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# Level IV Data Package

MWH Group 240233

**Method: EPA 2540C**

2805090138  
2805090133  
2805090136  
2805090137  
2805090124  
2805090121  
2805090122  
2805090123  
2805090115  
2805090112  
2805090135  
2805090134  
2805090120  
2805090119  
2805090118  
2805090117  
2805090116  
2805090132

MWH Laboratories  
750 Royal Oaks Drive, Suite 100  
Monrovia, CA 91108

TOTAL DISSOLVED SOLIDS (TDS)  
SM 2540C

Standards: NaCl MWH # AAAR0701-1  
Na2SO4 MWH # AXAD0504-2  
NaCl MWH # AAAR06013-3

True Value Exp. Date  
175 mg/L 11/7/08  
700 mg/L 11/13/08  
10 mg/L 11/13/08

% Rec  
80 - 114  
80 - 114  
80 - 114

Analysis Start Date: 5/13/08 End: 5/17/08  
Oven Temp (180 ± 2°C): Start: 180 C End: 180 C  
Oven Mts: Precision STM 135 Ser no.: T11A111-8  
Dry Time (hrs): \_\_\_\_\_ ± 12

Client Name: N/A  
Sample ID: 2805060923  
Sample Volume (mL): 50  
Crucible Number: C8  
Crucible Weight (g): 51.4850  
Crucible + residue (1st wt (g)): 51.4851  
Crucible + residue (2nd wt (g)): 51.4851  
Residue C-A (g): 0.0000  
TDS (mg/L): ND  
pH: N/A  
EC: N/A  
OC 1: N/A  
OC 2: N/A

Run #	Sample ID	Client Name	Date Collected	Sample Volume (mL)	Crucible Number	Crucible Weight (g)	Crucible + residue (1st wt (g))	Crucible + residue (2nd wt (g))	Residue C-A (g)	TDS (mg/L)	pH	EC	**TDS/EC	3rd Weighing/Comments
1	2805060923	Kerr McGee	5/7/08	50	509	73.1127	73.2440	73.2436	0.1313	2620	7	4000	0.66	
DUP	2805060923	Kerr McGee	5/7/08	50	D9	69.2725	69.4046	69.4045	0.1321	2642	7	4000	0.66	
2	2805060969	Kerr McGee	5/7/08	100	PA	68.5091	68.5090	68.5091	-0.0001	1	7	2	-0.50	OK
3	2805060903	Kerr McGee	5/7/08	50	Z3	75.0494	75.0750	75.0754	0.0256	512	7	800	0.36	
4	2805090112	Kerr McGee	5/8/08	25	517	73.0733	73.2200	73.2198	0.1467	5668	7	8000	0.73	
5	2805090115	Kerr McGee	5/8/08	25	ZH	67.3125	67.4351	67.4346	0.1226	4904	7	5400	0.91	
6	2805090116	Kerr McGee	5/8/08	10	J8	73.9142	73.9720	73.9721	0.0578	5780	7	8700	0.66	
7	2805090117	Kerr McGee	5/8/08	25	PT1	50.2065	50.3021	50.3020	0.0926	3704	7	5000	0.74	
8	2805090118	Kerr McGee	5/8/08	25	SX	72.0337	72.1653	72.1657	0.1316	5272	7	6200	0.65	
9	2805090119	Kerr McGee	5/8/08	50	U9	75.2551	75.3036	75.3033	0.0485	970	7	1410	0.69	
10	2805090120	Kerr McGee	5/8/08	50	M7	67.9783	68.0894	68.0880	0.1111	2222	7	3000	0.74	
11	2805090121	Kerr McGee	5/8/08	25	4	68.2644	68.3800	68.3802	0.1256	5024	7	6200	0.81	
DUP	2805090121	Kerr McGee	5/8/08	25	DJ	50.5696	50.6941	50.6941	0.1245	4980	7	6200	0.80	
12	2805090122	Kerr McGee	5/8/08	10	NY	66.8514	66.9330	66.9331	0.0816	8160	7	9120	0.89	
13	2805090123	Kerr McGee	5/8/08	2	6J	71.1801	71.1860	71.1858	0.0159	7850	7	10000	0.80	
14	2805090124	Kerr McGee	5/8/08	2	RA	73.4832	73.5132	73.5133	0.0300	15000	7	15100	0.96	
15	2805090132	Kerr McGee	5/8/08	2	Z0	71.6508	71.6775	71.6776	0.0267	13350	7	14120	0.95	
16	2805090133	Kerr McGee	5/8/08	2	21	66.3068	66.3373	66.3372	0.0306	15250	7	15000	1.02	
17	2805090134	Kerr McGee	5/8/08	25	BK	69.3309	69.4324	69.4322	0.1015	4980	7	6000	0.68	
18	2805090135	Kerr McGee	5/8/08	25	KC	68.2479	68.3585	68.3590	0.1106	4424	7	6000	0.74	
19	2805090136	Kerr McGee	5/8/08	2	50	67.1475	67.1702	67.1702	0.0227	11350	7	12000	0.95	
20	2805090137	Kerr McGee	5/8/08	2	AX1	73.6023	73.6056	73.6056	0.0333	18650	7	17000	0.98	

Recoveries: Blank - < 0.5 mg  
MRL - 50 - 150%  
LCS - 60 - 114%  
Duplicates - < 10% RPD

Calculations: TDS (mg/L) =  $\frac{(C-A) \times 1,000,000}{B}$   
%RPD =  $\frac{|S1-S2| \times 100}{(S1+S2)/2}$   
S1 = TDS of sample  
S2 = TDS of Duplicate

MRL: 10 mg/L  
\*\*EC (0.55 ± 0.7): Expected TDS Value  
Min/Max Residue: 0.5 mg - 200 mg  
Holding time: 7 day from sampling date  
Residues must be within 0.5 mg of each other

MWH Laboratories  
750 Royal Oaks Drive, Suite 100  
Morrovia, CA 91106

TOTAL DISSOLVED SOLIDS (TDS)  
SM 2540C

Standards:  
NaCl MW 58.442  
Na2SO4 MW 142.04  
NaHCO3 MW 84.007  
Na2CO3 MW 105.99

Oven Temp: 180° ± 2°C; Start: 180 C End: 180 C  
Oven Mfr: Precision STM 135 Ser no.: 111AW54  
Dry Time (hrs): 12

Analytical Start Date: 8/13/08  
Analytical End Date: 8/13/08  
Reviewed By: [Signature]  
LIMS Check By: [Signature]  
WHS OC: Chelsea Mei  
WHS QIR Needed: [Signature]

Run #	Sample ID	Client Name	Date Collected	Sample Volume (mL)	Crucible Number	Crucible Weight (g)	Crucible + residue 1st wt (g)	Crucible + residue 2nd wt (g)	Residue C-A (g)	pH	EC	3rd Weighing/Comments
1	Blank	N/A	N/A	50	C9	51.4850	51.4850	51.4857	0.0000	N/A	N/A	
2	MRL 1 - 10 mg/L	N/A	N/A	100	O6	72.4616	72.4616	72.4615	0.0000	N/A	N/A	
3	MRL 1 - 10 mg/L, DUP	N/A	N/A	100	3HA	68.1743	68.1752	68.1753	0.0009	N/A	N/A	
4	LCS 1 - 175 mg/L	N/A	N/A	50	65F	49.8443	49.8525	49.8527	0.0082	N/A	N/A	
5	LCS 2 - 700 mg/L	N/A	N/A	50	K	50.4891	50.5231	50.5233	0.0340	N/A	N/A	
6	993	Kerr-McBee	6/8/08	50	609	73.1127	73.2440	73.2439	0.1313	7	4000	73.2439
7	999	Kerr-McBee	6/8/08	50	09	69.2725	69.4046	69.4045	0.1321		4000	
8	090093	Kerr-McBee	6/8/08	100	PA	68.5091	68.5090	68.5091	-0.0001			
9	112			50	22	75.0494	75.0750	75.0754	0.0256		880	
10	115			25	517	73.0733	73.2200	73.2198	0.1467		8000	
11	116			25	24	67.3125	67.4357	67.4348	0.1233		5400	
12	117			10	78	73.9142	73.9735	73.9721	0.0578		8700	< 73.9720
13	118			25	PT1	50.2095	50.3050	50.3020	0.0926		5000	50.3021
14	119			25	5X	72.0337	72.1728	72.1657	0.0071		6000	72.1655
15	120			50	19	75.2551	75.3036	75.3033	0.0485		1400	
16	121			50	107	67.9783	68.0894	68.0890	0.1111		3000	
17	121			25	4	66.8544	66.9300	66.9302	0.0756		6200	
18	122			25	DT	50.5496	50.6941	50.6941	0.1445		6000	
19	123			10	14	66.8574	66.9311	66.9331	0.0757		9120	66.9330
20	124			20	65	71.1801	71.1960	71.1958	0.0159		10000	
21	132			2	PA	73.4830	73.4515	73.4513	0.0300		15100	73.4513
22	133			2	20	71.6508	71.6775	71.6776	0.0267		14110	
23	134			2	21	66.3068	66.3373	66.3372	0.0305		15000	
24	135			25	8K	69.8309	69.8324	69.8322	0.1015		6000	
25	136			25	KC	68.2479	68.3585	68.3580	0.1106		6000	
26	137			2	50	62.1475	62.1702	62.1702	0.0227		12000	
27				2	AX1	73.6023	73.6967	73.6958	0.0933		17000	73.6956

Calculation:  
TDS (mg/L) =  $\frac{C-A}{B} \times 1,000,000$

MRPD =  $\frac{IS1-S2}{S1+S2} \times 100$

Recoveries:  
Blank - < 0.5 mg  
MRL - 50 - 150%  
LCS - 80 - 114%  
Duplicates - < 10% RPD

MRL: 10 mg/L  
EC (0.55 - 0.7) Expected TDS Value  
Min/Max Residue: 0.5 mg - 200 mg  
Holding time: 7 day from sampling date  
Residues must be within 0.5 mg of each other

MWH Laboratories  
750 Royal Oaks Drive, Suite 100  
Monrovia, CA 91106

TOTAL DISSOLVED SOLIDS (TDS)

Standards:  
NaCl MWH\_AAA060717-1  
Na2SO4-MWH\_AAA060515-2  
NaCl MWH\_AAA060517-3

Total Value Exp. Date  
175 mg/L\_11/17/08  
700 mg/L\_11/15/08  
10 mg/L\_11/17/08

% Rec  
80 - 114  
80 - 114  
80 - 114

Oven Temp (180" ± 2°C): Start: 180 C End: 180 C  
Oven Mfr: "Precision STM 135" Ser no.: "11AW6"  
Dry Time (hrs): \*12

Analyst Start Date: 5/13/08 End: 5/19/08  
Analyte: AXA  
Reviewed By: J. May 08  
LMS Check By: N  
Was OC Criteria Met: Y N  
Was OR Needed: Y N

Run #	Sample ID	Client Name	Date Collected	Simple Volume (mL)	Crucible Number	Crucible Weight (g)	Crucible + residue (1st wt) (g)	Crucible + residue (2nd wt) (g)	OC 1	Residue C-A (g)	TDS (mg/L)	pH	EC	** TDS/EC	OC 2	3rd Weighing/Comments
Blank		N/A	N/A	50	B	50.5604	50.5606	50.5603		0.0002	4	N/A	N/A	N/A		
1	MRL 1 - 10 mg/L	N/A	N/A	100	4AX	66.4981	66.4972	66.4803		0.0011	11	N/A	N/A	N/A		
2	MRL 1 - 10 mg/L DUP	N/A	N/A	100	EJ	73.8444	73.8454	73.8453		0.0010	10	N/A	N/A	N/A		
3	LCS 1 - 175 mg/L	N/A	N/A	50	EZ	73.1726	73.1872	73.3187		0.0078	152	N/A	N/A	N/A		
4	LCS 2 - 700 mg/L	N/A	N/A	50	HI	67.1417	67.1751	67.1753		0.0334	688	N/A	N/A	N/A		
5	2805090138	KERR MCGEE	5/8/08	50	C2	50.7189	50.8796	50.8785		0.1607	3214	7	4000		0.80	
6	DUP	KERR MCGEE	5/8/08	50	M	71.8114	71.7727	71.7730		0.1613	3228	7	4000		0.81	
7	2805090152	KERR MCGEE	5/8/08	2	V3	78.3300	76.3516	76.3514		0.0216	10800	7	16000		0.68	76.3535
8	2805090157	KERR MCGEE	5/8/08	2	41	72.5387	72.5571	72.5567		0.0184	8200	7	14000		0.66	
9	2805090170	KERR MCGEE	5/8/08	50	CR	66.0200	66.0426	66.0425		0.0221	442	7	710		0.02	
10	2805090171	KERR MCGEE	5/8/08	25	EGH	74.9096	74.9816	74.9812		0.0720	2880	7	5000		0.58	
11	2805090173	KERR MCGEE	5/8/08	25	444	74.3078	74.3827	74.3825		0.0848	3386	7	5100		0.66	
12	2805090174	KERR MCGEE	5/8/08	50	74	55.5182	55.5658	55.5655		0.1686	3392	7	4000		0.85	
13	2805090175	KERR MCGEE	5/8/08	80	77	50.1945	50.2893	50.2893		0.0948	1896	7	3000		0.63	
14	2805090176	KERR MCGEE	5/8/08	50	ZOO	50.3280	50.4230	50.4234		0.0944	1888	7	3000		0.63	
15	2805090177	KERR MCGEE	5/8/08	50	FL	52.5148	52.6448	52.6446		0.1288	2586	7	4000		0.85	
16	2805090178	KERR MCGEE	5/8/08	25	TD	70.7016	70.8460	70.8460		0.1444	5778	7	8000		0.72	
17	DUP	KERR MCGEE	5/8/08	25	10	71.1268	71.2718	71.2715		0.1450	5800	7	8000		0.72	
18	2805090179	KERR MCGEE	5/8/08	50	DIF	66.7834	66.9550	66.9552		0.1716	3432	7	4000		0.86	
19	2805090180	KERR MCGEE	5/8/08	25	8DL	73.4008	73.5085	73.5087		0.1066	4224	7	5200		0.81	
20	2805090130	KERR MCGEE	5/8/08	25	TJ	50.8366	50.7520	50.7521		0.1154	4819	7	7000		0.66	
21	2805090182	KERR MCGEE	5/8/08	25	515	75.3448	75.4838	75.4940		0.1460	5860	7	8500		0.70	
22	2805090187	KERR MCGEE	5/8/08	50	15	78.2849	78.3259	78.3262		0.0410	820	7	1800		0.51	
23	2805090208	KERR MCGEE	5/8/08	50	AI	66.8034	66.8206	66.8200		0.0171	342	7	550		0.62	
24	2805090222	KERR MCGEE	5/8/08	50	Z4	70.8080	70.8804	70.8808		0.1524	3048	7	4000		0.76	
25	2805100128	KERR MCGEE	5/8/08	10	518	73.5303	73.5822	73.5818		0.0519	5100	7	9000		0.58	
26	2805100129	KERR MCGEE	5/8/08	25	C	50.8923	51.0383	51.0382		0.1460	5840	7	8000		0.73	

Blank - < 0.5 mg  
MRL - 50 - 150%  
LCS - 80 - 114%  
Duplicates - < 10% RPD

Recoveries:  
MRL: 10 mg/L  
\*\*EC\*(0.55 - 0.7): Expected TDS Value  
Min/Max Residue: 0.5 mg - 200 mg

Holding time: 7 day from sampling date  
Residues must be within 0.5 mg of each other

Calculation:  
A = Crucible Wt (g)  
B = Sample Vol (mL)  
C = Crucible + residue (g)  
S1 = TDS of sample  
S2 = TDS of Duplicate

%RPD =  $\frac{|S1-S2|}{S1+S2} \times 100$   
(S1+S2)/2

MVH Laboratories  
750 Royal Oaks Drive, Suite 100  
Monrovia, CA 91106  
TOTAL DISSOLVED SOLIDS (TDS)  
SM 2540C

Standards:  
HCl MW: 36.4609  
Na2SO4 MW: 142.0429  
HCl MW: 36.4609  
Na2SO4 MW: 142.0429

Oven Temp (180 ± 2°C) Start: 180 C End: 180 C  
Oven Mfr: Precision STM 135<sup>+</sup> Ser no.: 11AW-R  
Dry Time (hrs): 17.2

Run #	Sample ID	Client Name	Client Name	Sample Volume (mL)	Crucible Number	Crucible Weight (g)	Crucible + residue 1st wt (g)	Crucible + residue 2nd wt (g)	Residue CA (g)	pH	EC	3rd Weighing/Comments
1	1805090138	Kerr McGee	Kerr McGee	50	B	50.5654	50.5656	50.5656	0.0002	N/A	N/A	
DUP	138			100	HAX	68.4961	68.4969	68.4969	0.0011	N/A	N/A	
2	152			100	EJ	73.6454	73.6455	73.6455	0.0010	N/A	N/A	
3	157			50	EZ	73.1796	73.1872	73.1873	0.0076	N/A	N/A	
4	170			50	H1	67.1417	67.1751	67.1753	0.0334	N/A	N/A	
5	171			50	CR	50.7189	50.8796	50.8795	0.1607	7	4000	
6	173			60	M	71.6114	71.7727	71.7730	0.1613	7	4000	
7	174			2	K3	76.3300	76.3535	76.3574	0.0216	7	1600	76.3516
8	175			2	H1	72.5357	72.5571	72.5567	0.0214	7	14800	
9	176			50	CR	68.02205	68.0426	68.0425	0.0221	7	710	
10	177			25	551	74.9096	74.9816	74.9812	0.0720	7	5000	
11	178			25	444	74.3078	74.3927	74.3925	0.0849	7	5130	
12	179			50	74	56.5162	56.6858	56.6855	0.1696	7	4000	
13	180			50	77	50.1945	50.2893	50.2892	0.0948	7	3000	
14	510010130			50	FL	52.5148	52.6446	52.6445	0.1298	7	3000	50.4230
15	182			25	70	70.7016	70.8460	70.8456	0.1444	7	4000	
16	187			25	10	71.1268	71.2718	71.2716	0.1450	7	8000	
17	208			25	DIF	66.7834	66.9550	66.9552	0.1716	7	4000	
18	232			25	BAU	73.4009	73.5065	73.5067	0.1056	7	5200	
19	180510128			25	70	50.6366	50.7520	50.7521	0.1154	7	7000	
20	129			50	515	75.3448	75.4938	75.4940	0.1490	7	8500	
				50	15	79.2849	79.3259	79.3262	0.0410	7	1600	
				50	AI	66.8034	66.8205	66.8200	0.0171	7	550	
				10	Z4	70.8080	70.9604	70.9608	0.1524	7	4000	
				25	519	73.5303	73.5822	73.5818	0.0519	7	9000	
				25	C	50.8923	51.0383	51.0382	0.1460	7	8000	

Calculations:  
TDS (mg/L) =  $\frac{(C-A) \times 1,000,000}{B}$   
MRPD =  $\frac{(S1-S2) \times 100}{(S1+S2)/2}$

Recoveries:  
Blank - < 0.5 mg  
MRL - 50 - 150%  
LCS - 80 - 114%  
Duplicates - < 10% RPD

MPL: 10 mg/L  
EC: (0.55 - 0.7) Expected TDS Value  
Nitrate Residue: 0.5 mg - 200 mg  
Holding time: 7 day from sampling date  
Residues must be within 0.5 mg of each other

Analyst: AKL Date: 5/13/08 End: 5/19/08  
Reviewed By: \_\_\_\_\_  
LIMS Check By: \_\_\_\_\_  
Was QC Criteria Met: Y N  
Was QR Method: Y N

MWH Laboratories  
750 Royal Oaks Drive, Suite 100  
Monrovia, CA 91106

TOTAL DISSOLVED SOLIDS (TDS)

SM 2540C

Standards: NRC1 MWF\_AA008050-1 True Value Exp. Date 80-114  
 NRC2 MWF\_AA008050-2 175 mg/L\_11/20/08 80-114  
 NRC3 MWF\_AA008050-3 700 mg/L\_11/20/08 80-114  
 NRC4 MWF\_AA008050-3 10 mg/L\_12/03/08 80-114

Oven Temp (180 ± 2°C): Start 180 C End 180 C  
 Oven Mfr: Precision STM 135 Ser no: 11-AW-B  
 Dry Time (hrs): 112

Analysis Start Date: 8/4/08 End: 8/6/08  
 Analyst: AXA  
 Reviewed By: [Signature]  
 LIMS Check By: [Signature]  
 Was OC Criteria Met: [Signature]  
 Was OIR Needed: [Signature]

Run #	Sample ID	Client Name	Date Collected	Sample Volume (mL)	Crucible Number	Crucible Weight (g)	Crucible + residue 1st wt (g)	Crucible + residue 2nd wt (g)	Residue C-A (g)	TDS (mg/L)	pH	EC	**TDS/EC	OC 1	OC 2	% Rec	3rd Weighing/Comments
1	2805090124	KERR MC GEE	5/8/08	50	21	53.3341	53.3339	53.3339	-0.0002	4	N/A	N/A	N/A	1	2	80-114	
2	2805090124	KERR MC GEE	5/8/08	100	A	66.7758	66.7767	66.7766	0.0009	9	N/A	N/A	N/A	1	2	80-114	
3	2805090133	KERR MC GEE	5/8/08	100	LED	79.5097	79.5106	79.5106	0.0009	9	N/A	N/A	N/A	1	2	80-114	
4	2805140117	KERR MC GEE	5/13/08	50	LY	68.0196	68.0203	68.0204	0.0007	134	N/A	N/A	N/A	1	2	80-114	76%
5	2805140128	KERR MC GEE	5/13/08	50	X	50.7827	50.8255	50.8255	0.0028	656	N/A	N/A	N/A	1	2	80-114	
6	2805140129	KERR MC GEE	5/13/08	2	515	75.3433	75.3669	75.3671	0.0236	11800	7	15100	0.78	1	2	80-114	TDR
7	2805140133	KERR MC GEE	5/13/08	2	N4	70.0930	70.1195	70.1187	0.0235	11750	7	15100	0.78	1	2	80-114	TDR
8	2805030625	CMPL	6/3/08	25	E	73.1760	73.1920	73.1924	0.0190	9500	7	15000	0.63	1	2	80-114	TDR
9	2805030541	CMPL	6/3/08	2	V8	76.5103	76.5975	76.5978	0.1877	7508	7	8870	0.85	1	2	80-114	TDR
10	2806030545	BURBANK	6/3/08	2	501	71.8907	71.7182	71.7180	0.0275	13750	7	16460	0.84	1	2	80-114	
11	2806030603	RIVERSIDE	6/3/08	2	YUM	74.0886	74.1188	74.1186	0.0222	11100	7	13510	0.82	1	2	80-114	
12	2806030603	RIVERSIDE	6/3/08	100	H19	74.5088	74.5088	74.5087	0.0003	3	7	4	0.75	1	2	80-114	
13	2806030713	ADOBESPR	6/2/08	50	VA	71.0658	71.0692	71.0694	0.0036	72	7	115	0.63	1	2	80-114	
14	2806030780	LUNDEWH	6/2/08	50	10	71.1194	71.1411	71.1412	0.0217	434	7	710	0.61	1	2	80-114	
15	2806030861	MAGIC LABS	5/28/08	50	S10	72.8718	72.8780	72.8703	0.0072	144	7	250	0.58	1	2	80-114	
16	2806030741	KERR MC GEE	6/2/08	50	21	66.3040	66.3219	66.3220	0.0179	358	7	600	0.60	1	2	80-114	
17	2806030013	RIVERSIDE	5/20/08	50	RW	72.2100	72.2268	72.2267	0.0169	338	7	800	0.56	1	2	80-114	
18	2806030713	ADOBESPR	6/2/08	50	2R	72.3320	72.3534	72.3535	0.0214	428	7	720	0.59	1	2	80-114	
19	2806030780	LUNDEWH	6/2/08	50	2H	67.2830	67.2987	67.2985	0.0137	274	7	480	0.57	1	2	80-114	
20	2806030741	KERR MC GEE	6/2/08	50	528	74.7606	74.7637	74.7635	0.0031	82	7	120	0.52	1	2	80-114	
21	2806030013	RIVERSIDE	5/20/08	50	503	75.1114	75.1430	75.1427	0.0318	632	7	1050	0.60	1	2	80-114	
22	2806030013	RIVERSIDE	5/20/08	50	503	74.2978	74.3158	74.3154	0.0178	356	7	580	0.61	1	2	80-114	

Calculations: TDS (mg/L) =  $\frac{C-A}{B} \times 1,000,000$   
 \*RPD =  $\frac{S1-S2}{(S1+S2)/2} \times 100$   
 Recovers: Blank - < 0.5 mg  
 MRL - 50 - 150%  
 LCS - 80 - 114%  
 Duplicates - < 10% RPD  
 Holding time: 7 day from sampling date  
 Residues must be within 0.5 mg of each other

12:00

MWH Laboratories  
750 Royal Oaks Drive, Suite 100  
Monrovia, CA 91016-3828

Page      of     

**TOTAL DISSOLVED SOLIDS (TDS) MW SOP REVISION 6  
SM2540C**

Analysis start date: 6/4/08 End: 6/4/08  
 Analyst: ANA  
 Reviewed By: YP 6/10/08  
 LIMS Check By: YR 6/10/08  
 Was QC Criteria Met: Y  
 Was QIR Needed: Y

Oven Temp (180 ± 2°C): Start 180 C End: 180 C  
 Oven Mfr: "Precision STM135" Ser no.: "11AW-6"  
 Dry Time (hrs): 1/2

Standards:  
 NaCl MW# 58.44 EC# 20-1 True Value Exp. Date  
 Na2SO4 MW# 142.04 EC# 20-2 175 mg/L 11/30/08 85-115  
 NaCl MW# 58.44 EC# 20-3 700 mg/L 11/30/08 85-115  
 10 mg/L 12/13/08 50-150

Run #	Sample ID	Client Name	Date Collected	Sample Volume (ml)	Crucible Number	Crucible Weight (g)	Crucible + residue 1st wt. (g)	Crucible + residue 2nd wt. (g)	Residue B-A (g)	TDS (mg/L)	pH	EC	EC-0.6	2nd Weighing/Comments
1	MR1-10 mg/L	N/A	N/A	50	21	53.3341	53.3339	53.3339	2.0002	4	N/A	N/A	N/A	
2	MR1-10 mg/L DUP	N/A	N/A	100	A	68.7758	68.7767	68.7769	0.0009	9	N/A	N/A	N/A	
3	LCS 1 - 175 mg/L	N/A	N/A	100	25D	78.5097	78.5106	78.5106	0.0009	7	N/A	N/A	N/A	
4	LCS 2 - 700 mg/L	N/A	N/A	50	21	68.0196	68.0263	68.0264	0.0067	134	N/A	N/A	N/A	
5	1805090124	Kerr McCabe	5-8-08	50	X	50.7927	50.8055	50.8253	0.0328	656	N/A	N/A	N/A	
6	124			515	515	75.3132	75.3069	75.3069	0.0063	1180	7	1590	9260	
7	133			N4		70.0930	70.1165	70.1167	0.0235	11750		15100	9260	
8	128		5-13-08	25	E	73.1760	73.1950	73.1954	0.0190	9500		15900	9200	
9	129			2	F4	78.5103	78.4980	78.4981	0.0123	7508		8670	6322	
10	1805140133			2	V8	67.5417	67.5676	67.5676	0.0259	12950		17230	10338	
11	18051403825	CMP	6-3-08	100	YLM	71.6907	71.7182	71.7180	0.0275	13750		16460	9876	
12	541			50	H19	74.0946	74.1188	74.1189	0.0242	11100		13510	8106	
13	543	Burbank		50	V9	74.5085	74.5098	74.5097	0.0013	3		4	2.4	
14	546	CMP		50	10	71.0656	71.0692	71.0694	0.0038	72		115	69	
15	603	Everwide		50	510	71.1194	71.1111	71.1412	0.0217	434		710	426	
16	603	Everwide		50	21	74.6718	74.6790	74.6783	0.0072	144		250	150	
17	603	Everwide		50	21	66.3040	66.3219	66.3280	0.0240	358		600	360	
18	603	Everwide		50	21	72.1100	72.4114	72.4267	0.0167	338		600	360	
19	603	Everwide		50	21	66.3040	66.3219	66.3280	0.0240	358		600	360	
20	603	Everwide		50	21	72.1100	72.4114	72.4267	0.0167	338		600	360	
21	603	Everwide		50	21	66.3040	66.3219	66.3280	0.0240	358		600	360	
22	603	Everwide		50	21	72.1100	72.4114	72.4267	0.0167	338		600	360	
23	603	Everwide		50	21	66.3040	66.3219	66.3280	0.0240	358		600	360	
24	603	Everwide		50	21	72.1100	72.4114	72.4267	0.0167	338		600	360	
25	603	Everwide		50	21	66.3040	66.3219	66.3280	0.0240	358		600	360	
26	603	Everwide		50	21	72.1100	72.4114	72.4267	0.0167	338		600	360	
27	603	Everwide		50	21	66.3040	66.3219	66.3280	0.0240	358		600	360	
28	603	Everwide		50	21	72.1100	72.4114	72.4267	0.0167	338		600	360	
29	603	Everwide		50	21	66.3040	66.3219	66.3280	0.0240	358		600	360	
30	603	Everwide		50	21	72.1100	72.4114	72.4267	0.0167	338		600	360	
31	603	Everwide		50	21	66.3040	66.3219	66.3280	0.0240	358		600	360	
32	603	Everwide		50	21	72.1100	72.4114	72.4267	0.0167	338		600	360	
33	603	Everwide		50	21	66.3040	66.3219	66.3280	0.0240	358		600	360	
34	603	Everwide		50	21	72.1100	72.4114	72.4267	0.0167	338		600	360	
35	603	Everwide		50	21	66.3040	66.3219	66.3280	0.0240	358		600	360	
36	603	Everwide		50	21	72.1100	72.4114	72.4267	0.0167	338		600	360	
37	603	Everwide		50	21	66.3040	66.3219	66.3280	0.0240	358		600	360	
38	603	Everwide		50	21	72.1100	72.4114	72.4267	0.0167	338		600	360	
39	603	Everwide		50	21	66.3040	66.3219	66.3280	0.0240	358		600	360	
40	603	Everwide		50	21	72.1100	72.4114	72.4267	0.0167	338		600	360	

MRL: 10 mg/L  
 EC\*(0.55 - 0.7): expected TDS value  
 Min/Max Residue: 0.5mg - 200 mg

Drying Efficiency: % change =  $\frac{|Final - Initial|}{Initial} * 100$   
 < 4% or 0.5 mg

Recoveries: Blank - < 0.5mg  
 MRL - 50%-150%  
 LCS - 80%-114%  
 Duplicates - < 10% RPD

Calculation:  
 TDS (mg/L) =  $\frac{C-A}{B} * 1,000,000$   
 %RPD =  $\frac{|S1-S2|}{(S1+S2)/2} * 100$

A = Crucible wt (g)  
 B = Sample Vol (ml)  
 C = Crucible+residue (g)

S1 = TDS of sample  
 S2 = TDS of duplicate



Received by Supervisor on 06-jun-2008  
QIR initiated by: axa

QUALITY INVESTIGATION REPORT

QIR No.: WETL\_243336

Analysis date: 060408  
Analyst: axa  
Method reference: E160.1-SM2  
Analytical instrument: INOT1  
Extraction Date: 060308  
Prepared By: axa

Group	Sample#	Sample ID	Customer	QC Ref	Test	PM
242813	2806030525 ✓	029-097 DIS FP MUN S	CMPL-029-NST	430804	TDS	ADE
242816	2806030541 ✓	029-096 DRK FP MUN S	CMPL-029-NST	430804	TDS	ADE
242819	2806030546 ✓	029-099 SPG FP ARROW	CMPL-029-NST	430804	TDS	ADE
242866	2806030741 ✓	STABILIZED WATER	KERRMCGEE-MP	430804	TDS	ADE
242560	2805300103 →	19498:7TH AND CHICAG	RIVERSIDE	430804	TDS	DEB
242836	2806030603 ✓	19498:7TH AND CHICAG	RIVERSIDE	430804	TDS	DEB
242856	2806030713 ✓	RAW SOURCE WATER	ADOBESPR	430804	TDS	MAG
242888	2806030861 ✓	832201 <i>summit</i>	MAGICLABS	430804	TDS	TDFA
242818	2806030543 ✓	1B52D:TK-601B INFLUE	BURBANK-BOU	430804	TDS	YOM
242874	2806030780 ✓	SOURCE ANNUAL	LUNDE-WH	430804	TDS	YOM

Brief Description: (include reason for non-compliance-Root Cause)

The LCS was below the acceptance limit of 80%, the result was 76%.

*(L2)*, results may be biased low.

MWH Laboratories  
750 Royal Oaks Drive, Suite 100  
Montrose, CA 91108

TOTAL DISSOLVED SOLIDS (TDS)  
SM 2540C

Analysis Start Date: 05/08 End: 07/08  
Reviewed By: *AVA*  
LIMS Check By: *AVA*  
Vials: CC Cracks Met: *Y*  
WAs: QIR Needed: *Y*

Standards:  
NaCl MW#\_AXA08030-1 True Value Exp. Date % Rec  
Na2SO4 MW#\_AXA08030-2 175 mg/L\_11/03/08 80.114  
NaCl MW#\_AXA08030-3 700 mg/L\_11/03/08 80.114  
NaCl MW#\_AXA08030-3 10 mg/L\_12/03/08 80.114

Oven Temp (180 ± 2°C): Start 180 C End 180 C  
Oven Mfr: Precision STM 135 Ser no.: 11AW-5  
Dry Time (hrs): 12

Run #	Sample ID	Client Name	Date Collected	Sample Volume (mL)	Crucible Number	Crucible Weight (g)	Crucible + residue 1st wt (g)	Crucible + residue 2nd wt (g)	Residue C-A (g)	TDS (mg/L)	pH	EC	--TDS/EC	OC 1	OC 2	3rd Weighing/Comments
1	Blank	N/A	N/A	50		50.5470	50.5469	50.5470	-0.0001	N/A	N/A	N/A	N/A			
2	MRL 1 - 10 mg/L	N/A	N/A	100	R4	73.7856	73.7864	73.7863	0.0008	8	N/A	N/A	N/A			
3	MRL 1 - 10 mg/L DUP	N/A	N/A	100	OO	71.0133	71.0135	71.0132	0.0012	12	N/A	N/A	N/A			
4	LCS 1 - 175 mg/L	N/A	N/A	50	L	65.8495	65.8474	65.8573	0.0079	158	N/A	N/A	N/A			
5	LCS 2 - 700 mg/L	N/A	N/A	50	IS	68.5220	68.5560	68.5558	0.0340	680	N/A	N/A	N/A			
6	2806040748	<del>XXXXXXXXXX</del>	8/4/08	50	OO	75.8964	75.8149	75.8147	0.0065	130	7	280	0.48			
7	2806040748	<del>XXXXXXXXXX</del>	8/4/08	50	Z2	67.2478	67.2544	67.2543	0.0066	132	7	280	0.47			
8	2806040748	<del>XXXXXXXXXX</del>	8/4/08	50	UG	72.7874	72.7150	72.7149	0.0078	132	7	280	0.54			
9	2806040750	<del>XXXXXXXXXX</del>	8/4/08	50	IS	71.8945	71.9020	71.9028	0.0084	188	7	280	0.60			
10	2806040794	<del>XXXXXXXXXX</del>	8/4/08	100	509	75.3051	75.3053	75.3054	0.0002	2	7	5	0.40			
11	2806040878	<del>XXXXXXXXXX</del>	8/4/08	50	BM	54.5965	54.5225	54.5221	0.0280	520	7	850	0.61			
12	2806030604	<del>XXXXXXXXXX</del>	8/2/08	2	BM	74.7072	74.7198	74.7185	0.0126	8300	7	8000	0.76			
13	2806030607	KERR MCGEE	8/2/08	2	BO	78.3599	78.3538	78.3540	0.0120	8450	7	8000	0.81			
14	2806050052	<del>XXXXXXXXXX</del>	5/25/08	50	28	66.9415	66.9603	66.9600	0.0198	378	7	885	0.55			
15										#DIV/0!	7		#DIV/0!	#		
16										#DIV/0!	7		#DIV/0!	#		
17										#DIV/0!	7		#DIV/0!	#		
18										#DIV/0!	7		#DIV/0!	#		
19										#DIV/0!	7		#DIV/0!	#		
20										#DIV/0!	7		#DIV/0!	#		

MR: 10 mg/L  
 \*\*EC: 10.55 - 0.7: Expected TDS Value  
 Min/Max Residue: 0.5 mg - 200 mg  
 Recoveries: Blank - <0.5 mg  
 MRL - 50 - 150%  
 LCS - 80 - 114%  
 Duplicates - < 10% RPD  
 Calculation: TDS (mg/L) =  $\frac{(C-A) \times 1,000,000}{B}$   
 %RPD =  $\frac{|S1-S2| \times 100}{(S1+S2)/2}$   
 A = Crucible Wt (g)  
 B = Sample Vol (mL)  
 C = Crucible + residue (g)  
 S1 = TDS of sample  
 S2 = TDS of Duplicate

**TOTAL DISSOLVED SOLIDS (TDS) MW SOP REVISION 6  
SM2540C**

Analysis start date: 6/15/08 End: 6/15/08

Reviewed By: YJ cs/lj/08

LIMS Check By: YJ

Was OC Criteria Met: (Y) N

Was QIR Needed: (Y) N

Oven Temp (180 ± 2°C): Start 180 C End: 180 C  
Oven Mfr: "Precision STM135" Ser no.: "11AW-6" C

Dry Time (hrs): 12

Standards:  
NaCl MW# 58.44 200 mg/L 175 mg/L 85-115  
Na2SO4 MW# 142.04 700 mg/L 700 mg/L 85-115  
NaCl MW# 58.44 10 mg/L 10 mg/L 50-150

Run #	Sample ID	Client Name	Date Collected	Sample Volume (ml)	Crucible Number	A Crucible Weight (g)	C Crucible + residue 1st wt. (g)	C Crucible + residue 2nd wt. (g)	Residue B-A (g)	TDS (mg/L)	pH	EC	EC*0.6	2nd Weighing/Comments
	Blank	N/A	N/A	50		52.5470	52.5470	52.5470	0.0001	1	N/A	N/A	N/A	
	MRL 1 - 10 mg/L	N/A	N/A	100	R1	73.7664	73.7664	73.7663	0.0008	8	N/A	N/A	N/A	
	MRL 1 - 10 mg/L DUP	N/A	N/A	100	D0	71.0183	71.0195	71.0192	0.0018	12	N/A	N/A	N/A	
	CS LCS 1 - 175 mg/L	N/A	N/A	50	L	45.8498	45.8574	45.8523	0.0074	158	N/A	N/A	N/A	
	CS LCS 2 - 700 mg/L	N/A	N/A	50	L1	49.6920	49.6920	49.6920	0.0000	680	N/A	N/A	N/A	
1	<del>28262440</del> 748		6-4-08	50	D	75.8084	75.8149	75.8147	0.0065	130	T	180	168	
2	749				22	67.2478	67.2544	67.2543	0.0066	132		180	168	
3	750				418	72.7074	72.7150	72.7149	0.0076	152		180	168	
4	794				1	71.8945	71.9029	71.9029	0.0084	168		180	168	
5	878				509	75.3051	75.3053	75.3054	0.0002	5		5	5	
6	2826232604		6-2-08	50	B1	54.5965	54.6225	54.6221	0.0260	520		850	570	
7	607			2	B	74.7076	74.7178	74.7178	0.0102	6300		8000	4800	
8	2826232604		5-25-08	50	B3	76.3509	76.3638	76.3640	0.0129	6450		685	411	
9	2826232604			50	B8	76.9415	76.9423	76.9420	0.0008	376				

Calculation:  
TDS (mg/L) =  $\frac{[C-A]}{B} \cdot 1,000,000$   
%RPD =  $\frac{|S1-S2|}{(S1+S2)/2} \cdot 100$

A = Crucible wt (g)  
B = Sample Vol (ml)  
C = Crucible+residue (g)  
S1 = TDS of sample  
S2 = TDS of duplicate

Drying Efficiency:  $\frac{[Init - Fin]}{Init} \cdot 100$   
< 4% or 0.5 mg

Recoveries: Blank < 0.5mg  
MRL - 50%-150%  
LCS - 80%-114%  
Duplicates < 10% RPD

Holding time: 7 day from sampling date

MRL: 10 mg/L  
EC\* (0.55 - 0.7): expected TDS value  
Min/Max Residue: 0.5mg - 200 mg

MWH Laboratories  
750 Royal Oaks Drive, Suite 100  
Morroville, CA 91108

TOTAL DISSOLVED SOLIDS (TDS)  
SM 2540C

Analysis Start Date: 5/5/08 End: 5/11/08  
 Analyzed By: AXA  
 Reviewed By: *AXA*  
 LIMS Check By: *AXA*  
 Was OC Criteria Met: *Y*  
 Was OR Needed: *N*

Standards:  
 NCI MW# AXA080500-1  
 N42S04 MW# AXA080530-2  
 NCI MW# AXA080603-3

True Value Exp. Date  
 175 mg/L 11/20/08  
 700 mg/L 11/20/08  
 10 mg/L 12/20/08

OC Temp (180 ± 2°C) Start: 180 C End: 180 C  
 Oven Mfr: Precision STM 135 Ser no.: 11AWJF  
 Dry Time (hrs): 12

% Rec  
 80 - 114  
 80 - 114  
 80 - 114

Run #	Sample ID	Client Name	Date Collected	Sample Volume (mL)	Crucible Number	Crucible Weight (g)	Crucible + residue 1st wt (g)	Crucible + residue 2nd wt (g)	Residue C-A (g)	TDS (mg/L)	pH	EC	**TDS/EC	OC 1	OC 2	3rd Weighing/Comments
BR	Blank	N/A	N/A	50	19	50.7620	50.7630	50.7633	0.0010	2	N/A	N/A	N/A			
MRL	MRL 1 - 10 mg/L	N/A	N/A	100	MX	66.4323	66.4333	66.4334	0.0010	10	N/A	N/A	N/A			
MRL	MRL 1 - 10 mg/L DUP	N/A	N/A	100	BI	72.0379	72.0390	72.0396	0.0011	11	N/A	N/A	N/A			
LCS	LCS 1 - 175 mg/L	N/A	N/A	50	DX	48.8181	48.8251	48.8292	0.0080	100	N/A	N/A	N/A			
LCS	LCS 2 - 700 mg/L	N/A	N/A	50	18	52.6091	52.6429	52.6428	0.0338	676	N/A	N/A	N/A			
1	2805090118	KERR MCGEE	5/6/08	25	527	75.8936	75.8936	75.8939	0.1396	5592	7	6200	0.90			TDS
DUP	2805090118	KERR MCGEE	5/6/08	25	34W	75.1973	75.3067	75.3065	0.1394	5376	7	6200	0.90			
2	2805070224	KERR MCGEE	5/6/08	2	LAL	65.5213	65.5450	65.5451	0.0237	11850	7	16300	0.73			+ TDS
3	2805070225	KERR MCGEE	5/6/08	2	DOD	74.7124	74.7370	74.7370	0.0246	12300	7	18110	0.78			+ TDS
4	2805070226	KERR MCGEE	5/6/08	2	Z4	70.7984	70.8208	70.8210	0.0224	11200	7	17000	0.66			+ TDS
5	2805070227	KERR MCGEE	5/6/08	2	Y14	72.3695	72.4208	72.4210	0.0243	12150	7	17700	0.69			+ TDS
6	2805070228	KERR MCGEE	5/6/08	2	NO	69.4380	69.4700	69.4701	0.0320	19000	7	17330	0.92			+ TDS
7	2805070229	KERR MCGEE	5/6/08	2	1	75.1388	75.1507	75.1508	0.0127	6350	7	12500	0.51			
8	2805070230	KERR MCGEE	5/6/08	2	37	70.1328	70.1527	70.1529	0.0201	10050	7	15000	0.67			
9	2805070231	KERR MCGEE	5/6/08	2	1	75.3698	75.4111	75.4115	0.0113	5650	7	12000	0.47			
10	2805070232	KERR MCGEE	5/6/08	2	BOL	73.3984	73.4190	73.4191	0.0208	10300	7	11300	0.91			
11	2805090122	KERR MCGEE	5/6/08	10	Z14	84.3241	84.4000	84.3998	0.0759	7590	7	6120	0.83			TDS
DUP	2805090122	KERR MCGEE	5/6/08	10	415	79.4208	79.4964	79.4968	0.0756	7590	7	6120	0.83			TDS
12	2805070234	KERR MCGEE	5/6/08	2	3V	67.7783	67.7950	67.7847	0.0167	8330	7	11000	0.76			TDS
13	2805070238	KERR MCGEE	5/6/08	10	8	60.7189	60.7930	60.7833	0.0761	7610	7	8900	0.86			
14	2805090655	KERR MCGEE	5/7/08	100	VV	73.4229	73.4230	73.4232	0.0001	1	7	3	0.33			+ TDS
15	2805090115	KERR MCGEE	5/6/08	25	15	50.5322	50.5415	50.5418	0.0093	4372	7	5400	0.81			+ TDS
16	2805090132	KERR MCGEE	5/6/08	2	30	68.0682	68.1160	68.1163	0.0478	8900	7	14120	0.63			
17	2805090137	KERR MCGEE	5/6/08	2	5	74.3911	74.4150	74.4148	0.0239	11950	7	17000	0.70			TDS
18	2805140594	KERR MCGEE	5/13/08	10	AS	50.2126	50.2863	50.2856	0.0724	7240	7	8970	0.81			
19	2805140134	KERR MCGEE	5/13/08	10	BR	73.2797	73.2797	73.2797	0.0		7	1				TDS
20	2805140116	KERR MCGEE	5/13/08	10	DA	69.1793	69.2478	69.2474	0.0685	8950	7	8790	0.79			

Calculation:  
 TDS (mg/L) =  $\frac{(C-A) \times 1,000,000}{B}$   
 %RPD =  $\frac{|S1-S2|}{(S1+S2)/2} \times 100$   
 S1 = TDS of sample  
 S2 = TDS of Duplicate

Recoveries:  
 Blank - < 0.5 mg  
 MRL - 50 - 150%  
 LCS - 80 - 114%  
 Duplicates - < 10% RPD

MRL: 10 mg/L  
 \*\*EC\* (0.55 - 0.7): Expected TDS Value  
 Min/Max Residue: 0.5 mg - 200 mg  
 Holding time: 7 day from sampling date  
 Residues must be within 0.5 mg of each other

TOTAL DISSOLVED SOLIDS (TDS) MW, SOP REVISION 6  
SM2540C

Analysis start date: 6/15/08 End: 6/15/08  
 Analyzed By: YL  
 LIMS Check By: YL  
 Was QC Criteria Met: Y  
 Was QIR Needed: Y

Oven Temp (180° ± 2°C): Start 150 C End: 150 C  
 Oven Mfr: "Precision STM135" Ser no.: "11AW-6"  
 Dry Time (hrs): 1.14

Standards:  
 NaCl MW# 58.44 175 mg/L  
 Na2SO4 MW# 142.04 700 mg/L  
 NaCl MW# 58.44 10 mg/L

% Rec.  
 85-115  
 85-115  
 50-150

Run #	Sample ID	Client Name	Date Collected	B Sample Volume (ml)	Crucible Number	A Crucible Weight (g)	C Crucible + residue 1st wt. (g)	Crucible + residue 2nd wt. (g)	Residue B-A (g)	TDS (mg/L)	pH	EC	EC*0.6	2nd Weighing/Comments
1	Blank	N/A	N/A	50	19	50.7629	50.7629	50.7629	0.0001	2	N/A	N/A	N/A	
2	MRL 1 - 10 mg/L	N/A	N/A	100	19X	66.4363	66.4363	66.4363	0.0010	10	N/A	N/A	N/A	
3	MRL 1 - 10 mg/L DUP	N/A	N/A	100	B1	72.0379	72.0379	72.0379	0.0011	11	N/A	N/A	N/A	
4	LCS 1 - 175 mg/L	N/A	N/A	50	DX	48.8181	48.8261	48.8262	0.0080	140	N/A	N/A	N/A	
5	LCS 2 - 700 mg/L	N/A	N/A	50	18	52.6091	52.6119	52.6128	0.0038	676	N/A	N/A	N/A	
6	Sup	Kerr Meese	6-6-08	2.5	527	75.6638	75.6326	75.6339	0.0312	5388	7	6400	3720	
7	1805070224		5-6-08	2	3VW	75.1673	75.1027	75.1065	0.0642	576		6400	3720	
8	225			2	LAL	65.8213	65.8450	65.8457	0.0237	11850		6400	3720	
9	226			2	DD	74.7124	74.7370	74.7370	0.0246	12300		6400	3720	
10	227			2	Y1	70.9984	70.8208	70.8210	0.0024	11200		6400	3720	
11	228			2	Y1	72.3245	72.4108	72.4120	0.0023	12150		6400	3720	
12	229			2	AD	68.4380	68.4100	68.4171	0.0020	16000		6400	3720	
13	230			2		75.1380	75.1507	75.1508	0.0127	6350		6400	3720	
14	231			2	37	70.1326	70.1527	70.1528	0.0201	10050		6400	3720	
15	232			2		75.9998	75.4111	75.4115	0.0113	5450		6400	3720	
16	1805070224		5-8-08	10	BDA	73.3984	73.4190	73.4191	0.0206	10300		6400	3720	
17	233			2	3V	64.3241	64.4020	64.4028	0.0787	7570		6400	3720	
18	1805070224		5-6-08	2	415	78.4200	78.4224	78.4228	0.0028	7580		6400	3720	
19	238			2	3V	67.7783	67.7450	67.7477	0.0167	8350		6400	3720	
20	1805070224		5-7-08	10	9	50.7169	50.7850	50.7853	0.0761	7610		6400	3720	
21	132		5-8-08	2.5	VV	73.4429	73.4230	73.4232	0.0001	1		6400	3720	
22	137			2	16	50.5322	50.6415	50.6418	0.1093	4372		6400	3720	
23	1805070224			2	30	68.0982	68.1160	68.1163	0.0178	8900		6400	3720	
24	134		5-10-08	10	J	74.3911	74.4150	74.4149	0.0239	11750		6400	3720	
25	116			10	AS	50.2129	50.2853	50.2866	0.0724	7240		6400	3720	
26				10	DR	73.2797	73.2797	73.2796	0	0		6400	3720	
27				10	DA	69.1783	69.2478	69.2474	0.0695	6970		6400	3720	

Calculation:  
 TDS (mg/L) =  $\frac{IC-A}{B} \cdot 1,000,000$   
 %RPD =  $\frac{|S1-S2|}{(S1+S2)/2} \cdot 100$

Drying Efficiency: % change =  $\frac{|Init - Fin|}{Init} \cdot 100$   
 < 4% or 0.5 mg  
 Recoveries: Blank - < 0.5mg  
 MRL - 50%-150%  
 LCS - 80%-114%  
 Duplicates - < 10% RPD  
 Holding time: 7 day from sampling date  
 all samples TDR

MRL: 10 mg/L  
 EC\*(0.55 - 0.7): expected TDS value  
 Mini/Max Residue: 0.5mg - 200 mg

A = Crucible wt (g)  
 B = Sample Vol (ml)  
 C = Crucible+residue (g)  
 S1 = TDS of sample  
 S2 = TDS of duplicate

Received by Supervisor on 30-may-2008  
 QIR initiated by: lmr

QUALITY INVESTIGATION REPORT                      QIR No.: WETL\_242625

Analysis date: 051308  
 Analyst: axa  
 Method reference: E160.1-SM2  
 Analytical instrument: INOT1  
 Extraction Date: 051308  
 Prepared By: axa

Group	Sample#	Sample ID	Customer	QC Ref	Test	PM
/240243	2805090184	PC-2	KERRMCGEE-MP	428171	TDS	ADE
/240243	2805090185	PC-2D	KERRMCGEE-MP	428171	TDS	ADE
/240243	2805090181	PC-4	KERRMCGEE-MP	428171	TDS	ADE
/240243	2805090186	EB050808	KERRMCGEE-MP	428171	TDS	ADE
/240243	2805090189	FB050808	KERRMCGEE-MP	428171	TDS	ADE
240326	2805100132	CLD1-R	KERRMCGEE-MP	428171	TDS	ADE
240326	2805100131	CLD2-RD	KERRMCGEE-MP	428171	TDS	ADE
240326	2805100134	PC-108	KERRMCGEE-MP	428171	TDS	ADE
240326	2805100133	PC-110	KERRMCGEE-MP	428171	TDS	ADE
240326	2805100135	PC-62	KERRMCGEE-MP	428171	TDS	ADE
240326	2805100137	EB050908	KERRMCGEE-MP	428171	TDS	ADE
240326	2805100136	PC-112	KERRMCGEE-MP	428171	TDS	ADE
240327	2805100139	M-115	KERRMCGEE-MP	428171	TDS	ADE
240327	2805100138	M-22A	KERRMCGEE-MP	428171	TDS	ADE
240327	2805100140	M-14A	KERRMCGEE-MP	428171	TDS	ADE
240407	2805120190	100249	WAD	428171	TDS	JCH

**Brief Description: (include reason for non-compliance-Root Cause)**

LCS1 recovery was 61% and the acceptable range is 80%-114%.  
 LCS1 is NaCl solution used to assess how well the dissolved salts are moving through the glass fiber filter. LCS2, a sodium sulfate solution, yielded a recovery of 91%.  
 Sodium sulfate is used to assess if any moisture is adsorbed to the residue during the final weighings.

**Corrective Action Taken/Prevention:**

Results reported. Duplicates for the run were <10% RPD and the reported results were within the expected range based on the TDS/EC ratios. Two other batches analysed that day had LCS1 recoveries of 94.3% and 86.9%.

**Impact on Data Quality:**

Possible low bias to samples results based on LCS1 recovery. Reported results had TDS/EC ratios in the mid-60s to 70s percentile.  
 LIMS user: lmr                      Date/time stamp: 05-jun-2008 13:36:56

**Data Disposition/Acceptable/Method/Regulations:**

Data acceptable for compliance based on passing LCSs and other QCs. Report with L2 flag.  
 LIMS user: yyc                      Date/time stamp: 05-jun-2008 14:41:37

**Annotation:**

L2 - The associated blank spike recovery was below lab  
acceptance limits.

LIMS user:ycy      Date/time stamp:05-jun-2008 14:41:37

Client Contact:

ok to report - comment on low LCS recovery.

LIMS user:ade      Date/time stamp:06-jun-2008 06:12:09

~~\*\*\*~~ - report results. flag/comment per qir.

LIMS user:jch      Date/time stamp:09-jun-2008 13:05:11

## Detail Report for QIR group#

242625

Group	Sample#	Sample ID	Customer	QC Ref	Test	Analyst	Analysis Date	Prep	Prep Date	Inst
240243	2805090181	PC-4	KERRMCGEE-MP	428171	TDS	axa	05/13/08 10:14	axa	05/13/08 07:00	INOT1
240243	2805090184	PC-2	KERRMCGEE-MP	428171	TDS	axa	05/13/08 10:14	axa	05/13/08 07:00	INOT1
240243	2805090185	PC-2D	KERRMCGEE-MP	428171	TDS	axa	05/13/08 10:14	axa	05/13/08 07:00	INOT1
240243	2805090186	EB050808	KERRMCGEE-MP	428171	TDS	axa	05/13/08 10:14	axa	05/13/08 07:00	INOT1
240243	2805090189	FB050808	KERRMCGEE-MP	428171	TDS	axa	05/13/08 10:14	axa	05/13/08 07:00	INOT1
240326	2805100131	CLD2-RD	KERRMCGEE-MP	428171	TDS	axa	05/13/08 10:14	axa	05/13/08 07:00	INOT1
240326	2805100132	CLD1-R	KERRMCGEE-MP	428171	TDS	axa	05/13/08 10:14	axa	05/13/08 07:00	INOT1
240326	2805100133	PC-110	KERRMCGEE-MP	428171	TDS	axa	05/13/08 10:14	axa	05/13/08 07:00	INOT1
240326	2805100134	PC-108	KERRMCGEE-MP	428171	TDS	axa	05/13/08 10:14	axa	05/13/08 07:00	INOT1
240326	2805100135	PC-62	KERRMCGEE-MP	428171	TDS	axa	05/13/08 10:14	axa	05/13/08 07:00	INOT1
240326	2805100136	PC-112	KERRMCGEE-MP	428171	TDS	axa	05/13/08 10:14	axa	05/13/08 07:00	INOT1
240326	2805100137	EB050908	KERRMCGEE-MP	428171	TDS	axa	05/13/08 10:14	axa	05/13/08 07:00	INOT1
240327	2805100138	M-22A	KERRMCGEE-MP	428171	TDS	axa	05/13/08 10:14	axa	05/13/08 07:00	INOT1
240327	2805100139	M-115	KERRMCGEE-MP	428171	TDS	axa	05/13/08 10:14	axa	05/13/08 07:00	INOT1
240327	2805100140	M-14A	KERRMCGEE-MP	428171	TDS	axa	05/13/08 10:14	axa	05/13/08 07:00	INOT1
240407	2805120190	100249	W	428171	TDS	axa	05/13/08 10:14	axa	05/13/08 07:00	INOT1



Batch# 428171 TDS

Analyte	QC	Actual	Found	Lower	Yield	Upper	Statu
Total Dissolved Solid (TDS)	DUP	4676	4900	0.0	4.7	10.0	OK
Total Dissolved Solid (TDS)	LCS1	175	116	80.0	66.3	114.0	Alarm
Total Dissolved Solid (TDS)	LCS2	700	638	80.0	91.1	114.0	OK
Total Dissolved Solid (TDS)	MBLK	ND	ND	0.0		0.0	OK
Total Dissolved Solid (TDS)	MRL_CHK	10.0	8	50.0	80.0	150.0	OK
Total Dissolved Solid (TDS)	RPD_LCS	66.28	91.14	0.0	31.58	20.0	Alarm

**Standard  
Preparation  
Worksheet  
&  
Certificate of  
Analysis**

Reagent Preparation Documentation

AXA080532-2

Reagent: TDS 700ppm  
 Date Received/Prepped: 4/4/08 4/17/08 5/13/08 5/4/08 5/15/08 6/30/08  
 Date Expired: 10/4/08 11/13/08 11/20/08 15/4/08 11/15/08 11/30/08  
 Manufacturer: \_\_\_\_\_  
 Storage Condition: \_\_\_\_\_

MW #: AXA080417-2  
 By: Andrea  
 Matrix: AD  
 Amount: 1L  
 Lot #: 46282709

Component	Comment	Standard	Concentration
<u>Sodium Sulfate</u>	<u>Weigh 0.7003g &amp; dilute w</u>		
	<u>11 of DI H<sub>2</sub>O</u>		
	<u>2.7006995g to 1L DI H<sub>2</sub>O</u>	<u>AXA080417-2</u>	

Comment: \_\_\_\_\_

Reagent: TDS 10ppm  
 Date Received/Prepped: 4/15/08 4/17/08 4/23/08 4/29/08 5/1/08 5/7/08  
 Date Expired: 10/15/08 10/17/08 10/23/08 10/29/08 11/1/08 11/7/08  
 Manufacturer: \_\_\_\_\_  
 Storage Condition: \_\_\_\_\_

MW #: AXD080415  
 By: AXD  
 Matrix: AG  
 Amount: 1L  
 Lot #: \_\_\_\_\_

Component	Comment	Standard	Concentration
<u>500ppm Sol'n</u>	<u>20 ml dilute in 1000 mL DI H<sub>2</sub>O</u>	<u>AXA071213-2</u>	
<u>"</u>	<u>"</u>		
<u>"</u>	<u>"</u>	<u>AXA080423-3</u>	

Comment: \_\_\_\_\_

Reagent: TSS 10ppm  
 Date Received/Prepped: 4/20/08 5/12/08 5/21/08 12/10/08 12/15/08 12/21/08 1/6/09 1/13/09 1/20/09  
 Date Expired: 10/20/08 11/12/08 11/21/08 11/27/08 12/10/08 12/20/08 1/25/09  
 Manufacturer: \_\_\_\_\_  
 Storage Condition: \_\_\_\_\_

MW #: AXA080430-2  
 By: Andrea  
 Matrix: \_\_\_\_\_  
 Amount: \_\_\_\_\_  
 Lot #: \_\_\_\_\_

Component	Comment	Standard	Concentration
<u>D.D118g celite</u>	<u>dilute in 1L of DI H<sub>2</sub>O</u>	<u>R200030</u>	<u>10</u>
<u>"</u>	<u>"</u>	<u>↓</u>	<u>↓</u>
<u>"</u>	<u>"</u>		
<u>"</u>	<u>"</u>		

Comment: R 200030

# Reagent Preparation Documentation

Page: \_\_\_\_\_

**Reagent:** TDS 175 ppm AXA080530-1  
**Date Received/Prepped:** 5/7/08 5/18/08 5/30/08 4/13/08 6/13/08 1/7/09  
**Date Expired:** 11/7/08 11/18/08 12/27/08 12/15/08 12/30/08 1/2/09  
**Manufacturer:** \_\_\_\_\_  
**Storage Condition:** \_\_\_\_\_

**MW #:** AL180507-1  
**By:** Ad  
**Matrix:** AD  
**Amount:** 1L  
**Lot #:** \_\_\_\_\_

Component	Comment	Standard	Concentration
1000ppm NaCl	17.5ml & dilute to 1L w/ DI H <sub>2</sub> O	R201617	

Comment: \_\_\_\_\_

**Reagent:** TDS 10ppm  
**Date Received/Prepped:** 5/09/08 5/13/08 5/15/08 1/14/08 1/22/08 1/21/08  
**Date Expired:** 11/9/08 11/13/08 11/15/08 11/18/08 11/22/08 11/21/08  
**Manufacturer:** \_\_\_\_\_  
**Storage Condition:** \_\_\_\_\_

**MW #:** AX180509-3  
**By:** Andrea  
**Matrix:** AD  
**Amount:** 1L  
**Lot #:** \_\_\_\_\_

Component	Comment	Standard	Concentration
500ppm NaCl	20ml & dilute to 1L w/ DI H <sub>2</sub> O	R201607	

Comment: \_\_\_\_\_

**Reagent:** TDS 10ppm AXA080603-3  
**Date Received/Prepped:** 5/30/08 2/3/09 1/2/08 1/2/08 1/7/08 1/7/08  
**Date Expired:** 11/2/08 12/27/08 1/2/08 1/10/09 1/2/09  
**Manufacturer:** \_\_\_\_\_  
**Storage Condition:** \_\_\_\_\_

**MW #:** AL180530-3  
**By:** Andrea  
**Matrix:** AD  
**Amount:** 1L  
**Lot #:** \_\_\_\_\_

Component	Comment	Standard	Concentration
500ppm NaCl	20ml & dilute to 1L w/ DI H <sub>2</sub> O	R201617	
"			
"			
"			
"			

Comment: \_\_\_\_\_

Reagent Preparation Documentation

Reagent: TDS 175 ppm  
 Date Received/Prepped: 5/7/08 5/19/08 5/20/08 4/30/08 6/13/08 7/21/08  
 Date Expired: 11/7/08 11/19/08 11/30/08 1/24/09 2/30/08 4/21/09  
 Manufacturer: \_\_\_\_\_  
 Storage Condition: \_\_\_\_\_

MW #: ALA180507-1  
 By: AS  
 Matrix: AR  
 Amount: 1L  
 Lot #: \_\_\_\_\_

Component	Comment	Standard	Concentration
<u>1000 ppm NaCl</u>	<u>17.5ml &amp; dilute to 1L w/ DI H<sub>2</sub>O</u>	<u>R201617</u>	

Comment: \_\_\_\_\_

Reagent: TDS 10 ppm  
 Date Received/Prepped: 5/09/08 5/13/08 5/15/08 5/18/08 5/22/08 5/27/08  
 Date Expired: 11/9/08 11/13/08 11/15/08 11/18/08 11/22/08 11/27/08  
 Manufacturer: \_\_\_\_\_  
 Storage Condition: \_\_\_\_\_

MW #: ALA180529-3  
 By: Andrew  
 Matrix: AR  
 Amount: 1L  
 Lot #: \_\_\_\_\_

Component	Comment	Standard	Concentration
<u>500 ppm NaCl</u>	<u>20ml &amp; dilute to 1L w/ DI H<sub>2</sub>O</u>	<u>R201617</u>	

Comment: \_\_\_\_\_

Reagent: TDS 10 ppm  
 Date Received/Prepped: 5/30/08 4/3/08 4/12/08 4/23/08 7/11/08 7/21/08  
 Date Expired: 1/23/09 1/27/08 2/27/08 6/10/09 11/2/09  
 Manufacturer: \_\_\_\_\_  
 Storage Condition: \_\_\_\_\_

MW #: ALA180530-3  
 By: Andrew  
 Matrix: AR  
 Amount: 1L  
 Lot #: \_\_\_\_\_

Component	Comment	Standard	Concentration
<u>500 ppm NaCl</u>	<u>20ml &amp; dilute to 1L w/ DI H<sub>2</sub>O</u>	<u>R201617</u>	
<u>"</u>			
<u>"</u>			
<u>"</u>			
<u>"</u>			

Comment: \_\_\_\_\_

Reagent Preparation Documentation

Reagent:  
Date Received/Prepped:  
Date Expired:  
Manufacturer:  
Storage Condition:

TDS 500 ppm Intermediate  
11/27/07 / / / / /  
5/27/08 / / / / /

MW #: AK9071127  
By: Andra  
Matrix: AQ  
Amount: 1L  
Lot #: 070196

Component	Comment	Standard	Concentration
<u>1000 ppm NaCl</u>	<u>Take 50ml + dilute to 1L of DI H<sub>2</sub>O</u>	<u>R201617</u>	

Comment:

Reagent:  
Date Received/Prepped:  
Date Expired:  
Manufacturer:  
Storage Condition:

TDS 10 ppm  
2/5/08 12/11/08 13/3/08 13/17/08 13/20/08 3/29/08  
5/5/08 18/17/08 19/3/08 19/17/08 19/20/08 9/29/08

MW #: AKA180205-2  
By: Andra  
Matrix: AQ  
Amount: 1L  
Lot #:

Component	Comment	Standard	Concentration
<u>0.01189 Pelite</u>	<u>dilute in 1L of DI H<sub>2</sub>O</u>	<u>R200030</u>	<u>(10 ppm)</u>

Comment: Pelite 545 (R200030)

Reagent:  
Date Received/Prepped:  
Date Expired:  
Manufacturer:  
Storage Condition:

TDS 175 ppm  
4/5/08 13/3/08 4/25/08 5/12/08 5/17/08 8/5/08  
8/5/08 9/3/08 10/25/08 11/12/08 11/17/08 2/5/09

MW #: AKA180205-1  
By: Andra  
Matrix: AQ  
Amount: 1L  
Lot #:

Component	Comment	Standard	Concentration
<u>0.1753 Pelite</u>	<u>diluted in 1L of DI H<sub>2</sub>O</u>	<u>R200030</u>	<u>175 ppm</u>
<u>0.1752 Pelite</u>			
<u>0.1750 Pelite</u>			
<u>0.1751 Pelite</u>			
<u>0.1752 Pelite</u>			
<u>0.1753 Pelite</u>			

Comment:

Reagent Documentation

Reagent: DPD Free Chlorine Reagent  
 Date Received: 20 April  
 Date Expired: March 2010  
 Manufacturer: HACH  
 Storage Condition: 10-25°C

Reagent #: 201615  
 By: TLH  
 Matrix: solid  
 Amount: 15 x 47g  
 Lot #: A7078

Component	Comment	Standard	Concentration
	HACH # 21055-60		
	10 inorganics 5 GC		

Comment:

Reagent: TOX Organic Standard  
 Date Received: April 24 07  
 Date Expired: Oct 23 07  
 Manufacturer: CPI  
 Storage Condition: room temp

Reagent #: 201616  
 By: TLH  
 Matrix: aq  
 Amount: 100 mL  
 Lot #: 122206

Component	Comment	Standard	Concentration
	CPI # 805-001		

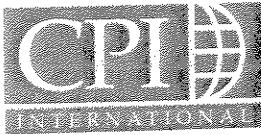
Comment:

Reagent: 10,000 µg/mL NaCl Std  
 Date Received: 24 April 07  
 Date Expired: Oct 08  
 Manufacturer: CPI  
 Storage Condition: room temp

Reagent #: 201617  
 By: TLH  
 Matrix: aq  
 Amount: 22500 mL  
 Lot #: 07D196

Component	Comment	Standard	Concentration
	CPI # 4400-05104RH02		

Comment:



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*Innovative Solutions  
 in Analytical Science and  
 Technology*

Expiry: 10/23/2008

## Certificate of Analysis

**Part Number:** 4400-051014RH02  
**Lot Number:** 07D196  
**Shelf Life:** 18 months

MWH  
 Custom NaCl  
 H2O

Concentrations in ug/mL  $\pm$  0.5%

NaCl 10000

This standard solution was prepared using high-purity starting materials, high-purity acid (if required) and 18-megaohm de-ionized water. The starting materials were weighed to five significant figures and diluted in volumetric glassware calibrated to five significant figures.

Starting materials were analyzed at 1000 $\mu$ g/mL by ICP-MS for trace impurities. The standard solution concentrations were certified instrumentally against the National Institute of Standards and Technology's SRM 3100 series, NIST approved second source and/or gravimetrically.

Accuracy and stability are guaranteed to within plus or minus 0.5% of the certified value for the stated shelf life from the date of shipment. The solution should be kept tightly capped and stored under normal laboratory conditions. See attached MSDS for proper handling information.

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# Reagent Preparation Documentation

Page: \_\_\_\_\_

**Reagent:** TDS 700ppm → AXA080504-2  
**Date Received/Prepped:** 4/4/08 4/17/08 5/13/08 5/4/08 5/15/08 5/30/08  
**Date Expired:** 10/4/08 11/17/08 11/21/08 15/4/08 11/15/08 11/30/08  
**Manufacturer:** \_\_\_\_\_  
**Storage Condition:** \_\_\_\_\_

**MW #:** axa080417-2  
**By:** Andrea  
**Matrix:** 40  
**Amount:** 1L  
**Lot #:** 46282709

Component	Comment	Standard	Concentration
<u>Sodium Sulfate</u>	<u>Weight 0.7003g &amp; dilute w</u>		
	<u>11 of DI H<sub>2</sub>O</u>		
	<u>2.70 0.6995g to 1L DI H<sub>2</sub>O</u>	<u>axa080417-2</u>	

Comment: \_\_\_\_\_

**Reagent:** TDS 10ppm  
**Date Received/Prepped:** 4/15/08 4/17/08 4/23/08 4/29/08 5/1/08 5/7/08  
**Date Expired:** 10/15/08 10/17/08 10/23/08 10/29/08 11/1/08 11/7/08  
**Manufacturer:** \_\_\_\_\_  
**Storage Condition:** \_\_\_\_\_

**MW #:** AXD080415  
**By:** AXD  
**Matrix:** AG  
**Amount:** 1L  
**Lot #:** \_\_\_\_\_

Component	Comment	Standard	Concentration
<u>500ppm Sol'n</u>	<u>20 ml dilute in 1000 mL DI H<sub>2</sub>O</u>	<u>axa071213-2</u>	
<u>"</u>	<u>"</u>		
<u>"</u>	<u>"</u>	<u>axa080423-3</u>	

Comment: \_\_\_\_\_

**Reagent:** TSS 10ppm  
**Date Received/Prepped:** 4/30/08 5/12/08 5/24/08 10/10/08 10/30/08 11/25/08  
**Date Expired:** 10/30/08 11/12/08 11/21/08 11/21/08 11/21/08 11/25/08  
**Manufacturer:** \_\_\_\_\_  
**Storage Condition:** \_\_\_\_\_

**MW #:** AXA080430-2  
**By:** Andrea  
**Matrix:** \_\_\_\_\_  
**Amount:** \_\_\_\_\_  
**Lot #:** \_\_\_\_\_

Component	Comment	Standard	Concentration
<u>D.0118g celite</u>	<u>dilute in 1L of DI H<sub>2</sub>O</u>	<u>R200030</u>	<u>10</u>
<u>"</u>	<u>"</u>	<u>↓</u>	<u>↓</u>
<u>"</u>	<u>"</u>		
<u>"</u>	<u>"</u>		

Comment: R 200030

Reagent Preparation Documentation

Page: \_\_\_\_\_

Reagent: TDS 175 ppm

MW #: AXA080507-1

Date Received/Prepped: 5/7/08 5/18/08 5/30/08 6/10/08 6/23/08 7/2/08

By: AA

Date Expired: 11/7/08 11/10/08 12/3/08 12/10/08 12/30/08 1/2/09

Matrix: AD

Manufacturer: \_\_\_\_\_

Amount: 1L

Storage Condition: \_\_\_\_\_

Lot #: \_\_\_\_\_

Component	Comment	Standard	Concentration
1000ppm NaCl	17.5ml & dilute to 1L w/ DI H <sub>2</sub> O	R201617	

Comment: \_\_\_\_\_

Reagent: TDS 10ppm

MW #: AXA080529-3

Date Received/Prepped: 5/09/08 5/13/08 5/15/08 5/18/08 5/22/08 5/27/08

By: Andrea

Date Expired: 11/9/08 11/13/08 11/15/08 11/18/08 11/22/08 11/27/08

Matrix: AD

Manufacturer: \_\_\_\_\_

Amount: 1L

Storage Condition: \_\_\_\_\_

Lot #: \_\_\_\_\_

Component	Comment	Standard	Concentration
500ppm NaCl	20ml & dilute to 1L w/ DI H <sub>2</sub> O	R201617	

Comment: \_\_\_\_\_

Reagent: TDS 10ppm

MW #: AXA080530-3

Date Received/Prepped: 5/30/08 6/3/08 6/12/08 6/23/08 7/11/08 7/21/08

By: Andrea

Date Expired: 11/23/08 12/2/08 12/23/08 6/10/09 11/2/09

Matrix: AD

Manufacturer: \_\_\_\_\_

Amount: 1L

Storage Condition: \_\_\_\_\_

Lot #: \_\_\_\_\_

Component	Comment	Standard	Concentration
500ppm NaCl	20ml & dilute to 1L w/ DI H <sub>2</sub> O	R201617	
"			
"			
"			
"			

Comment: \_\_\_\_\_

Reagent Documentation

Reagent: DPD Free Chlorine Reagent  
 Date Received: 20 April  
 Date Expired: March 2010  
 Manufacturer: HACH  
 Storage Condition: 10-25°C

Reagent #: 201615  
 By: TLH  
 Matrix: solid  
 Amount: 15 x 47g  
 Lot #: A7078

Component	Comment	Standard	Concentration
	HACH # 21055-60		
	10 inorganics		
	5 GC		

Comment:

Reagent: TOX Organic Standard  
 Date Received: April 24 07  
 Date Expired: Oct 23 07  
 Manufacturer: CPI  
 Storage Condition: room temp

Reagent #: 201616  
 By: TLH  
 Matrix: aq  
 Amount: 100mL  
 Lot #: 122206

Component	Comment	Standard	Concentration
	CPI # 805-001		

Comment:

Reagent: 10,000µg/mL NaCl Std  
 Date Received: 24 April 07  
 Date Expired: Oct 08  
 Manufacturer: CPI  
 Storage Condition: room temp

Reagent #: 201617  
 By: TLH  
 Matrix: aq  
 Amount: 22500mL  
 Lot #: 07D196

Component	Comment	Standard	Concentration
	CPI # 4410-05104R402		

Comment:



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R201617 Rec'd 4-24-01

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Expiry: 10/23/2008

# Certificate of Analysis

**Part Number: 4400-051014RH02**  
**Lot Number: 07D196**  
**Shelf Life: 18 months**

MWH  
 Custom NaCl  
 H2O

Concentrations in ug/mL ± 0.5%

NaCl 10000

This standard solution was prepared using high-purity starting materials, high-purity acid (if required) and 18-megaohm de-ionized water. The starting materials were weighed to five significant figures and diluted in volumetric glassware calibrated to five significant figures.

Starting materials were analyzed at 1000µg/mL by ICP-MS for trace impurities. The standard solution concentrations were certified instrumentally against the National Institute of Standards and Technology's SRM 3100 series, NIST approved second source and/or gravimetrically.

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Reagent Preparation Documentation

Reagent:

Date Received/Prepped:

Date Expired:

Manufacturer:

Storage Condition:

TDS 500 ppm Intermediate  
 11/21/07 1 1 1 1 1  
 5/27/08 1 1 1 1 1

MW #: AKA071127

By: Andrea

Matrix: AQ

Amount: 1L

Lot #: 270196

Component	Comment	Standard	Concentration
10000 ppm NaCl	Take 50ml + dilute to 1L of DI H <sub>2</sub> O	R201417	

Comment:

Reagent:

Date Received/Prepped:

Date Expired:

Manufacturer:

Storage Condition:

TDS 10 ppm  
 2/5/08 1 2/17/08 1 3/3/08 1 3/17/08 1 3/20/08 1 3/29/08  
 8/5/08 1 8/17/08 1 9/3/08 1 9/17/08 1 9/20/08 1 9/29/08

MW #: AKA020205-2

By: Andrea

Matrix: AQ

Amount: 1L

Lot #:

Component	Comment	Standard	Concentration
0.0189 Pelite	dilute in 1L of DI H <sub>2</sub> O	R200030	(10 ppm)

Comment: Pelite 545 (R200030)

Reagent:

Date Received/Prepped:

Date Expired:

Manufacturer:

Storage Condition:

TDS 175 ppm  
 2/5/08 1 3/3/08 1 4/25/08 1 5/12/08 1 5/17/08 1 8/5/08  
 8/5/08 1 9/3/08 1 10/25/08 1 11/12/08 1 11/17/08 1 2/5/09

MW #: AKA030205-1

By: Andrea

Matrix: AQ

Amount: 1L

Lot #:

Component	Comment	Standard	Concentration
0.1753 Pelite	diluted in 1L of DI H <sub>2</sub> O	R00030	175 ppm
0.1752 Pelite			
0.1750 Pelite			
0.1751 Pelite			
0.1752 Pelite			
0.1753 Pelite			

Comment: