morris	1978	April	3	19.454		
R.A. Morris	1978	July	22	17.601		New installation. Rodstop @ 15.9
R.A. Morris	1978	Oct.	7	17.613	17.604	Rod stop @ 15.980
R.A. Morris	1979	April	20	17.604		" "
R. Edwing	1980	Feb.	13	17.600		Removal. Rod stop @ 15.970'

NOAA FORM 77-45
(1-73)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

TIDAL BENCH MARKS

B. M. W1091 (1967) at Mad River, Arcata Bay, Calif 941-8865

The bench mark is a C&GS bench mark disk stamped "W 1091, 1967," 3.5 miles west along Sanoa Road from the intersection of H Street at Arcata, at the junction of a graveled road northwest to a lumber yard, at the first steel tower of a power transmission line southwest of a bridge over Mad River Slough, in the top of the concrete base of the southwest steel leg of the tower, 84 feet northwest of the center line of the road, 39 feet northwest of the northwest rail of the main track of Northwestern Pacific Railroad, 24 feet northeast of the center line of the graveled road, and about 3 feet higher than the road.

11.089 ft above NGVD (1967 adj)

	Date			Above zero of Tide Staff	Above B. M. 1.735	RESET	Remarks
Established by	Year	Month	Day	Feet	Feet		
Recovered by							
R.A. Morris	1977	Sept	14	18.889	-0.581	-0.579	
R.A. Morris	1978	Oct	7	17.037	-0.576		
R. Edwing	1980	Feb.	13	17.020	-0.580		

RELEVELING RUN DATE: 20 JUN 89 TIME: 10:30 PAGE 2
ARCATA VIA EUREKA AND GARBERVILLE TO WESTPORT CA HGZ L25053
4.0 MM 1ST-ORDER/CLASS II

RHK/NGS 30 AUG 1988 01 NOV 1988

SPSN	ACRN	Designation	Spur Codes	Distance km	Observed Ht meters	Normal Ortho Ht meters	Runs	Latitude DD MM SS	Longitude DDD MM SS
2532	LV0296	Z 1087		8.547	1.91277	1.91282	1	40 49 50	124 04 52
2533	LV0295	Y 1087 RESET		9.438	1.03543	1.03548	1	40 49 27	124 05 08
2534	LV0638	E 1401		10.283	0.51115	0.51120	1	40 49 09	124 05 27
2535	LV0293	X 1087 RESET		11.730	1.00005	1.00010	1	40 48 48	124 06 18
2536	LV0291	H 75 RESET		12.860	0.67635	0.67640	1	40 48 22	124 06 54
2537	LV0289	W 1087 RESET		13.784	1.00116	1.00121	1	40 48 16	124 07 30
2538	LV0287	J 75 RESET		15.051	6.88907	6.88912	2	40 48 18	124 08 26
2539	LV0639	941 8802 B TIDAL	)	15.705	3.03365	3.03370	2	40 48 25	124 08 32
2540	LV0640	941 8802 A TIDAL	)	15.784	2.04287	2.04292	2	40 48 25	124 08 30
2538	LV0287	J 75 RESET	*	15.051	6.88907	6.88912	2	40 48 18	124 08 26
2541	LV0285	60		15.572	5.83248	5.83253	1	40 48 17	124 08 48
2542	LV0283	63		16.120	11.21757	11.21762	1	40 48 17	124 09 12
2543	LV0641	F 1401	)	17.610	10.63113	10.63119	2	40 47 50	124 08 24
2544	LV0642	941 8799 E TIDAL	)	18.899	19.69536	19.69542	2	40 47 42	124 07 30
2545	LV0643	941 8799 A TIDAL	)	19.340	1.96402	1.96408	2	40 47 43	124 07 12
2542	LV0283	63	*	16.120	11.21757	11.21762	1	40 48 17	124 09 12
2546	LV0281	941 8801 TIDAL 2		17.065	13.57838	13.57843	1	40 48 06	124 09 46
2547	LV0279	941 8801 TIDAL 1		17.421	4.87821	4.87826	1	40 48 10	124 09 57
2549	LV0644	EF 45		17.944	2.13693	2.13698	1	40 48 11	124 10 10
2548	LV0645	941 8801 TIDAL		18.371	3.63857	3.63862	1	40 48 15	124 09 57
2550	LV0646	G 1401		19.353	2.50443	2.50448	1	40 47 54	124 10 25
2551	LV0277	32		20.196	4.00255	4.00260	1	40 47 29	124 10 36
2552	LV0276	V 1087		20.876	4.08379	4.08384	1	40 47 08	124 10 49
2553	LV0647	941 8778 A TIDAL		22.557	2.13292	2.13297	1	40 46 38	124 11 38
2554	LV0648	H 1401		23.819	4.48883	4.48888	1	40 46 01	124 11 25
2555	LV0649	S 1067 RESET		25.129	3.22012	3.22017	1	40 45 18	124 11 21
2556	LV0650	941 8757 A TIDAL	)	25.477	3.25238	3.25243	2	40 45 22	124 11 37
2555	LV0649	S 1067 RESET	*	25.129	3.22012	3.22017	1	40 45 18	124 11 21
2557	LV0266	R 1087		26.550	4.32012	4.32017	1	40 44 41	124 11 44
2558	LV0651	J 1401		26.926	2.15601	2.15606	1	40 44 34	124 12 07
2559	LV0264	Q 1087		27.924	8.95793	8.95798	1	40 44 12	124 12 28
2560	LV0652	941 8739 C TIDAL	)	28.130	1.96229	1.96234	2	40 44 14	124 12 37
2561	LV0653	941 8739 B TIDAL	)	28.316	1.77478	1.77483	2	40 44 19	124 12 42
2562	LV0654	941 8739 A TIDAL	)	28.407	2.11548	2.11553	2	40 44 22	124 12 43
2559	LV0264	Q 1087	*	27.924	8.95793	8.95798	1	40 44 12	124 12 28

36.803
44.549
16.005
7.011
11.938

UNADJUSTED ELEVATIONS