

DIVISION OF WATER
 AGREED AT 70 GOVT 30 PRIVATE
 WITH MANABU TAGAMORI 12/2/87
 Meredith, TOM TAKE & RWD

COMPARISON OF PRIVATE AND STATE WATER OWNERSHIP
 AS CALCULATED BY THE METHODS DESCRIBED

	<u>Private</u>	<u>State</u>
(1) 1949 Isohyetal Study	26.782%	73.218%
(2) 1985 D.L.N.R. Study	25.650%	74.350%
(3) 1985 EMI Study	26.258%	73.742%
→ (4) 1985 EMI Re-study	<u>26.316%</u>	<u>73.684%</u>
(5) Actual Yield - 1949 Data	30.540%	69.460%
(6) Actual Yield - 1985 Data	30.200%	69.800%
→ (7) 1985 DLNR RE-STUDY	27.39%	72.61%

Notes: AGREEMENT w/Manabu T. 12/2/87 30.00 70.00

- (1) 1949 isohyetal calculations by license area and combined.
- (2) 1985 isohyetal calculations for one license by D.L.N.R.
- (3) 1985 isohyetal calculations for one license by EMI Co.
- (4) 1985 isohyetal calculations by four individual licenses and combined, by EMI Co.
- (5) Actual water yield calculated by license using 1949 isohyetal study.
- (6) Actual water yield calculated by license using 1985 isohyetal study [(4) above].

(7) 1985 RE-STUDY AS PRESENTED AT DEC 24, 1987 MEETING

ACTUAL TOTAL WATER YIELD BY LICENSE

PERIOD 1970-85

	<u>Nahiku</u>	<u>Keanae</u>	<u>Honomanu</u>	<u>Huelo</u>	<u>Total</u>
1970-71	8,502	18,996	11,607	22,681	61,786
1971-72	5,228	11,086	6,703	17,479	40,496
1972-73	7,094	16,201	10,484	25,985	59,764
1973-74	5,698	12,625	6,817	14,272	39,412
1974-75	6,532	14,569	7,882	20,264	49,247
1975-76	6,923	15,819	8,597	23,515	54,854
1976-77	5,805	13,705	8,537	21,213	49,260
1977-78	5,684	14,010	7,774	22,238	49,706
1978-79	8,232	17,949	12,552	25,668	64,401
1979-80	8,495	16,950	13,654	15,748	54,847
1980-81	5,233	12,521	6,850	20,192	44,796
1981-82	7,697	16,427	13,366	17,370	54,860
1982-83	7,515	16,064	10,990	27,027	61,596
1983-84	7,597	16,069	10,379	27,588	61,633
1984-85	5,881	11,712	9,024	19,015	45,632
				TOTAL	792,290

ACTUAL YIELD STATE WATER BY LICENSE
 USING 1949 ISOHYETAL STUDY

PERIOD 1970-75

	<u>Nahiku</u> 95.02%	<u>Keanae</u> 79.19%	<u>Honomanu</u> 47.39%	<u>Huelo</u> 64.49%	<u>Total</u>	<u>% Govt.</u>
1970-71	8,079	15,043	5,501	14,627	43,250	70.00
1971-72	4,968	8,779	3,177	11,272	28,196	69.63
1972-73	6,741	12,830	4,968	16,758	41,297	69.10
1973-74	5,414	9,998	3,231	9,204	27,847	70.66
1974-75	6,207	11,537	3,735	13,068	34,547	70.15
1975-76	6,578	12,527	4,074	15,165	38,344	69.90
1976-77	5,516	10,853	4,046	13,680	34,095	69.21
1977-78	5,401	11,095	3,684	14,341	34,521	69.45
1978-79	7,822	14,214	5,948	16,553	44,537	69.16
1979-80	8,072	13,423	6,471	10,156	38,122	69.51
1980-81	4,972	9,915	3,246	13,022	31,155	69.55
1981-82	7,314	13,009	6,334	11,202	37,859	69.01
1982-83	7,141	12,721	5,208	17,430	42,500	69.00
1983-84	7,219	12,725	4,919	17,792	42,655	69.21
1984-85	5,588	9,275	4,276	12,263	31,402	68.82
				TOTAL	550,327	69.46

COMPARISON OF PRIVATE AND STATE WATER OWNERSHIP
AS CALCULATED BY THE METHODS DESCRIBED

	<u>Private</u>	<u>State</u>
(1) 1949 Isohyetal Study	26.782%	73.218%
(2) 1985 D.L.N.R. Study	25.650%	74.350%
(3) 1985 EMI Study	26.258%	73.742%
(4) 1985 EMI Re-study	26.316%	73.684%
(5) Actual Yield - 1949 Data	30.540%	69.460%
(6) Actual Yield - 1985 Data	30.200%	69.800%

Notes:

- (1) 1949 isohyetal calculations by license area and combined.
- (2) 1985 isohyetal calculations for one license by D.L.N.R.
- (3) 1985 isohyetal calculations for one license by EMI Co.
- (4) 1985 isohyetal calculations by four individual licenses and combined, by EMI Co.
- (5) Actual water yield calculated by license using 1949 isohyetal study.
- (6) Actual water yield calculated by license using 1985 isohyetal study [(4) above].

COMPARISON OF PRIVATE AND STATE WATER OWNERSHIP
BASED ON 1949 AND 1985 ISOHYETAL STUDIES BY LICENSEE

	<u>PRIVATE OWNERSHIP</u>	<u>STATE OWNERSHIP</u>
		<u>NAHIKU LICENSE</u>
1949	4.98%	95.02%
1985	4.35%	95.65%
		<u>KEANAE LICENSE</u>
1949	20.81%	79.19%
1985	16.33%	83.67%
		<u>HONOMANU LICENSE</u>
1949	52.61%	47.39%
1985	50.65%	49.35%
		<u>HUELO LICENSE</u>
1949	35.51	64.49%
1985	38.82	61.18%
		<u>TOTAL</u>
1949	26.78%	73.22%
1985	26.32%	73.68%

Civil No. 19-1-0019-01 (JPC)

Defendant A&B/EMI's Exhibit AB-113

FOR IDENTIFICATION _____

RECEIVED IN EVIDENCE _____

CLERK _____