

Supplementary Table. 2: Analysis of the differences in Na between the categories with a confidence interval of 95% ($\alpha = 0.05$). Pr values < 0.05 indicate the samples are statistically different and Pr values ≥ 0.05 indicate the samples are statistically not different (marked in red).

Contrast	Difference	Standardized difference	Critical value	Pr > Diff	Significant
Bakken vs Lance	85341.77	19.47	2.96	<0.001	Yes
Bakken vs Mesaverde	85132.96	21.82	2.96	<0.001	Yes
Bakken vs Wilcox	74333.35	20.09	2.96	<0.001	Yes
Bakken vs Marcellus	56184.86	15.29	2.96	<0.001	Yes
Bakken vs Edwards	50112.56	13.33	2.96	<0.001	Yes
Bakken vs Trenton	44332.31	11.46	2.96	<0.001	Yes
Trenton vs Lance	41009.47	12.69	2.96	<0.001	Yes
Trenton vs Mesaverde	40800.65	16.08	2.96	<0.001	Yes
Trenton vs Wilcox	30001.05	13.55	2.96	<0.001	Yes
Trenton vs Marcellus	11852.55	5.46	2.96	<0.001	Yes
Trenton vs Edwards	5780.25	2.50	2.96	0.16	No
Edwards vs Lance	35229.22	11.36	2.96	<0.001	Yes
Edwards vs Mesaverde	35020.40	14.77	2.96	<0.001	Yes
Edwards vs Wilcox	24220.80	11.98	2.96	<0.001	Yes
Edwards vs Marcellus	6072.30	3.08	2.96	0.04	Yes
Marcellus vs Lance	29156.92	9.73	2.96	<0.001	Yes
Marcellus vs Mesaverde	28948.10	12.97	2.96	<0.001	Yes
Marcellus vs Wilcox	18148.50	9.78	2.96	<0.001	Yes
Wilcox vs Lance	11008.42	3.64	2.96	0.01	Yes
Wilcox vs Mesaverde	10799.61	4.75	2.96	<0.001	Yes
Mesaverde vs Lance	208.81	0.06	2.96	1.00	No
Tukey's d critical value:			4.193		