



Location / Parameter	Cotton Valley Louisiana		Marcellus Pennsylvania		Haynesville Louisiana		Eagle Ford Texas			Fixed Facility Colorado Pond	
	Raw	EC	Raw	EC	Raw	EC	Raw	EC	Membrane	Raw	Membrane
Units in mg/l (except where noted)											
TPH, Total (C6 - C35)	11,506	2.67	22.18	5.54	49.50	5.93	35.50		BRL	n/c	n/c
BTEX, Total	3533.9	2.745	-	-	-	-	0.03227		BRL	n/c	n/c
BOD	26,022	208	-	-	102	81.2	-		-	n/c	n/c
Iron	61.8	BRL	50.0	1.0	160	<1.0	82	1	0.0	25	BRL
Si	40.8	0.273	-	-	17.02	3.286	23.4	0.351	<0.5	49.3	4
Barium	282	254	258	38	1090	1.0	4.78	3	0.1	14	5.0
Strontium	1307	1270	108	72	2000	417	578	352	5.8	n/c	n/c
Total Hardness (CaCO ₃)	7585	7124	1,250	697	6930	3650	6,681	5,399	195	720	4
Calcium (Ca ²⁺)	-	-	437	250	-	-	6080	5360	178	240	1.2
Magnesium (Mg ²⁺)	669	101	39	17	360	280	691	504	9.2	28.8	0.24
Total Phosphate (PO ₄)	-	-	-	-	-	-	n/c		< 0.4	4.6	BRL
Nitrate (NO ₃)	-	-	-	-	-	-	n/c		< 1.0	n/c	n/c
Total Sulfur (SO ₄ ⁻²)	-	-	0	53	-	-	185		< 5.0	9	BRL
Chloride (Cl ⁻)	-	-	7,000	7,200	-	-	42,700		985	25,080	600
Total Sodium (Na ⁺)	-	-	4,298	4,196	-	-	23,100		906	n/c	n/c
Total Potassium (K ⁺)	-	-	35	31	-	-	501		12.1	n/c	n/c
Turbidity (ntu)	opaque	< 1.0	-	-	-	-	Opaque		< 0.5	615	< 1.0
TSS	382	46	300	8.0	1326	154	470		BRL	410	<3.0
SRB (cfu/100ml)	-	-	450,000	4,200	-	-	-		-	n/c	n/c
Specific Conductance, at 25 C° (µmhos)	-	-	20,900	21,400	-	-	89,000		3,200	28,300	1,330

Treatability of Produced Waters

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