Validation Data

Done for Secules

New Hampshire, USA

Secules Analysis	1/6/06			3/1/2006 increase flow remove flow restrictor
	Before mg/l	After mg/l	reduction	TDS > 25 ppm
TDS	260	10	96.2%	63
pH	7.75	5.54	28.5%	6.6
Turibidity	0.5	0.5		0.5
Anion				
Chloride	7.44	<1.0	86.6%	4
Flouride	<.1	<0.10	90.0%	<0.10
Nitrate (as N)	3.44	<0.10	90.0%	<0.10
Nitrite (as N)	<0.05	<0.10	90.0%	<0.10
Nitrate/Nitrite (as N)	3.44	<0.10	90.0%	<0.10
Metal Analysis				
Copper	<0.010	<0.010		<0.010
Iron	<0.010	<0.010		<0.010
Manganese	<0.010	<0.010		<0.010
Sodium	3.39	<0.50	90.0%	1.84
Hardness	181	<0.50	90.0%	44.4
Calcium	42.5	<0.50	90.0%	9.13
Magnesium	18.2	<0.50	90.0%	5.24
Arsenic	0.039	<0.010	90.0%	<0.010

4/25/2006

Water dispenser
Lab of Korea

	influent	Effluent	%P
N	29	0.54	98%
F	9.6	0.6	94%
Cd	0.041	0.001	98%
As	0.129	0.011	91%
P	0.73	0.04	95%
Fe	0.92	0.01	99%
Cl	153	4	97%
Cr	0.18	0.005	97%
Pb	0.32	0.004	99%
Hg	0.0043	0.0007	84%

Our warehouse water

San Antonio, TX USA

	Feed ppm	Effluent ppm	% Removed
TDS	280	17	94%
Hardness	260	20	92%
Alkalinity	223	15	93%
Chloride	22	6	73%
Flouride	0.62	0.1	84%
Nitrates	1.72	0.07	96%

Coal Bed Methane in Atlantic Rim Basis, Southern Wyoming, USA

EWP was used at Morgan Run
Our Test Results

Major Ions	Units	Feed	Effluent	Discharge Limits
Sodium	mg/L	325	87.8	-
Potassium	mg/L	24.6	3.7	-
Calcium	mg/L	15.2	122.3	-
Magnesium	mg/L	0.8	30.1	-
Carbonate	mg/L	127.0	16.5	-
Bicarbonate	mg/L	213.0	27.7	-
Chloride	mg/L	162.7	43.9	405
Sulfate	mg/L	164.3	32.9	3,000
Nitrite+Nitrate as N	mg/L	-	-	-
Fluoride	mg/L	4.3	0.2	2,000
Iron	ug/L	4.6	0.2	430
			-	-
Total Petroleum Hydrocarbons	mg/L	<1	-	10
Total Dissolved Solids @ 180°C	mg/L	905	331	500
Specific Conductance @ 25°C	umhos/cm	1,713	343	750
pH	std. units	10.2	7.0	9
Sodium Absorption Ratio (SAR)4	no unis	22.1	1.8	3

1 year of successful operation

PWPS

Dr. Schweng, Uniersity of New Mexico, USA

contaminant	Feed	Purified Effluent	Regulatory Limit	Reduction
Arsenic	80 ppb	5 ppb	10 ppb	95%
Nitrates	100 mg/l	.12 mg/l	10 mg/l	99.9%

Dynamic Details, Inc.
End of Pipe Waste Treatment Pilot Test

		city water	waste water feed	Composite effluent	Regen waste	% Purify	
Calcium	mg/l	75.7	119	14.3	631	88.0%	
Copper	mg/l	0.015	0.488	0.008	1.92	98.4%	
Iron	mg/l	0.013	0.02	0.004	0.064	80.0%	
Magnesium	mg/l	18.7	17.7	1.79	81	89.9%	
Manganese	mg/l	0.014	0.092	0.007	0.072	92.4%	
Nickel	mg/l		0.267	0.032	0.94	88.0%	
Potassium	mg/l	6.6	19.2	5.97	53.4	68.9%	
Sodium	mg/l	86.5	260	78	1,220	70.0%	
Zinc	mg/l	0.022	0.016	0.0032	0.002	80.0%	
Bicarbonate	mg/l	247	186	37.2	747	80.0%	
Alkalinity	mg/l	202	152	30.4	612	80.0%	
Total Hardness	mg/l	316	370	43	1910	88.4%	
Specific Conductance	umos	938	1990	398	7700		
Total Dissolved Solids	**mg/l**	**390**	**1200**	240	**6010**	**80.0%**	**AVERAGE**
Chloride	mg/l	97.3	240	72	1090	70.0%	
Nitrate	mg/l	14.7	25.3	0.76	98.16	97.0%	
Sulfate	mg/l	152	408	81.6	2470	80.0%	
Total Organic Carbon	mg/l	1.9	3.8	1.1			
MBAS	mg/l	0	0	0	0		
Flouride	mg/l	0.43	12	2.4	38.4	80.0%	-
pH		7.71	7.7	7.35	7.73		
Total Anions	meq/L	10.2	21.8	5.37	94.4		
Total Cations	meq/L	10.2	21	5.71	92.6		

EXPERIMENT: run at .4 gpm the composite samples were taken from a second drum containing waste water.
We noted a verage purification of 80% while the test. the sample were taken from 3 runs spanning 1 hour each