ENCYCLE / TEXAS INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA	WID # 0000489	LAB NO. CC 5590
WASTE DESCRIPTION: PHOTOWASTE		VOLUME: 4,653 GAL
WASTE CODE(S): D007/11	LOAD # 3988	DATE: 6-29-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	7.2	
Al	2.1	
As	Ø	
Au	Ø	
Ba	<0.1	
Ca	51.5	
Cd	Ø	
Co	<0.1	
Cr	<1.0	
Cu	10.8	
Fe	33.2	
Mg	123.8	
Mn	<1.0	
Na	1,285	
Ni	<1.0	
P	44.5	
Pb	<1.0	
Se	Ø	
Si	3.0	
Sn	1.6	
V	<0.1	
Zn	<1.0	

pH 7.2	COLOR GREY BLACK	F	
Sp. Gr. 1.00	PHASES S	CL	
Total CN- N/A	ACIDITY	NO2	
Reac. CN- N/A	ALKALINITY	Br	
NH3 as N 580	ODOR M	NO3	
TOC 730 ppm		PO4	
VOC <50		SO4	

PROCESS STAGES

PARAMETERS

		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: H. Kuiezykowska
Wendland

LAB MANAGER MZ 6-29-92

REAGENT COST
006561

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 22025 Operator: HLW
Run Time: 06/29/92 13:50:25
Comment: CC-55-90
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.191	2.097	<.0000	<.0000	.0735	51.50	<.0000
SDev	.079	.146	.1382	.0374	.0055	.66	.0044
%RSD	1.100	6.982	42.18	234.0	7.509	1.290	25.17
#1	7.115	2.097	<.0000	.0385	.0692	50.61	<.0000
#2	7.189	2.205	<.0000	<.0000	.0807	51.38	<.0000
#3	7.301	1.890	<.0000	<.0000	.0750	51.89	<.0000
#4	7.161	2.197	<.0000	<.0000	.0692	52.10	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0333	.5990	10.81	33.22	123.8	.1514	1285.
SDev	.0098	.0048	.08	.73	1.4	.0024	7.
%RSD	29.46	.8081	.7126	2.195	1.168	1.563	.5515
#1	.0308	.6014	10.72	32.26	121.9	.1526	1277.
#2	.0410	.5917	10.89	33.40	123.5	.1526	1289.
#3	.0410	.6014	10.86	33.21	124.9	.1479	1292.
#4	.0205	.6014	10.77	34.02	125.0	.1526	1280.

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2427	44.47	.8883	<.0000	3.000	1.622	.0229
SDev	.0622	.42	.0835	.1845	.154	.096	.0118
%RSD	25.65	.9405	9.396	257.8	5.128	5.927	51.43
#1	.2728	44.23	.8129	<.0000	2.923	1.661	.0229
#2	.2918	44.28	.8361	.1952	2.923	1.491	.0312
#3	.2538	45.10	.9058	<.0000	2.923	1.718	.0062
#4	.1523	44.28	.9987	<.0000	3.231	1.619	.0312

Elem	Zn
Units	ppm
Avge	.1304
SDev	.0585
%RSD	44.89
#1	.2068
#2	.1417
#3	.1015
#4	.0715

006562

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ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA | WID # 00008499 | LAB NO: CC 55-90

WASTE DESCRIPTION: PHOTOWASTE | VOLUME: 4,865 GAL

WASTE CODE(S): D007 / 11 | LOAD # 3970 | DATE: 6-24-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	8.5	
Al	2.6	
As	Ø	
Au	Ø	
Ba	Ø	
Ca	53	
Cd	Ø	
Co	Ø	
Cr	<1.0	
Cu	22.1	
Fe	24.1	
Mg	23.5	
Mn	<1.0	
Na	1135	
Ni	<1.0	
P	23.8	
Pb	<1.0	
Se	Ø	
Si	3.2	
Sn	1.4	
V	Ø	
Zn	Ø	

pH 7.1 COLOR GREY

Sp. Gr. 1.00 PHASES S

Total CN- ACIDITY

Reac. CN- ALKALINITY

NH3 as N 450 ODOR M

TOC 456.2

VOC <5,

F
CL
NO2
Br
NO3
PO4
SO4

PROCESS STAGES

PARAMETERS

INITIAL	100 mL	pH	REDOX	T°C

COMMENTS:

CHEMISTS: J. Zwierzykowski

LAB MANAGER MZ. 6-24-92

REAGENT COST 006563

CONFIDENTIAL

Analysis Report Wed 06-24-92 02:29:09 PM page 1

Method: ENCYCLE Sample Name: SAMPLE #21885 Operator: HMZ
Run Time: 06/24/92 14:26:54
Comment: CC-55-90
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	8.452	2.584	<.0000	<.0000	.0546	52.99	<.0000
SDev	.095	.214	.2512	.0598	.0034	.71	.0085
%RSD	1.126	8.301	52.53	24.35	6.242	1.348	23.33
#1	8.314	2.622	<.0000	<.0000	.0517	51.95	<.0000
#2	8.457	2.622	<.0000	<.0000	.0576	53.10	<.0000
#3	8.518	2.288	<.0000	<.0000	.0576	53.49	<.0000
#4	8.518	2.802	<.0000	<.0000	.0517	53.42	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0051	.4208	22.13	24.32	23.53	.1184	1135.
SDev	.0242	.0200	.21	.37	.46	.0046	11.
%RSD	472.6	4.743	.9621	1.508	1.954	3.868	.9518
#1	.0230	.3973	21.91	23.85	22.84	.1124	1131.
#2	.0026	.4418	22.26	24.24	23.72	.1172	1141.
#3	<.0000	.4319	22.35	24.70	23.79	.1220	1147.
#4	.0230	.4121	21.98	24.50	23.76	.1220	1123.

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1933	23.80	.7290	<.0000	3.204	1.409	<.0000
SDev	.0323	.92	.1253	.3076	.202	.098	.0110
%RSD	16.72	3.866	17.19	1032.	6.298	6.939	38.72
#1	.1746	22.48	.7005	<.0000	2.970	1.511	<.0000
#2	.2396	24.56	.9055	<.0000	3.126	1.308	<.0000
#3	.1908	24.25	.6094	<.0000	3.283	1.473	<.0000
#4	.1681	23.92	.7005	.4294	3.439	1.346	<.0000

Elem	Zn
Units	ppm
Avge	<.0000
SDev	.0119
%RSD	3.594
#1	<.0000
#2	<.0000
#3	<.0000
#4	<.0000

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ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA	WID # 00068580	LAB NO. CC 55-90
WASTE DESCRIPTION: Photo waste		VOLUME: 4628 GAL
WASTE CODE(S): D007/11	LOAD #3948	DATE: 6-18-92

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm
Ag	19.1	
Al	3.7	
As	Ø	
Au	Ø	
Ba	<0.1	
Ca	58.2	
Cd	Ø	
Co	<0.1	
Cr	<1.0	
Cu	<1.0	
Fe	58.7	
Mg	58.2	
Mn	<1.0	
Na	1,074	
Ni	1.4	
P	36.7	
Pb	<1.0	
Se	Ø	
Si	3.8	
Sn	2.4	
V	<0.1	
Zn	<0.1	

pH 6.2 COLOR Grey

Sp. Gr. 1.00 PHASES S

Total CN- ACIDITY

Reac. CN- ALKALINITY

NH3 as N 530 ODOR m

TOC 510.5

VOC <50

F
Cl
NO2
Br
NO3
PO4
SO4

PROCESS STAGES

PARAMETERS

		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: [illegible], [illegible], SW

LAB MANAGER ME 6-18-92

REAGENT COST 006565

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 21658 Operator: SDW
Run Time: 06/18/92 14:10:02
Comment: CC-55-90
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.11	3.733	<.0000	<.0000	.0781	58.16	<.0000
SDev	.29	.117	.0391	.0716	.0076	.12	.0155
%RSD	1.506	3.125	37.97	91.80	9.753	.2143	12.27
#1	19.46	3.773	<.0000	<.0000	.0673	58.34	<.0000
#2	19.05	3.877	<.0000	<.0000	.0835	58.11	<.0000
#3	19.13	3.646	<.0000	<.0000	.0835	58.06	<.0000
#4	18.77	3.630	<.0000	<.0000	.0721	58.11	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0429	.3528	.9106	58.66	58.20	.2542	1074.
SDev	.0131	.0314	.0613	.86	.16	.0059	15.
%RSD	30.38	8.878	6.732	1.464	.2796	2.319	1.350
#1	.0278	.3082	.9833	57.66	58.33	.2601	1093.
#2	.0581	.3661	.9333	59.71	58.35	.2554	1072.
#3	.0480	.3564	.8829	58.87	58.05	.2554	1075.
#4	.0379	.3805	.8425	58.38	58.07	.2460	1058.

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.403	36.69	.7923	<.0000	3.812	2.397	.0687
SDev	.042	.07	.1467	.2346	.154	.192	.0215
%RSD	2.964	.1875	18.52	54.22	4.040	8.024	31.30
#1	1.411	36.60	.7244	<.0000	3.735	2.370	.0437
#2	1.426	36.73	.9735	<.0000	4.043	2.532	.0937
#3	1.432	36.66	.6376	<.0000	3.735	2.331	.0770
#4	1.342	36.75	.6339	<.0000	3.735	2.155	.0604

Elem	Zn
Units	ppm
Avge	.0610
SDev	.0087
%RSD	14.32
#1	.0515
#2	.0658
#3	.0706
#4	.0563

006566

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ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA	WID # 00008479	LAB NO. CC 55-90
WASTE DESCRIPTION: PHOTOWASTE		VOLUME: 4,610 GAL
WASTE CODE(S): D007/11	LOAD # 3915	DATE: 06-10-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	13.8	
Al	1.9	
As	Ø	
Au	Ø	
Ba	<0.1	
Ca	51.3	
Cd	Ø	
Co	<0.1	
Cr	1.0	
Cu	<1.0	
Fe	38.4	
Mg	22.6	
Mn	<1.0	
Na	1,045	
Ni	<1.0	
P	95.7	
Pb	<1.0	
Se	Ø	
Si	3.3	
Sn	4.1	
V	<0.1	
Zn	<1.0	

pH	8.1	COLOR	GREY
Sp. Gr.	1.00	PHASES	S
Total CN-		ACIDITY	
Reac. CN-		ALKALINITY	
NH3 as N	250	ODOR	M
TOC	829.4		
VOC	<50		

F
CL
NO2
Br
NO3
PO4
SO4

PROCESS STAGES

PARAMETERS

		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: J. Zmierzlowska

LAB MANAGER MZ 6-10-92

REAGENT COST 006567

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 21394 Operator: HMZ
Run Time: 06/10/92 14:38:40
Comment: CC-55-90 SHIPMENT
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13.75	1.948	<.0000	<.0000	.0523	51.33	<.0000
SDev	.17	.098	.0510	.0140	.0000	.21	.0091
%RSD	1.231	5.053	390.2	41.50	.0000	.4043	84.33
#1	13.73	1.836	<.0000	<.0000	.0523	51.24	<.0000
#2	13.78	1.969	.0152	<.0000	.0523	51.22	<.0000
#3	13.54	2.071	<.0000	<.0000	.0523	51.33	<.0000
#4	13.95	1.915	.0414	<.0000	.0523	51.65	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0478	1.038	.4717	38.36	22.57	.1072	1045.
SDev	.0071	.012	.0120	.70	.09	.0063	9.
%RSD	14.85	1.198	2.555	1.832	.3989	5.825	.8729
#1	.0478	1.024	.4740	38.35	22.51	.1041	1058.
#2	.0565	1.055	.4836	38.48	22.68	.1124	1045.
#3	.0478	1.037	.4740	37.44	22.43	.0999	1040.
#4	.0391	1.037	.4549	39.15	22.60	.1124	1037.

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1417	95.74	.5227	<.0000	3.326	4.086	.0114
SDev	.0172	.73	.1151	.2815	.265	.102	.0062
%RSD	12.11	.7574	22.02	6458.	7.970	2.493	54.43
#1	.1300	94.97	.5040	.1326	3.151	4.124	.0114
#2	.1245	96.27	.5227	.0828	3.291	4.208	.0190
#3	.1603	95.28	.3920	<.0000	3.711	3.974	.0038
#4	.1521	96.44	.6720	.1700	3.151	4.039	.0114

Elem	Zn
Units	ppm
Avge	.7149
SDev	.0036
%RSD	.5364
#1	.7179
#2	.7099
#3	.7139
#4	.7179

006568

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ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA | WID # 00008478 | LAB NO: CC 55-90
WASTE DESCRIPTION: PHOTOWASTE | VOLUME: 4,694 GAL
WASTE CODE(S): D007 / 11 | LOAD # 3908 | DATE: 06-09-1992

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	17.5	
Al	2.6	
As	Ø	
Au	Ø	
Ba	<0.1	
Ca	63.0	
Cd	Ø	
Co	<0.1	
Cr	<1.0	
Cu	1.3	
Fe	43.1	
Mg	22.3	
Mn	<1.0	
Na	1,170	
Ni	<1.0	
P	76.2	
Pb	<1.0	
Se	Ø	
Si	3.	
Sn	4.7	
V	<0.1	
Zn	<1.0	

pH 7.2 | COLOR GREY | F
Sp. Gr. 1.00 | PHASES S | CL
Total CN- | ACIDITY | NO2
Reac. CN- | ALKALINITY | Br
NH3 as N 330 | ODOR M | NO3
TOC 783.7 | | PO4
VOC <100 | | SO4

PROCESS STAGES

PARAMETERS

INITIAL	100 mL	pH	REDOX	T°C

COMMENTS:

CHEMISTS: M. Kwierzyleowska

LAB MANAGER

REAGENT COST
006560

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE #21356 Operator: HMZ
Run Time: 06/09/92 13:52:11
Comment: CC-55-90 SHIPMENT
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	17.52	2.625	<.0000	<.0000	.1009	62.95	<.0000
SDev	.59	.257	.1305	.0452	.0057	1.32	.0063
%RSD	3.372	9.791	49.79	52.01	5.631	2.099	17.75
#1	16.66	2.551	<.0000	<.0000	.0939	61.00	<.0000
#2	17.90	2.909	<.0000	<.0000	.1009	63.30	<.0000
#3	17.90	2.307	<.0000	<.0000	.1079	63.63	<.0000
#4	17.65	2.730	<.0000	<.0000	.1009	63.86	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0237	.3911	1.342	43.14	22.25	.1628	1170.
SDev	.0150	.0381	.036	.82	.48	.0028	21.
%RSD	63.48	4.280	2.709	1.896	2.152	1.719	1.819
#1	.0331	.8438	1.290	41.92	21.54	.1594	1138.
#2	.0016	.8764	1.372	43.53	22.30	.1628	1179.
#3	.0331	.9220	1.360	43.64	22.45	.1628	1181.
#4	.0268	.9220	1.348	43.48	22.53	.1662	1183.

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5170	76.24	.7711	.0516	3.097	4.748	.0429
SDev	.0314	1.90	.1524	.2193	.220	.114	.0089
%RSD	6.082	2.494	19.77	424.7	7.090	2.402	20.66
#1	.4736	73.40	.7935	.0057	2.856	4.659	.0463
#2	.5141	77.10	.9393	.0287	3.337	4.741	.0531
#3	.5392	77.40	.7823	<.0000	3.217	4.911	.0326
#4	.5411	77.08	.5692	.3499	2.977	4.681	.0394

Elem	Zn
Units	ppm
Avge	.4520
SDev	.0111
%RSD	2.414
#1	.4485
#2	.4676
#3	.4485
#4	.4676

783.7

ENCYCLE/TEXAS, INC.
5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA | WID # 0000847? | LAB NO. CC 55-90
WASTE DESCRIPTION: PHOTOWASTE | VOLUME: 4,719 GAL
WASTE CODE(S): D007, 11 | LOAD # 3892 | DATE: 6-5-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	13.3	
Al	2.1	
As	Ø	
Au	Ø	
Ba	Ø	
Ca	47.3	
Cd	Ø	
Co	Ø	
Cr	1.1	
Cu	2.1	
Fe	56	
Mg	36.1	
Mn	<1.0	
Na	1,115	
Ni	<1.0	
P	116	
Pb	<1.0	
Se	Ø	
Si	3.1	
Sn	10.5	
V	Ø	
Zn	<0.1	

pH 8.0	COLOR GREY	F
Sp. Gr. 1.01	PHASES 3	CL
Total CN-	ACIDITY	NO2
Reac. CN-	ALKALINITY	Br
NH3 as N 360	ODOR M	NO3
TOC 1,112 ppm		PO4
VOC <100		SO4

PROCESS STAGES

		PARAMETERS		
		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: SM J. Liverzytowska

LAB MANAGER MZ 6-5-92

REAGENT COST
006571

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 21260 Operator: SDW
Run Time: 06/05/92 14:01:26
Comment: CC-99-90 SHIPMENT
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13.27	2.101	<.0000	<.0000	<.0000	47.33	<.0000
SDev	.20	.082	.2281	.0266	.0000	.40	.0111
%RSD	1.492	3.901	72.63	21.23	.0000	.8554	17.64
#1	13.50	2.180	.0218	<.0000	<.0000	47.81	<.0000
#2	13.37	2.018	<.0000	<.0000	<.0000	47.47	<.0000
#3	13.07	2.162	<.0000	<.0000	<.0000	47.13	<.0000
#4	13.15	2.045	<.0000	<.0000	<.0000	46.89	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0090	1.123	2.104	55.99	36.10	.2188	1115.
SDev	.0219	.031	.092	.45	.36	.0085	13.
%RSD	243.4	2.750	4.354	.7954	1.003	3.871	1.190
#1	.0210	1.116	2.188	56.51	36.61	.2259	1129.
#2	<.0000	1.144	2.177	56.10	36.06	.2259	1121.
#3	<.0000	1.082	2.043	55.93	35.93	.2146	1112.
#4	.0330	1.150	2.009	55.43	35.78	.2089	1098.

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5941	116.0	.9323	<.0000	3.134	10.52	.0024
SDev	.0315	1.6	.2368	.4344	.106	.56	.0093
%RSD	5.296	1.409	25.40	549.7	3.396	5.282	383.0
#1	.5514	118.1	.9403	<.0000	3.041	10.92	.0000
#2	.6048	116.0	.9081	.1141	3.041	11.04	.0097
#3	.5941	115.7	.6510	.1141	3.226	10.26	<.0000
#4	.6262	114.1	1.230	.1844	3.226	9.861	.0097

Elem	Zn
Units	ppm
Avge	.0619
SDev	.0072
%RSD	11.55
#1	.0557
#2	.0557
#3	.0681
#4	.0681

ENCYCLE /TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA	WID # 00008476	LAB NO. CC 55-90
WASTE DESCRIPTION: PHOTOWASTE		VOLUME: 4,746 GAL
WASTE CODE(S): D007, 11	LOAD # 3869	DATE: 6-1-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	6.5	
Al	3.9	
As	Ø	
Au	Ø	
Ba	<0.1	
Ca	51.2	
Cd	<0.1	
Co	<0.1	
Cr	4.2	
Cu	1.2	
Fe	48.8	
Mg	40.8	
Mn	<1.0	
Na	1,740	
Ni	<1.0	
P	122.9	
Pb	<1.0	
Se	Ø	
Si	2.9	
Sn	5.9	
V	Ø	
Zn	<1.0	

pH 7.7	COLOR GREY	F
Sp. Gr. 1.01	PHASES S	CL
Total CN-	ACIDITY	NO2
Reac. CN-	ALKALINITY	Br
NH3 as N 480	ODOR M	NO3
TOC 924.9		PO4
VOC <50		SO4

PROCESS STAGES

PARAMETERS

		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: M. Zmerzlikar

LAB MANAGER MZ 6-01-92

REAGENT COST 006573

CONFIDENTIAL

Analysis Report Mon 06-01-92 02:18:29 PM page 1

Method: ENCYCLE Sample Name: SAMPLE # 21102 Operator: HMZ
Run Time: 06/01/92 14:16:14
Comment: CC-55-89 SHIPMENT
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.468	3.928	<.0000	<.0000	.0472	51.17	.0414
SDev	.121	.171	.1135	.0482	.0067	.45	.0488
%RSD	1.876	4.351	37.29	44.08	14.18	.8876	117.9
#1	6.382	3.846	<.0000	<.0000	.0524	50.53	.1029
#2	6.360	3.827	<.0000	<.0000	.0454	51.17	.0582
#3	6.512	4.184	<.0000	<.0000	.0384	51.56	<.0000
#4	6.620	3.856	<.0000	<.0000	.0524	51.40	.0045

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0348	4.215	1.166	48.81	40.75	.1544	1740.
SDev	.0184	.010	.049	.44	.28	.0346	13.
%RSD	52.90	.2309	4.181	.8966	.6810	22.38	.7512
#1	.0620	4.208	1.231	48.20	40.39	.1941	1722.
#2	.0232	4.208	1.166	48.81	40.82	.1727	1742.
#3	.0232	4.228	1.114	49.22	40.72	.1255	1754.
#4	.0310	4.216	1.153	49.00	41.06	.1255	1743.

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1612	122.9	.5575	.0833	2.942	5.860	<.0000
SDev	.0851	1.7	.1091	.1721	.125	.164	.0164
%RSD	52.79	1.356	19.57	206.7	4.242	2.791	255.3
#1	.2608	120.6	.4593	<.0000	2.942	5.669	.0150
#2	.2033	123.1	.5064	<.0000	3.095	5.795	<.0000
#3	.0927	124.5	.5535	.1978	2.942	6.046	<.0000
#4	.0881	123.4	.7106	.2602	2.789	5.932	<.0000

Elem	Zn
Units	ppm
Avge	.3893
SDev	.2119
%RSD	54.43
#1	.6606
#2	.4547
#3	.2274
#4	.2145

006574

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RECYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA	WID # 00008475	LAB NO. CC 55-90	
WASTE DESCRIPTION: PHOTONASTE		VOLUME: 4,855 GAL	
WASTE CODE(S): D007, 11, D003	LOAD # 3865	DATE: 5-29-92	

ICP	PRE-SCREEN	POST-TREATMENT	pH 8.0	COLOR GREY	F
	ppm	ppm	Sp. Gr. 1.03	PHASES S	CL
Ag	15.3		Total CN-	ACIDITY	NO2
Al	23.0		Reac. CN-	ALKALINITY	Br
As	Ø		NH3 as N 2,900	ODOR M	NO3
Au	Ø		TOC 2,385		PO4
Ba	Ø		VOC < 300		SO4
Ca	41.4				
Cd	Ø				
Co	<0.1				
Cr	71.9				
Cu	2.5				
Fe	117.4				
Mg	42.5				
Mn	<1.0				
Na	4,974				
Ni	<0.1				
P	118.5				
Pb	<1.0				
Se	Ø				
Si	3.1				
Sn	12.2				
V	Ø				
Zn	<0.1				

PROCESS STAGES

		PARAMETERS		
		pH	REDOX	T°C
INITIAL 2X	100 mL			

COMMENTS: CN(F) N.D, PRIOR TO TREATMENT IT SHOULD BE DILUTED 1 to 1 to have 2 BATCHES

CHEMISTS: J. Zwierzykowska

LAB MANAGER MZ 5-29-92

REAGENT COST 006575

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 21034 Operator: HMZ
Run Time: 05/29/92 14:07:48
Comment: CC-55-90 SHIPMENT
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	15.33	22.97	<.0000	<.0000	.0036	41.41	<.0000
SDev	.21	.24	.1009	.0285	.0045	.22	.0180
%RSD	1.398	1.062	16.80	17.38	127.7	.5325	41.25
#1	15.59	23.20	<.0000	<.0000	.0095	41.41	<.0000
#2	15.41	22.63	<.0000	<.0000	.0047	41.14	<.0000
#3	15.12	23.05	<.0000	<.0000	.0000	41.42	<.0000
#4	15.19	22.98	<.0000	<.0000	.0000	41.68	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0199	71.90	2.501	117.4	42.48	.2281	4974.
SDev	.0149	.28	.055	.4	.24	.0048	64.
%RSD	75.00	.3942	2.210	.3080	.5584	2.094	1.291
#1	.0323	72.15	2.573	117.7	42.80	.2353	5060.
#2	.0124	71.57	2.514	116.9	42.27	.2257	4983.
#3	.0025	71.76	2.445	117.4	42.49	.2257	4916.
#4	.0323	72.13	2.474	117.7	42.33	.2257	4936.

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0551	118.5	.4005	.1799	3.135	12.19	<.0000
SDev	.0440	.5	.1343	.1811	.000	.13	.0158
%RSD	79.99	.4061	33.52	100.7	.0000	1.037	6.330
#1	.0893	118.9	.5685	.3166	3.135	12.25	<.0000
#2	<.0000	118.3	.2584	.3454	3.135	12.22	<.0000
#3	.0625	117.9	.4393	<.0000	3.135	12.01	<.0000
#4	.0774	118.9	.3359	.0863	3.135	12.29	<.0000

Elem	Zn
Units	ppm
Avge	.0931
SDev	.0067
%RSD	7.172
#1	.0854
#2	.1009
#3	.0905
#4	.0957

006576

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ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA	WID # 00150367	LAB NO. CC-55-90
WASTE DESCRIPTION: PHOTO WASTE		VOLUME: 4642 Gallons
WASTE CODE(S): D007 + D011	LOAD # 3840	DATE: 5-22-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	26.3	
Al	2.5	
As	∅	
Au	∅	
Ba	<0.1	
Ca	41.8	
Cd	∅	
Co	<1.0	
Cr	96.7	
Cu	<1.0	
Fe	187.8	
Mg	39.8	
Mn	<1.0	
Na	2320	
Ni	∅	
P	84.7	
Pb	∅	
Se	<1.0	
Si	1.6	
Sn	4.0	
V	∅	
Zn	<1.0	

pH	8.7	COLOR	Brown	F	NA
Sp. Gr.	1.00	PHASES	Single	CL	
Total CN-	NA	ACIDITY	NA	NO2	
Reac. CN-	NA	ALKALINITY	NA	Br	
NH3 as N	1900 ppm	ODOR	Organics	NO3	
TOC	39850 ppm			PO4	
VOC	284 ppm			SO4	✱

PROCESS STAGES

		PARAMETERS		
		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: Nick Gallagos
Joe Alvarez

LAB MANAGER M2 5-22-92

REAGENT COST
006577

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 20813 Operator: NG
Run Time: 05/22/92 15:50:08
Comment: CC-55-90
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	26.34	2.564	<.0000	<.0000	.0409	41.81	<.0000
SDev	.82	.347	.1725	.0552	.0071	.42	.0063
%RSD	3.120	13.55	15.60	17.83	17.36	1.015	5.726
#1	25.49	2.159	<.0000	<.0000	.0508	41.31	<.0000
#2	27.07	2.451	<.0000	<.0000	.0339	41.77	<.0000
#3	25.79	2.663	<.0000	<.0000	.0395	41.81	<.0000
#4	27.02	2.982	<.0000	<.0000	.0395	42.34	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2088	96.79	.8609	187.8	39.84	.5608	2320.
SDev	.0231	1.27	.0364	2.5	.48	.0089	46.
%RSD	11.08	1.309	4.222	1.343	1.193	1.593	1.980
#1	.2302	95.52	.9076	185.6	40.15	.5582	2303.
#2	.1766	96.58	.8636	187.4	39.56	.5582	2312.
#3	.2195	96.51	.8196	186.8	39.32	.5531	2279.
#4	.2088	98.55	.8526	191.4	40.33	.5737	2386.

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0892	84.71	.5360	.3515	1.672	4.000	<.0000
SDev	.0366	1.74	.1933	.0985	.211	.081	.0128
%RSD	41.09	2.052	36.07	28.02	12.60	2.022	3.289
#1	.1085	82.95	.8236	.4801	1.427	4.092	<.0000
#2	.1309	84.04	.4053	.2400	1.591	3.964	<.0000
#3	.0635	84.77	.4575	.3429	1.754	3.908	<.0000
#4	.0538	87.06	.4575	.3429	1.917	4.037	<.0000

Elem	Zn
Units	ppm
Avge	.6853
SDev	.0114
%RSD	1.659
#1	.6867
#2	.6977
#3	.6701
#4	.6867

006578

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ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA	WID # D0008474	LAB NO. CC 55-90
WASTE DESCRIPTION: PHOTOWASTE		VOLUME: 4828 Gallons
WASTE CODE(S): D007, 11	LOAD # 3833	DATE: 5-21-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	6.3	
Al	2.0	
As	∅	
Au	∅	
Ba	<0.1	
Ca	48.2	
Cd	∅	
Co	<0.1	
Cr	<1.0	
Cu	24.9	
Fe	98.3	
Mg	81.0	
Mn	<1.0	
Na	1162	
Ni	<1.0	
P	70.5	
Pb	<1.0	
Se	∅	
Si	2.3	
Sn	3.5	
V	∅	
Zn	<1.0	

pH 7.9	COLOR GREEN	F	NA
Sp. Gr. 1.02	PHASES SINGLE	Cl	
Total CN- NA	ACIDITY NA	NO2	
Reac. CN- NA	ALKALINITY NA	Br	
NH3 as N 450ppm	ODOR MILD	NO3	
TOC 950ppm		PO4	
VOC NA		SO4	

PROCESS STAGES

		PARAMETERS		
		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: NICK GALLEGOS

LAB MANAGER MZ 5-21-92

REAGENT COST 006579

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 20772 Operator: NG
Run Time: 05/21/92 15:42:37
Comment: CC-55-90
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.361	2.068	<.0000	<.0000	.0367	48.22	<.0000
SDev	.046	.107	.0306	.0483	.0025	.65	.0092
%RSD	.7210	5.194	4.415	33.28	6.897	1.348	10.54
#1	6.312	2.086	<.0000	<.0000	.0404	47.33	<.0000
#2	6.410	1.915	<.0000	<.0000	.0354	48.17	<.0000
#3	6.388	2.166	<.0000	<.0000	.0354	48.56	<.0000
#4	6.334	2.104	<.0000	<.0000	.0354	48.81	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0397	.4986	24.97	98.38	81.01	.2127	1162.
SDev	.0100	.0185	.10	.63	.90	.0052	7.
%RSD	25.12	3.715	.3832	.6400	1.115	2.439	.6214
#1	.0397	.4932	25.10	97.63	79.68	.2059	1173.
#2	.0275	.4932	24.96	98.11	81.23	.2168	1161.
#3	.0519	.4825	24.97	98.84	81.44	.2113	1158.
#4	.0397	.5253	24.87	98.96	81.67	.2168	1157.

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5538	70.58	.4617	<.0000	2.385	3.535	<.0000
SDev	.0493	1.55	.0782	.5962	.166	.084	.0143
%RSD	8.899	2.196	16.94	109.2	6.963	2.379	163.3
#1	.5806	68.63	.4617	<.0000	2.255	3.573	<.0000
#2	.5842	71.54	.5703	.1213	2.602	3.482	.0088
#3	.5699	70.09	.4255	<.0000	2.428	3.634	<.0000
#4	.4804	72.07	.3893	<.0000	2.255	3.451	<.0000

Elem	Zn
Units	ppm
Avge	.2096
SDev	.0057
%RSD	2.745
#1	.2096
#2	.2166
#3	.2096
#4	.2025

ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA | WID # 00008473 | LAB NO. CC 55-90
WASTE DESCRIPTION: PHOTO WASTE | VOLUME: 4904 Gallons
WASTE CODE(S): D007, 11 | LOAD # 3813 | DATE: 5-18-92

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm
Ag	6.3	
Al	1.1	
As	2.4	
Au	∅	
Ba	<0.1	
Ca	73.7	
Cd	∅	
Co	∅	
Cr	2.4	
Cu	12.1	
Fe	31.0	
Mg	77.6	
Mn	<1.0	
Na	938.3	
Ni	<1.0	
P	36.7	
Pb	2.4	
Se	∅	
Si	3.5	
Sn	4.7	
V	∅	
Zn	<1.0	

pH 9.2 COLOR DK GREEN | F NA
Sp. Gr. 1.02 PHASES Single | CL
Total CN- NA ACIDITY NA | NO2
Reac. CN- NA ALKALINITY NA | Br
NH3 as N 140ppm ODOR Mild | NO3
TOC 376.0 | PO4
VOC NA | SO4

PROCESS STAGES

INITIAL	100 mL	PARAMETERS pH	REDOX	T°C

COMMENTS:

CHEMISTS: N. Gallegos
J. Alvarez
LAB MANAGER MZ 5-18-92

REAGENT COST 006581

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 20656 Operator: NG
Run Time: 05/18/92 15:16:33
Comment: CC-55-90 LOAD # 3813
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.315	1.073	2.377	<.0000	.0575	73.69	<.0000
SDev	.113	.164	.238	.0951	.0065	.58	.0247
%RSD	1.796	15.31	10.00	201.8	11.23	.7844	134.4
#1	6.223	1.137	2.083	<.0000	.0600	72.97	<.0000
#2	6.279	.9535	2.570	<.0000	.0550	73.56	<.0000
#3	6.279	.9259	2.283	<.0000	.0500	74.35	<.0000
#4	6.481	1.275	2.570	.0871	.0651	73.88	.0126

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0538	2.421	12.07	30.99	77.62	.1001	938.3
SDev	.0216	.028	.10	.38	.65	.0027	11.3
%RSD	40.18	1.157	.7947	1.225	.8356	2.703	1.199
#1	.0506	2.386	11.97	30.98	76.78	.0987	926.9
#2	.0632	2.443	12.01	30.89	77.44	.0987	931.4
#3	.0253	2.412	12.16	31.50	78.10	.1041	951.7
#4	.0759	2.443	12.15	30.59	78.17	.0987	943.0

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1000	36.70	2.386	.3165	3.514	4.687	.0023
SDev	.0239	.72	.539	.5977	.283	.338	.0293
%RSD	23.89	1.953	22.59	188.8	8.064	7.205	1265.
#1	.0931	36.55	2.295	.7650	3.167	4.850	.0116
#2	.0793	36.28	1.967	.1319	3.514	4.467	<.0000
#3	.1344	36.22	3.169	<.0000	3.514	4.352	<.0000
#4	.0931	37.76	2.113	.8177	3.861	5.080	.0393

Elem	Zn
Units	ppm
Avge	.5174
SDev	.0149
%RSD	2.879
#1	.5057
#2	.5213
#3	.5057
#4	.5369

006582

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ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA | WID # 00008472 | LAB NO. CC 55-90
WASTE DESCRIPTION: Photo Waste | VOLUME: 4348 Gallons
WASTE CODE(S): D007, 11 | LOAD # 3809 | DATE: 5-18-90

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	1.9	
Al	<1.0	
As	2.7	
Au	⊘	
Ba	<0.1	
Ca	69.2	
Cd	<0.1	
Co	<1.0	
Cr	1.0	
Cu	4.4	
Fe	16.3	
Mg	31.8	
Mn	<1.0	
Na	357.4	
Ni	<1.0	
P	18.8	
Pb	1.7	
Se	⊘	
Si	2.0	
Sn	2.6	
V	⊘	
Zn	1.3	

pH 7.4 | COLOR Lt Gray | F NA
Sp. Gr. 1.00 | PHASES Single | CL
Total CN- NA | ACIDITY NA | NO2
Reac. CN- NA | ALKALINITY NA | Br
NH3 as N [illegible] | ODOR M,Id | NO3
TOC 207.0 1308ppm | PO4
VOC NA | SO4 NA

PROCESS STAGES

INITIAL	100 mL	PARAMETERS pH	REDOX	T°C

COMMENTS:

CHEMISTS: N. Gallegos
J. Alvarez
LAB MANAGER MZ 5-18-92

REAGENT COST
006583

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 20655 Operator: NG
Run Time: 05/18/92 15:13:36
Comment: CC-55-90 LOAD # 3809
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.983	.5284	2.691	<.0000	.0525	69.17	.0195
SDev	.038	.1376	.495	.0548	.0065	.84	.0115
%RSD	1.905	26.04	18.39	86.75	12.30	1.218	59.21
#1	1.927	.6318	2.598	<.0000	.0450	68.46	.0310
#2	2.005	.6594	2.742	<.0000	.0550	68.64	.0218
#3	2.005	.4388	3.314	.0124	.0600	69.24	.0218
#4	1.994	.3837	2.112	<.0000	.0500	70.33	.0034

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1170	1.027	4.419	16.33	31.75	.1460	357.4
SDev	.0261	.047	.073	.12	.24	.0052	3.1
%RSD	22.29	4.619	1.656	.7059	.7448	3.546	.8579
#1	.0885	.9779	4.343	16.31	31.43	.1474	354.7
#2	.1012	1.083	4.378	16.18	31.85	.1420	355.1
#3	.1391	.9990	4.448	16.37	31.98	.1420	358.9
#4	.1391	1.046	4.507	16.45	31.75	.1528	361.0

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2266	18.75	1.666	.5144	2.039	2.569	.0162
SDev	.0610	.77	.141	.6158	.100	.372	.0177
%RSD	26.90	4.132	8.442	119.7	4.914	14.50	109.4
#1	.1758	18.42	1.675	1.134	2.126	3.048	.0208
#2	.2413	19.34	1.858	<.0000	1.952	2.665	.0393
#3	.3068	19.43	1.603	.8177	1.952	2.358	.0023
#4	.1827	17.81	1.530	.3957	2.126	2.205	.0023

Elem	Zn
Units	ppm
Avge	1.323
SDev	.014
%RSD	1.074
#1	1.315
#2	1.331
#3	1.307
#4	1.338

ENCYCLE /TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA	WID #0000 8471	LAB NO. CC 55-90	
WASTE DESCRIPTION: PHOTOWASTE		VOLUME: 4,880 GAL	
WASTE CODE(S): D007/ 11	LOAD # 3807	DATE: 5-14-92	

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm
Ag	3.8	
Al	1.1	
As	0	
Au	0	
Ba	<0.1	
Ca	56	
Cd	<1.0	
Co	0	
Cr	2.2	
Cu	2.2	
Fe	10.7	
Mg	12.4	
Mn	0	
Na	255	
Ni	<1.0	
P	10.8	
Pb	2.1	
Se	0	
Si	3.0	
Sn	<1.0	
V	0	
Zn	5.9	

pH	7.4	COLOR	GREY	F
Sp. Gr.	1.00	PHASES	S	CL
Total CN-	N/A	ACIDITY	N/A	NO2
Reac. CN-	N/A	ALKALINITY	N/A	Br
NH3 as N	98 ppm	ODOR	M	NO3
TOC	160			PO4
VOC	N.D			SO4

PROCESS STAGES

PARAMETERS

PROCESS STAGES		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: H. Wierzykowska, [signature] Wendland

LAB MANAGER MZ 5-14-92

REAGENT COST 006585

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE M# 20574 Operator: HLW
Run Time: 05/14/92 14:38:03
Comment: CC-55-90
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.752	1.145	<.0000	<.0000	.0363	55.97	.1675
SDev	.051	.097	.1753	.0466	.0267	.33	.1084
%RSD	1.365	8.502	184.5	88.76	73.58	.5980	64.71
#1	3.689	1.278	.1320	<.0000	.0685	55.52	.3050
#2	3.740	1.141	<.0000	<.0000	.0470	56.04	.1886
#3	3.770	1.115	<.0000	<.0000	.0201	56.33	.1287
#4	3.811	1.046	<.0000	<.0000	.0094	55.99	.0476

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	<.0000	2.198	2.208	10.66	12.38	.0143	255.0
SDev	.0201	.238	.616	.43	.19	.0244	2.2
%RSD	40.31	10.84	27.89	4.052	1.520	170.0	.8573
#1	<.0000	2.502	3.009	11.21	12.66	.0478	252.7
#2	<.0000	2.242	2.323	10.72	12.35	.0143	256.4
#3	<.0000	2.112	1.927	10.54	12.26	.0048	257.3
#4	<.0000	1.936	1.573	10.17	12.26	<.0000	253.7

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5093	10.84	2.053	<.0000	2.964	.6478	<.0000
SDev	.1442	.56	.821	.2174	.231	.2185	.0249
%RSD	28.32	5.184	39.96	76.98	7.792	33.73	119.4
#1	.6818	10.10	2.964	<.0000	3.310	.9273	.0062
#2	.5558	10.69	2.471	<.0000	2.848	.6986	<.0000
#3	.4568	11.27	1.650	<.0000	2.848	.5462	<.0000
#4	.3428	11.28	1.129	<.0000	2.848	.4192	<.0000

Elem	Zn
Units	ppm
Avge	5.931
SDev	2.396
%RSD	40.39
#1	8.986
#2	6.478
#3	4.872
#4	3.388

006586

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ENCYCLE / TEXAS, INC.
5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA | WID # 0 0008470 | LAB NO. CC 5590
WASTE DESCRIPTION: Photo waste | VOLUME: 4882 GAL
WASTE CODE(S): D007 / 0011 | LOAD # 3799 | DATE: 5-13-92

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm
Ag	4.0	
Al	<1.0	
As	1.3	
Au	<1.0	
Ba	<1.0	
Ca	60.5	
Cd	<1.0	
Co	<1.0	
Cr	4.5	
Cu	2.4	
Fe	10.5	
Mg	12.4	
Mn	<1.0	
Na	200.0	
Ni	<1.0	
P	10.4	
Pb	<1.0	
Se	<1.0	
Si	2.0	
Sn	1.1	
V	<1.0	
Zn	<1.0	

pH 7.6	COLOR Grey	F	
Sp. Gr. 1.00	PHASES M	CL	
Total CN-	ACIDITY	NO2	
Reac. CN-	ALKALINITY	Br	
NH3 as N 75.0	ODOR S	NO3	
TOC 130.5		PO4	
VOC <50 ppm		SO4	

PROCESS STAGES

PARAMETERS

Stage		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: [signature]

LAB MANAGER

REAGENT COST

006587

Analysis Report Wed 05-13-92 01:59:29 PM page 1

Method: ENCYCLE Sample Name: SAMPLE # 20516 Operator: HLW
Run Time: 05/13/92 13:57:15
Comment: CC-55-90
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.960	.3314	1.32[illegible]	.0192	.0093	60.49	.0038
SDev	.092	.3537	.140[illegible]	.0612	.0007	.55	.0152
%RSD	2.331	106.6	10.51	318.2	28.57	.9161	397.3
#1	3.963	.8431	1.4[illegible]	.1061	.0053	61.27	.0008
#2	3.902	.2090	1.[illegible]	<.0000	.0106	60.50	<.0000
#3	4.019	.1053	[illegible]	<.0000	.0106	60.09	.0221
#4	4.057	.3431	1.341	.0093	.0106	60.10	.0069

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0371	4.430	1.[illegible]	10.51	12.36	.0385	199.9
SDev	.0026	.033	.02[illegible]	.14	.35	.0041	1.2
%RSD	71.31	.7377	1.[illegible]	1.320	2.811	10.64	.5797
#1	.0370	4.494	1.3[illegible]	10.69	12.63	.0417	198.2
#2	.0342	4.423	1.3[illegible]	10.54	11.93	.0374	200.3
#3	.0342	4.427	1.[illegible]	10.42	12.46	.0331	200.2
#4	.0713	4.436	1.4[illegible]	10.51	12.50	.0417	200.4

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1752	10.41	.551[illegible]	.5847	1.956	1.142	.0019
SDev	.1242	.13	.271[illegible]	.6513	.239	.119	.0219
%RSD	70.89	1.234	41.[illegible]	111.3	12.20	10.39	1149.
#1	.3511	10.34	.56[illegible]	1.137	1.100	1.134	.0190
#2	.1745	10.43	.42[illegible]	1.107	1.921	1.138	<.0000
#3	.0876	10.37	.174[illegible]	<.0000	1.061	1.002	<.0000
#4	.0876	10.45	.3503	.3472	1.642	1.293	.0190

Elem	Zn
Units	ppm
Avge	.1414
SDev	.0076
%RSD	5.387
#1	.1501
#2	.1414
#3	.1361
#4	.1361

006588

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ENCYCLE /TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA | WID # 00008449 | LAB NO. CC55-90
WASTE DESCRIPTION: Photowaste | VOLUME: 4810 Gal
WASTE CODE(S): D007 / D011 | LOAD # 3783 | DATE: 5-11-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	19.7	
Al	5.2	
As	0	
Au	<0.1	
Ba	0.1	
Ca	53.4	
Cd	0	
Co	<0.1	
Cr	13.1	
Cu	1.8	
Fe	22.4	
Mg	42.7	
Mn	0.1	
Na	1008	
Ni	1.1	
P	65.5	
Pb	0.5	
Se	<0.2	
Si	0	
Sn	8.2	
V	<0.1	
Zn	0.3	

pH 6.7 | COLOR BRN Grey | F
Sp. Gr. 1.02 | PHASES 1 | CL
Total CN- | ACIDITY | NO2
Reac. CN- | ALKALINITY | Br
NH3 as N 280 ppm | ODOR M | NO3
TOC 442.7 ppm | | PO4
VOC | | SO4

PROCESS STAGES

INITIAL	100 mL

PARAMETERS

pH	REDOX	T°C

COMMENTS:

CHEMISTS: KC

LAB MANAGER

REAGENT COST - 006589

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 20413 Operator: BC
Run Time: 05/11/92 14:42:00
Comment: CC-55-89 #1
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.71	5.222	<.0000	.0558	.1443	53.38	<.0000
SDev	1.09	.367	.0636	.0234	.0517	2.38	.0142
%RSD	5.505	7.03%	91.02	50.72	35.82	4.463	22.3%
#1	18.61	4.763	.0140	.0772	.1563	50.18	<.0000
#2	19.51	5.200	<.0000	.0398	.1745	53.17	<.0000
#3	20.39	5.252	<.0000	.0245	.1729	54.30	<.0000
#4	20.47	5.667	<.0000	.0315	.0687	55.48	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0730	17.39	1.765	12.72	41.11	.1137	1308.
SDev	.0038	.58	.052	.49	1.79	.0025	32
%RSD	13.44	3.35%	3.1%	3.87	1.196	2.181	2.73
#1	.0705	18.32	1.821	13.17	42.21	.1113	1341.
#2	.0705	18.06	1.773	12.69	42.74	.1117	1307.
#3	.0803	16.43	1.739	12.38	43.41	.1161	1334.
#4	.1307	17.17	1.711	12.17	38.21	.1161	1307.

Elem	Ni	P	Pb	Sb	Si	Sr	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.102	15.45	.5014	.1613	<.3000	3.159	.0191
SDev	.104	2.96	.1320	.3960	.8387	.448	.0081
%RSD	9.465	4.519	31.45	245.4	1.13e	3.472	42.58
#1	1.332	13.33	.5497	<.0000	<.0000	3.600	.0254
#2	1.054	15.24	.3996	<.0000	<.0000	3.293	.0254
#3	1.257	17.23	.5021	.2344	.3000	3.333	.0085
#4	1.059	17.91	.6679	.6044	<.3000	3.603	.0170

Elem	Zn
Units	ppm
Avge	.0369
SDev	.0178
%RSD	3.911
#1	.0554
#2	.0413
#3	.0278
#4	.0229

280 MB
4427

006590

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ENCYCLE/TEXAS, INC.
5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA	WID # 00008450	LAB NO. CC 55-90
WASTE DESCRIPTION: Photowaste		VOLUME: 3750 Gal
WASTE CODE(S): D007 / D0011	LOAD # 3784	DATE: 5-11-92

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm
Ag	21.2	
Al	1.9	
As	0	
Au	0	
Ba	0.1	
Ca	51.9	
Cd	0	
Co	<0.1	
Cr	12.1	
Cu	1.1	
Fe	19.5	
Mg	38.9	
Mn	<0.1	
Na	1000	
Ni	0.2	
P	93.8	
Pb	0.4	
Se	0.4	
Si	0	
Sn	4.6	
V	0	
Zn	0.8	

pH	8.0	COLOR	BRN GRAY	F
Sp. Gr.	1.00	PHASES	1	CL
Total CN-		ACIDITY		NO2
Reac. CN-		ALKALINITY		Br
NH3 as N	330 ppm	ODOR	Mild	NO3
TOC	523.7 ppm			PO4
VOC				SO4

PROCESS STAGES

Stage		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: BC

LAB MANAGER

REAGENT COST

006591

Method: ENCYCLE Sample Name: SAMPLE # 20414 Operator: BC
Run Time: 05/11/92 14:44:57
Comment: CC-55-89 #2
Mode: CONC Conv. Factor: 10

Elem	Ag	Al	As	AL	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	21.22	1.862	<.0000	.0259	.1448	51.91	.0000
SDev	.69	.021	.1506	.0843	.0664	1.25	.0063
%RSD	3.259	1.105	61.00	327.1	45.83	2.402	94.65
#1	20.17	1.857	<.0000	.0589	.1740	50.36	<.0000
#2	21.00	1.892	<.0000	<.0000	.0453	51.56	<.0000
#3	21.99	1.849	<.0000	.0422	.1799	52.47	.0025
#4	21.84	1.849	<.0000	.0987	.1796	53.26	<.0000

Elem	Co	Cr	Cu	Fe	Mo	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0227	12.06	1.122	19.46	38.92	.3921	1300.0
SDev	.0172	.28	.033	.53	.98	.0387	22.41
%RSD	75.90	2.350	1.399	2.748	2.512	9.864	2.041
#1	.0201	11.70	1.095	18.79	37.78	.3826	1269.8
#2	<.0000	11.98	1.093	19.36	38.43	.3874	1300.
#3	.0403	12.20	1.160	19.61	39.77	.3969	1307.
#4	.0302	12.38	1.139	20.07	39.70	.4017	1321.

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2484	93.83	.4196	.3795	<.0000	4.569	<.0000
SDev	.0400	3.50	.0734	.3998	.3904	.285	.0176
%RSD	16.09	3.728	18.69	105.4	.7869	1.365	39.48
#1	.1981	89.34	.4315	.6641	<.0000	4.540	<.0000
#2	.2395	93.23	.3133	<.0000	<.0000	4.364	<.0000
#3	.2632	95.11	.4315	.7779	<.0000	4.621	<.0000
#4	.2928	97.65	.5024	.0949	<.0000	4.451	<.0000

Elem	Zn
Units	ppm
Avge	.1438
SDev	.0447
%RSD	5.037
#1	.1790
#2	.1391
#3	.1552
#4	.1481

330 NH3

006592

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ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA | WID # 00150366 | LAB NO. CC 55-90
WASTE DESCRIPTION: PHOTOWASTE | VOLUME:
WASTE CODE(S): D007/D011 | LOAD # 3758 | DATE: 5-6-92

ICP	PRE-SCREEN	POST-TREATMENT			
	ppm	ppm	pH 2.2	COLOR Grey	F
Ag	72.5		Sp. Gr. 1.03	PHASES 1	CL
Al	0.8		Total CN-	ACIDITY	NO2
As	<0.10		Reac. CN-	ALKALINITY	Br
Au	<0.10		NH3 as N 20 ppm	ODOR M	NO3
Ba	0.4		TOC 299.7 ppm		PO4
Ca	53.9		VOC		SO4
Cd	<0.10				
Co	0.2				
Cr	0.6				
Cu	<0.10				
Fe	860.9				
Mg	39.9				
Mn	1.7				
Na	671.5				
Ni	0.2				
P	36.7				
Pb	0.9				
Se	<0.10				
Si	3.9				
Sn	3.1				
V	<0.10				
Zn	0.9				

PROCESS STAGES

PARAMETERS

INITIAL	100 mL	pH	REDOX	T°C

COMMENTS:

CHEMISTS: SW Cardwell

LAB MANAGER C Payne 5.6.92

REAGENT COST 006593

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 20276 Operator: SDW
Run Time: 05/06/92 15:55:08
Comment: CC-55-90
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	72.54	.8150	<.0000	<.0000	.3535	53.89	<.0000
SDev	1.90	.0898	.2033	.0249	.0050	.13	.0140
%RSD	2.616	11.01	4.783	1.362	1.403	.2779	3.125
#1	70.11	.6906	<.0000	<.0000	.3470	53.69	<.0000
#2	72.10	.9049	<.0000	<.0000	.3574	53.85	<.0000
#3	73.39	.8360	<.0000	<.0000	.3574	54.00	<.0000
#4	74.04	.8284	<.0000	<.0000	.3522	54.00	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0039	.6330	.0384	360.9	39.96	1.763	671.5
SDev	.0352	.0461	.0490	3.1	.22	.009	2.6
%RSD	17.26	7.291	55.46	.8552	.5540	.5352	.3907
#1	.0404	.6697	.1204	361.1	40.05	1.765	672.3
#2	.0096	.6321	.1400	356.6	40.19	1.750	667.7
#3	.1568	.5682	.0413	363.5	39.64	1.772	673.4
#4	.0096	.6621	.0516	361.1	39.97	1.765	672.7

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2405	36.66	.9417	<.0000	3.970	3.079	<.0000
SDev	.0492	.53	.1735	.4648	.393	.245	.0130
%RSD	20.45	1.440	18.95	69.58	9.906	7.962	50.48
#1	.2388	36.07	1.168	.0064	3.620	3.368	<.0000
#2	.2614	36.71	.8840	<.0000	4.509	3.134	<.0000
#3	.1733	37.34	.7413	<.0000	3.747	2.775	<.0000
#4	.2884	36.53	.9728	<.0000	4.001	3.037	<.0000

Elem	Zn
Units	ppm
Avge	.3993
SDev	.0206
%RSD	1.293
#1	.3836
#2	.3900
#3	.3920
#4	.4297

006594

CONFIDENTIAL

ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300

P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA | WID # 0000 8448 | LAB NO. CC-55-90

WASTE DESCRIPTION: PHOTO WASTE | VOLUME: 5243 GALLONS

WASTE CODE(S): D007 / D011 | LOAD # 3747 | DATE: 5-4-92

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm
Ag	6.1	
Al	1.1	
As	⊘	
Au	⊘	
Ba	<0.1	
Ca	53.8	
Cd	⊘	
Co	⊘	
Cr	2.2	
Cu	<1.0	
Fe	18.9	
Mg	26.9	
Mn	<0.1	
Na	910.1	
Ni	<1.0	
P	116.4	
Pb	⊘	
Se	⊘	
Si	3.5	
Sn	7.0	
V	⊘	
Zn	<1.0	

pH 8.2 COLOR GRAY-GREEN

SD. GR. 1.02 PHASES Single

Total CN- NA ACIDITY NA

Reac. CN- NA ALKALINITY NA

NH3 as N 1128ppm ODOR Mild

TOC 425.8ppm

VOC NA

F	NA
CL	
NO2	
Br	
NO3	
PO4	
SO4	

PROCESS STAGES

INITIAL	PARAMETERS pH	REDOX	T°C

COMMENTS:

CHEMISTS: Richard Calleyn

LAB MANAGER M2 5-4-92

REAGENT COST

006595

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 20175 Operator: NG
Run Time: 05/04/92 16:24:03
Comment: CC-55-90 SHIPMENT
Mode: CONC Conv. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.090	1.125	<.0000	<.0000	.0879	53.75	<.0000
SDev	.298	.259	.0819	.0343	.0056	.62	.0090
%RSD	4.898	22.99	182.6	130.6	6.415	1.159	213.8
#1	5.634	.7527	<.0000	<.0000	.0923	52.99	<.0000
#2	6.056	1.320	.0028	.0156	.0928	53.50	.0073
#3	6.093	1.148	<.0000	<.0000	.0831	54.29	<.0000
#4	6.335	1.277	<.0000	<.0000	.0830	54.23	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0166	2.169	.1773	18.91	26.90	.0670	910.1
SDev	.0176	.173	.0129	.19	.31	.0046	5.9
%RSD	106.3	8.228	7.262	1.007	1.144	6.895	.6520
#1	.0277	2.046	.1682	18.71	26.44	.0605	906.9
#2	.0277	2.434	.1955	18.84	27.06	.0716	904.2
#3	<.0000	2.103	.1682	19.15	27.10	.0679	917.8
#4	.0203	2.093	.1773	18.96	26.99	.0679	911.4

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1439	116.4	.4500	.3095	3.545	7.025	<.0000
SDev	.0176	1.3	.2291	.4099	.119	.096	.0169
%RSD	12.25	1.079	50.93	132.4	3.359	1.371	125.9
#1	.1324	114.9	.3532	.3376	3.451	6.922	<.0000
#2	.1696	115.7	.7569	.0460	3.576	7.031	.0101
#3	.1324	117.4	.2137	<.0000	3.451	6.995	<.0000
#4	.1412	117.5	.4710	.8779	3.700	7.152	<.0000

Elem	Zn
Units	ppm
Avge	.3169
SDev	.0051
%RSD	1.609
#1	.3229
#2	.3189
#3	.3116
#4	.3150

006596

CONFIDENTIAL

ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA	WID #00008447	LAB NO. CC 55-90
WASTE DESCRIPTION: PHOTOWASTE		VOLUME: 4744 GAL.
WASTE CODE(S): D007 / D011	LOAD #3746	DATE: 5-4-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	5.8	
Al	1.1	
As	0	
Au	0	
Ba	<1.0	
Ca	48.3	
Cd	0	
Co	0	
Cr	2.5	
Cu	0	
Fe	15.1	
Mg	20.8	
Mn	<0.1	
Na	885.7	
Ni	0	
P	60.9	
Pb	0	
Se	0	
Si	2.9	
Sn	2.8	
V	0	
Zn	2.3	

pH 7.5 COLOR Brown F NA
Sp. Gr. 1.00 PHASES Single CL
Total CN- NA ACIDITY NA NO2
Reac. CN- NA ALKALINITY NA Br
NH3 as N 250ppm ODOR M NO3
TOC 258,700ppm PO4
VOC NA SO4

PROCESS STAGES

PARAMETERS

		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: Nick Dallaire

LAB MANAGER MZ 5-4-92

REAGENT COST
006597

Method: ENCYCLE Sample Name: SAMPLE # 20174 Operator: NG
Run Time: 05/04/92 15:44:46
Comment: CC-55-90 SHIPMENT
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.862	1.100	<.0000	<.0000	.3334	48.32	.0006
SDev	.159	.314	.2275	.0852	.0147	.48	.0119
%RSD	2.715	28.54	36.76	148.3	5.254	.9862	2117.
#1	5.698	1.040	<.0000	<.0000	.3586	47.62	.0164
#2	5.811	.8097	<.0000	<.0000	.3223	48.54	<.0000
#3	5.852	1.001	<.0000	<.0000	.3271	48.41	<.0000
#4	6.080	1.543	<.0000	.0281	.3366	48.69	.0028

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0012	2.461	.0317	15.38	20.76	.0606	885.7
SDev	.0252	.334	.1468	.27	.32	.0033	9.3
%RSD	1438.	1.368	147.5	1.674	1.543	5.394	1.111
#1	.0213	2.432	.2861	14.93	20.37	.0614	875.9
#2	<.0000	2.432	<.0000	15.15	20.31	.0580	899.1
#3	.0070	2.134	.0106	15.03	20.79	.0520	886.5
#4	.0140	2.495	.0498	15.03	21.07	.0648	881.4

Elem	Ni	P	Pb	Sb	Si	Sn	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0463	<0.95	.1836	.0681	2.901	2.738	<.0000
SDev	.0233	.54	.1842	.0517	.203	.178	.0390
%RSD	50.33	.8837	99.24	75.93	6.998	6.401	153.1
#1	.0557	40.51	.4207	.0976	2.735	2.705	.0595
#2	.0322	<1.43	.0040	.0976	2.842	2.900	<.0000
#3	.0224	<0.91	.0847	<.0000	2.842	2.579	<.0000
#4	.0744	<1.25	.3500	.0759	3.194	2.968	.0032

Elem	Zn
Units	ppm
Avge	2.292
SDev	.010
%RSD	.4464
#1	2.279
#2	2.297
#3	2.296
#4	2.302

006593

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ENCYCLE /TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA	WID #00008446	LAB NO. CC-55-90
WASTE DESCRIPTION: PHOTOWASTE		VOLUME: 4744 GALLONS
WASTE CODE(S): D007 / D011	LOAD # 3743	DATE: 5-1-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	6.8	
Al	<1.0	
As	⊖	
Au	⊖	
Ba	⊖	
Ca	45.7	
Cd	⊖	
Co	⊖	
Cr	1.7	
Cu	<1.0	
Fe	19.0	
Mg	30.4	
Mn	<1.0	
Na	630.3	
Ni	<1.0	
P	49.2	
Pb	<1.0	
Se	⊖	
Si	3.1	
Sn	4.8	
V	⊖	
Zn	<1.0	

pH 7.7 COLOR GRAY/GREEN
Sp. Gr. 1.00 PHASES SINGLE
Total CN- NA ACIDITY NA
Reac. CN- NA ALKALINITY NA
NH3 as N 1408ppm ODOR MILD
TOC 270.5ppm
VOC NA

F NA
CL
NO2
Br
NO3
PO4
SO4 NA

PROCESS STAGES

PARAMETERS

		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: Rich Gallegos

LAB MANAGER

REAGENT COST
006599

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 20145 Operator: HLW
Run Time: 05/04/92 09:13:06
Comment: CC-55-90 5-1-92
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.775	.9370	<.0000	<.0000	.0666	45.66	<.0000
SDev	.282	.3026	.0854	.0320	.0105	1.05	.0065
%RSD	4.166	32.29	15.39	153.0	15.84	2.295	46.19
#1	6.418	1.001	<.0000	.0258	.0796	44.66	<.0000
#2	6.680	1.213	<.0000	<.0000	.0701	44.90	<.0000
#3	7.002	1.029	<.0000	<.0000	.0606	46.20	<.0000
#4	7.002	.5056	<.0000	<.0000	.0559	46.85	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0070	1.746	.9693	19.00	30.42	.0580	630.3
SDev	.0236	.022	.4275	.13	.59	.0056	13.0
%RSD	336.7	1.248	44.10	.6811	1.951	9.606	2.068
#1	.0000	1.724	1.409	19.11	29.92	.0643	620.5
#2	.0140	1.741	1.013	18.93	29.90	.0580	618.0
#3	.0000	1.743	.7907	19.04	30.32	.0510	637.7
#4	.0350	1.774	.4575	19.03	31.03	.0580	644.3

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0300	49.18	.9805	<.0000	3.076	4.794	<.0000
SDev	.0270	1.17	.3656	.1246	.166	.699	.0197
%RSD	89.46	2.376	37.28	287.2	5.387	14.57	112.5
#1	.0472	47.81	1.441	<.0000	2.842	5.533	.0095
#2	<.0000	48.43	1.053	<.0000	3.194	5.212	<.0000
#3	.0567	49.94	.8595	<.0000	3.194	4.411	<.0000
#4	.0286	50.74	.5639	.1410	3.076	4.022	<.0000

Elem	Zn
Units	ppm
Avge	.4485
SDev	.0043
%RSD	.9543
#1	.4502
#2	.4443
#3	.4443
#4	.4502

006600

CONFIDENTIAL

ENCYCLE /TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA	WID #00008445	LAB NO. CC 55-90
WASTE DESCRIPTION: Photowaste		VOLUME:
WASTE CODE(S): D007 / 11	LOAD # 3723	DATE: 4-29-92

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm
Ag	10.4	
Al	3.5	
As	Ø	
Au	Ø	
Ba	<1.0	
Ca	48.2	
Cd	<1.0	
Co	Ø	
Cr	2.0	
Cu	<1.0	
Fe	28.5	
Mg	31.3	
Mn	<1.0	
Na	996.2	
Ni	<1.0	
P	130.1	
Pb	<1.0	
Se	<1.0	
Si	5.6	
Sn	6.8	
V	Ø	
Zn	9.4	

pH 8.3	COLOR Green	F
Sp. Gr. 1.00	PHASES S	CL
Total CN-	ACIDITY	NO2
Reac. CN-	ALKALINITY	Br
NH3 as N 200	ODOR M	NO3
TOC 646.7		PO4
VOC <100		SO4

PROCESS STAGES

		PARAMETERS pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: [signature]

LAB MANAGER

REAGENT COST

006601

Method: ENCYCLE Sample Name: SAMPLE # 20037 Operator: HLW
Run Time: 04/29/92 14:46:49
Comment: CC-55-90
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.38	3.506	<.0000	<.0000	.0932	48.22	.0798
SDev	.42	.121	.0756	.0683	.0193	.49	.0050
%RSD	4.024	3.455	230.5	110.6	20.67	1.022	6.301
#1	9.815	3.528	.1303	.0256	.1074	47.58	.0835
#2	10.40	3.389	.0303	<.0000	.1027	48.09	.0729
#3	10.50	3.666	<.0000	<.0000	.0849	48.59	.0793
#4	10.82	3.442	<.0000	<.0000	.0979	48.63	.0835

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	<.0000	1.970	.5031	29.46	31.29	.1285	996.2
SDev	.0322	.034	.0786	.43	.35	.0027	9.8
%RSD	246.6	1.707	15.61	1.500	1.140	2.067	.9862
#1	<.0000	1.949	.6091	29.07	31.11	.1285	991.7
#2	<.0000	1.921	.4394	28.05	30.99	.1253	999.3
#3	.0229	1.975	.4479	29.38	31.72	.1318	1001.
#4	<.0000	1.985	.5158	29.35	31.13	.1285	1003.

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1335	130.1	.9352	.1471	5.630	6.826	<.0000
SDev	.0442	1.1	.1804	.2402	.145	.197	.0243
%RSD	33.15	.8336	19.29	163.3	2.569	2.742	1645.
#1	.1975	129.3	1.139	.0098	5.426	6.693	.0301
#2	.0963	130.2	.7514	<.0000	5.574	6.773	<.0000
#3	.1161	131.5	.9276	.4014	5.798	6.911	<.0000
#4	.1241	130.2	.9729	.2647	5.662	7.026	.0000

Elem	Zn
Units	ppm
Avge	9.110
SDev	.058
%RSD	.6151
#1	9.175
#2	9.103
#3	9.129
#4	9.133

006602

ENVIROCLEAN TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA	WID # ODO68444	LAB NO: CC 55-90
WASTE DESCRIPTION: PHOTOWASTE		VOLUME: 479 GAL
WASTE CODE(S): D607/11	LOAD # 3699	DATE: 4-24-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	21.9	
Al	2.2	
As	Ø	
Au	Ø	
Ba	<1.0	
Ca	46.1	
Cd	Ø	
Co	Ø	
Cr	1.2	
Cu	<1.0	
Fe	47.8	
Mg	43.2	
Mn	<1.0	
Na	603.9	
Ni	11.5	
P	68.5	
Pb	1.1	
Se	Ø	
Si	3.2	
Sn	3.0	
V	Ø	
Zn	<1.0	

pH 7.3 COLOR Grey F
Sp. Gr. 1.01 PHASES S CL
Total CN- ACIDITY NO2
Reac. CN- ALKALINITY Br
NH3 as N 290 ODOR M NO3
TOC 495 PO4
VOC <100 ppm SO4

PROCESS STAGES

		PARAMETERS		
		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: [signature]

LAB MANAGER

REAGENT COST
006603

Method: ENCYCLE Sample Name: SAMPLE # 19888 Operator: HLW
Run Time: 04/24/92 13:40:44
Comment: CC-55-90
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	21.89	2.186	<.0000	<.0000	.0633	46.11	<.0000
SDev	.94	.318	.0588	.0134	.0050	.86	.0963
%RSD	4.274	14.53	9.388	28.79	7.979	1.866	16.70
#1	20.59	2.200	<.0000	<.0000	.0620	45.00	<.0000
#2	21.84	1.821	<.0000	<.0000	.0567	45.90	<.0000
#3	22.66	2.593	<.0000	<.0000	.0672	46.57	<.0000
#4	22.47	2.130	<.0000	<.0000	.0672	46.96	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0099	1.179	.3113	47.83	43.18	.0366	603.9
SDev	.0279	.034	.0264	.95	.84	.0019	9.1
%RSD	282.8	2.888	8.490	1.993	1.955	5.249	1.509
#1	.0165	1.135	.3067	47.04	42.15	.0349	592.0
#2	.0362	1.192	.3159	47.60	42.87	.0349	602.1
#3	<.0000	1.172	.2792	47.47	43.67	.0382	609.2
#4	.0165	1.215	.3433	49.21	44.04	.0382	612.6

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.47	68.49	1.088	.0779	3.244	2.969	<.0000
SDev	1.90	1.02	.127	.1659	.188	.074	.0181
%RSD	16.53	1.484	11.64	212.9	5.789	2.498	127.7
#1	12.60	67.19	1.108	<.0000	3.272	2.963	<.0000
#2	12.20	68.17	.9988	.2297	3.052	2.884	<.0000
#3	12.44	69.34	.9852	<.0000	3.492	2.963	<.0000
#4	8.635	69.24	1.259	.2133	3.162	3.065	<.0000

Elem	Zn
Units	ppm
Avge	.0185
SDev	.0080
%RSD	43.28
#1	.0269
#2	.0235
#3	.0134
#4	.0101

006604

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

REPORT

LIQUIDS

CLIENT: NASA	WID # 00008443	LAB NO. CC 55-90	
WASTE DESCRIPTION: PHOTOWASTE		VOLUME: 4726GAL	
WASTE CODE(S): D007/11	LOAD # 3698	DATE: 2-23-92	

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm
Ag	25.6	
Al	3.4	
As	Ø	
Au	Ø	
Ba	Ø	
Ca	47.1	
Cd	Ø	
Co	Ø	
Cr	3.1	
Cu	Ø	
Fe	33.7	
Mg	28.2	
Mn	Ø	
Na	643.3	
Ni	Ø	
P	62.6	
Pb	Ø	
Se	Ø	
Si	Ø	
Sn	1.8	
V	Ø	
Zn	Ø	

pH	6.9	COLOR	GREY	F
Sp. Gr.	1.00	PHASES	S	CL
Total CN-		ACIDITY		NO2
Reac. CN-		ALKALINITY		Br
NH3 as N	350 ppm	ODOR	M	NO3
TOC	4683 ppm			PO4
VOC	<100			SO4

PROCESS STAGES

PARAMETERS

Stage		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: SDWendland

LAB MANAGER

REAGENT COST 006605

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 19841 Operator: HLW
Run Time: 04/23/92 14:20:03
Comment: CC-55-90 SHIPMENT
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	25.55	3.378	<.0000	<.0000	<.0000	47.06	<.0000
SDev	1.01	.125	.1071	.0414	.0076	.98	.0090
%RSD	3.940	3.688	14.03	231.8	1.383	2.083	1.494
#1	24.34	3.265	<.0000	.0277	<.0000	45.90	<.0000
#2	25.15	3.281	<.0000	.0068	<.0000	46.74	<.0000
#3	26.10	3.518	<.0000	<.0000	<.0000	47.35	<.0000
#4	26.61	3.447	<.0000	<.0000	<.0000	48.23	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0269	3.101	<.0000	33.73	28.19	<.0000	643.3
SDev	.0230	.069	.0177	.68	.39	.0050	13.1
%RSD	85.32	2.211	4.986	2.012	1.390	.9321	2.041
#1	.0519	3.035	<.0000	33.54	27.75	<.0000	628.0
#2	.0212	3.067	<.0000	32.98	27.98	<.0000	639.0
#3	.0366	3.107	<.0000	33.78	28.48	<.0000	646.8
#4	<.0000	3.194	<.0000	34.61	28.56	<.0000	659.2

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	<.0000	62.55	.2002	<.0000	<.0000	1.785	.0075
SDev	.0303	1.26	.2530	.2238	.1828	.112	.0123
%RSD	5.519	2.015	126.4	30.39	7.443	6.246	163.3
#1	<.0000	61.27	.1171	<.0000	<.0000	1.847	.0225
#2	<.0000	62.03	.5251	<.0000	<.0000	1.794	<.0000
#3	<.0000	62.66	<.0000	<.0000	<.0000	1.874	.0075
#4	<.0000	64.24	.2380	<.0000	<.0000	1.626	.0075

Elem	Zn
Units	ppm
Avge	<.0000
SDev	.0133
%RSD	2.972
#1	<.0000
#2	<.0000
#3	<.0000
#4	<.0000

006606

[illegible]

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

[illegible] REPORT

LIQUIDS

CLIENT: NASA	WID # 00008442	LAB NO. CC 5590	
WASTE DESCRIPTION: PHOTOWASTE		VOLUME: 4,771 GAL	
WASTE CODE(S): D007/11	LOAD # 3697	DATE: 4-23-92	

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm
Ag	94.4	
Al	14.8	
As	Ø	
Au	Ø	
Ba	Ø	
Ca	50.0	
Cd	Ø	
Co	<1.0	
Cr	1.5	
Cu	Ø	
Fe	50.1	
Mg	14.5	
Mn	Ø	
Na	717.4	
Ni	Ø	
P	33.1	
Pb	Ø	
Se	Ø	
Si	Ø	
Sn	2.0	
V	Ø	
Zn	Ø	

pH	6.9	COLOR	GREY	F
Sp. Gr.	1.00	PHASES	S	CL
Total CN-		ACIDITY		NO2
Reac. CN-		ALKALINITY		Br
NH3 as N	1,350	ODOR	M	NO3
TOC	854.3			PO4
VOC	<100			SO4

PROCESS STAGES

PARAMETERS

PROCESS STAGES		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: A. Zmierzyklawska

LAB MANAGER ME 4-23-92

REAGENT COST

006607

Method: ENCYCLE Sample Name: SAMPLE # 19840 Operator: HMZ
Run Time: 04/23/92 13:45:54
Comment: CC-55-90 SHIPMENT
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	94.38	14.77	<.0000	<.0000	<.0000	49.99	<.0000
SDev	2.32	.48	.0295	.0166	.0078	1.11	.0148
%RSD	2.461	3.281	3.553	43.23	1.446	2.228	2.414
#1	91.37	14.20	<.0000	<.0000	<.0000	48.60	<.0000
#2	94.04	14.62	<.0000	<.0000	<.0000	49.67	<.0000
#3	95.20	14.93	<.0000	<.0000	<.0000	50.50	<.0000
#4	96.90	15.35	<.0000	<.0000	<.0000	51.18	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0539	1.521	<.0000	50.11	14.47	<.0000	717.4
SDev	.0357	.059	.0215	1.40	.19	.0020	13.8
%RSD	66.37	3.866	7.855	2.786	1.319	.4484	1.930
#1	.0904	1.459	<.0000	48.66	14.24	<.0000	700.2
#2	.0673	1.483	<.0000	49.32	14.46	<.0000	713.4
#3	.0519	1.558	<.0000	50.68	14.45	<.0000	723.9
#4	.0058	1.582	<.0000	51.78	14.71	<.0000	732.3

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	<.0000	33.06	.0076	<.0000	<.0000	2.047	.0169
SDev	.0378	1.07	.1488	.2468	.1669	.128	.0142
%RSD	6.858	3.244	1969.	42.76	15.19	6.235	84.13
#1	<.0000	31.79	.1776	<.0000	<.0000	2.211	.0376
#2	<.0000	32.73	<.0000	<.0000	<.0000	1.918	.0075
#3	<.0000	33.39	.0869	<.0000	<.0000	1.980	.0150
#4	<.0000	34.33	<.0000	<.0000	<.0000	2.078	.0075

Elem	Zn
Units	ppm
Avge	<.0000
SDev	.0135
%RSD	2.588
#1	<.0000
#2	<.0000
#3	<.0000
#4	<.0000

NH_3 1350
TOC

006608
CONFIDENTIAL

ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0200
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA	WID # 000 8144	LAB NO. CC 55-90
WASTE DESCRIPTION: PHOTONASTE		VOLUME: 4,598 GAL
WASTE CODE(S): D007 / 11	LOAD # 369	DATE: 4-22-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	1.	
Al	Ø	
As	Ø	
Au	<1.0	
Ba	Ø	
Ca	44.6	
Cd	Ø	
Co	Ø	
Cr	7.0	
Cu	<1.0	
Fe	26.0	
Mg	30.5	
Mn	Ø	
Na	4538	
Ni	<1.0	
P	28.9	
Pb	<1.0	
Se	Ø	
Si	3.5	
Sn	1.9	
V	Ø	
Zn	<1.0	

pH 6-8 COLOR Grey

Sp. Gr. 1.00 PHASES 2

Total CN- FACILITY

Reac. CN- ALKALINITY

NH3 as N 23 ODOR M

TOC 382.7

VOC <10

F
Cl
NO2
Br
NO3
PO4
SO4

PROCESS STAGES

		PARAMETERS		
		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: H.Z. H.W.

LAB MANAGER ME 4-22-92

REAGENT COST 006609

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 19804 Operator: HLW
Run Time: 04/22/92 14:34:16
Comment: CC-55-90
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.108	<.0000	<.0000	.0456	<.0000	44.57	<.0000
SDev	.102	.2571	.2302	.0911	.0221	1.04	.0231
%RSD	9.190	485.1	25.14	199.7	151.8	2.332	31.23
#1	1.213	<.0000	<.0000	.1164	.0081	43.03	<.0000
#2	1.035	<.0000	<.0000	.0612	<.0000	44.89	<.0000
#3	1.177	.2181	<.0000	.0917	<.0000	45.07	<.0000
#4	1.008	.0387	<.0000	<.0000	<.0000	45.29	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0339	6.975	.2299	26.01	30.48	<.0000	453.8
SDev	.0269	.155	.0633	.51	.44	.0036	10.3
%RSD	79.47	2.216	27.54	1.975	1.435	8.510	2.262
#1	.0713	6.749	.3030	25.75	29.83	<.0000	438.4
#2	.0285	7.021	.2164	26.09	30.58	<.0000	458.3
#3	.0285	7.096	.2489	26.69	30.78	<.0000	458.1
#4	.0071	7.036	.1515	25.51	30.73	<.0000	460.2

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0670	28.90	.4313	<.0000	3.531	1.888	<.0000
SDev	.0648	.80	.1459	.1847	.189	.096	.0195
%RSD	96.69	2.779	33.83	14.57	5.357	5.105	154.7
#1	.0493	27.84	.5717	<.0000	3.436	1.771	.0018
#2	.0300	29.80	.3937	<.0000	3.689	1.901	<.0000
#3	.1629	29.04	.5169	<.0000	3.689	2.006	<.0000
#4	.0257	28.91	.2431	<.0000	3.310	1.875	<.0000

Elem	Zn
Units	ppm
Avge	.1150
SDev	.0031
%RSD	2.655
#1	.1150
#2	.1113
#3	.1150
#4	.1128

006610

ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA | WID # 00008440 | LAB NO. CC 55-90
WASTE DESCRIPTION: PHOTOWASTE | VOLUME: 4.821 GAL
WASTE CODE(S): D007/11 | LOAD # 3690 | DATE: 4-22-92

ICP	PRE-SCREEN	POST-TREATMENT	pH 8.8	COLOR GREY	F
	ppm	ppm	Sp. Gr. 1.00	PHASES 3	CL
Ag	1.3		Total CN-	ACIDITY	NO2
Al	<0.5		Reac. CN-	ALKALINITY	Br
As	Ø		NH3 as N 36	ODOR M	NO3
Au	Ø		TOC 596.7		PO4
Ba	<0.1		VOC <20		SO4
Ca	47.3				
Cd	Ø				
Co	Ø				
Cr	5.6				
Cu	<1.0				
Fe	34.3				
Mg	37.9				
Mn	Ø				
Na	776.8				
Ni	Ø				
P	79.9				
Pb	Ø				
Se	Ø				
Si	4.2				
Sn	2.1				
V	Ø				
Zn	<1.0				

PROCESS STAGES

		PARAMETERS		
		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS: CN (F) N.D.

CHEMISTS: H.Z. H.W.

LAB MANAGER MR 4-22-92

REAGENT COST 006611

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 19803 Operator: HLW
Run Time: 04/22/92 14:23:03
Comment: CC-55-90
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.251	.4016	<.0000	<.0000	.0551	47.32	<.0000
SDev	.052	.3832	.2889	.0576	.0032	.30	.0227
%RSD	4.165	95.42	41.92	50.57	5.882	1.685	21.17
#1	1.311	<.0000	<.0000	<.0000	.0600	46.15	<.0000
#2	1.275	.4709	<.0000	<.0000	.0535	47.50	<.0000
#3	1.222	.3949	<.0000	<.0000	.0535	47.80	<.0000
#4	1.195	.2507	<.0000	<.0000	.0535	47.84	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0018	5.581	.0920	34.29	37.95	<.0000	776.3
SDev	.0485	.132	.0640	1.58	.78	.0057	9.3
%RSD	2720.	2.360	69.60	4.602	2.052	18.18	1.196
#1	.0499	5.409	.1407	34.53	37.09	<.0000	762.9
#2	<.0000	5.558	<.0000	31.99	37.49	<.0000	782.0
#3	.0214	5.644	.1299	35.22	38.59	<.0000	781.8
#4	.0000	5.715	.0974	35.42	38.63	<.0000	780.4

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0011	79.87	.4074	<.0000	4.193	2.051	<.0000
SDev	.1043	1.49	.4229	.2875	.230	.096	.0648
%RSD	9730.	1.866	103.8	14.24	5.491	4.659	149.9
#1	.0407	77.93	.3730	<.0000	3.941	2.093	.0162
#2	<.0000	79.48	<.0000	<.0000	4.319	1.945	<.0000
#3	.0815	80.84	.4622	<.0000	4.445	2.006	<.0000
#4	.0343	81.21	.4485	<.0000	4.067	2.162	<.0000

Elem	Zn
Units	ppm
Avge	.0926
SDev	.0191
%RSD	20.60
#1	.1001
#2	.0664
#3	.0926
#4	.1113

006612

CONFIDENTIAL

ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA | WID # 00008439 | LAB NO. CC 55-90
WASTE DESCRIPTION: PHOTO WASTE | VOLUME: 4634 G
WASTE CODE(S): D009/11 | LOAD # 3685 | DATE: 4-21-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	1,4	
Al	0,6	
As	<0,10	
Au	<0,10	
Ba	<0,10	
Ca	47,9	
Cd	<0,10	
Co	<0,10	
Cr	1,6	
Cu	0,6	
Fe	46,2	
Mg	43,2	
Mn	0,2	
Na	911,4	
Ni	<0,10	
P	99,6	
Pb	<0,10	
Se	<0,10	
Si	3,8	
Sn	2,5	
V	<0,10	
Zn	0,5	

pH 7,9	COLOR Green	F
Sp. Gr. 1,0	PHASES 1	CL
Total CN-	ACIDITY	NO2
Reac. CN-	ALKALINITY	Br
NH3 as N 69,0 ppm	ODOR M	NO3
TOC 450,6 ppm		PO4
VOC		SO4

PROCESS STAGES

PARAMETERS

	pH	REDOX	T°C
INITIAL 100 mL			

COMMENTS:

CHEMISTS: S Woodward

LAB MANAGER MZ 4-21-91

REAGENT COST
006613

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 19728 Operator: SDW
Run Time: 04/21/92 15:10:17
Comment: CC-55-90
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.435	.5520	<.0000	<.0000	.0015	47.91	<.0000
SDev	.050	.1214	.1697	.1095	.0031	.55	.0112
%RSD	3.476	22.00	40.68	87.56	200.0	1.146	76.72
#1	1.478	.6101	<.0000	.0362	.0062	47.17	.0009
#2	1.384	.4474	<.0000	<.0000	.0000	47.87	<.0000
#3	1.401	.4551	<.0000	<.0000	.0000	48.13	<.0000
#4	1.478	.6953	<.0000	<.0000	.0000	48.46	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.313	1.583	.6327	46.22	43.18	.1799	911.4
SDev	1.371	.026	.0590	.79	.26	.0339	9.1
%RSD	41.39	1.667	9.329	1.719	.6029	18.85	1.003
#1	1.431	1.618	.7175	47.05	43.02	.1412	899.2
#2	4.477	1.563	.6044	45.33	43.08	.2185	911.2
#3	4.166	1.563	.5838	45.80	43.06	.1950	914.3
#4	3.178	1.589	.6249	46.70	43.57	.1647	921.0

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1057	99.57	.9924	.0734	3.855	2.466	.0017
SDev	.0358	1.46	.3412	.1858	.113	.104	.0461
%RSD	33.92	1.468	34.38	253.0	2.941	4.210	2742.
#1	.1414	97.65	1.425	.1469	3.798	2.369	.0589
#2	.1301	99.37	.6338	<.0000	3.798	2.407	<.0000
#3	.0850	100.2	.8316	.1142	3.798	2.483	<.0000
#4	.0662	101.1	1.079	.2285	4.025	2.604	.0185

Elem	Zn
Units	ppm
Avge	.4704
SDev	.0578
%RSD	12.29
#1	.5540
#2	.4644
#3	.4334
#4	.4299

006614

CONFIDENTIAL

ENVIROTECH TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA PHOTOWASTE	WID # 00008438	LAB NO. CC 55-90
WASTE DESCRIPTION: PHOTOWASTE		VOLUME: 4,772 GAL
WASTE CODE(S): D007/11	LOAD # 3671	DATE: 4-16-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	3.3	
Al	1.1	
As	Ø	
Au	Ø	
Ba	<1.0	
Ca	47.6	
Cd	Ø	
Co	Ø	
Cr	<1.0	
Cu	27.1	
Fe	74.7	
Mg	61.5	
Mn	<0.1	
Na	632.1	
Ni	<1.0	
P	35.6	
Pb	<1.0	
Se	Ø	
Si	4.1	
Sn	3.0	
V	Ø	
Zn	<1.0	

pH 7.2	COLOR GREY	F	
Sp. Gr. 1.00	PHASES S	CL	
Total CN-	ACIDITY	NO2	
Reac. CN-	ALKALINITY	Br	
NH3 as N 105	ODOR M	NO3	
TOC 585.6		PO4	
VOC <50		SO4	

PROCESS STAGES

		PARAMETERS		
		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: H. Zmierzlowski

LAB MANAGER

REAGENT COST 006615

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 19614 Operator: HMZ
Run Time: 04/16/92 14:17:35
Comment: CC-55-90 SHIPMENT
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.290	1.138	<.0000	<.0000	.1119	47.63	<.0000
SDev	.049	.165	.0363	.0537	.0429	.31	.0084
%RSD	1.494	14.50	11.45	23.53	38.30	.6545	14.62
#1	3.351	1.133	<.0000	<.0000	.1199	47.94	<.0000
#2	3.246	.9453	<.0000	<.0000	.1327	47.79	<.0000
#3	3.255	1.349	<.0000	<.0000	.1455	47.55	<.0000
#4	3.307	1.125	<.0000	<.0000	.0496	47.23	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0045	.1143	27.05	74.66	61.54	.0643	632.1
SDev	.0178	.0157	.40	1.33	.44	.0086	6.6
%RSD	398.1	13.75	1.497	1.375	.7145	13.32	1.041
#1	.0268	.1166	27.51	75.36	61.78	.0716	638.3
#2	<.0000	.1350	27.20	75.12	61.98	.0716	635.4
#3	<.0000	.1074	26.96	74.37	61.41	.0586	630.6
#4	.0089	.0982	26.55	73.52	60.99	.0554	623.6

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4581	35.62	.9135	<.0000	4.074	3.009	.0079
SDev	.0449	.37	.1968	.4331	.062	.079	.0267
%RSD	9.802	1.043	21.43	312.9	1.529	2.625	335.5
#1	.4902	36.06	.9754	<.0000	4.021	3.033	.0191
#2	.4062	35.77	.8048	.0568	4.021	2.964	.0191
#3	.4383	35.23	.7252	<.0000	4.128	3.108	<.0000
#4	.5005	35.42	1.169	.2129	4.128	2.930	.0254

Elem	Zn
Units	ppm
Avge	.2018
SDev	.0133
%RSD	6.604
#1	.2058
#2	.2026
#3	.1838
#4	.2153

006616

ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA	WID # 0000843	LAB NO: CC 55-90
WASTE DESCRIPTION: PHOTOWASTE		VOLUME: ANALYTICAL
WASTE CODE(S): D007 / 11	LOAD # 3663	DATE: 4-15-92

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm
Ag	3.2	
Al	1.5	
As	Ø	
Au	Ø	
Ba	<1.0	
Ca	41.1	
Cd	Ø	
Co	<1.0	
Cr	<1.0	
Cu	43.1	
Fe	39.1	
Mg	40.8	
Mn	<1.0	
Na	831.1	
Ni	<1.0	
P	17.5	
Pb	<1.0	
Se	Ø	
Si	3.6	
Sn	1.7	
V	<0.1	
Zn	<1.0	

pH	8.0	COLOR	GREY
Sp. Gr.	1.00	PHASES	S
Total CN-		ACIDITY	
Reac. CN-		ALKALINITY	
NH3 as N	140	ODOR	M
TOC	585.7		
VOC	<100		

F	
Cl	
NO2	
Br	
NO3	
PO4	
SO4	

PROCESS STAGES

PARAMETERS

INITIAL	100 mL	pH	REDOX	T°C

COMMENTS:

CHEMISTS: J. Kmiecikowski

LAB MANAGER: D Payne 4-15-92

REAGENT COST 006617

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 19578 Operator: HMZ
Run Time: 04/15/92 14:13:24
Comment: CC-55-90 SHIPMENT
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.171	1.516	<.0000	<.0000	.0735	41.09	<.0000
SDev	.161	.244	.0738	.0370	.0500	1.97	.0126
%RSD	5.079	16.08	26.54	43.30	67.94	4.783	22.57
#1	3.000	1.353	<.0000	<.0000	.1471	39.15	<.0000
#2	3.077	1.387	<.0000	<.0000	.0453	39.99	<.0000
#3	3.253	1.447	<.0000	<.0000	.0396	41.58	<.0000
#4	3.353	1.877	<.0000	<.0000	.0622	43.62	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0430	.3509	43.12	39.11	40.77	.0802	831.1
SDev	.0257	.0262	1.89	1.23	1.98	.0028	36.8
%RSD	59.84	7.462	4.388	3.151	4.866	3.482	4.432
#1	.0793	.3787	41.19	38.43	38.70	.0781	792.6
#2	.0309	.3159	42.07	38.03	39.83	.0781	812.5
#3	.0202	.3502	43.76	39.15	41.24	.0810	842.1
#4	.0416	.3587	45.47	40.82	43.30	.0839	877.1

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.7054	17.48	.6529	.2941	3.626	1.709	.0125
SDev	.2295	1.31	.1364	.1199	.194	.187	.0184
%RSD	32.53	7.467	20.90	40.75	5.356	10.93	146.8
#1	.7489	15.80	.7774	.2632	3.474	1.468	.0334
#2	.5235	17.15	.6555	.1765	3.474	1.715	<.0000
#3	.5363	18.21	.7165	.2756	3.676	1.732	<.0000
#4	1.013	18.77	.4624	.4613	3.879	1.923	.0223

Elem	Zn
Units	ppm
Avge	.2496
SDev	.0168
%RSD	6.717
#1	.2383
#2	.2355
#3	.2524
#4	.2721

NH_3 140
TOC 585.7

006618

ENCYCLE/TEXAS, INC.
5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA | WID # 00008431 | LAB NO. CC 55590

WASTE DESCRIPTION: PHOTOWASTE | VOLUME:

WASTE CODE(S): D007/11 | LOAD # 3644 | DATE: 4-14-92

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm
Ag	2.6	
Al	1.2	
As	1.1	
Au	<0.10	
Ba	<0.10	
Ca	36.4	
Cd	<0.10	
Co	<0.10	
Cr	<0.10	
Cu	<0.10	
Fe	34.7	
Mg	37.7	
Mn	<0.10	
Na	590.3	
Ni	9.3	
P	128.6	
Pb	1.2	
Se	<0.10	
Si	2.6	
Sn	2.3	
V	<0.10	
Zn	0.36	

pH 6.9	COLOR Green	F	
Sp. Gr. 1.00	PHASES 1	CL	
Total CN-	ACIDITY	NO2	
Reac. CN-	ALKALINITY	Br	
NH3 as N 190 ppm	ODOR m	NO3	
TOC 500.9 ppm		PO4	
VOC		SO4	

PROCESS STAGES

		PARAMETERS		
		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: [signature]

LAB MANAGER MZ 4/14/92

REAGENT COST

006619

Method: ENCYCLE Sample Name: SAMPLE # 19537 Operator: SDW
Run Time: 04/13/92 14:22:10
Comment: CC-55-90
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.626	1.231	1.108	.0533	.0386	36.37	<.0000
SDev	.083	.499	.186	.0819	.0168	.75	.0300
%RSD	3.167	40.53	16.78	153.7	43.61	2.049	6.386
#1	2.719	.7495	1.370	.1267	.0614	35.72	<.0000
#2	2.552	1.928	1.106	.0821	.0214	35.73	<.0000
#3	2.674	1.175	1.001	.0681	.0386	36.99	<.0000
#4	2.560	1.070	.9540	<.0000	.0328	37.03	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0474	<.0000	.2347	34.75	37.67	.0302	590.3
SDev	.0586	.0578	.1117	1.64	.59	.0050	12.0
%RSD	123.5	194.3	47.60	4.729	1.562	16.50	2.033
#1	.1331	.0415	.3919	36.65	37.56	.0374	578.9
#2	.0329	<.0000	.1760	33.78	36.91	.0287	581.0
#3	.0013	<.0000	.2323	35.53	38.29	.0287	600.6
#4	.0224	<.0000	.1384	33.04	37.90	.0259	600.8

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.289	128.6	1.225	<.0000	2.583	2.322	.0542
SDev	.179	3.5	.540	.3013	.183	.226	.0635
%RSD	1.928	2.756	44.10	103.0	7.090	9.734	117.1
#1	9.085	125.3	1.989	<.0000	2.482	2.644	.1485
#2	9.195	125.8	.8619	<.0000	2.783	2.311	.0228
#3	9.465	131.4	1.228	.1204	2.683	2.194	.0343
#4	9.411	131.9	.8234	<.0000	2.382	2.140	.0114

Elem	Zn
Units	ppm
Avge	.3621
SDev	.0184
%RSD	5.074
#1	.3762
#2	.3360
#3	.3735
#4	.3628

006620

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ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300

P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA | WID # 0000430 | LAB NO. CC 515-90

WASTE DESCRIPTION: PHOTO WASTE | VOLUME 4479 G

WASTE CODE(S): D007/11 | LOAD # 3123 | DATE: 4-10-92

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm
Ag	7,2	
Al	1,6	
As	<0,10	
Au	<0,10	
Ba	<0,10	
Ca	41,9	
Cd	<0,10	
Co	<0,10	
Cr	0,1	
Cu	0,2	
Fe	57,6	
Mg	59,7	
Mn	<0,10	
Na	850,7	
Ni	<0,10	
P	38,6	
Pb	0,6	
Se	<0,10	
Si	2,9	
Sn	1,2	
V	<0,10	
Zn	0,2	

pH 9,5 COLOR GROOM F

Sp. Gr. 1,0 PHASES 1 CL

Total CN- ACIDITY NO2

Reac. CN- ALKALINITY Br

NH3 as N 240 ppm ODOR M NO3

TOC 547,9 ppm PO4

VOC SO4

PROCESS STAGES

		PARAMETERS		
		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: [signature]

LAB MANAGER M.F. 4/10/92

REAGENT COST 006621

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 19480 Operator: SDW
Run Time: 04/10/92 14:32:03
Comment: CC-55-90
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.197	1.583	<.0000	<.0000	<.0000	41.91	<.0000
SDev	.263	.140	.1655	.1142	.0583	1.49	.0093
%RSD	3.660	8.858	128.9	70.69	500.7	3.544	9.212
#1	6.815	1.455	.0989	.0069	.0414	39.68	<.0000
#2	7.262	1.529	<.0000	<.0000	<.0000	42.61	<.0000
#3	7.290	1.782	<.0000	<.0000	<.0000	42.54	<.0000
#4	7.420	1.566	<.0000	<.0000	.0363	42.78	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	<.0000	.1095	.1503	57.63	59.73	<.0000	850.7
SDev	.0308	.0268	.0226	1.31	1.79	.0025	31.4
%RSD	69.78	24.44	15.03	2.266	2.989	9.820	3.691
#1	.0012	.1407	.1826	55.70	57.09	<.0000	803.7
#2	<.0000	.0784	.1396	58.00	60.54	<.0000	868.9
#3	<.0000	.0992	.1310	58.45	60.30	<.0000	864.0
#4	<.0000	.1199	.1482	58.39	61.00	<.0000	866.0

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0116	38.64	.6016	.0697	2.974	1.255	.0446
SDev	.0223	1.32	.1709	.3190	.179	.113	.0272
%RSD	192.6	3.413	28.42	457.6	6.031	9.002	61.04
#1	.0260	36.87	.8502	<.0000	2.740	1.419	.0773
#2	<.0000	39.02	.5483	.2490	2.927	1.237	.0197
#3	.0318	38.65	.4595	<.0000	3.115	1.199	.0249
#4	.0058	40.03	.5483	.3983	3.115	1.166	.0564

Elem	Zn
Units	ppm
Avge	.1727
SDev	.0061
%RSD	3.534
#1	.1733
#2	.1660
#3	.1709
#4	.1807

006622

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ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA | WID # 0000849 | LAB NO: CC 55290

WASTE DESCRIPTION: PHOTOWASTE | VOLUME: 4,707 GAL

WASTE CODE(S): D007/11 | LOAD # 3617 | DATE: 4-8-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	32.4	
Al	10.7	
As	⊖	
Au	⊖	
Ba	<1.0	
Ca	44.7	
Cd	⊖	
Co	<1.0	
Cr	68.6	
Cu	<1.0	
Fe	87.5	
Mg	29.6	
Mn	<1.0	
Na	2071	
Ni	<1.0	
P	28.2	
Pb	<1.0	
Se	⊖	
Si	2.7	
Sn	1.2	
V	⊖	
Zn	<1.0	

pH	9.4	COLOR	BROWN
Sp. Gr.	1.00	PHASES	S
Total CN-		ACIDITY	
Reac. CN-		ALKALINITY	
NH3 as N	1200	ODOR	M
TOC	3628		
VOC	<300		

F	
CL	
NO2	
Br	
NO3	
PO4	
SO4	

PROCESS STAGES

		PARAMETERS		
		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS: CN(F) N.D.

CHEMISTS: J. Zwierzyglowski

LAB MANAGER MZ 4/8/92

REAGENT COST
006623

Method: ENCYCLE Sample Name: SAMPLE # 19424 Operator: HLW
Run Time: 04/08/92 14:24:19
Comment: CC-55-90
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	32.39	10.66	<.0000	<.0000	.3046	44.71	<.0000
SDev	.53	.31	.1331	.0307	.0172	.31	.0140
%RSD	1.622	2.872	29.94	29.79	5.656	.6872	35.84
#1	32.39	10.32	<.0000	<.0000	.2899	45.11	<.0000
#2	32.34	11.06	<.0000	<.0000	.3030	44.46	<.0000
#3	31.77	10.57	<.0000	<.0000	.3292	44.47	<.0000
#4	33.05	10.67	<.0000	<.0000	.2964	44.81	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2878	68.64	.9722	87.51	29.55	.4771	2071.
SDev	.0354	.47	.0375	1.10	.37	.0062	19.
%RSD	12.31	.6902	3.857	1.260	1.250	1.304	.9252
#1	.3311	69.29	1.018	89.16	30.02	.4835	2097.
#2	.2845	68.33	.9535	87.01	29.21	.4762	2057.
#3	.2911	68.25	.9856	87.10	29.67	.4798	2057.
#4	.2445	68.70	.9320	86.79	29.30	.4689	2075.

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1288	28.19	.3010	<.0000	2.738	1.231	<.0000
SDev	.0307	.47	.1435	.2074	.148	.112	.0246
%RSD	23.84	1.655	47.68	78.21	5.412	9.077	6.475
#1	.1404	28.45	.3879	<.0000	2.532	1.351	<.0000
#2	.0879	27.69	.3531	<.0000	2.885	1.296	<.0000
#3	.1606	27.92	.3763	<.0000	2.767	1.173	<.0000
#4	.1263	28.70	.0868	<.0000	2.767	1.106	<.0000

Elem	Zn
Units	ppm
Avge	.9489
SDev	.0053
%RSD	.5534
#1	.9413
#2	.9504
#3	.9504
#4	.9534

006624

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ENCYCLE/TEXAS, INC.
5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT
LIQUIDS

CLIENT: NASA | WID # 00008428 | LAB NO. CC 55-90
WASTE DESCRIPTION: Photowaste | VOLUME: 4651 GAL
WASTE CODE(S): D007/11 | LOAD # 3616 | DATE: 4-6-92

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm
Ag	<1.0	
Al	<1.0	
As	0	
Au	0	
Ba	<1.0	
Ca	41.8	
Cd	0	
Co	<1.0	
Cr	<1.0	
Cu	<1.0	
Fe	57.3	
Mg	86.5	
Mn	<1.0	
Na	953.9	
Ni	<1.0	
P	40.3	
Pb	<1.0	
Se	0	
Si	8.7	
Sn	1.7	
V	<1.0	
Zn	<1.0	

pH	7.5	COLOR	Grey	F	
Sp. Gr.	1.01	PHASES	S	CL	
Total CN-		ACIDITY		NO2	
Reac. CN-		ALKALINITY		Br	
NH3 as N	50.0	ODOR	M	NO3	
TOC	534.8			PO4	
VOC				SO4	

PROCESS STAGES

		PARAMETERS pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: [signature]

LAB MANAGER MZ 4/6/92

REAGENT COST

006625

Method: ENCYCLE Sample Name: SAMPLE # 19311 Operator: HLW
Run Time: 04/06/92 14:08:18
Comment: CC-55-90
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9146	.3137	<.0000	<.0000	.1525	41.81	<.0000
SDev	.0468	.2383	.0537	.0210	.0094	.54	.0057
%RSD	5.113	75.95	11.05	16.70	6.186	1.291	19.97
#1	.8965	.0819	<.0000	<.0000	.1415	41.26	<.0000
#2	.8603	.4816	<.0000	<.0000	.1478	41.56	<.0000
#3	.9328	.1379	<.0000	<.0000	.1604	41.91	<.0000
#4	.9690	.5535	<.0000	<.0000	.1604	42.51	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0112	.0009	.1616	57.33	86.53	.0407	953.9
SDev	.0109	.0951	.0052	.50	1.24	.0044	6.5
%RSD	97.59	10400.	3.226	.8641	1.431	10.71	.6762
#1	.0256	<.0000	.1694	57.36	85.32	.0468	949.0
#2	<.0000	.1407	.1590	56.65	86.08	.0364	951.0
#3	.0064	<.0000	.1590	57.45	86.47	.0399	952.3
#4	.0128	<.0000	.1590	57.84	88.24	.0399	963.4

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0600	40.30	.6085	<.0000	8.709	1.659	.0095
SDev	.0291	.72	.1628	.2633	.894	.059	.0098
%RSD	48.48	1.791	26.76	131.6	10.27	3.547	103.3
#1	.0713	40.47	.6196	<.0000	7.618	1.724	.0209
#2	.0196	39.84	.8077	<.0000	8.394	1.684	<.0000
#3	.0610	39.64	.4094	<.0000	9.170	1.643	.0133
#4	.0879	41.24	.5974	.0733	9.656	1.586	.0057

Elem	Zn
Units	ppm
Avge	.2227
SDev	.0072
%RSD	3.234
#1	.2138
#2	.2227
#3	.2227
#4	.2315

NH_3 = 50. ppm
TOC 534.8

006626

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ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA | WID #: | LAB NO. CC 55-90

WASTE DESCRIPTION: PHOTOWASTE | VOLUME: 4706 G 4706

WASTE CODE(S): D007 / 11 | LOAD # 3604 | DATE: 4-3-92

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm
Ag	1,3	
Al	0,7	
As	<0,10	
Au	<0,10	
Ba	0,2	
Ca	46,7	
Cd	<0,10	
Co	<0,10	
Cr	<0,10	
Cu	0,2	
Fe	22,9	
Mg	31,9	
Mn	<0,10	
Na	603.4	
Ni	<0,10	
P	31,9	
Pb	<0,10	
Se	<0,10	
Si	3,4	
Sn	1,5	
V	<0,10	
Zn	0,2	

pH 8,0	COLOR Lt Green	F
Sp. Gr. 1,01	PHASES 1	CL
Total CN-	ACIDITY	NO2
Reac. CN-	ALKALINITY	Br
NH3 as N 90 ppm	ODOR M	NO3
TOC 301,8 ppm		PO4
VOC		SO4

PROCESS STAGES

		PARAMETERS pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: S Werdlaw

LAB MANAGER C Payne 4-3-92

REAGENT COST

006627

Method: ENCYCLE Sample Name: SAMPLE # 19256 Operator: SDW
Run Time: 04/03/92 14:58:24
Comment: CC-55-90
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.258	.7530	.0042	<.0000	.1909	46.70	<.0000
SDev	.029	.0667	.1875	.0403	.0111	.63	.0162
%RSD	2.294	8.859	4511.	50.60	5.789	1.351	254.2
#1	1.250	.7066	.2591	<.0000	.1764	45.88	.0127
#2	1.267	.8519	.0152	<.0000	.1893	46.57	.0010
#3	1.293	.7308	<.0000	<.0000	.1958	46.99	<.0000
#4	1.224	.7227	<.0000	<.0000	.2022	47.35	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0085	<.0000	.1607	22.94	31.99	.0307	603.4
SDev	.0376	.0721	.0449	.87	.39	.0080	5.5
%RSD	440.0	25.96	27.95	3.795	1.233	26.18	.9047
#1	.0616	<.0000	.2277	23.98	31.65	.0381	597.3
#2	<.0000	<.0000	.1420	22.01	31.89	.0344	600.5
#3	<.0000	<.0000	.1420	22.48	31.86	.0195	606.6
#4	<.0000	<.0000	.1313	23.28	32.56	.0307	609.2

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0148	31.92	.4575	<.0000	3.392	1.467	.0075
SDev	.0386	.64	.2057	.1328	.156	.084	.0221
%RSD	260.9	2.000	44.95	116.5	4.611	5.735	294.4
#1	.0153	31.04	.6194	.0217	3.574	1.468	.0301
#2	.0660	31.86	.4408	<.0000	3.331	1.576	<.0000
#3	<.0000	32.44	.1730	<.0000	3.210	1.371	<.0000
#4	.0048	32.35	.5970	<.0000	3.452	1.452	.0226

Elem	Zn
Units	ppm
Avge	.2134
SDev	.0089
%RSD	4.167
#1	.2178
#2	.2178
#3	.2001
#4	.2178

006628

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ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300

P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA | WID # 00008426 | LAB NO. CC 5590

WASTE DESCRIPTION: Photowaste | VOLUME: 4417G

WASTE CODE(S): D007, D011 | LOAD # 3603 | DATE: 4/2/92

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm
Ag	3,6	
Al	1,2	
As	<0,10	
Au	<0,10	
Ba	<0,10	
Ca	46,2	
Cd	<0,10	
Co	<0,10	
Cr	0,10	
Cu	0,6	
Fe	20,6	
Mg	16,9	
Mn	<0,10	
Na	566,5	
Ni	<0,10	
P	21,3	
Pb	<0,10	
Se	<0,10	
Si	3,7	
Sn	0,99	
V	<0,10	
Zn	0,3	

pH 8.00	COLOR GREY	F	
Sp. Gr. 1.00	PHASES S	CL	
Total CN-	ACIDITY	NO2	
Reac. CN-	ALKALINITY	Br	
NH3 as N 200ppm	ODOR MILD	NO3	
TOC 200,7 ppm		PO4	
VOC		SO4	

PROCESS STAGES

		PARAMETERS pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: S.L. Wendland

LAB MANAGER MZ 4/2/92

REAGENT COST

006629

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Method: ENCYCLE Sample Name: SAMPLE # 19206 Operator: SDW
Run Time: 04/02/92 14:10:37
Comment: CC-55-90
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.605	1.209	.0078	<.0000	.0556	46.20	<.0000
SDev	.103	.300	.1195	.0804	.0061	.44	.0131
%RSD	2.844	24.81	1540.	634.9	10.94	.9602	165.3
#1	3.709	.8520	.1611	.0791	.0540	45.63	.0087
#2	3.478	1.072	<.0000	<.0000	.0477	46.12	<.0000
#3	3.570	1.482	<.0000	<.0000	.0604	46.37	<.0000
#4	3.663	1.431	.0408	.0156	.0604	46.68	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	<.0000	.0897	.6649	20.62	16.88	.0563	566.5
SDev	.0320	.0312	.0671	1.62	.31	.0090	4.1
%RSD	405.1	34.79	10.09	7.842	1.814	15.93	.7211
#1	.0277	.1300	.7519	22.68	17.21	.0675	561.0
#2	<.0000	.0557	.5985	18.81	16.51	.0525	566.7
#3	<.0000	.0788	.6291	20.11	16.76	.0465	567.8
#4	.0066	.0942	.6803	20.90	17.04	.0585	570.7

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0506	21.35	.5071	.0112	3.701	.9903	.0109
SDev	.0591	.37	.2661	.1283	.222	.0638	.0568
%RSD	116.9	1.747	52.47	1144.	5.989	6.445	520.6
#1	.1289	20.82	.8222	.1365	3.841	1.028	.0702
#2	<.0000	21.54	.2698	.1066	3.561	.8963	<.0000
#3	.0264	21.66	.3043	<.0000	3.934	1.032	<.0000
#4	.0571	21.38	.6323	<.0000	3.468	1.004	.0390

Elem	Zn
Units	ppm
Avge	.3345
SDev	.0132
%RSD	3.961
#1	.3447
#2	.3219
#3	.3244
#4	.3472

006630

ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA	WID # 00008425	LAB NO. CC 55-90
WASTE DESCRIPTION: Photowaste		VOLUME: 3669 Gal
WASTE CODE(S): D7 / D11	LOAD # 3573	DATE: 7-1-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	3.9	
Al	0.8	
As	0.2	
Au	<0.1	
Ba	0	
Ca	47.1	
Cd	<0.1	
Co	<0.1	
Cr	<0.1	
Cu	0.1	
Fe	18.0	
Mg	19.1	
Mn	<0.1	
Na	540.3	
Ni	<0.1	
P	23.1	
Pb	2.1	
Se	0.4	
Si	4.4	
Sn	1.3	
V	<0.1	
Zn	0.3	

pH 7.4	COLOR BROWN	F	
Sp. Gr. 1.01	PHASES S	CL	
Total CN-	ACIDITY	NO2	
Reac. CN-	ALKALINITY	Br	
NH3 as N 164ppm	ODOR M	NO3	
TOC 291.6ppm		PO4	
VOC		SO4	

PROCESS STAGES

	PARAMETERS		
	pH	REDOX	T°C
INITIAL 100 mL			

COMMENTS:

CHEMISTS: B Cassidy

LAB MANAGER D Payne 7.1.92

REAGENT COST

006631

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 19148 Operator: BC
Run Time: 04/01/92 14:28:40
Comment: NASA 55
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.885	.7734	.2129	.0280	<.0000	47.14	.0344
SDev	.132	.2223	.0846	.0314	.0681	.45	.0060
%RSD	3.397	28.75	39.76	112.4	1233.	.9620	17.35
#1	3.809	.4740	.2098	.0270	<.0000	46.58	.0265
#2	3.738	.7371	.0943	.0661	.0184	46.98	.0378
#3	3.991	.9186	.2767	.0297	.0258	47.39	.0400
#4	4.001	.9639	.2706	<.0000	.0405	47.60	.0333

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0389	.0849	.1437	17.98	19.13	.0443	540.3
SDev	.0162	.0385	.0259	.92	.25	.0060	2.4
%RSD	41.63	45.33	18.00	5.144	1.293	13.47	.4474
#1	.0584	.1425	.1797	18.92	19.29	.0401	537.6
#2	.0350	.0671	.1318	16.77	18.86	.0401	539.0
#3	.0195	.0629	.1198	17.81	18.99	.0443	542.4
#4	.0428	.0671	.1437	18.43	19.38	.0527	542.3

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0356	23.05	2.073	.4039	4.378	1.261	.0295
SDev	.0259	.32	.383	.1595	.070	.305	.0270
%RSD	72.90	1.409	18.49	39.49	1.600	24.18	91.47
#1	.0421	22.68	2.606	.3740	4.273	1.138	.0527
#2	.0397	22.96	2.057	.2902	4.413	1.717	.0021
#3	<.0000	23.46	1.920	.6373	4.413	1.109	.0105
#4	.0611	23.08	1.708	.3142	4.413	1.080	.0527

Elem	Zn
Units	ppm
Avge	.2929
SDev	.0188
%RSD	6.404
#1	.3192
#2	.2929
#3	.2831
#4	.2765

NH_3 160

5500 IJP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

REPORT

LIQUIDS

CLIENT: NASA	WID # 00008424	LAB NO. CC 55-90
WASTE DESCRIPTION: Photowaste		VOLUME: 4763 gal
WASTE CODE(S): D007 / 11	LOAD # 3572	DATE: 3-31-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	1.6	
Al	0	
As	8.3	
Au	0	
Ba	0	
Ca	45.6	
Cd	0	
Co	0	
Cr	<0.1	
Cu	0	
Fe	23.9	
Mg	17.7	
Mn	<0.1	
Na	268.9	
Ni	0	
P	9.8	
Pb	1.0	
Se	1.0	
Si	2.2	
Sn	0.2	
V	0	
Zn	0	

pH 7.2	COLOR BROWN	F	
Sp. Gr. 1.00	PHASES S	CL	
Total CN-	ACIDITY	NO2	
Reac. CN-	ALKALINITY	Br	
NH3 as N 240 ppm	ODOR MILD	NO3	
TOC 267.3 ppm		PO4	
VOC		SO4	

PROCESS STAGES

		PARAMETERS		
		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: BC KMC

LAB MANAGER MR 3/31/92

REAGENT COST 006633

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 19081 Operator: NG
Run Time: 03/31/92 13:43:37
Comment: CC-55-90 SHIPMENT
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.563	<.0000	8.282	<.0000	<.0000	45.62	<.0000
SDev	.043	.6297	.857	.0866	.0134	.34	.0112
%RSD	2.731	35.01	10.35	22.12	200.0	.7505	11.97
#1	1.568	<.0000	7.230	<.0000	.0000	45.18	<.0000
#2	1.506	<.0000	8.413	<.0000	.0000	45.87	<.0000
#3	1.609	<.0000	8.169	<.0000	<.0000	45.91	<.0000
#4	1.568	<.0000	9.315	<.0000	.0000	45.53	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	<.0000	.0257	<.0000	23.92	17.72	.0473	268.9
SDev	.1701	.1079	.0827	2.41	.79	.0412	2.9
%RSD	446.8	419.9	12.17	10.06	4.440	87.03	1.075
#1	.0063	.0404	<.0000	22.85	17.18	<.0000	264.9
#2	<.0000	<.0000	<.0000	21.78	17.83	.0473	268.9
#3	.1840	.1725	<.0000	27.33	18.79	.0764	270.6
#4	<.0000	<.0000	<.0000	23.70	17.08	.0764	271.4

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	<.0000	9.783	.9741	.9994	2.225	.1949	<.0000
SDev	.3027	.927	.3983	.4997	.966	.2376	.0809
%RSD	3017.	9.479	40.90	50.00	43.40	121.9	147.5
#1	<.0000	10.24	.6786	.7495	1.405	<.0000	<.0000
#2	<.0000	8.477	1.317	.5189	1.405	.2140	<.0000
#3	.2870	10.60	1.317	1.672	2.810	.1987	.0392
#4	.1425	9.816	.5828	1.057	3.279	.4739	<.0000

Elem	Zn
Units	ppm
Avge	<.0000
SDev	.0617
%RSD	81.01
#1	<.0000
#2	<.0000
#3	<.0000
#4	<.0000

006634

CONFIDENTIAL

ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300

P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA | WID # 0000842 3 | LAB NO. CC 5590

WASTE DESCRIPTION: PHOTOWASTE | VOLUME: 46 gal

WASTE CODE(S): D007/11 | LOAD # 3556 | DATE: 3-26-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	8,2	
Al	1,7	
As	<0,10	
Au	<0,10	
Ba	0,5	
Ca	43,9	
Cd	<0,10	
Co	<0,10	
Cr	0,3	
Cu	1,9	
Fe	25,1	
Mg	3,7	
Mn	<0,10	
Na	492,1	
Ni	0,3	
P	13,9	
Pb	<0,10	
Se	<0,10	
Si	3,0	
Sn	0,9	
V	<0,10	
Zn	0,2	

pH 7,2 COLOR Brown

Sp. Gr. 1,00 PHASES Single

Total CN= ACIDITY

Reac. CN= ALKALINITY

NH3 as N 390 ppm ODOR Mild

TOC 2928 ppm

VOC

F	
CL	
NO2	
Br	
NO3	
PO4	
SO4	

PROCESS STAGES

PARAMETERS

		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: SWadland

LAB MANAGER MZ 3/26/92

REAGENT COST 006635

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 18928 Operator: SDW
Run Time: 03/26/92 14:46:29
Comment: CC-55-90
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	8.159	1.715	<.0000	.0344	.4754	43.93	<.0000
SDev	.154	.109	.1122	.0203	.0146	.51	.0184
%RSD	1.888	6.351	13.05	58.96	3.072	1.164	141.1
#1	7.950	1.791	<.0000	.0358	.4540	43.16	.0101
#2	8.197	1.564	<.0000	.0061	.4846	44.19	<.0000
#3	8.169	1.707	<.0000	.0538	.4846	44.21	<.0000
#4	8.321	1.799	<.0000	.0417	.4785	44.15	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0419	.2699	1.917	25.10	3.762	.0539	492.1
SDev	.0211	.0339	.032	.83	.228	.0051	4.6
%RSD	50.40	12.55	1.673	3.301	6.072	9.497	.9289
#1	.0698	.2949	1.957	26.08	4.074	.0610	486.4
#2	.0219	.2231	1.903	24.24	3.528	.0529	497.1
#3	.0458	.2949	1.925	25.47	3.752	.0529	494.0
#4	.0299	.2670	1.882	24.63	3.696	.0488	490.7

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2864	13.95	.3877	.3066	2.973	.9723	.0688
SDev	.0647	.62	.1801	.4385	.168	.1559	.0321
%RSD	22.59	4.424	46.46	143.0	5.655	16.03	46.70
#1	.3615	14.43	.6394	.8315	2.939	1.177	.1032
#2	.2160	13.15	.2238	<.0000	2.806	.9109	.0267
#3	.2529	14.44	.3837	.4365	2.939	.9928	.0802
#4	.3153	13.80	.3037	.1663	3.206	.8085	.0650

Elem	Zn
Units	ppm
Avge	.2022
SDev	.0101
%RSD	4.974
#1	.2022
#2	.2145
#3	.2022
#4	.1899

006636

CONFIDENTIAL

ENCYCLE / TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA	WID # 0008422	LAB NO: CC 55-90
WASTE DESCRIPTION: Photowaste		VOLUME: 471 G
WASTE CODE(S): D007/D011	LOAD # 3555	DATE: 3-25-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	8.4	
Al	1.8	
As	0	
Au	0	
Ba	<0.1	
Ca	48.1	
Cd	<0.1	
Co	<0.1	
Cr	0.7	
Cu	1.5	
Fe	26.3	
Mg	5.8	
Mn	0.1	
Na	1009	
Ni	0.7	
P	16.9	
Pb	0.2	
Se	0.4	
Si	4.2	
Sn	0.5	
V	0.2	
Zn	0.8	

pH 7.3	COLOR GRAY	F
Sp. Gr. 1.00	PHASES S	CL
Total CN-	ACIDITY	NO2
Reac. CN-	ALKALINITY	Br
NH3 as N 390 ppm	ODOR MILD	NO3
TOC 338.9 ppm		PO4
VOC		SO4

PROCESS STAGES

	PARAMETERS		
	pH	REDOX	T°C
INITIAL 100 mL			

COMMENTS:

CHEMISTS: L. Cassidy

LAB MANAGER MZ 3/25/92

REAGENT COST 006637

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 18883 Operator: BC
Run Time: 03/25/92 14:34:08
Comment: NASA 55 3-25-92
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	8.364	1.841	<.0000	<.0000	.0584	48.09	.0012
SDev	.008	.195	.2206	.0456	.0107	.52	.0072
%RSD	.1013	10.59	41.87	334.7	18.26	1.083	597.2
#1	8.370	2.031	<.0000	<.0000	.0701	47.40	<.0000
#2	8.370	1.572	<.0000	.0056	.0643	48.03	<.0000
#3	8.362	1.914	<.0000	.0214	.0526	48.29	.0114
#4	8.353	1.847	<.0000	<.0000	.0468	48.63	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0714	.6790	1.487	26.32	5.761	.1240	1009.
SDev	.0176	.0155	.008	.53	.139	.0084	7.
%RSD	24.64	2.280	.5690	2.009	2.417	6.759	.6766
#1	.0535	.6830	1.487	26.07	5.821	.1128	1001.
#2	.0615	.6669	1.497	25.80	5.765	.1250	1009.
#3	.0932	.6992	1.487	27.03	5.892	.1332	1007.
#4	.0773	.6669	1.477	26.37	5.567	.1250	1018.

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.7487	16.90	.1927	.3571	4.241	.4590	.1695
SDev	.0384	.27	.1019	.3374	.220	.1576	.0132
%RSD	5.133	1.612	52.87	94.48	5.184	34.34	7.784
#1	.7337	16.50	.0763	.5672	4.241	.5190	.1657
#2	.7240	17.12	.3172	<.0000	4.241	.6442	.1657
#3	.8061	16.97	.2208	.3781	4.510	.3938	.1886
#4	.7312	17.01	.1566	.6092	3.972	.2791	.1581

Elem	Zn
Units	ppm
Avge	.7568
SDev	.1093
%RSD	14.44
#1	.6152
#2	.7609
#3	.7693
#4	.8817

$NH_3 = 390$

006638

CONFIDENTIAL

ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA	WID # 00150383	LAB NO. CC55-90
WASTE DESCRIPTION: PHOTO WASTE		VOLUME: 4687.8G
WASTE CODE(S): D007/D011	LOAD # 3540	DATE: 3-23-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	6.9	
Al	1.7	
As	<0.10	
Au	<0.10	
Ba	<0.10	
Ca	50.3	
Cd	<0.10	
Co	<0.10	
Cr	0.3	
Cu	3.1	
Fe	17.9	
Mg	6.8	
Mn	<0.10	
Na	6.36.8	
Ni	<0.10	
P	19.3	
Pb	<0.10	
Se	<0.10	
Si	4.5	
Sn	0.7	
V	<0.10	
Zn	0.6	

pH 8.3	COLOR Brown	F	
Sp. Gr. 1.00	PHASES 1	CL	
Total CN-	ACIDITY	NO2	
Reac. CN-	ALKALINITY	Br	
NH3 as N 400ppm	ODOR M	NO3	
TOC 257.7ppm		PO4	
VOC		SO4	

PROCESS STAGES

PARAMETERS

		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: SWendland

LAB MANAGER MZ 3/23/92

REAGENT COST

006639

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 18778 Operator: SDW
Run Time: 03/23/92 15:34:56
Comment: CC-55-90
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.922	1.739	<.0000	.0067	.0382	50.28	.0245
SDev	.030	.137	.1331	.0421	.0061	.18	.0136
%RSD	.4278	7.883	56.04	631.7	16.00	.3512	55.60
#1	6.940	1.590	<.0000	<.0000	.0290	50.22	.0190
#2	6.879	1.706	<.0000	<.0000	.0412	50.21	.0239
#3	6.940	1.921	<.0000	.0603	.0412	50.15	.0435
#4	6.931	1.739	<.0000	.0101	.0412	50.54	.0116

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0203	.3000	3.133	17.90	6.778	.0640	636.8
SDev	.0176	.0121	.018	.31	.070	.0040	3.1
%RSD	86.41	4.051	.5804	1.756	1.036	6.278	.4821
#1	<.0000	.3059	3.141	18.00	6.880	.0692	636.0
#2	.0366	.3020	3.152	17.80	6.720	.0650	636.1
#3	.0203	.3098	3.109	18.28	6.749	.0608	633.8
#4	.0285	.2824	3.131	17.54	6.763	.0608	641.1

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0608	19.30	.3878	<.0000	4.474	.7086	<.0000
SDev	.0261	.36	.1713	.1947	.186	.0686	.0216
%RSD	42.94	1.852	44.18	84.92	4.159	9.682	882e6
#1	.0398	19.20	.3080	.0092	4.211	.7922	.0056
#2	.0585	19.38	.4448	<.0000	4.605	.7169	<.0000
#3	.0982	19.74	.5969	<.0000	4.474	.7002	.0281
#4	.0468	18.89	.2015	<.0000	4.605	.6250	<.0000

Elem	Zn
Units	ppm
Avge	.6165
SDev	.0112
%RSD	1.815
#1	.6312
#2	.6156
#3	.6156
#4	.6039

006640

CONFIDENTIAL

ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA	WID#001S0382	LAB NO: CC 55-90
WASTE DESCRIPTION: PHOTO WASTE		VOLUME: 4612 Gallons
WASTE CODE(S): D007 / D011	LOAD #3528	DATE: 3-19-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	6,7	
Al	1,5	
As	∅	
Au	∅	
Ba	<0,1	
Ca	50,9	
Cd	<1,0	
Co	∅	
Cr	2,7	
Cu	47,3	
Fe	19,3	
Mg	11,3	
Mn	<0,1	
Na	412	
Ni	<1,0	
P	∅	
Pb	<1,0	
Se	∅	
Si	4,2	
Sn	<1.0	
V	∅	
Zn	4,9	

pH 7,1	COLOR Lt BROWN	F NA	
Sp. Gr. 1,00	PHASES Single	CL	
Total CN – NA	ACIDITY NA	NO2	
Reac. CN – NA	ALKALINITY NA	Br	
NH3 as N 210ppm	ODOR MILD	NO3	
TOC - 1508pm		PO4	
VOC NA		SO4	NA

PROCESS STAGES

		PARAMETERS		
		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: NG + MZ

LAB MANAGER MZ 3/19/92

REAGENT COST

006641

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 18691 Operator: HMZ
Run Time: 03/19/92 14:09:22
Comment: CC-55-90 SHIPMENT
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.717	1.537	<.0000	.0891	.0699	50.88	.3377
SDev	.040	.198	.2429	.1025	.0080	.27	.0172
%RSD	.5945	12.90	124.6	115.0	11.44	.5293	5.105
#1	6.760	1.744	.0836	.2294	.0778	50.71	.3596
#2	6.741	1.659	<.0000	.0663	.0714	50.62	.3426
#3	6.675	1.317	<.0000	<.0000	.0587	51.02	.3206
#4	6.694	1.428	<.0000	.0774	.0714	51.20	.3279

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0337	2.694	47.33	19.39	11.32	.0918	411.7
SDev	.0480	.029	.38	1.61	.56	.0052	3.5
%RSD	142.5	1.076	.7953	8.306	4.937	5.655	.8427
#1	.0971	2.737	47.12	21.59	12.02	.0990	409.2
#2	.0416	2.680	46.92	19.59	11.16	.0907	408.1
#3	<.0000	2.684	47.59	18.07	10.68	.0866	414.8
#4	.0099	2.676	47.70	18.31	11.41	.0907	414.5

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2738	<.0000	.4478	.1694	4.241	.7431	.0020
SDev	.0766	.3194	.3679	.2030	.078	.1183	.0266
%RSD	28.00	1.514	82.15	119.9	1.833	15.92	1347.
#1	.3581	<.0000	.9766	.4028	4.174	.9049	.0336
#2	.2916	<.0000	.3744	.0183	4.308	.6314	.0099
#3	.1728	<.0000	.1274	.2746	4.174	.7499	<.0000
#4	.2726	<.0000	.3127	<.0000	4.308	.6861	<.0000

Elem	Zn
Units	ppm
Avge	4.861
SDev	.033
%RSD	.6813
#1	4.838
#2	4.834
#3	4.866
#4	4.906

006642

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ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA | WED # 00150381 | LAB NO. CC 55-90

WASTE DESCRIPTION: PHOTOWASTE | VOLUME: 4.48 GAL

WASTE CODE(S): D007 / 11 | LOAD # 3515 | DATE: 3-18-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	2.4	
Al	<1.0	
As	Ø	
Au	Ø	
Ba	Ø	
Ca	51.8	
Cd	Ø	
Co	Ø	
Cr	5.6	
Cu	<1.0	
Fe	9.9	
Mg	13.5	
Mn	<0.1	
Na	390.1	
Ni	Ø	
P	19.6	
Pb	<1.0	
Se	Ø	
Si	3.8	
Sn	1.2	
V	Ø	
Zn	<1.0	

pH 8.5 COLOR GREY

Sp. Gr. 1.00 PHASES 3

Total CN- FACILITY

Reac. CN- ALKALINITY

NH3 as N 125 ODOR M

TOC 184.3

VOC <10

CL	
NO2	
Br	
NO3	
PO4	
SO4	

PROCESS STAGES:

PARAMETERS:

		pH	REDOX	T °C
INITIAL	100 mL			

COMMENTS: CN (F) N.D.

CHEMISTS: J. Kmieczykowska

LAB MANAGER MZ 3/18/92

REAGENT COST 006643

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 18643 Operator: HMZ
Run Time: 03/18/92 13:59:57
Comment: CC-55-90 SHIPMENT
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.429	.5575	<.0000	.0585	.0305	51.84	.0093
SDev	.018	.3141	.1624	.0715	.0062	.36	.0153
%RSD	.7546	56.33	37.60	122.2	20.16	.6885	164.9
#1	2.425	.6406	<.0000	<.0000	.0385	51.32	.0099
#2	2.444	.0984	<.0000	<.0000	.0321	51.95	<.0000
#3	2.444	.6843	<.0000	.1182	.0257	51.95	.0173
#4	2.405	.8068	<.0000	.1227	.0257	52.13	.0223

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0040	5.563	.7725	9.876	13.51	.0458	390.1
SDev	.0218	.036	.0244	.319	.33	.0040	2.3
%RSD	550.8	.6428	3.156	3.229	2.475	8.704	.5969
#1	.0297	5.520	.7642	9.972	13.50	.0447	386.8
#2	<.0000	5.564	.7422	9.414	13.05	.0406	392.0
#3	.0139	5.560	.7862	9.972	13.81	.0489	390.4
#4	<.0000	5.607	.7972	10.15	13.69	.0489	391.2

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	<.0000	19.61	.2805	.1190	3.758	1.171	<.0000
SDev	.0354	.32	.0917	.1061	.282	.055	.0073
%RSD	221.3	1.655	32.69	89.21	7.514	4.686	12.35
#1	<.0000	19.73	.2152	.0935	3.627	1.091	<.0000
#2	<.0000	19.44	.2306	.0085	3.497	1.184	<.0000
#3	<.0000	19.26	.2613	.1105	3.758	1.201	<.0000
#4	.0363	20.00	.4150	.2635	4.150	1.210	<.0000

Elem	Zn
Units	ppm
Avge	.2106
SDev	.0124
%RSD	5.894
#1	.1967
#2	.2047
#3	.2166
#4	.2246

184.3

006644

CONFIDENTIAL

ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300

P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA	WID # 0015038O	LAB NO. CC 55-90	
WASTE DESCRIPTION: Photowaste		VOLUME: 4137 GAL	
WASTE CODE(S): D007 / D011	LOAD # 3514	DATE: 3-11-92	

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	1.38	
Al	.52	
As	<0.1	
Au	0.10	
Ba	0.05	
Ca	50.44	
Cd	0.15	
Co	0.05	
Cr	2.68	
Cu	17.35	
Fe	16.10	
Mg	5.00	
Mn	0.16	
Na	248.40	
Ni	0.14	
P	<0.01	
Pb	0.08	
Se	0.23	
Si	5.68	
Sn	1.02	
V	<0.01	
Zn	2.43	

pH 6.5	COLOR BRN/GRY		F
Sp. Gr. 1.02	PHASES 5		CL
Total CN-	ACIDITY		NO2
Reac. CN-	ALKALINITY		Br
NH3 as N 43.0	ODOR MILD		NO3
TOC 93.35			PO4
VOC ND			SO4

PROCESS STAGES

PARAMETERS

		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: B.C., d.P., N.G.

LAB MANAGER d Payne 3.17.92

REAGENT COST 006645

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 18609 Operator: NG
Run Time: 03/17/92 15:14:03
Comment: CC-55-90 NASA SHIPMENT
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.379	.5243	<.0000	.1008	.0525	50.44	.1479
SDev	.025	.7370	.0611	.0481	.0080	.36	.0111
%RSD	1.781	140.6	5.657	47.67	15.25	.7230	7.500
#1	1.410	1.470	<.0000	.1585	.0636	50.01	.1637
#2	1.365	<.0000	<.0000	.1222	.0445	50.76	.1417
#3	1.354	.6274	<.0000	.0595	.0509	50.27	.1390
#4	1.387	.2958	<.0000	.0630	.0509	50.72	.1472

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0534	2.679	17.35	16.10	5.000	.1151	248.4
SDev	.0304	.022	.12	1.02	.348	.0036	2.0
%RSD	56.94	.8221	.7145	6.316	6.951	3.110	.8073
#1	.0790	2.704	17.28	17.57	5.506	.1195	246.6
#2	.0192	2.674	17.48	15.42	4.789	.1151	250.7
#3	.0363	2.652	17.21	15.42	4.757	.1107	246.9
#4	.0790	2.687	17.43	15.98	4.948	.1151	249.4

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1445	<.0000	.0810	.2291	5.682	1.023	<.0000
SDev	.0419	.5886	.0780	.1318	.179	.123	.0178
%RSD	29.01	344.8	96.28	57.53	3.146	12.07	1907e6
#1	.1739	.3742	.0682	.2011	5.504	1.155	.0244
#2	.0824	<.0000	.0682	.3881	5.646	1.059	<.0000
#3	.1634	.2429	<.0000	.2572	5.646	.8589	<.0000
#4	.1582	<.0000	.1875	.0701	5.930	1.019	.0019

Elem	Zn
Units	ppm
Avge	2.427
SDev	.033
%RSD	1.339
#1	2.452
#2	2.457
#3	2.396
#4	2.401

006646

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ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA	WID #	LAB NO. CC 55-91
WASTE DESCRIPTION: PHOTO WASTE		VOLUME: 4917 GALLONS
WASTE CODE(S): D007/D011	LOAD # 3508	DATE: 3-16-92

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm
Ag	2.8	
Al	1.1	
As	Ø	
Au	Ø	
Ba	<0.1	
Ca	52.7	
Cd	<1.0	
Co	<0.1	
Cr	4.8	
Cu	57.6	
Fe	23.2	
Mg	8.5	
Mn	<0.1	
Na	462.4	
Ni	<1.0	
P	Ø	
Pb	<1.0	
Se	<1.0	
Si	3.4	
Sn	1.2	
V	Ø	
Zn	6.2	

pH 6.2	COLOR BROWN/GRAY	F	NA
Sp. Gr. 1.00	PHASES Single	CL	
Total CN - NA	ACIDITY NA	NO2	
Reac. CN - NA	ALKALINITY NA	Br	
NH3 as N 1250ppm	ODOR Mild	NO3	
TOC 156,300ppm		PO4	
VOC NA		SO4	NA

PROCESS STAGES

PARAMETERS

	pH	REDOX	T°C
INITIAL 100 mL			

COMMENTS:

CHEMISTS: NICK GALLEGOS

LAB MANAGER MR 3/16/92

REAGENT COST
006647

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 18545 Operator: NG
Run Time: 03/16/92 15:07:25
Comment: CC-55-90
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.835	1.105	<.0000	<.0000	.0361	52.71	.4769
SDev	.009	.204	.1182	.0062	.0060	.14	.0089
%RSD	.3216	18.44	124.3	919.7	16.65	.2700	1.859
#1	2.823	.9011	<.0000	<.0000	.0376	52.71	.4661
#2	2.833	1.075	<.0000	<.0000	.0314	52.91	.4864
#3	2.842	1.057	.0676	.0009	.0439	52.58	.4813
#4	2.842	1.388	<.0000	.0072	.0314	52.65	.4737

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0344	4.776	57.63	23.15	8.478	.0866	462.4
SDev	.0066	.025	.30	.18	.094	.0024	1.6
%RSD	19.21	.5309	.5187	.7881	1.112	2.816	.3438
#1	.0344	4.748	57.92	23.10	8.385	.0845	463.9
#2	.0425	4.801	57.86	22.98	8.608	.0845	463.1
#3	.0344	4.793	57.40	23.41	8.475	.0887	462.3
#4	.0263	4.760	57.35	23.10	8.445	.0887	460.2

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1836	<.0000	.5976	.2979	3.382	1.241	<.0000
SDev	.0278	.5400	.0327	.1686	.205	.133	.0000
%RSD	15.15	2.633	5.469	56.61	6.061	10.69	.0000
#1	.1646	<.0000	.6278	.4670	3.075	1.181	<.0000
#2	.1818	<.0000	.5976	.3865	3.485	1.345	<.0000
#3	.2235	<.0000	.5522	.2576	3.485	1.354	<.0000
#4	.1646	<.0000	.6127	.0805	3.485	1.081	<.0000

Elem	Zn
Units	ppm
Avge	6.173
SDev	.009
%RSD	.1516
#1	6.183
#2	6.179
#3	6.167
#4	6.163

ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA	WID # 00150378	LAB NO. CC 55-90
WASTE DESCRIPTION: PHOTOWASTE		VOLUME 4,504 GAL
WASTE CODE(S): D007/11	LOAD # 3507	DATE: 3-13-92

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm
Ag	2.7	
Al	<1.0	
As	Ø	
Au	<0.1	
Ba	<0.1	
Ca	47.4	
Cd	Ø	
Co	Ø	
Cr	8.5	
Cu	3.2	
Fe	22.6	
Mg	7.6	
Mn	<0.1	
Na	461.7	
Ni	<1.0	
P	10.9	
Pb	<0.1	
Se	Ø	
Si	5.0	
Sn	<1.0	
V	Ø	
Zn	<1.0	

pH 8.0 COLOR GREY F
Sp. Gr. 1.00 PHASES S CL
Total CN- ACIDITY NO2
Reac. CN- ALKALINITY Br
NH3 as N 180 ODOR M NO3
TOC 253.3 PO4
VOC <20 SO4

PROCESS STAGES

PARAMETERS

		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: J. Kwiecryliowska

LAB MANAGER MZ 3/13/92

REAGENT COST 006649

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 18465 Operator: HLW
Run Time: 03/13/92 10:13:55
Comment: CC-55-90 SHIPMENT
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.653	.5333	<.0000	.0290	.0218	47.37	<.0000
SDev	.067	.2454	.0585	.0774	.0149	.79	.0112
%RSD	2.534	46.00	21.30	267.0	68.23	1.660	92.14
#1	2.585	.2531	<.0000	.0685	.0403	46.47	.0021
#2	2.605	.4249	<.0000	<.0000	.0134	47.02	<.0000
#3	2.705	.6418	<.0000	.0998	.0268	47.74	<.0000
#4	2.715	.8136	<.0000	.0252	.0067	48.26	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	<.0000	8.514	3.208	22.57	7.603	.0420	461.7
SDev	.0442	.139	.115	1.26	.262	.0046	4.7
%RSD	900.0	1.632	3.582	5.600	3.441	10.94	1.012
#1	<.0000	8.389	3.369	22.13	7.648	.0456	456.8
#2	<.0000	8.419	3.125	21.05	7.291	.0360	458.8
#3	.0466	8.559	3.125	23.15	7.551	.0456	464.8
#4	<.0000	8.691	3.211	23.97	7.924	.0408	466.6

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1704	10.89	.0876	.0705	4.953	.7333	<.0000
SDev	.0101	.62	.2294	.2850	.247	.1437	.0152
%RSD	5.919	5.679	261.9	404.1	4.986	19.59	38.44
#1	.1763	10.44	.0827	.4819	4.700	.6775	<.0000
#2	.1554	10.28	<.0000	<.0000	4.989	.5557	<.0000
#3	.1737	11.40	<.0000	<.0000	4.845	.8500	<.0000
#4	.1763	11.44	.4136	<.0000	5.278	.8500	<.0000

Elem	Zn
Units	ppm
Avge	.1688
SDev	.0706
%RSD	41.80
#1	.2514
#2	.2014
#3	.0963
#4	.1263

006650

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ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA | WID # 00150388 | LAB NO. CCE 55-90
WASTE DESCRIPTION: PHOTOWASTE | VOLUME: 4,682 GAL
WASTE CODE(S): D007/11 | LOAD # 3496 | DATE: 3-12-92

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm
Ag	15.9	
Al	10.5	
As	Θ	
Au	<1.0	
Ba	<1.0	
Ca	27.85	
Cd	Θ	
Co	<1.0	
Cr	37.5	
Cu	1.2	
Fe	57.81	
Mg	11.2	
Mn	<1.0	
Na	1373	
Ni	<1.0	
P	14.3	
Pb	Θ	
Se	<1.0	
Si	38.4	
Sn	<1.0	
V	Θ	
Zn	2.7	

pH 9.3 | COLOR BROWN | F
Sp. Gr. 1.01 | PHASES S | CL
Total CN- | ACIDITY | NO2
Reac. CN- | ALKALINITY | Br
NH3 as N 800 | ODOR M | NO3
TOC 1,770 | | PO4
VOC <100 | | SO4

PROCESS STAGES

	PARAMETERS		
	pH	REDOX	T°C
INITIAL			
100 mL			

COMMENTS: CN(F) N.D.

CHEMISTS: A. Kilewska / J. Zwierzykowska
LAB MANAGER MR 3/12/92

REAGENT COST 006651

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 18397 Operator: HLW
Run Time: 03/12/92 08:19:59
Comment: CC-55-90
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	15.94	10.52	<.0000	.1005	.0560	27.85	<.0000
SDev	.72	1.58	.2853	.0404	.0132	.15	.0133
%RSD	4.548	15.00	26.91	40.27	23.53	.5317	52.95
#1	16.11	8.443	<.0000	.1422	.0494	27.69	<.0000
#2	15.15	12.12	<.0000	.0875	.0494	27.75	<.0000
#3	15.64	11.24	<.0000	.1220	.0494	27.94	<.0000
#4	16.85	10.27	<.0000	.0501	.0758	28.00	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0866	37.48	1.200	57.81	11.24	.2121	1373.
SDev	.0141	.22	.103	.16	.24	.0039	2.
%RSD	16.27	.5824	8.550	.2803	2.110	1.832	.1369
#1	.1011	37.25	1.072	58.02	11.06	.2131	1373.
#2	.0681	37.34	1.161	57.72	11.05	.2091	1371.
#3	.0928	37.66	1.283	57.66	11.28	.2172	1376.
#4	.0846	37.68	1.283	57.84	11.56	.2091	1374.

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4178	14.34	<.0000	.4684	38.40	.4251	<.0000
SDev	.0330	.28	.1683	.2971	.11	.0809	.0135
%RSD	7.891	1.980	488.8	63.43	.2842	19.03	7.676
#1	.4002	14.57	.0646	.8321	38.40	.3511	<.0000
#2	.4656	14.59	<.0000	.2370	38.40	.5267	<.0000
#3	.3923	14.04	<.0000	.5897	38.27	.3696	<.0000
#4	.4133	14.15	.1162	.2149	38.54	.4528	<.0000

Elem	Zn
Units	ppm
Avge	2.651
SDev	.091
%RSD	3.437
#1	2.541
#2	2.611
#3	2.728
#4	2.724

006652

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ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300

P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA | WID # 0615037 | LAB NO. CC55-90

WASTE DESCRIPTION: Photowaste | VOLUME:

WASTE CODE(S): D007 / 11 | LOAD # 3486 | DATE: 3-10-92

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm
Ag	2.96	
Al	<1.0	
As	0	
Au	<0.10	
Ba	<1.0	
Ca	41.0	
Cd	<1.0	
Co	<1.0	
Cr	9.4	
Cu	<1.0	
Fe	35.2	
Mg	14.3	
Mn	<1.0	
Na	660.8	
Ni	<1.0	
P	14.3	
Pb	<1.0	
Se	<1.0	
Si	14.4	
Sn	<1.0	
V	0	
Zn	<1.0	

pH 7.8 | COLOR Grey | F

Sp. Gr. 1.00 | PHASES S | CL

Total CN- | ACIDITY | NO2

Reac. CN- | ALKALINITY | Br

NH3 as N 240 | ODOR m | NO3

TOC 372 | | PO4

VOC <50 | | SO4

PROCESS STAGES

INITIAL	100 mL	PARAMETERS pH	REDOX	T°C

COMMENTS:

CHEMISTS: H. Zmierzychowska

LAB MANAGER MZ 3/11/92

REAGENT COST 006653

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 18366 Operator: HLW
Run Time: 03/11/92 08:05:42
Comment: CC-55-90 3-10-92
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.959	.9716	<.0000	.0220	.0707	41.00	.0061
SDev	.064	.2770	.0521	.0396	.0892	.28	.0067
%RSD	2.167	28.51	12.43	179.9	126.2	.6946	108.6
#1	2.946	1.367	<.0000	.0323	.1543	40.69	.0123
#2	2.928	.8867	<.0000	.0341	.1414	40.87	.0078
#3	2.910	.9115	<.0000	<.0000	<.0000	41.36	<.0000
#4	3.053	.7209	<.0000	.0565	<.0000	41.06	.0078

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0154	9.403	.8022	35.18	14.27	.0058	660.8
SDev	.0231	.086	.0330	.82	.14	.0067	5.9
%RSD	149.3	.9165	4.118	2.331	.9789	115.5	.9001
#1	.0444	9.304	.8181	35.67	14.25	.0077	654.4
#2	.0212	9.363	.8287	35.12	14.45	.0115	657.7
#3	<.0000	9.498	.7544	34.05	14.11	<.0000	667.8
#4	.0058	9.446	.8075	35.90	14.29	.0077	663.5

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0258	14.32	.5226	.1690	14.37	.8536	<.0000
SDev	.0818	.31	.1867	.2577	.06	.1114	.0222
%RSD	317.3	2.137	35.73	152.5	.4329	13.05	74.65
#1	<.0000	14.00	.6255	.3281	14.40	1.001	<.0000
#2	.0917	14.14	.6414	<.0000	14.28	.8097	<.0000
#3	.0150	14.64	.5780	<.0000	14.40	.7379	<.0000
#4	.0821	14.52	.2455	.4474	14.40	.8655	<.0000

Elem	Zn
Units	ppm
Avge	.1878
SDev	.0185
%RSD	9.835
#1	.1928
#2	.2009
#3	.1605
#4	.1969

006654

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ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300

P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA | WID # 00150376 | LAB NO: CC 55-90

WASTE DESCRIPTION: PHOTOWASTE | VOLUME: 4,929 GAL

WASTE CODE(S): D007/11 | LOAD # 3485 | DATE: 3-9-92

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm
Ag	2.2	
Al	<1.0	
As	Ø	
Au	<1.0	
Ba	<1.0	
Ca	42.2	
Cd	Ø	
Co	<0.1	
Cr	<1.0	
Cu	1.1	
Fe	90.2	
Mg	11.5	
Mn	Ø	
Na	612.6	
Ni	Ø	
P	8.2	
Pb	<1.0	
Se	Ø	
Si	13.8	
Sn	<1.0	
V	<0.1	
Zn	<0.1	

pH	7.1	COLOR	4 GREY
Sp. Gr.	1.00	PHASES	S
Total CN-		ACIDITY	
Reac. CN-		ALKALINITY	
NH3 as N	240	ODOR	M
TOC	417		
VOC	<50		

F
CL
NO2
Br
NO3
PO4
SO4

PROCESS STAGES

PARAMETERS

	100 mL	pH	REDOX	T°C
INITIAL				

COMMENTS:

CHEMISTS: J. Zwierzykowska

LAB MANAGER MZ 3/11/92

REAGENT COST 006655

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 18365 Operator: HLW
Run Time: 03/11/92 08:03:15
Comment: CC-55-90 3-9-92
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.163	.8224	<.0000	.1007	.1462	42.15	<.0000
SDev	.046	.2086	.0574	.0262	.0032	.20	.0043
%RSD	2.139	25.36	7.545	26.05	2.198	.4748	21.28
#1	2.196	.5138	<.0000	.1059	.1414	42.16	<.0000
#2	2.196	.9695	<.0000	.1256	.1478	42.39	<.0000
#3	2.098	.9198	<.0000	.0637	.1478	42.14	<.0000
#4	2.161	.8867	<.0000	.1077	.1478	41.90	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0251	.4829	1.140	90.21	11.48	.0029	612.6
SDev	.0161	.0069	.018	.70	.12	.0019	3.3
%RSD	64.05	1.420	1.592	.7760	1.014	66.67	.5324
#1	.0058	.4888	1.158	90.03	11.63	.0038	613.2
#2	.0444	.4730	1.147	91.18	11.34	.0038	616.6
#3	.0212	.4849	1.116	90.11	11.48	.0038	611.9
#4	.0290	.4849	1.137	89.51	11.49	<.0000	608.8

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0090	8.156	.4593	.3729	13.84	.2433	.0205
SDev	.0121	.182	.1160	.3753	.07	.0299	.0121
%RSD	135.1	2.230	25.26	100.7	.5190	12.27	59.38
#1	.0270	8.031	.4672	<.0000	13.78	.2513	.0205
#2	.0054	8.249	.5464	.7258	13.78	.2752	.0354
#3	.0006	7.979	.2930	.2685	13.90	.2433	.0056
#4	.0030	8.365	.5305	.6065	13.90	.2034	.0205

Elem	Zn
Units	ppm
Avge	.0969
SDev	.0020
%RSD	2.083
#1	.0959
#2	.0959
#3	.0959
#4	.1000

006656

ENCYCLE/TEXAS, INC.
5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA | WID # 00150375 | LAB NO. CC 55-90
WASTE DESCRIPTION: PHOTOWASTE | VOLUME: 4,615 GAL
WASTE CODE(S): D007 / 11 | LOAD # 3476 | DATE: 3-6-92

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm
Ag	3.8	
Al	<1.0	
As	Ø	
Au	Ø	
Ba	Ø	
Ca	36.6	
Cd	<0.1	
Co	Ø	
Cr	2.2	
Cu	5.4	
Fe	19.1	
Mg	22.5	
Mn	<0.1	
Na	951	
Ni	<0.1	
P	16.3	
Pb	<1.0	
Se	Ø	
Si	Ø	
Sn	<1.0	
V	<0.1	
Zn	<1.0	

pH	7.9	COLOR	BROWN-GREY		
Sp. Gr.	1.00	PHASES	S	CL	
Total CN-		ACIDITY		NO2	
Reac. CN-		ALKALINITY		Br	
NH3 as N	150	ODOR	M	NO3	
TOC	462.8			PO4	
VOC	<100			SO4	

PROCESS STAGES

PROCESS STAGES		pH	REDOX	T°C
INITIAL	100 mL			

PARAMETERS

COMMENTS:

CHEMISTS: A. Zwierzykowska

LAB MANAGER MZ 3/6/92

REAGENT COST

0066557

Method: ENCYCLE Sample Name: SAMPLE # 18314 Operator: HMZ
Run Time: 03/06/92 14:04:42
Comment: CC-55-90 SHIPMENT
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.750	.6631	<.0000	.0398	<.0000	36.56	.0293
SDev	.052	.3751	.2764	.0416	.0037	.65	.0094
%RSD	1.395	56.57	13.90	104.4	40.00	1.773	32.02
#1	3.812	.1314	<.0000	.0347	<.0000	35.93	.0353
#2	3.694	.6735	<.0000	.0846	<.0000	36.15	.0243
#3	3.723	.9654	<.0000	.0545	<.0000	36.82	.0188
#4	3.773	.8820	<.0000	<.0000	<.0000	37.35	.0390

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0067	2.202	5.350	19.13	22.53	.0668	951.0
SDev	.0148	.018	.063	.66	.23	.0030	13.0
%RSD	221.7	.8333	1.185	3.434	1.032	4.474	1.363
#1	.0117	2.203	5.307	19.35	22.27	.0668	936.2
#2	.0251	2.175	5.307	18.29	22.42	.0668	945.4
#3	<.0000	2.217	5.343	19.02	22.60	.0631	955.9
#4	<.0000	2.210	5.441	19.86	22.81	.0705	966.2

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0980	16.26	.9110	<.0000	<.0000	.6624	.0268
SDev	.0411	.21	.1565	.4045	.1378	.0845	.0229
%RSD	41.93	1.280	17.17	536.7	.8875	12.76	85.37
#1	.0404	16.08	.8022	.3059	<.0000	.6193	.0607
#2	.1374	16.10	.7649	.1463	<.0000	.6717	.0179
#3	.1108	16.33	.9763	<.0000	<.0000	.7765	.0179
#4	.1032	16.52	1.101	<.0000	<.0000	.5819	.0107

Elem	Zn
Units	ppm
Avge	.6408
SDev	.0152
%RSD	2.367
#1	.6225
#2	.6340
#3	.6532
#4	.6532

NH_3 150

462.8

006658

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ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300

P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA | WID #00150374 | LAB NO. CC 55-90

WASTE DESCRIPTION: PHOTO WASTE | VOLUME: 4704 G

WASTE CODE(S): D007/D011 | LOAD # 3470 | DATE: 3-3-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	6,6	
Al	1,4	
As	<0,10	
Au	<0,10	
Ba	<0,10	
Ca	54,2	
Cd	<0,10	
Co	<0,10	
Cr	~~27,8~~	7.8 PC
Cu	0,4	
Fe	27,8	
Mg	40,69	
Mn	<0,10	
Na	342,9	
Ni	0,~~2~~	
P	16,9	
Pb	1,9	
Se	<0,10	
Si	4,2	
Sn	1,1	
V	<0,10	
Zn	<0,10	

pH 7,00 COLOR Green | F

Sp. Gr. 1,00 PHASES 1 | CL

Total CN - ACIDITY | NO2

Reac. CN - ALKALINITY | Br

NH3 as N 240,0 ppm ODOR M | NO3

TOC 191,8 ppm | PO4

VOC | SO4

PROCESS STAGES

INITIAL		PARAMETERS pH	REDOX	T°C

COMMENTS:

CHEMISTS: [signature]

LAB MANAGER M Z 3/3/92

REAGENT COST 006659

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Method: ENCYCLE Sample Name: SAMPLE # 18142 Operator: SDW
Run Time: 03/03/92 15:33:46
Comment: CC-55-90
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.628	1.448	.1194	.0827	<.0000	54.18	<.0000
SDev	.082	.365	.1923	.0606	.0069	.48	.0070
%RSD	1.235	25.24	161.0	73.24	200.0	.8919	13.47
#1	6.506	1.130	.0694	.1142	.0069	53.53	<.0000
#2	6.669	1.821	.2917	.1525	<.0000	54.13	<.0000
#3	6.669	1.139	.2472	.0278	<.0000	54.44	<.0000
#4	6.669	1.702	<.0000	.0365	<.0000	54.64	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0085	7.842	.3523	27.85	40.69	.0109	342.9
SDev	.0212	.088	.0066	.21	.19	.0022	1.9
%RSD	250.0	1.117	1.878	.7482	.4717	20.00	.5654
#1	.0360	7.739	.3580	27.99	40.50	.0120	340.0
#2	.0021	7.805	.3580	27.89	40.58	.0120	343.4
#3	.0106	7.936	.3466	27.96	40.73	.0076	344.1
#4	<.0000	7.888	.3466	27.54	40.94	.0120	344.1

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1955	16.93	1.949	.1787	4.242	1.122	.0825
SDev	.0379	.19	.173	.1832	.083	.182	.0043
%RSD	19.39	1.095	8.885	102.6	1.957	16.22	5.263
#1	.2267	16.96	2.152	.3790	4.170	1.229	.0890
#2	.2292	17.14	1.941	.2491	4.313	1.318	.0803
#3	.1555	16.69	1.973	.1408	4.170	1.016	.0803
#4	.1708	16.95	1.730	<.0000	4.313	.9265	.0803

Elem	Zn
Units	ppm
Avge	<.0000
SDev	.0086
%RSD	3.715
#1	<.0000
#2	<.0000
#3	<.0000
#4	<.0000

006660

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ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA	WID # 00 50365	LAB NO. CC 55-90
WASTE DESCRIPTION: PHOTOWASTE		VOLUME: 4630 Gallon
WASTE CODE(S): D007 / D011	LOAD # 3448	DATE: 2-27-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag		
Al		
As		
Au		
Ba		
Ca		
Cd		
Co		
Cr		
Cu		
Fe	29.9	
Mg		
Mn		
Na		
Ni		
P		
Pb		
Se		
Si		
Sn		
V		
Zn		

pH 7.00	COLOR Blue-Green	F	NA
Sp. Gr. 1.00	PHASES Single	CL	
Total CN- NA	ACIDITY NA	NO2	
Reac. CN- N	ALKALINITY NA	Br	
NH3 as N 230	ODOR Mild	NO3	
TOC 371.1		PO4	
VOC NA		SO4	

PROCESS STAGES

PARAMETERS

		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: Nick Gallegos

LAB MANAGER MZ 2/27/92

REAGENT COST
006661

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5500 UP RIVER ROAD (512) 289-0300

P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA | WID # 00150363 | LAB NO. CC 55-90

WASTE DESCRIPTION: PHOTOWASTE | VOLUME: 4576 GAL

WASTE CODE(S): D007 / D011 | LOAD # 3447 | DATE: 2-26-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag		
Al		
As		
Au		
Ba		
Ca		
Cd		
Co		
Cr		
Cu		
(Fe)	26.0	
Mg		
Mn		
Na		
Ni		
P		
Pb		
Se		
Si		
Sn		
V		
Zn		

pH	6.5	COLOR	Green/Grey
Sp. Gr.	1.01	PHASES	SINGLE
Total CN-		ACIDITY	
Reac. CN-		ALKALINITY	
NH3 as N	210 ppm	ODOR	MLD
TOC	488.2 ppm		
VOC			

F
CL
NO2
Br
NO3
PO4
SO4

PROCESS STAGES

	PARAMETERS		
	pH	REDOX	T°C
INITIAL			
100 mL			

COMMENTS:

CHEMISTS: SW
DC

LAB MANAGER MZ 2/26/92

REAGENT COST

006662

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5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA	WID # 00150362	LAB NO. CC 55-90	
WASTE DESCRIPTION: PHOTOWASTE		VOLUME: 4634 GAL	
WASTE CODE(S): D007/D011	LOAD # 3419	DATE: 2-21-92	

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm
Ag	7.7	
Al	2.3	
As	Ø	
Au	Ø	
Ba	Ø	
Ca	47.5	
Cd	Ø	
Co	Ø	
Cr	<1	
Cu	<1	
Fe	36.7	
Mg	40.9	
Mn	<0.1	
Na	714.8	
Ni	<1	
P	36.9	
Pb	<1	
Se	Ø	
Si	4.1	
Sn	1.4	
V	Ø	
Zn	<1	

pH	7.5	COLOR	Green/Gray	F	N/A
Sp. Gr.	1.01	PHASES	Single	CL	↓
Total CN-	NA	ACIDITY	NA	NO2	
Reac. CN-	NA	ALKALINITY	NA	Br	
NH3 as N	540	ODOR	MILD	NO3	
TOC	536.4			PO4	
VOC	<100			SO4	

PROCESS STAGES

		PARAMETERS pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: Nick Gallegos

LAB MANAGER MZ 2/21/92

REAGENT COST

006663

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 18021 Operator: NG
Run Time: 02/21/92 16:47:36
Comment: CC-55-90
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.651	2.324	.1062	.0749	.0125	47.46	<.0000
SDev	.049	.201	.2355	.0840	.0161	.20	.0096
%RSD	.6404	8.664	221.7	112.3	129.1	.4147	34.13
#1	7.664	2.496	<.0000	.0527	.0312	47.20	.0025
#2	7.674	2.223	<.0000	<.0000	.0127	47.50	<.0000
#3	7.690	2.090	.4501	.1748	.0062	47.44	<.0000
#4	7.573	2.486	.0556	.0979	<.0000	47.68	<.0000

Elem	Cr	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0115	.1398	.2691	36.63	40.98	.0540	714.3
SDev	.0052	.0072	.0053	.51	.25	.0034	1.6
%RSD	189.9	5.175	1.980	1.389	.6003	6.281	.2308
#1	<.0000	.1388	.2664	37.28	40.73	.0584	714.8
#2	<.0000	.1303	.2664	36.77	40.98	.0543	717.0
#3	.0699	.1472	.2664	36.64	40.95	.0543	713.2
#4	.0103	.1430	.2771	36.04	41.22	.0501	714.0

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1588	36.85	.8331	.2079	4.141	1.409	.0183
SDev	.0167	.52	.1256	.3951	.066	.236	.0122
%RSD	10.52	1.402	15.07	190.1	1.587	16.78	66.67
#1	.1644	36.77	.8249	.1831	4.174	1.585	.0244
#2	.1644	37.38	.6624	.0643	4.174	1.138	.0081
#3	.1720	37.03	.9550	<.0001	4.042	1.627	.0326
#4	.1343	36.17	.8900	.7573	4.174	1.284	.0081

Elem	Zn
Units	ppm
Avge	.2012
SDev	.0232
%RSD	11.53
#1	.1938
#2	.1839
#3	.1981
#4	.1941

006664

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ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300

P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA | WID # 00150333 | LAB NO. CC 55-90

WASTE DESCRIPTION: PHOTOWASTE | VOLUME: 4641 Gal

WASTE CODE(S): D007 / D011 | LOAD # 3405 | DATE: 2-18-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag		
Al		
As		
Au		
Ba		
Ca		
Cd		
Co		
Cr		
Cu		
Fe	18.2 ppm	
Mg		
Mn		
Na		
Ni		
P		
Pb		
Se		
Si		
Sn		
V		
Zn		

pH 8.4	COLOR Brown	F	N/A
Sp. Gr. 1.01	PHASES Single	CL	
Total CN- N/A	ACIDITY N/A	NO2	
Reac. CN- N/A	ALKALINITY N/A	Br	
NH3 as N 1300 ppm	ODOR Mild	NO3	
TOC 2371 ppm		PO4	
VOC 914 ppm		SO4	

PROCESS STAGES

PARAMETERS

		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS

CHEMISTS: Nick Gallegos Sla

LAB MANAGER MT 2/18/92

REAGENT COST

006665

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5500 UP RIVER ROAD (512) 289-0300

P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA | WID # 0015036O | LAB NO. CC 55-90

WASTE DESCRIPTION: PHOTOWASTE | VOLUME: 4895

WASTE CODE(S): D007/D011 | LOAD # 3404 | DATE: 2-14-92

ICP	PRE-SCREEN	POST-TREATMENT	pH 8.1	COLOR Green	F
	ppm	ppm	Sp. Gr. 1.01	PHASES 3	CL
Ag			Total CN-	ACIDITY	NO2
Al			Reac. CN-	ALKALINITY	Br
As			NH3 as N 350 ppm	ODOR M	NO3
Au			TOC 880 ppm		PO4
Ba			VOC ppm		SO4
Ca					
Cd					
Co					
Cr					
Cu					
Fe	54.2 ppm	by AA			
Mg					
Mn					
Na					
Ni					
P					
Pb					
Se					
Si					
Sn					
V					
Zn					

PROCESS STAGES

PARAMETERS		
pH	REDOX	T°C

INITIAL 100 mL

COMMENTS

CHEMISTS: SW & BC

LAB MANAGER MZ 2/14/92

REAGENT COST 006666

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ENCYCLE[redacted]S, INC.
5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA
WID # 00150330
LAB NO. CC 55-90
WASTE DESCRIPTION: Photowaste
VOLUME: 4575 gal.
WASTE CODE(S): D007/D011
LOAD # 3380
DATE: 2-12-92

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm
Ag		
Al		
As		
Au		
Ba		
Ca		
Cd		
Co		
Cr		
Cu	1.0 ppm	
Fe	75.0 ppm	By A.A.
Mg		
Mn		
Na		
Ni		
P		
Pb		
Se		
Si		
Sn		
V		
Zn	[illegible]	

pH	7.3	COLOR	GREEN	F
Sp. Gr.	1.04	PHASES	S	CL
Total CN-		ACIDITY		NO2
Reac. CN-		ALKALINITY		Br
NH3 as N	620 ppm	ODOR	MILD	NO3
TOC	1052 ppm			PO4
VOC	<50 ppm			SO4

PROCESS STAGES

		PARAMETERS pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: [illegible signature]

LAB MANAGER MZ 2/12/92

REAGENT COST

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SHIPMENT REPORT

LIQUIDS

CLIENT: NASA #254	WID #0050329	LAB NO. CC-55-90
WASTE DESCRIPTION: PHOTOWASTE		VOLUME: 4642
WASTE CODE(S): D007 / D011	LOAD #3346	DATE: 2-6-92

ICP	PRE-SCREEN	POST-TREATMENT
	PPm	PPm
Ag	6.6	
Al	⊘	
As	⊘	
Au	<1.0	
Ba	<1.0	
Ca	47.6	
Cd	⊘	
Co	<0.1	
Cr	<1.0	
Cu	61.7	
Fe	78.2	
Mg	97.1	
Mn	<1.0	
Na	1060	
Ni	<1.0	
P	57.2	
Pb	<1.0	
Se	⊘	
Si	⊘	
Sn	2.7	
V	⊘	
Zn	⊘	

pH 8.2 COLOR Grey
Sp. Gr. 1.00 PHASES S
Total CN- ACIDITY N/A
Reac. CN- ALKALINITY N/A
NH3 as N 340 ODOR
TOC 704.6
VOC <150 ppm

F	N/A
Cl	
NO2	
Br	
NO3	
PO4	
SO4	

PROCESS STAGES

PARAMETERS

INITIAL	100 mL	pH	REDOX	T°C

COMMENTS:

CHEMISTS: [signature]

LAB MANAGER

REAGENT COST
006668

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Method: ENCYCLE Sample Name: SAMPLE # 17688 Operator: HLW
Run Time: 02/06/92 10:22:03
Comment: CC-55-90 #254
Mode: CONC Corr. Factor: 10

Elem	AG	AL	AS	AU	BA	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.586	<.0000	<.0000	.1225	.0878	47.58	<.0000
SDev	.113	.9813	.1692	.0685	.0043	.54	.0123
%RSD	1.714	9.655	35.61	55.91	4.848	1.134	12.68
#1	6.495	<.0000	<.0000	.1748	.0867	47.13	<.0000
#2	6.482	<.0000	<.0000	.1850	.0912	47.29	<.0000
#3	6.696	<.0000	<.0000	.0447	.0823	48.35	<.0000
#4	6.670	<.0000	<.0000	.0854	.0912	47.56	<.0000

Elem	CO	CR	CU	FE	MG	MN	NA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0087	.4939	61.70	78.18	97.13	.1851	1060.
SDev	.0225	.0124	.63	.62	1.02	.0014	13.
%RSD	259.8	2.517	1.014	.7926	1.052	.7522	1.221
#1	<.0000	.4951	61.57	78.74	96.10	.1863	1059.
#2	.0368	.5107	61.12	78.19	96.84	.1839	1052.
#3	<.0000	.4822	62.59	78.49	98.54	.1839	1078.
#4	.0152	.4874	61.53	77.32	97.04	.1863	1050.

Elem	NI	P	PB	SE	SI	SN	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.6760	57.15	.6248	<.0000	<.0000	2.686	<.0000
SDev	.0263	.72	.1182	.1972	1.626	.075	.0196
%RSD	3.887	1.260	18.92	17.08	5.599	2.789	783.2
#1	.6902	57.00	.5270	<.0000	<.0000	2.661	.0075
#2	.6821	56.31	.6426	<.0000	<.0000	2.591	.0175
#3	.6373	58.06	.5448	<.0000	<.0000	2.746	<.0000
#4	.6943	57.21	.7850	<.0000	<.0000	2.746	<.0000

Elem	ZN
Units	ppm
Avge	<.0000
SDev	.0747
%RSD	2.126
#1	<.0000
#2	<.0000
#3	<.0000
#4	<.0000

006669

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5500 UP RIVER ROAD (512) 289-0300

P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA #252	WID # 00150327	LAB NO. CC 55-90
WASTE DESCRIPTION: PHOTO WASTE		VOLUME: 4,476G.
WASTE CODE(S): D007/11	LOAD # 3314	DATE: 1-31-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	8.2	
Al	<1.0	
As	Ø	
Au	Ø	
Ba	<0.1	
Ca	41.5	
Cd	Ø	
Co	Ø	
Cr	<1.0	
Cu	11.7	
Fe	35.8	
Mg	21.5	
Mn	<1.0	
Na	581.5	
Ni	<1.0	
P	34.4	
Pb	1.1	
Se	Ø	
Si	4.5	
Sn	1.4	
V	Ø	
Zn	2.3	

pH 8.3	COLOR GREY	F	
Sp. Gr. 1.00	PHASES S	CL	
Total CN-	ACIDITY	NO2	
Reac. CN-	ALKALINITY	Br	
NH3 as N 365	ODOR M	NO3	
TOC 386.4		PO4	
VOC <50		SO4	

PROCESS STAGES

PARAMETERS

INITIAL	100 mL	pH	REDOX	T°C

COMMENTS:

CHEMISTS: J. Kwiezyluowska

LAB MANAGER MZ 1/31/92

REAGENT COST

006670

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Method: ENCYCLE Sample Name: SAMPLE # 17410 Operator: BC
Run Time: 01/31/92 08:37:07
Comment: CC-55-90 SHIPMENT # 252
Mode: CONC Corr. Factor: 10

Elem	AG	AL	AS	AU	BA	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	8.197	.9311	<.0000	<.0000	.0486	41.46	<.0000
SDev	.162	.2456	.1342	.0654	.0114	.53	.0372
%RSD	1.972	26.38	131.2	556.2	23.35	1.278	132.7
#1	7.992	1.175	.0534	.0670	.0644	40.88	.0146
#2	8.143	.8025	<.0000	.0170	.0486	41.25	<.0000
#3	8.312	1.095	<.0000	<.0000	.0434	41.55	<.0000
#4	8.340	.6518	<.0000	<.0000	.0381	42.14	<.0000

Elem	CO	CR	CU	FE	MG	MN	NA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0152	.4328	11.66	35.76	21.47	.2964	581.5
SDev	.0347	.0842	.08	.54	.03	.0167	11.6
%RSD	227.3	19.46	.6829	1.515	.1402	5.621	1.991
#1	.0610	.5266	11.58	36.36	21.50	.3090	569.9
#2	.0229	.4758	11.67	35.91	21.49	.3090	576.4
#3	<.0000	.3898	11.63	35.70	21.43	.2934	582.6
#4	<.0000	.3390	11.77	35.06	21.47	.2740	597.0

Elem	NI	P	PB	SE	SI	SN	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9771	34.37	1.069	.0782	4.451	1.383	<.0000
SDev	.1018	.47	.280	.2976	.074	.182	.0249
%RSD	10.42	1.373	26.18	380.6	1.661	13.18	1265.
#1	1.099	33.93	1.212	.2586	4.515	1.605	.0295
#2	1.014	34.07	1.363	.2105	4.387	1.439	.0059
#3	.9334	34.50	.7238	<.0000	4.387	1.178	<.0000
#4	.8627	34.98	.9763	.2105	4.515	1.309	<.0000

Elem	ZN
Units	ppm
Avge	2.305
SDev	.661
%RSD	28.70
#1	2.982
#2	2.689
#3	2.040
#4	1.507

386.4
365

006671

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5500 UP RIVER ROAD (512) 289-0300

P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA # 253	WID # 00150328	LAB NO. CC 55-90
WASTE DESCRIPTION: PHOTOWASTE		VOLUME: 4,551 GAL
WASTE CODE(S): D007/11	LOAD # 3315	DATE: 2-3-92

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm
Ag	3.9	
Al	<1.0	
As	0	
Au	<0.1	
Ba	<1.0	
Ca	44.0	
Cd	0	
Co	<1.0	
Cr	0	
Cu	<1.0	
Fe	61.8	
Mg	63.9	
Mn	<1.0	
Na	954.1	
Ni	<1.0	
P	51.8	
Pb	0	
Se	0	
Si	3.9	
Sn	1.0	
V	0	
Zn	0	

pH	8.5	COLOR	GREY
Sp. Gr.	1.00	PHASES	S
Total CN-		ACIDITY	
Reac. CN-		ALKALINITY	
NH3 as N	350	ODOR	M
TOC	696.3		
VOC	<100		

F
CL
NO2
Br
NO3
PO4
SO4

PROCESS STAGES

PARAMETERS

	pH	REDOX	T°C
INITIAL 100 mL			

COMMENTS: CN(F) N.D.

CHEMISTS: M. Zmiewski, Howsha, Wendland

LAB MANAGER MZ 2-3-92

REAGENT COST 006672

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 17484 Operator: HLW
Run Time: 02/03/92 08:45:52
Comment: CC-55-90 SHIPMENT # 253
Mode: CONC Corr. Factor: 10

Elem	AG	AL	AS	AU	BA	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.925	.3490	<.0000	.0462	.1584	43.97	<.0000
SDev	.056	.1313	.2887	.0718	.0071	.48	.0143
%RSD	1.418	37.61	61.88	155.5	4.454	1.081	39.57
#1	3.882	.3211	<.0000	.1127	.1683	43.32	<.0000
#2	3.873	.1756	<.0000	<.0000	.1570	43.95	<.0000
#3	3.964	.4325	<.0000	.0937	.1570	44.17	<.0000
#4	3.982	.4667	<.0000	.0227	.1514	44.44	<.0000

Elem	CO	CR	CU	FE	MG	MN	NA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2056	<.0000	.5500	61.82	63.87	.4534	954.1
SDev	.0294	.0402	.0203	.40	.62	.0798	6.6
%RSD	14.31	39.12	3.694	.6483	.9769	17.60	.6936
#1	.2395	<.0000	.5634	61.39	63.19	.5411	946.1
#2	.2076	<.0000	.5205	61.61	63.49	.4927	961.2
#3	.2076	<.0000	.5634	61.96	64.46	.4202	951.6
#4	.1677	<.0000	.5527	62.31	64.32	.3597	957.5

Elem	NI	P	PB	SE	SI	SN	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2338	51.78	<.0000	<.0000	3.884	1.000	<.0000
SDev	.0102	.71	.1476	.4628	.125	.206	.0248
%RSD	4.371	1.361	19.43	115.5	3.218	20.64	188.8
#1	.2436	50.81	<.0000	<.0000	3.851	1.084	.0113
#2	.2228	51.72	<.0000	.2233	3.721	.9846	<.0000
#3	.2275	52.21	<.0000	<.0000	3.982	1.209	.0038
#4	.2413	52.39	<.0000	<.0000	3.982	.7229	<.0000

Elem	ZN
Units	ppm
Avge	<.0000
SDev	.0138
%RSD	5.270
#1	<.0000
#2	<.0000
#3	<.0000
#4	<.0000

006673

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5500 UP RIVER ROAD (512) 289-0300

P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA - #DSP	WID #00150326	LAB NO. CC 55-90
WASTE DESCRIPTION: PHOTO WASTE		VOLUME: 4627 Gallons
WASTE CODE(S): D001 7/11	LOAD #3309	DATE: 1-29-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	<1.0	
Al	Ø	
As	<1.0	
Au	Ø	
Ba	Ø	
Ca	3.4	
Cd	Ø	
Co	Ø	
Cr	<0.1	
Cu	<1.0	
Fe	3.3	
Mg	1.9	
Mn	<0.1	
Na	57.4	
Ni	<0.1	
P	5.1	
Pb	<1.0	
Se	Ø	
Si	<1.0	
Sn	<1.0	
V	Ø	
Zn	<1.0	

pH 8.2	COLOR Light Brown	F	N/A
Sp. Gr. 1.00	PHASES Single	CL	
Total CN- N/A	ACIDITY N/A	NO2	
Reac. CN- N/A	ALKALINITY N/A	Br	
NH3 as N 365	ODOR Mild	NO3	
TOC 252.0		PO4	
VOC N/A		SO4	Ø

PROCESS STAGES

		PARAMETERS		
		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: Nicki Gallegos
Barbara Carmody

LAB MANAGER MZ 1/29/92

REAGENT COST 006674

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 17293 Operator: BC
Run Time: 01/29/92 10:08:06
Comment: NASA
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	AU	BA	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.6700	.1527	.3105	<.0000	.0325	3.448	.0304
SDev	.0065	.0580	.0366	.0093	.0122	.030	.0121
%RSD	.9700	37.97	11.79	32.87	37.57	.8666	39.85
#1	.6678	.1600	.3038	<.0000	.0461	3.458	.0466
#2	.6634	.0894	.2717	<.0000	.0367	3.479	.0318
#3	.6788	.2278	.3065	<.0000	.0300	3.408	.0246
#4	.6700	.1334	.3600	<.0000	.0171	3.448	.0185

Elem	CO	CR	CU	FE	Fe2714	MG	MN
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0395	.0442	.1310	3.287	4.082	1.927	.0396
SDev	.0133	.0036	.0135	.032	.141	.030	.0112
%RSD	33.67	8.084	10.29	.9646	3.465	1.535	28.34
#1	.0579	.0494	.1490	3.286	4.095	1.956	.0544
#2	.0404	.0423	.1326	3.325	3.900	1.938	.0414
#3	.0317	.0416	.1244	3.248	4.090	1.886	.0346
#4	.0280	.0436	.1178	3.289	4.245	1.927	.0281

Elem	NA	NI	P	PB	SE	SI	SN
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	57.40	.0572	5.139	.1132	<.0000	.6439	.3187
SDev	.76	.0032	.038	.0329	.0652	.0303	.0194
%RSD	1.330	5.612	.7323	29.08	267.7	4.711	6.102
#1	57.59	.0619	5.135	.1585	<.0000	.6128	.3470
#2	58.19	.0564	5.098	.1161	<.0000	.6483	.3100
#3	56.36	.0552	5.135	.0934	.0284	.6838	.3031
#4	57.47	.0552	5.189	.0849	.0284	.6306	.3146

Elem	V	ZN
Units	ppm	ppm
Avge	.0003	.1572
SDev	.0031	.0134
%RSD	1200.	8.524
#1	.0039	.1739
#2	<.0000	.1612
#3	<.0000	.1506
#4	.0018	.1430

006675

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5500 UP RIVER ROAD (512) 289-0300

P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA #250	WID # 0015033	LAB NO. CC 55-90	
WASTE DESCRIPTION: PHOTO WASTE		VOLUME: 4,500 GAL	
WASTE CODE(S): D007/11	LOAD # 3292	DATE: 1-27-92	

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm
Ag	5.1	
Al	<1.0	
As	Ø	
Au	Ø	
Ba	0.1	
Ca	41.0	
Cd	Ø	
Co	Ø	
Cr	<2.0	
Cu	1.3	
Fe	94	
Mg	71	
Mn	<1.0	
Na	960	
Ni	<1.0	
P	34	
Pb	Ø	
Se	Ø	
Si	<10	
Sn	<1.0	
V	Ø	
Zn	<1.0	

pH	8.3	COLOR	8 BROWN	F
Sp. Gr.	1.00	PHASES	S	CL
Total CN-		ACIDITY		NO2
Reac. CN-		ALKALINITY		Br
NH3 as N	2,400	ODOR	M	NO3
TOC	6,263 ppm			PO4
VOC	479 ppm			SO4

PROCESS STAGES

		PARAMETERS pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS: CN(F) N.D.

CHEMISTS: M. Zmierzykowska

LAB MANAGER MZ 1/29/92

REAGENT COST

006676

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5500 UP RIVER ROAD (512) 289-0200
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA	WID # 00150385	LAB NO. CC 55-90
WASTE DESCRIPTION: Photowaste		VOLUME: 48396
WASTE CODE(S): D007, D011	LOAD # 3280	DATE: 1-24-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	6.0	
Al	0.2	
As	<0.1	
Au	0.1	
Ba	<0.1	
Ca	32.2	
Cd	<0.1	
Co	<0.1	
Cr	0.7	
Cu	0.3	
Fe	24.8	
Mg	32.4	
Mn	0.1	
Na	752.4	
Ni	<0.1	
P	29.3	
Pb	0.4	
Se	<0.1	
Si	4.1	
Sn	1.4	
V	<0.1	
Zn	0.1	

pH 8.4	COLOR GRAY	F	
Sp. Gr. 1.03	PHASES 2	CL	
Total CN-	ACIDITY	NO2	
Reac. CN-	ALKALINITY	Br	
NH3 as N 395 ppm	ODOR M	NO3	
TOC 403 ppm		PO4	
VOC		SO4	

PROCESS STAGES

		PARAMETERS		
		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: Debra Carmody

LAB MANAGER MZ 1/24/92

REAGENT COST 006677

CONFIDENTIAL

Analysis Report Fri 01-24-92 08:49:25 AM page

Method: ENCYCLE Sample Name: SAMPLE # 17215 Operator: BC
Run Time: 01/24/92 08:47:14
Comment: NASA 1-24-92
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.972	.1516	<.0000	.1426	.0199	32.18	<.0000
SDev	.062	.1265	.3043	.0310	.0022	.22	.0037
%RSD	1.037	83.46	33.19	21.71	11.11	.6767	765.9
#1	5.933	.2064	<.0000	.1247	.0210	31.90	<.0000
#2	5.908	.2148	<.0000	.1424	.0210	32.13	.0005
#3	6.007	<.0000	<.0000	.1863	.0210	32.27	.0044
#4	6.040	.2232	<.0000	.1172	.0166	32.41	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0016	.6738	.2790	24.82	32.43	.0977	752.4
SDev	.0252	.0148	.0139	.09	.21	.0034	3.9
%RSD	1566.	2.203	4.986	.3481	.6564	3.478	.5156
#1	.0080	.6587	.2770	24.75	32.20	.0994	748.8
#2	<.0000	.6662	.2607	24.75	32.42	.0926	752.4
#3	.0337	.6928	.2932	24.87	32.38	.0994	750.8
#4	<.0000	.6776	.2851	24.93	32.71	.0994	757.8

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0454	29.28	.4374	<.0000	4.050	1.362	.0038
SDev	.0150	.60	.1860	.1960	.064	.099	.0044
%RSD	33.01	2.049	42.53	168.9	1.585	7.272	115.5
#1	.0372	28.86	.4374	<.0000	4.046	1.500	.0077
#2	.0569	29.34	.3467	.0829	4.069	1.357	.0000
#3	.0591	28.80	.2689	<.0000	3.966	1.271	.0000
#4	.0284	30.10	.6966	<.0000	4.120	1.318	.0077

Elem	Zn
Units	ppm
Avge	.0879
SDev	.0087
%RSD	9.901
#1	.0783
#2	.0992
#3	.0853
#4	.0888

TOC = 403.0

Mg = 395

006678

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ENCYCLE[redacted]S, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA ~~#218~~	WID # 00150324	LAB NO. CC 55-90
WASTE DESCRIPTION: Photowaste		VOLUME: 47356
WASTE CODE(S): D007, D011	LOAD # 3271	DATE: 1-21-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	4.4	
Al	0.6	
As	<0.1	
Au	<0.10	
Ba	0.1	
Ca	35.4	
Cd	<0.1	
Co	0.1	
Cr	8.5	
Cu	0.1	
Fe	25.3	
Mg	6.8	
Mn	0.2	
Na	745.3	
Ni	<0.1	
P	41.3	
Pb	0.4	
Se	0.5	
Si	5.4	
Sn	1.5	
V	<0.1	
Zn	0.1	

pH 8.7	COLOR GRAY	F	
Sp. Gr. 1.03	PHASES S	CL	
Total CN-	ACIDITY	NO2	
Reac. CN-	ALKALINITY	Br	
NH3 as N 400	ODOR M	NO3	
TOC 392.4		PO4	
VOC		SO4	

PROCESS STAGES

	PARAMETERS		
	pH	REDOX	T°C
INITIAL 100 mL			

COMMENTS:

CHEMISTS: B. Cannady

LAB MANAGER: MZ 1/21/92

REAGENT COST

006679

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 17057 Operator: BC
Run Time: 01/21/92 08:21:21
Comment: NASA 1-21
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.369	.6033	<.0000	.0235	.1102	35.43	.0851
SDev	.075	.0997	.5324	.0713	.0315	.06	.0430
%RSD	1.722	16.53	634.7	303.0	28.57	.1687	50.59
#1	4.336	.5572	.2621	.0928	.1432	35.36	.1394
#2	4.476	.6494	.4578	.0715	.1300	35.43	.0997
#3	4.303	.4902	<.0000	<.0000	.0903	35.51	.0525
#4	4.360	.7164	<.0000	<.0000	.0771	35.41	.0487

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1010	8.545	.1226	25.31	6.841	.1505	745.3
SDev	.0673	.021	.0768	.95	.274	.0396	2.6
%RSD	66.63	.2473	62.67	3.772	4.003	26.33	.3499
#1	.1735	8.518	.2110	25.86	6.948	.2003	743.6
#2	.1420	8.541	.1628	26.35	7.112	.1638	744.5
#3	.0536	8.556	.0583	24.28	6.466	.1239	749.2
#4	.0347	8.567	.0583	24.76	6.838	.1139	744.0

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0071	41.34	.4022	.5270	5.356	1.495	<.0000
SDev	.0383	.45	.2549	.0357	.108	.037	.0382
%RSD	539.4	1.080	63.38	6.764	2.025	2.478	153.6
#1	.0640	41.88	.5649	.4801	5.214	1.497	<.0000
#2	<.0000	40.80	.6263	.5427	5.394	1.532	.0153
#3	<.0000	41.26	.3561	.5218	5.343	1.444	<.0000
#4	<.0000	41.42	.0614	.5636	5.472	1.506	<.0000

Elem	Zn
Units	ppm
Avge	.1046
SDev	.0559
%RSD	53.47
#1	.1762
#2	.1202
#3	.0708
#4	.0511

006680

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ENCYCLE[redacted]S INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA #247	WID # 00150323	LAB NO. CC 55-90
WASTE DESCRIPTION: PHOTO WASTE		VOLUME: 4815 Gallon
WASTE CODE(S): D007, D011	LOAD # 3264	DATE: 1-20-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	3,9	
Al	1,1	
As	Ø	
Au	Ø	
Ba	<0,1	
Ca	36,6	
Cd	<0,1	
Co	Ø	
Cr	12,6	
Cu	Ø	
Fe	22,6	
Mg	6,1	
Mn	<0,1	
Na	626,3	
Ni	<1,0	
P	36,3	
Pb	Ø	
Se	Ø	
Si	4,0	
Sn	1,6	
V	Ø	
Zn	<1,0	

pH 8,9	COLOR GREY	F N/A
Sp. Gr. 1,03	PHASES Single	CL
Total CN - N/A	ACIDITY N/A	NO2
Reac. CN - N/A	ALKALINITY N/A	Br
NH3 as N 34	ODOR Mild	NO3
TOC 396,2		PO4
VOC N/A		SO4

PROCESS STAGES

		PARAMETERS		
		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: Nick Gallegos

LAB MANAGER MZ 1/20/92

REAGENT COST
006681

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 16989 Operator: NG
Run Time: 01/20/92 08:51:19
Comment: CC-55-90 1-20-92
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.892	1.128	<.0000	.1131	.0398	36.63	.0257
SDev	.067	.189	.2459	.0593	.0059	.31	.0056
%RSD	1.718	16.77	38.12	52.37	14.75	.8461	21.81
#1	3.822	.8711	<.0000	.0766	.0375	36.51	.0295
#2	3.847	1.327	<.0000	.1282	.0466	36.34	.0219
#3	3.949	1.148	<.0000	.1900	.0421	36.61	.0314
#4	3.949	1.164	<.0000	.0578	.0330	37.06	.0200

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0183	12.62	<.0000	22.58	6.114	.0760	626.3
SDev	.0139	.10	.0227	.31	.182	.0042	5.5
%RSD	73.91	.7646	1.936	1.371	2.978	5.531	.8707
#1	.0016	12.56	<.0000	22.18	5.969	.0718	628.1
#2	.0329	12.54	<.0000	22.52	6.370	.0818	621.7
#3	.0266	12.63	<.0000	22.89	6.114	.0751	622.3
#4	.0141	12.75	<.0000	22.73	6.002	.0751	633.2

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1486	36.33	<.0000	.3441	4.042	1.572	<.0000
SDev	.0418	.33	.0522	.2202	.201	.224	.0165
%RSD	28.15	.9068	93.18	63.97	4.977	14.23	39.67
#1	.1636	36.11	<.0000	.1475	3.836	1.537	<.0000
#2	.0874	36.42	<.0000	.6195	3.954	1.406	<.0000
#3	.1821	36.03	.0156	.4228	4.307	1.898	<.0000
#4	.1615	36.76	<.0000	.1868	4.072	1.447	<.0000

Elem	Zn
Units	ppm
Avge	.9725
SDev	.0649
%RSD	6.668
#1	1.051
#2	.9354
#3	.9981
#4	.9057

006682

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ENCYCLE-TEXAS, INC.

6500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA # 246	WID # 00150322	LAB NO. CC 55-90	
WASTE DESCRIPTION: PHOTONASTE		VOLUME: 4,568 GAL	
WASTE CODE(S): D007/11	LOAD # 3257	DATE: 1-16-92	

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm
Ag	3.4	
Al	<0.1	
As	Ø	
Au	0.1	
Ba	<0.1	
Ca	32.5	
Cd	Ø	
Co	<0.1	
Cr	Ø	
Cu	15.5	
Fe	22.5	
Mg	6.5	
Mn	<1.0	
Na	615	
Ni	<1.0	
P	29.1	
Pb	<1.0	
Se	Ø	
Si	4.2	
Sn	1.9	
V	<0.1	
Zn	<1.0	

pH 8.3	COLOR GREY	F	
Sp. Gr. 1.01	PHASES S	Cl	
Total CN-	ACIDITY	NO2	
Reac. CN-	ALKALINITY	Br	
NH3 as N 289	ODOR M	NO3	
TOC 438.5		PO4	
VOC <20		SO4	

PROCESS STAGES

PARAMETERS

		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS: CN/F/ N.D.

CHEMISTS: J. Zmierzlowska

LAB MANAGER ME 1-16-92

REAGENT COST 006683

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 16917 Operator: HMZ
Run Time: 01/16/92 09:57:54
Comment: CC-55-90 SHIPMENT # 246
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.386	.0664	<.0000	.1088	.0251	32.45	<.0000
SDev	.041	.1528	.3634	.0077	.0048	.30	.0064
%RSD	1.214	230.3	119.0	7.047	19.25	.9199	101.0
#1	3.400	<.0000	<.0000	.1173	.0293	32.21	.0030
#2	3.325	.2313	<.0000	.1097	.0209	32.19	<.0000
#3	3.400	<.0000	<.0000	.0987	.0209	32.63	<.0000
#4	3.417	.1508	.2046	.1097	.0293	32.78	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0165	<.0000	15.51	22.48	6.487	.1398	615.0
SDev	.0095	.0380	.11	.52	.110	.0050	3.6
%RSD	57.74	2.271	.7002	2.331	1.698	3.595	.5776
#1	.0083	<.0000	15.52	23.16	6.457	.1376	614.0
#2	.0248	<.0000	15.36	22.22	6.376	.1347	610.4
#3	.0083	<.0000	15.59	21.95	6.477	.1406	618.1
#4	.0248	<.0000	15.58	22.61	6.639	.1464	617.5

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1916	29.11	.1711	.4148	4.220	1.909	.0414
SDev	.0217	.83	.1692	.2881	.181	.132	.0097
%RSD	11.32	2.841	98.90	69.46	4.299	6.899	23.57
#1	.1977	30.22	.2595	.7915	4.013	2.002	.0414
#2	.1834	28.22	.2595	.4863	4.174	1.921	.0345
#3	.2181	29.05	<.0000	.1621	4.240	1.719	.0345
#4	.1670	28.95	.2477	.2193	4.451	1.994	.0551

Elem	Zn
Units	ppm
Avge	.2378
SDev	.0026
%RSD	1.089
#1	.2378
#2	.2346
#3	.2378
#4	.2409

006684

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ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA # 245	WID # 00150321	LAB NO. CC 55-90
WASTE DESCRIPTION: PHOTOWASTE		VOLUME: 4,580 GAL
WASTE CODE(S): D007, 11	LOAD # 3243	DATE: 01-14-92

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm
Ag	4.5	
Al	<1.0	
As	Ø	
Au	Ø	
Ba	Ø	
Ca	37.4	
Cd	Ø	
Co	Ø	
Cr	<0.5	
Cu	<1.0	
Fe	25.5	
Mg	14.6	
Mn	<1.0	
Na	820.7	
Ni	<0.1	
P	43.8	
Pb	<1.0	
Se	Ø	
Si	4.9	
Sn	2.5	
V	Ø	
Zn	<1.0	

pH 8.7	COLOR GREY	F	
Sp. Gr. 1.00	PHASES S	CL	
Total CN-	ACIDITY	NO2	
Reac. CN-	ALKALINITY	Br	
NH3 as N 250	ODOR M	NO3	
TOC 536.9		PO4	
VOC <50		SO4	

PROCESS STAGES

	PARAMETERS		
	pH	REDOX	T°C
INITIAL 100 mL			

COMMENTS: CN(F) N.D.

CHEMISTS: H. Zmierzlowska

LAB MANAGER MZ 1-14-92

REAGENT COST 006685

CONFIDENTIAL

Analysis Report Tue 01-14-92 09:14:53 AM page 1

Method: ENCYCLE Sample Name: SAMPLE # 16768 Operator: HMZ
Run Time: 01/14/92 09:12:42
Comment: CC-55-90 SHIPMENT # 245
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.477	.4945	.1530	.0404	.0079	37.35	<.0000
SDev	.116	.0772	.1844	.0801	.0100	.38	.0183
%RSD	2.583	15.60	120.6	198.4	126.7	1.015	46.98
#1	4.556	.4100	.3169	.1280	.0113	36.91	<.0000
#2	4.556	.4523	.1566	.0772	.0204	37.19	<.0000
#3	4.486	.5791	.2440	.0136	.0023	37.55	<.0000
#4	4.311	.5368	<.0000	<.0000	<.0000	37.76	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	<.0000	.2131	.1989	25.53	14.62	.2213	820.7
SDev	.0200	.0316	.0184	.62	.07	.0047	7.5
%RSD	73.42	14.83	9.239	2.442	.4905	2.128	.9102
#1	<.0000	.2254	.2217	26.44	14.71	.2189	813.0
#2	<.0000	.2519	.2052	25.41	14.56	.2252	816.3
#3	<.0000	.1913	.1803	25.27	14.56	.2252	823.6
#4	<.0000	.1837	.1886	25.02	14.66	.2158	829.7

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0534	43.80	.1144	<.0000	4.947	2.480	.0166
SDev	.0245	.40	.1351	.1284	.144	.116	.0298
%RSD	45.80	.9082	118.1	267.9	2.919	4.690	179.2
#1	.0821	44.03	.3083	<.0000	4.749	2.359	.0592
#2	.0623	43.68	.0159	.1331	4.971	2.560	.0148
#3	.0446	44.20	.1049	<.0000	4.971	2.404	<.0000
#4	.0248	43.30	.0286	<.0000	5.096	2.597	.0000

Elem	Zn
Units	ppm
Avge	.2662
SDev	.0065
%RSD	2.447
#1	.2679
#2	.2611
#3	.2611
#4	.2747

006686

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ENCYCLE-TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300

P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

REPORT

LIQUIDS

CLIENT: NASA # 245 | WID # 00150320 | LAB NO. CC 55-90

WASTE DESCRIPTION: PHOTOWASTE | VOLUME: 4,954 GAL

WASTE CODE(S): D007, 11 | LOAD # 3232 | DATE: 1-9-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	6.3	
Al	1.3	
As	0	
Au	<0.1	
Ba	<0.1	
Ca	37.1	
Cd	0	
Co	<1.0	
Cr	<1.0	
Cu	<1.0	
Fe	23.5	
Mg	9.1	
Mn	1.9	
Na	735.1	
Ni	<1.0	
P	35	
Pb	<1.0	
Se	0	
Si	7.9	
Sn	1.9	
V	<0.1	
Zn	<1.0	

pH 8.6 COLOR GREY

Sp. Gr. 1.02 PHASES 5

Total CN- ACIDITY

Reac. CN- ALKALINITY

NH3 gas N 470 ODOR M

TOC 610.8

VOC <100

F
Cl
NO2
Br
NO3
PO4
SO4

PROCESS STAGES

PARAMETERS

		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS: CN (F) N.D.

CHEMISTS: H. Lucerzylowski

LAB MANAGER MZ 1/9/92

REAGENT COST

006687

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Method: ENCYCLE Sample Name: SAMPLE # 16666 Operator: HMZ
Run Time: 01/09/92 10:29:35
Comment: CC-55-90 SHIPMENT # 243
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.299	1.280	<.0000	.0736	.0316	37.13	<.0000
SDev	.124	.079	.0763	.0417	.0023	.47	.0051
%RSD	1.965	6.201	32.75	53.10	7.143	1.270	16.65
#1	6.477	1.177	<.0000	.1214	.0304	36.67	<.0000
#2	6.257	1.257	<.0000	.1072	.0304	36.73	<.0000
#3	6.274	1.346	<.0000	.0458	.0304	37.45	<.0000
#4	6.189	1.338	<.0000	.0399	.0350	37.61	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.3760	.6343	.5199	23.45	9.062	1.865	735.1
SDev	.0313	.0292	.0141	.56	.149	.012	4.6
%RSD	8.317	4.600	2.711	2.379	1.639	.6674	.6260
#1	.3730	.6520	.5385	23.16	9.148	1.880	730.9
#2	.4142	.6096	.5220	23.13	9.008	1.868	731.5
#3	.3789	.6096	.5137	23.24	8.379	1.856	739.8
#4	.3378	.6662	.5054	24.29	9.212	1.853	738.3

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2622	34.99	.1881	<.0000	7.893	1.876	.0723
SDev	.0363	.30	.1307	.1304	.150	.078	.0198
%RSD	13.83	.8548	69.50	294.8	1.901	4.176	27.36
#1	.2223	34.70	.2132	<.0000	7.672	1.921	.0843
#2	.2513	35.21	.0376	<.0000	7.998	1.761	.0775
#3	.3093	35.29	.1505	<.0000	7.973	1.894	.0430
#4	.2658	34.77	.3512	.0934	7.928	1.930	.0843

Elem	Zn
Units	ppm
Avge	.2109
SDev	.0226
%RSD	10.69
#1	.1873
#2	.2042
#3	.2109
#4	.2413

NH_3 470
TOC

006688

CONFIDENTIAL

ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300

P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA #243	WID # 00150331	LAB NO. CC 53-90
WASTE DESCRIPTION: PHOTO WASTE		VOLUME: 4689G
WASTE CODE(S): D002, 11	LOAD # 3203	DATE: 1-3-92

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	24.9	
Al	19.1	
As	Ø	
Au	Ø	
Ba	<0.1	
Ca	34.5	
Cd	<0.1	
Co	1.8	
Cr	87.3	
Cu	13.9	
Fe	46.2	
Mg	5.9	
Mn	<1.0	
Na	1,455	
Ni	<0.1	
P	2.2	
Pb	<1.0	
Se	Ø	
Si	3.3	
Sn	<1.0	
V	Ø	
Zn	1.1	

pH 8.5	COLOR Brown		F
Sp. Gr. 1.01	PHASES 1		CL
Total CN-	ACIDITY		NO2
Reac. CN-	ALKALINITY		Br
NH3 as N 860 ppm	ODOR M		NO3
TOC 3,408			PO4
VOC <200			SO4

PROCESS STAGES

PARAMETERS

		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS: CN (F) N.D.

CHEMISTS: Sl Wendland
H. Zwierzykowski

LAB MANAGER MZ 1/3/92

REAGENT COST

006689

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 16474 Operator: HMZ
Run Time: 01/03/92 11:26:01
Comments: CC-55-90 SHIPMENT
Mode: CONC Conv Factor: 10

Elem	Ag	Al	As	Au	B	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	54.14	19.78	2521	.2531	.2471	74.47	.0174
Dev	.74	.08	1.01	.0225	.0026	.84	.0042
%RSD	1.11	.432	39.5	11.3	1.05	1.13	23.87
#1	54.74	19.12	.0000	1434	.2474	74.74	.0147
#2	53.47	19.80	.3477	.2501	.2494	73.94	.0184
#3	55.22	19.11	1364	.2427	.2443	74.62	.0198
#4	54.13	19.79	1.0001	.3000	.2475	74.71	.0156

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.211	77.32	17.21	16.13	3.223	.7437	1.453
Dev	.033	.33	.41	.1	.021	.0049	.2
%RSD	2.713	.4268	2.356	.6216	.6474	.6587	13.73
#1	1.223	76.96	17.32	16.07	3.201	.7432	1.212
#2	1.213	77.23	17.54	16.22	3.221	.7491	1.674
#3	1.169	77.67	17.07	16.11	3.244	.7439	1.453
#4	1.241	77.43	17.21	16.19	3.224	.7387	1.474

Elem	Ni	P	Pb	Sb	Se	Si	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2516	2.274	.1634	7421	.1114	5.023	.2005
Dev	.0423	.329	.1799	.0999	.111	.331	.0264
%RSD	16.81	14.47	110.1	13.46	99.71	6.591	13.19
#1	.2414	2.366	.3401	.8021	.2139	5.333	.2225
#2	.2135	1.914	.1107	.7443	.1139	5.016	.1995
#3	.2737	2.362	.0429	.7329	.1139	5.027	.1995
#4	.2777	2.353	.0334	.7392	.1139	4.717	.1905

Elem	Zn
Units	ppm
Avg	1.147
Dev	.054
%RSD	4.701
#1	1.177
#2	1.177
#3	1.177
#4	1.177

NH3 860

ENCYCLE /TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT:	WID #	LAB NO. CC
WASTE DESCRIPTION:		VOLUME:
WASTE CODE(S):	LOAD #	DATE:

ICP	PRE-SCREEN	POST-TREATMENT	pH	COLOR	F
	ppm	ppm	Sp. Gr.	PHASES	CL
Ag			Total CN-	ACIDITY	NO2
Al			Reac. CN-	ALKALINITY	Br
As			NH3 as N	ODOR	NO3
Au			TOC		PO4
Ba			VOC		SO4
Ca					
Cd					
Co					
Cr					
Cu					
Fe					
Mg					
Mn					
Na					
Ni					
P					
Pb					
Se					
Si					
Sn					
V					
Zn					

PROCESS STAGES

PARAMETERS

		pH	REDOX	T °C
INITIAL	100 mL			

COMMENTS:

CHEMISTS:

LAB MANAGER

REAGENT COST
006691

CONFIDENTIAL

CHECK CN
DRAGER TUBE
WHEN Fe & TCC ARE
HIGH and pH > 7

396.2

Shipment
CC 55-90

10-91 - 12-91

SHIP 216 (OCT 1941)

006692

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ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

REPORT

LIQUIDS

CLIENT: NASA #242 | WID # 0015030 | LAB NO. CC 55-70
WASTE DESCRIPTION: PHOTO WASTE | VOLUME: 46576
WASTE CODE(S): D007,11 | LOAD # 3189 | DATE: 12-27-91

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	16.5	
Al	6.0	
As	<0.10	
Au	<0.10	
Ba	<0.10	
Ca	37.5	
Cd	<0.10	
Co	<0.10	
Cr	0.4	
Cu	0.4	
Fe	30.5	
Mg	22.3	
Mn	<0.10	
Na	1,355.0	
Ni	<0.10	
P	32.4	
Pb	0.7	
Se	<0.10	
Si	7.4	
Sn	2.2	
V	<0.10	
Zn	0.3	

pH 8.7 COLOR Brown F
Sp. Gr. 1.04 PHASES 1 Cl
Total CN- ACIDITY NO2
Reac. CN- ALKALINITY Br
NH3 as N 600 ODOR (1) NO3
TOC 748.4 ppm PO4
VOC SO4

PROCESS STAGES

	PARAMETERS		
	pH	REDOX	T°C
INITIAL 100 mL			

COMMENTS:

CHEMISTS: SWendland

LAB MANAGER C Payne 12.27.91

REAGENT COST
006693

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2

006694

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5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA #241 | WID # 00513591 | LAB NO. CC 5570

WASTE DESCRIPTION: Photowaste | VOLUME: 4857G

WASTE CODE(S): D007, 11 | LOAD # 3184 | DATE: 12-20-91

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm
Ag	25.7	
Al	5.9	
As	⊖	
Au	⊖	
Ba	⊖	
Ca	38.5	
Cd	⊖	
Co	<1.0	
Cr	84.6	
Cu	3.7	
Fe	126.5	
Mg	61.2	
Mn	<1.0	
Na	1455	
Ni	<1.0	
P	14.6	
Pb	⊖	
Se	⊖	
Si	6.7	
Sn	1.6	
V	⊖	
Zn	<1.0	

pH	8.7	COLOR	BROWN	F
Sp. Gr.	1.05	PHASES	5	CL
Total CN-		ACIDITY		NO2
Reac. CN-		ALKALINITY		Br
NH3 as N	900	ODOR	M	NO3
TOC	3011 ppm			PO4
VOC	190 ppm			SO4

PROCESS STAGES

		PARAMETERS pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: B. Carmody

LAB MANAGER MZ 12-20-91

REAGENT COST

006695

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006696

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ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA # 240	WID # CO150301	LAB NO. CC 55-90	
WASTE DESCRIPTION: PHOTONASTE		VOLUME: 4,540G	
WASTE CODE(S): D007, 11	LOAD # 3/67	DATE: 12-17-91	

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	120.6	
Al	4.1	
As	Ø	
Au	<1.0	
Ba	<1.0	
Ca	40.7	
Cd	Ø	
Co	Ø	
Cr	<1.0	
Cu	<1.0	
Fe	30.7	
Mg	39.4	
Mn	<1.0	
Na	1,130	
Ni	Ø	
P	21.9	
Pb	Ø	
Se	Ø	
Si	5.7	
Sn	<1.0	
V	Ø	
Zn	<1.0	

pH 7.7	COLOR GREEN	F	
Sp. Gr. 1.00	PHASES S	Cl	
Total CN-	ACIDITY	NO2	
Reac. CN-	ALKALINITY	Br	
NH3 as N 370	ODOR M	NO3	
TOC 384.9		PO4	
VOC <50		SO4	

PROCESS STAGES

PARAMETERS

INITIAL 100 mL	pH	REDOX	T°C

COMMENTS:

CHEMISTS: H. Kwiecryglowski

LAB MANAGER ME 12-17-91

REAGENT COST 006697

CONFIDENTIAL

Elem	Ag	Al	As	Au	B	Ca	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	[illegible]	[illegible]	< .0000	.1022	0.01	40.20	[illegible]
StDev	[illegible]	[illegible]	.0007	.0578	.0000	3.2	[illegible]
%RSD	[illegible]	[illegible]	[illegible]	56.55	13.76	8.168	[illegible]
#1	119.1	4.[illegible]	< .0000	.0667	.0435	40.29	< .0000
#2	120.8	3.741	< .0000	.0541	.0444	40.52	< .0000
#3	120.[illegible]	3.944	< .0000	.1701	.0505	40.82	< .0000
#4	122.4	4.335	< .0000	.1781	.0498	41.13	< .0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0116	.2883	.0809	30.48	39.63	.0652	1130.
StDev	.0154	.0107	.0078	.98	.63	.0061	4.
%RSD	135.0	3.542	9.606	3.203	1.093	13.39	.3320
#1	.0095	.2873	.0809	30.23	39.00	.0626	1132.
#2	.0228	.2795	.0714	29.99	39.29	.0390	1129.
#3	< .0000	.2834	.0809	30.37	39.39	.0661	1133.
#4	.0228	.3028	.0905	32.14	40.02	.0539	1124.

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	< .0000	21.88	.0839	< .0000	5.682	.7432	< .0000
StDev	.0195	.25	.1559	.3859	.3056	.0825	.0132
%RSD	337.2	1.159	185.7	181.6	5.392	11.10	217.7
#1	< .0000	21.51	.1847	< .0000	5.507	.6918	< .0000
#2	.0111	21.92	.0056	< .0000	5.430	.7999	< .0000
#3	< .0000	22.05	< .0000	< .0000	5.674	.7621	< .0000
#4	.0047	22.03	.2406	.2833	6.115	.7891	.0101

Elem	Zn
Units	ppm
Avge	.0644
StDev	.0113
%RSD	17.60
#1	.0528
#2	.0673
#3	.0586
#4	.0788

384.9

370

006698

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ENCYCLE/TEXAS, INC

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA	WID # 00150300	LAB NO. CC 55-70
WASTE DESCRIPTION: Photowaste		VOLUME:
WASTE CODE(S): D007, 11	LOAD # 3149	DATE: 12-13-91

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	107.5	
Al	4.2	
As	~~0~~	
Au	<0.1	
Ba	<0.1	
Ca	37.2	
Cd	~~0~~	
Co	<0.1	
Cr	1.6	
Cu	<1.0	
Fe	41.6	
Mg	67.8	
Mn	<0.1	
Na	1366	
Ni	<0.1	
P	37.4	
Pb	<1.0	
Se	<1.0	
Si	5.4	
Sn	1.4	
V	~~0~~	
Zn	<1.0	

pH 8.2	COLOR GREEN	F
Sp. Gr. 1.04	PHASES 1	CL
Total CN- N.D.	ACIDITY	NO2
Reac. CN-	ALKALINITY	Br
NH3 as N 570 ppm	ODOR MILD	NO3
TOC 736 ppm		PO4
VOC		SO4

PROCESS STAGES

PARAMETERS

		pH	REDOX	T °C
INITIAL	100 mL			

COMMENTS: N.D. Dräger

CHEMISTS: Barbara Cassidy

LAB MANAGER C. Payne 12-13-91

REAGENT COST 006699

CONFIDENTIAL

Operator

Elem	Ag	Al	As	[illegible]	[illegible]	[illegible]	[illegible]
Units	ppm	ppm	ppm	[illegible]	ppm	ppm	[illegible]
Avge	[illegible]	[illegible]	< .0000	[illegible]	[illegible]	[illegible]	[illegible]
SDev	[illegible]	[illegible]	[illegible]	.0631	.0608	[illegible]	[illegible]
%RSD	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
#1	[illegible]	4.065	< .0000	.1574	.1246	37.03	< .0000
#2	106.6	4.236	< .0000	.0858	.0449	37.16	< .0000
#3	107.6	4.303	< .0000	.0955	.0399	37.19	< .0000
#4	107.6	4.265	< .0000	.0038	.0449	37.58	< .0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0360	1.612	.4282	41.55	67.79	.0377	1366.
SDev	.0160	.022	.0330	.72	.47	.0039	9.
%RSD	44.41	1.383	7.715	1.738	.6982	10.33	.6297
#1	.0553	1.622	.4723	42.60	67.43	.0422	1364.
#2	.0166	1.587	.3929	41.03	67.50	.0332	1362.
#3	.0382	1.601	.4194	41.11	67.76	.0392	1359.
#4	.0332	1.637	.4282	41.46	68.47	.0362	1378.

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0222	37.39	.4012	.2270	5.422	1.402	.0036
SDev	.0228	.21	.1530	.2475	.082	.053	.0107
%RSD	102.7	.5673	38.13	109.1	1.507	3.787	300.0
#1	.0395	37.18	.5936	.2143	5.324	1.432	.0196
#2	<.0000	37.31	.3078	.2143	5.463	1.398	<.0000
#3	.0375	37.37	.2528	.5422	5.391	1.329	<.0000
#4	.0217	37.68	.4507	<.0000	5.510	1.449	<.0000

Elem	Zn
Units	ppm
Avge	.0467
SDev	.0109
%RSD	23.41
#1	.0573
#2	.0318
#3	.0460
#4	.0516

NH_3 510 ppm

ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: LAST #235	WID # CCISC 299	LAB NO. CC 55-90
WASTE DESCRIPTION: PAINT WASTE		VOLUME: 3421 GAL
WASTE CODE(S): D001, 11	LOAD # 3125	DATE: 12/10/91

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	140.8	
Al	4.7	
As	Ø	
Au	Ø	
Ba	<0.1	
Ca	60.7	
Cd	Ø	
Co	<0.1	
Cr	18.5	
Cu	5.0	
Fe	34.8	
Mg	76.2	
Mn	<0.1	
Na	986.1	
Ni	<0.1	
P	38.8	
Pb	Ø	
Se	<0.1	
Si	5.26	
Sn	1.3	
V	Ø	
Zn	1.4	

pH 6.20 COLOR BL/GR
Sp. Gr. 1.04 PHASES 1
Total CN- ACIDITY
Reac. CN- ALKALINITY
NH3 as N 560 ppm ODOR mild
TOC - 461 ppm
VOC

F	
Cl	
NO2	
Br	
NO3	
PO4	
SO4	

PROCESS STAGES

PARAMETERS

INITIAL	100 mL	pH	REDOX	T °C

COMMENTS:

CHEMISTS: MA / E.P.

LAB MANAGER

REAGENT COST
006701

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 15638 Operator: JRA
Run Time: 12/10/91 13:11:19
Comment: NASA
Mode: CONC Corr. Factor: x 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	14.08	.4745	<.0000	<.0000	.0089	6.076	.0000
SDev	.06	.0156	.0184	.0033	.0003	.027	.0013
%RSD	.4011	3.284	26.76	62.26	2.778	.4408	8753e6
#1	14.06	.4536	<.0000	<.0000	.0090	6.108	.0016
#2	14.01	.4722	<.0000	<.0000	.0090	6.048	<.0000
#3	14.12	.4891	<.0000	<.0000	.0085	6.087	.0004
#4	14.13	.4832	<.0000	<.0000	.0090	6.062	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0020	1.845	.5033	3.484	7.620	.0071	98.61
SDev	.0027	.003	.0040	.076	.027	.0003	.07
%RSD	130.7	.1731	.7880	2.195	.3508	4.348	.0688
#1	.0051	1.844	.5090	3.550	7.614	.0076	98.58
#2	.0016	1.842	.5011	3.375	7.589	.0070	98.56
#3	<.0000	1.849	.5029	3.520	7.653	.0070	98.71
#4	.0028	1.846	.5002	3.491	7.623	.0070	98.57

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0430	3.888	<.0000	.0180	.5259	.1384	<.0000
SDev	.0023	.051	.0107	.0275	.0182	.0168	.0027
%RSD	5.303	1.313	20.48	152.5	3.463	12.13	27.45
#1	.0436	3.852	<.0000	.0150	.5134	.1473	<.0000
#2	.0404	3.959	<.0000	.0062	.5349	.1182	<.0000
#3	.0422	3.850	<.0000	<.0000	.5470	.1562	<.0000
#4	.0458	3.892	<.0000	.0572	.5082	.1319	<.0000

Elem	Zn
Units	ppm
Avge	.1426
SDev	.0032
%RSD	2.233
#1	.1472
#2	.1402
#3	.1421
#4	.1408

x 10

006702

ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA # 237	WID # 00150298	LAB NO. CC	55-90
WASTE DESCRIPTION: PHOTOWASTE		VOLUME:	4,646 GAL
WASTE CODE(S): D007, 11	LOAD # 3108	DATE:	12-6-91

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm
Ag	253.7	
Al	7.0	
As	Ø	
Au	Ø	
Ba	<0.1	
Ca	34.6	
Cd	Ø	
Co	Ø	
Cr	5.2	
Cu	8.2	
Fe	39.1	
Mg	25.1	
Mn	<0.1	
Na	1,568	
Ni	<0.1	
P	44.5	
Pb	<1.0	
Se	Ø	
Si	4.8	
Sn	<1.0	
V	Ø	
Zn	<1.0	

pH	9.3	COLOR	BROWN
Sp. Gr.	1.02	PHASES	S
Total CN-		ACIDITY	
Reac. CN-		ALKALINITY	
NH3 as N	410	ODOR	M
TOC	1035		
VOC	<100		

F
CL
NO2
Br
NO3
PO4
SO4

PROCESS STAGES

PARAMETERS

INITIAL	100 mL	pH	REDOX	T°C

COMMENTS: CN(F) M.D. DRAGER

CHEMISTS: H. Zwierzykowska

LAB MANAGER MZ 12-6-91

REAGENT COST 006703

CONFIDENTIAL

Sequence # 1 Wed [illegible] 11 10:14:14 AM

Position: MCYCLE Sample Name: AMPLE # 1557 Operator: MM
Run Time: 12/04/91 10:13:56
Comment: CC-55-90 SHIPMENT # 917
Mode: CONC Conc. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	253.7	7.013	< .0000	< .0000	.0430	34.59	< .0000
SDev	2.8	.128	.0080	.0334	.0041	.30	.0025
%RSD	1.091	1.831	72.19	166.7	9.600	.8552	12.85
#1	251.0	6.858	< .0000	.0246	.0430	34.30	< .0000
#2	252.7	7.077	< .0000	< .0000	.0430	34.44	< .0000
#3	253.8	7.156	< .0000	< .0000	.0380	34.63	< .0000
#4	257.5	6.980	< .0000	< .0000	.0481	34.98	< .0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0086	5.189	8.160	39.11	25.12	.0774	1568.
SDev	.0065	.038	.041	.43	.22	.0092	10.
%RSD	310.3	.7359	.5007	1.088	.8683	11.94	.6413
#1	.0456	5.163	8.139	39.44	24.85	.0735	1561.
#2	< .0000	5.152	8.130	38.96	25.11	.0797	1562.
#3	.0057	5.210	8.148	38.57	25.12	.0673	1565.
#4	.0000	5.232	8.220	39.46	25.38	.0890	1582.

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0773	44.53	.3786	< .0000	4.769	.5550	< .0000
SDev	.0260	.54	.0909	.2289	.134	.1378	.0171
%RSD	33.59	1.222	24.02	118.6	2.847	24.82	46.68
#1	.1101	44.47	.4615	< .0000	4.580	.3732	< .0000
#2	.0847	44.29	.4396	.1068	4.776	.5247	< .0000
#3	.0508	44.07	.2625	< .0000	4.824	.6459	< .0000
#4	.0635	45.31	.3509	< .0000	4.898	.6763	< .0000

Elem	Zn
Units	ppm
Avge	.3458
SDev	.0080
%RSD	2.321
#1	.3564
#2	.3412
#3	.3382
#4	.3473

006704

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ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA #236 | WID # CO150297 | LAB NO. CC 55-90
WASTE DESCRIPTION: PHOTOWASTE | VOLUME: 4,838 GAL
WASTE CODE(S): D007, 11 | LOAD # 3103 | DATE: 12-5-91

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	70.1	
Al	2.2	
As	Ø	
Au	<0.2	
Ba	<0.1	
Ca	39.4	
Cd	Ø	
Co	<0.1	
Cr	4.7	
Cu	18.5	
Fe	37	
Mg	58.2	
Mn	<1.0	
Na	1,220	
Ni	<1.0	
P	30.5	
Pb	<1.0	
Se	Ø	
Si	5.3	
Sn	<1.0	
V	Ø	
Zn	<1.0	

pH	8.5	COLOR	GREY
Sp. Gr.	1.02	PHASES	S
Total CN-		ACIDITY	
Reac. CN-		ALKALINITY	
NH3 as N	150	ODOR	M
TOC	738		
VOC	<50		

F	
CL	
NO2	
Br	
NO3	
PO4	
SO4	

PROCESS STAGES

PARAMETERS

		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS: CN(F) N.D.

CHEMISTS: M. Zwierzykowska

LAB MANAGER ME 12-5-91

REAGENT COST

006705

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 156.16 Operator: JMT
Run Time: 12/06/91 09:22:45
Comment: CC-55-90 SHIPMENT # 236
Mode: CONC Conc. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	70.07	2.218	< .0000	.1106	.0532	39.36	< .0000
SDev	.89	.220	.2115	.0784	.0022	.61	.0000
%RSD	1.271	9.927	42.88	71.06	5.000	1.549	40.41
#1	68.87	2.492	< .0000	.2158	.0577	38.56	< .0000
#2	70.36	1.968	< .0000	.0274	.0524	39.38	< .0000
#3	70.05	2.166	< .0000	.1090	.0524	39.68	< .0000
#4	70.99	2.267	< .0000	.0893	.0524	40.03	< .0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0314	4.665	18.45	36.97	58.19	.1099	1220.
SDev	.0197	.048	.21	.31	.90	.0080	14.
%RSD	62.86	1.031	1.124	.8511	1.539	7.261	1.184
#1	.0561	4.609	18.15	36.60	56.99	.1173	1200.
#2	.0099	4.654	18.57	37.21	58.13	.1136	1225.
#3	.0363	4.673	18.45	36.81	58.51	.1099	1221.
#4	.0231	4.725	18.61	37.24	59.12	.0988	1234.

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2537	30.53	.7508	.0722	5.332	.6116	< .0000
SDev	.0479	.49	.1423	.2104	.114	.0450	.0364
%RSD	18.86	1.590	18.95	291.4	2.135	7.361	1728.
#1	.2630	29.87	.9585	< .0000	5.359	.5549	.0484
#2	.2651	30.55	.7258	< .0000	5.172	.6442	< .0000
#3	.1866	31.04	.6704	< .0000	5.440	.5961	< .0000
#4	.3001	30.67	.6483	.3875	5.359	.6511	< .0000

Elem	Zn
Units	ppm
Avge	.6393
SDev	.0080
%RSD	1.260
#1	.6324
#2	.6446
#3	.6324
#4	.6477

006706

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ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA #235 | WID # 00150296 | LAB NO. CC 55-90
WASTE DESCRIPTION: PHOTONASTE | VOLUME: 4,315 GAL
WASTE CODE(S): D007, 11 | LOAD # 3094 | DATE: 12-3-91

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	100.7	
Al	5.7	
As	Ø	
Au	Ø	
Ba	<0.1	
Ca	41	
Cd	Ø	
Co	<0.1	
Cr	7.7	
Cu	1.6	
Fe	32.8	
Mg	26	
Mn	<1.0	
Na	983.7	
Ni	<1.0	
P	33.1	
Pb	<1.0	
Se	Ø	
Si	6.3	
Sn	1.4	
V	<1.0	
Zn	3.8	

pH 8.0	COLOR GREEN	F	
SD. GR. 1.01	PHASES S	CL	
Total CN-	ACIDITY	NO2	
Reac. CN-	ALKALINITY	Br	
NH3 as N 230	ODOR M	NO3	
TOC 599.7		PO4	
VOC <100		SO4	

PROCESS STAGES

PARAMETERS

INITIAL	100 mL	pH	REDOX	T°C

COMMENTS: CN(F) N.D. DRÄGER

CHEMISTS: J. Zwierzykowski

LAB MANAGER MZ 12-3-91

REAGENT COST
006707

CONFIDENTIAL

Method: 12PPCLP Sample Name: SAMPLE # 15563 Operator: SLW
Run Time: 12/03/91 10:23:08
Comment: CC-55-90
Mode: CONC Conc. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	100.7	5.715	<.0000	<.0000	.0565	40.95	<.0000
SDev	1.4	.288	.0441	.0259	.0026	.45	.0150
%RSD	1.362	5.039	10.06	69.12	4.762	1.087	19.42
#1	99.55	5.379	<.0000	<.0000	.0539	40.48	<.0000
#2	99.55	5.686	<.0000	<.0000	.0539	40.67	<.0000
#3	102.1	6.082	<.0000	<.0000	.0539	41.33	<.0000
#4	101.6	5.713	<.0000	<.0000	.0584	41.34	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0292	7.746	1.585	32.78	26.00	.2548	983.7
SDev	.0154	.061	.076	.55	.22	.0135	7.6
%RSD	52.63	.7907	4.819	1.680	.8308	5.292	.7719
#1	.0461	7.668	1.497	32.75	25.94	.2617	977.1
#2	.0338	7.729	1.560	33.35	25.73	.2685	977.6
#3	.0277	7.805	1.606	32.04	26.14	.2513	992.6
#4	.0092	7.783	1.678	32.97	26.20	.2376	987.4

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4357	33.05	.7467	<.0000	6.326	1.436	.1265
SDev	.0368	.34	.0808	.2747	.231	.120	.0119
%RSD	8.437	1.017	10.82	64.59	3.657	8.394	9.375
#1	.3933	32.60	.8266	<.0000	6.061	1.408	.1403
#2	.4199	33.17	.8060	<.0000	6.218	1.574	.1324
#3	.4526	33.05	.6824	<.0000	6.449	1.473	.1166
#4	.4771	33.40	.6721	<.0000	6.578	1.289	.1166

Elem	Zn
Units	ppm
Avge	3.833
SDev	.038
%RSD	.9952
#1	3.786
#2	3.817
#3	3.860
#4	3.868

230

006708

CONFIDENTIAL

ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA #234	WID # CO150295	LAB NO. CC 55-90	
WASTE DESCRIPTION: PHOTONASTE		VOLUME: 4,570 GAL	
WASTE CODE(S): D007, 11	LOAD # 3096	DATE: 12-2-91	

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm
Ag	137.4	
Al	10.7	
As	Ø	
Au	<0.1	
Ba	<0.1	
Ca	41.8	
Cd	Ø	
Co	Ø	
Cr	20.4	
Cu	<1.0	
Fe	29.6	
Mg	24.7	
Mn	<0.1	
Na	989.3	
Ni	Ø	
P	40.1	
Pb	Ø	
Se	Ø	
Si	14.7	
Sn	<1.0	
V	Ø	
Zn	24.7	

pH 8.6	COLOR GREY	F	
Sp. Gr. 1.02	PHASES S	CL	
Total CN-	ACIDITY	NO2	
Reac. CN-	ALKALINITY	Br	
NH3 as N 255	ODOR M	NO3	
TOC 647.7		PO4	
VOC <200		SO4	

PROCESS STAGES

PARAMETERS

INITIAL 100 mL	pH	REDOX	T°C

COMMENTS:
CN(F) < 2 ppm DRÄGER

CHEMISTS: J. Zwierzykowski

LAB MANAGER M.Z 12-2-91

REAGENT COST
006709

CONFIDENTIAL

Sequence: [illegible] Sample Name: [illegible] # 15244 Operator: BMP
Run Time: 1/28/01 18:17:07
Comment: 21-35-30 SHIPMENT # 754
Mode: [illegible] Conc Factor= 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	137.4	10.74	<.0000	.0023	.0505	41.76	<.0000
SDev	1.3	.15	.1247	.0434	.0035	.42	.0028
%RSD	1.392	1.362	17.60	50.98	14.22	1.012	11.10
#1	136.9	10.61	<.0000	.1415	.0483	41.24	<.0000
#2	137.3	10.71	<.0000	.0812	.0483	41.69	<.0000
#3	138.1	10.95	<.0000	.0344	.0483	41.85	<.0000
#4	139.5	10.68	<.0000	.1322	.0653	42.26	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	<.0000	20.44	.1217	29.57	24.74	.0366	989.3
SDev	.0165	.25	.0202	.10	.18	.0056	8.3
%RSD	144.3	1.228	16.62	.3505	.7188	15.40	.8417
#1	.0086	20.14	.1217	29.46	24.61	.0447	978.3
#2	<.0000	20.40	.1405	29.70	24.59	.0350	991.8
#3	<.0000	20.44	.0936	29.52	24.80	.0317	988.7
#4	<.0000	20.76	.1311	29.60	24.97	.0350	998.2

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0216	40.12	.0074	.1024	14.73	.9570	<.0000
SDev	.0325	.50	.1056	.1643	.24	.1018	.0169
%RSD	150.8	1.237	1430.	160.5	1.619	10.63	23.97
#1	.0501	39.54	.0714	<.0000	14.45	.9187	<.0000
#2	.0080	40.31	<.0000	.3231	14.62	1.050	<.0000
#3	<.0000	39.95	<.0000	.1183	14.91	.8311	<.0000
#4	.0461	40.70	.1009	.0288	14.94	1.028	<.0000

Elem	Zn
Units	ppm
Avge	24.73
SDev	.28
%RSD	1.137
#1	24.40
#2	24.65
#3	24.82
#4	25.07

ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA # 232 | WID # 0057363C | LAB NO. CC 55-92

WASTE DESCRIPTION: PHOTOWASTE | VOLUME: 4,800 GAL

WASTE CODE(S): D007, 11 | LOAD # 3073 | DATE: 11-26-91

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm
Ag	105.5	
Al	3.6	
As	Ø	
Au	Ø	
Ba	<0.1	
Ca	43.8	
Cd	Ø	
Co	<0.1	
Cr	1.6	
Cu	<1.0	
Fe	72.9	
Mg	78.4	
Mn	<0.1	
Na	1,092	
Ni	Ø	
P	37.7	
Pb	1.0	
Se	Ø	
Si	5.5	
Sn	1.7	
V	Ø	
Zn	<1.0	

pH	7.4	COLOR	BLUE
Sp. Gr.	1.00	PHASES	5
Total CN-		ACIDITY	
Reac. CN-		ALKALINITY	
NH3 as N	260	ODOR	M
TOC	741		
VOC	<50		

F
CL
NO2
Br
NO3
PO4
SO4

PROCESS STAGES

PARAMETERS

	pH	REDOX	T°C
INITIAL 100 mL			

COMMENTS:

CHEMISTS: M. Kwiecyglowska

LAB MANAGER MZ 11-26-91

REAGENT COST 006711

CONFIDENTIAL

Analysis Report

Date: 11-26-91 10:21:44 AM Page

Operator: RMT

Method: 5-91 ORIENT

Elem	Ag	Al	As	Au	Ba	Ca	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	105.3	3.539	<.0000	<.0000	.0590	43.79	1.1000
SDev	n	.2834	.0426	.0078	.0103	.21	.0[illegible]
%RSD	.5553	8.006	60.94	743.2	17.52	.4817	1.[illegible]
#1	105.0	3.501	<.0000	.0410	.0726	43.64	<.0000
#2	106.2	3.387	<.0000	<.0000	.0605	44.09	<.0000
#3	105.9	3.633	<.0000	<.0000	.0484	43.78	<.0000
#4	105.1	4.036	<.0000	<.0000	.0545	43.64	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0619	1.593	.1157	72.85	78.35	.0393	1092
SDev	.0108	.0064	.0027	.66	.25	.0118	[illegible]8.
%RSD	17.52	.2798	19.64	.9124	.3159	30.15	.7109
#1	.0634	1.594	.1473	73.82	78.29	.0554	1089.
#2	.0571	1.587	.1157	72.72	78.22	.0375	1104.
#3	.0508	1.598	.0947	72.51	78.19	.0375	1091.
#4	.0761	1.594	.1052	72.35	78.20	.0268	1086.

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0254	37.73	1.046	<.0000	5.545	1.732	<.0000
SDev	.0227	.25	.054	.2333	.134	.163	.0218
%RSD	89.65	.6559	5.160	100.4	2.417	9.390	147.2
#1	<.0000	37.52	1.100	<.0000	5.516	1.926	.0148
#2	.0373	37.67	1.024	<.0000	5.371	1.699	<.0000
#3	.0492	38.09	.9807	.0428	5.609	1.767	<.0000
#4	.0174	37.64	1.078	<.0000	5.682	1.534	<.0000

Elem	Zn
Units	ppm
Avge	.1215
SDev	.0059
%RSD	4.836
#1	.1247
#2	.1151
#3	.1280
#4	.1183

006712

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ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA #232 | MID # 005136291 | LAB NO. CC 55-5C
WASTE DESCRIPTION: PHOTOWASTE | VOLUME: 4,864 GAL
WASTE CODE(S): D007, 11 | LOAD # 3065 | DATE: 11-22-91

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	22.4	
Al	3.1	
As	Ø	
Au	Ø	
Ba	<0.1	
Ca	41.8	
Cd	Ø	
Co	Ø	
Cr	<1.0	
Cu	1.1	
Fe	92.3	
Mg	78.6	
Mn	<0.1	
Na	872.2	
Ni	Ø	
P	35.5	
Pb	Ø	
Se	Ø	
Si	7.7	
Sn	<1.0	
V	Ø	
Zn	<1.0	

pH	5.6	COLOR	BLUE
SD. GR.	1.02	PHASES	S
Total CN-		ACIDITY	
Reac. CN-		ALKALINITY	
NH3 as N	205	ODOR	M
TOC	920.6		
VOC	<100		

	F
	CL
	NO2
	Br
	NO3
	PO4
	SO4

PROCESS STAGES

PARAMETERS

	pH	REDOX	T°C
INITIAL 100 mL			

COMMENTS:

CHEMISTS: J. Kmieraylowska

LAB MANAGER MZ 11/22/91

REAGENT COST
006713

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Analyzed : MP Name : SAMPLE # 130165 Operator : MP
Type : Flame Dilution : 1:1
Comment : Detection Limit # : 3
Mode : NC Order : Random

Elem	Ag	Al	As	Au	Ba	Ca	
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	[illegible]	1.073	< .0000	.0142	.0542	41.43	< .0000
SDev	.29	.356	.0047	.0594	.0083	.53	.0000
%RSD	1.255	19.48	19.91	362.7	15.33	1.270	1.1
#1	[illegible]	2.399	< .0000	.0330	.0623	41.44	< .0000
#2	22.00	3.384	< .0000	.0795	.0623	41.35	< .0000
#3	22.55	2.623	< .0000	< .0000	.0472	42.09	< .0000
#4	22.90	3.410	< .0000	< .0000	.0472	42.46	< .0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0092	.5502	1.087	92.25	78.55	.0688	872.2
SDev	.0370	.0377	.019	.92	.93	.0027	10.5
%RSD	403.1	6.844	1.787	.9955	1.187	3.922	1.207
#1	< .0000	.5596	1.094	92.27	77.79	.0675	868.1
#2	.0619	.5759	1.109	91.11	77.82	.0729	859.3
#3	.0069	.4946	1.079	92.27	78.86	.0675	879.6
#4	< .0000	.5705	1.064	93.36	79.73	.0675	881.9

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	< .0000	35.45	.0310	< .0000	7.743	.6042	< .0000
SDev	.0493	.55	.1534	.6760	.189	.0647	.0327
%RSD	196.4	1.541	494.4	199.9	2.437	10.70	188.6
#1	.0142	34.85	.0414	< .0000	7.509	.6585	.0058
#2	< .0000	36.17	.2275	.5835	7.696	.6585	.0058
#3	< .0000	35.43	< .0000	< .0000	7.810	.5690	< .0000
#4	< .0000	35.35	< .0000	< .0000	7.956	.5307	< .0000

Elem	Zn
Units	ppm
Avge	.2793
SDev	.0196
%RSD	7.013
#1	.2834
#2	.2616
#3	.2671
#4	.3052

006714

ENCYCLE/TEXAS, INC

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA #231 | MID # 00513628 | LAB NO. CC 55-90
WASTE DESCRIPTION: PHOTOWASTE | VOLUME: 4,586 GAL
WASTE CODE(S): D007, 11 | LOAD # 3040 | DATE: 11-19-91

ICP	PRE-SCREEN	POST-TREATMENT
	ppm	ppm
Ag	5.1	
Al	1.7	
As	Ø	
Au	Ø	
Ba	<0.1	
Ca	45.0	
Cd	Ø	
Co	Ø	
Cr	1.7	
Cu	<1.0	
Fe	22.6	
Mg	26.7	
Mn	<0.1	
Na	727.3	
Ni	<1.0	
P	28.1	
Pb	<1.0	
Se	Ø	
Si	7.1	
Sn	1.7	
V	Ø	
Zn	<0.1	

pH 7.0 | COLOR GREY | F
Sp. Gr. 1.01 | PHASES S | CL
TOX [illegible] | ACIDITY | NO2
PCBs [illegible] | ALKALINITY | Br
% H2O 162 | ODOR M | NO3
TOC 422.6 | | PO4
TOC <50 | | SO4

PROCESS STAGES

	PARAMETERS		
	pH	REDOX	T°C
INITIAL			

COMMENTS:

CHEMISTS: A. Zwierzynowska

LAB MANAGER MZ 11-19-91

REAGENT COST
006715

CONFIDENTIAL

Analysis Report Time 11-19-91 09:26:13 AM Page 1

Customer: MEDIA Sample Name: SAMPLE # 14371 Operator: UNK
Sample Time: 11:21 Type: S
Comment: 11-15-91 SHIPMENT # 21
Mode: CONC Corr. Factor: 1.0

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.139	1.667	.3725	.0234	.0706	45.03	< .0000
SDev	.017	.324	.3334	.0820	.0078	.23	.0134
%RSD	.3287	19.43	89.52	348.1	11.00	.7436	99.99
#1	5.153	1.446	.0383	.0133	.0639	45.09	< .0000
#2	5.117	1.679	.5662	< .0000	.0639	44.80	< .0000
#3	5.153	2.121	.1479	.1422	.0773	44.75	< .0000
#4	5.135	1.423	.7395	< .0000	.0773	45.48	< .0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0221	1.722	.9652	22.60	26.70	.0646	727.3
SDev	.0370	.021	.0231	.29	.27	.0088	7.2
%RSD	167.7	1.241	2.397	1.283	.9941	13.58	.9930
#1	< .0000	1.716	.9685	22.43	26.70	.0621	732.6
#2	.0066	1.695	.9414	22.47	26.40	.0621	726.0
#3	.0773	1.737	.9956	23.03	27.04	.0773	718.7
#4	.0066	1.742	.9550	22.47	26.64	.0570	733.9

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1028	28.08	.8874	.2760	7.091	1.734	.0026
SDev	.0198	.95	.2718	.4156	.257	.129	.0190
%RSD	19.30	3.386	30.63	150.6	3.628	7.426	730.3
#1	.1035	29.33	.8982	.5665	6.722	1.627	.0130
#2	.1121	27.11	.6601	.1888	7.110	1.644	< .0000
#3	.1206	27.64	1.266	.6246	7.247	1.906	.0236
#4	.0750	28.24	.7251	< .0000	7.285	1.759	< .0000

Elem	Zn
Units	ppm
Avge	.0953
SDev	.0082
%RSD	8.571
#1	.1021
#2	.0919
#3	.0858
#4	.1021

006716

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ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA #230 EMD # 005136Z LAB NO. CC 55-90
WASTE DESCRIPTION: PHOTOWASTE VOLUME: 4,5836.
WASTE CODE(S): D007, 11 LOAD # 3037 DATE: 11-18-91

ICP	PRE-SCREEN	POST-TREATMENT	pH 2.5	COLOR GREEN	F
	ppm	ppm	Sp. Gr. 1.00	PHASES S	CL
Ag	7.0		Total CN-	ACIDITY	NO2
Al	1.2		Free CN-	ALKALINITY	Br
As	Ø		Ammonia 170	ODOR M	NO3
Au	<0.1		TOC 326.4		PO4
Ba	0.1		VOC <50		SO4
Ca	44.7				
Cd	Ø				
Co	Ø				
Cr	1.9				
Cu	3.7				
Fe	20.6				
Mg	15.6				
Mn	<1.0				
Na	413.4				
Ni	3.7				
P	15.0				
Pb	<1.0				
Se	Ø				
Si	5.9				
Sn	<1.0				
V	Ø				
Zn	<1.0				

PROCESS STAGES

PARAMETERS

	pH	REDOX	T°C
INITIAL 100 GAL			

COMMENTS:

CHEMISTS: M. Zmierzyliowska

LAB MANAGER M Z 11.18.91

REAGENT COST
006717

CONFIDENTIAL

Method: [illegible] Matrix: Glass ASTM E 1479-91 Operator: HM
Run Time: 11/18/91 08:54:45
Comment: 11-55-90 SHIPMENT # 11
Mode: CONC Conc Factor: 1.0

Elem	Ag	Al	As	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.385	1.223	< .0000	.0690	1214	44.73	< .0000
SDev	.086	.065	1929	.0151	.0054	.36	.0000
%RSD	1.335	3.298	34.46	50.73	4.414	.7955	1.108
#1	6.918	1.210	< .0000	.1094	.1149	44.31	< .0000
#2	7.098	1.287	< .0000	.0740	.1214	44.60	< .0000
#3	7.008	1.178	< .0000	.0688	.1214	44.87	< .0000
#4	6.918	1.239	< .0000	.0740	.1280	45.14	< .0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0219	1.860	3.748	20.60	15.61	.1397	413.4
SDev	.0261	.031	.010	.31	.13	.0025	2.7
%RSD	119.4	1.680	.2787	1.490	.8390	1.802	.6644
#1	.0591	1.826	3.735	21.01	15.78	.1384	409.5
#2	.0153	1.844	3.761	20.64	15.56	.1434	413.4
#3	< .0000	1.897	3.748	20.42	15.61	.1384	414.7
#4	.0153	1.873	3.748	20.31	15.47	.1384	415.8

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.674	14.99	.5984	< .0000	5.891	.7310	< .0000
SDev	.077	.33	.0695	.3456	.244	.1880	.0128
%RSD	2.095	2.226	11.62	700.4	4.141	25.72	103.3
#1	3.567	14.58	.6389	< .0000	5.657	.7154	< .0000
#2	3.713	15.35	.4949	< .0000	5.789	.6034	< .0000
#3	3.742	14.89	.6209	.1419	5.891	1.002	.0025
#4	3.676	15.16	.6389	.2159	6.228	.6034	< .0000

Elem	Zn
Units	ppm
Avge	.1241
SDev	.0087
%RSD	7.011
#1	.1252
#2	.1298
#3	.1298
#4	.1114

3264

006718

ENCYCLE /TEXAS, INC

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA # 229 WID # 00513626 LAB NO. CC 55-90
WASTE DESCRIPTION: PHOTOWASTE VOLUME: 4,348 GAL
WASTE CODE(S): D007, 11 LOAD # 3030 DATE: 11-15-91

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm
Ag	10.5	
Al	1.6	
As	Ø	
Au	<0.1	
Ba	<0.1	
Ca	44.1	
Cd	Ø	
Co	<0.1	
Cr	1.1	
Cu	8.9	
Fe	15.1	
Mg	17.2	
Mn	<0.1	
Na	426	
Ni	Ø	
P	10.4	
Pb	Ø	
Se	Ø	
Si	4.0	
Sn	<1.0	
V	Ø	
Zn	Ø	

pH	8.4	COLOR	GREY	F
Sp. Gr.	1.01	PHASES	S	CL
Total CN-		ACIDITY		NO2
Reac. CN-		ALKALINITY		Br
NH3 as N	155	ODOR	M.	NO3
TOC	257.3			PO4
VOC	<20			SO4

PROCESS STAGES

INITIAL	100 mL	pH	REDOX	T°C

COMMENTS:

CHEMISTS: A. Zmierzykowski

LAB MANAGER

REAGENT COST

006719

CONFIDENTIAL

Method: ENVIRO Sample Name: SAMPLE # 14205 Operator: MM
Run Time: 11/15/91 10:52:35
Comment: 07-55-90 SHIPMENT # [illegible]
Mode: CONC Conc. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.45	1.597	<.0000	.0453	.0890	44.05	<.0000
SDev	11	107	.3700	.0374	.0539	.11	.0021
%RSD	1.036	6.708	961.5	82.60	60.59	.2462	70.41
#1	10.58	1.709	<.0000	.0709	.1698	44.00	<.0000
#2	10.33	1.578	<.0000	.0013	.0643	44.03	<.0000
#3	10.41	1.458	<.0000	.0814	.0577	43.96	<.0000
#4	10.50	1.644	.3405	.0277	.0643	44.21	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0274	1.110	8.918	15.10	17.24	.0388	426.0
SDev	.0160	.026	.058	.59	.20	.0041	1.3
%RSD	58.25	2.363	.6526	3.928	1.163	10.54	.2976
#1	.0295	1.146	8.989	15.88	17.53	.0388	426.5
#2	.0042	1.093	8.926	14.45	17.09	.0438	426.9
#3	.0379	1.088	8.847	15.11	17.12	.0388	424.1
#4	.0379	1.112	8.911	14.96	17.22	.0338	426.4

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	<.0000	10.37	<.0000	.1580	4.023	.8908	<.0000
SDev	.0376	.25	.1734	.4702	.149	.1201	.0182
%RSD	85.85	2.445	42.54	297.7	3.705	13.48	182.6
#1	<.0000	10.35	<.0000	.5104	3.961	.8316	.0099
#2	<.0000	10.72	<.0000	.4618	4.237	.8565	<.0000
#3	<.0000	10.11	<.0000	.1701	3.998	.8067	<.0000
#4	<.0000	10.30	<.0000	<.0000	3.894	1.068	<.0000

Elem	Zn
Units	ppm
Avge	<.0000
SDev	.0178
%RSD	7.225
#1	<.0000
#2	<.0000
#3	<.0000
#4	<.0000

257.3

006720

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ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA #228 WID # C0513629 LAB NO. CC 55-90

WASTE DESCRIPTION: PHOTOWASTE VOLUME: 4,707

WASTE CODE(S): D007, 11 LOAD # 3026 DATE: 11-14-91

ICP	PRE-SCREEN ppm	POST-TREATMENT ppm					
			pH	8.5	COLOR	GREY	F
			Sp. Gr.	1.00	PHASES	S	CL
Ag	14.4		Total CN-		ACIDITY		NO2
Al	2.6		Reac. CN-		ALKALINITY		Br
As	Ø		NH3 as N	310	ODOR	M	NO3
Au	<0.1		TOC	368.4			PO4
Ba	<0.1		VOC	<100			SO4
Ca	41.7						
Cd	Ø						
Co	Ø						
Cr	3.1						
Cu	44.8						
Fe	21.8						
Mg	45.9						
Mn	<0.1						
Na	642.5						
Ni	<1.0						
P	3.2						
Pb	1.3						
Se	Ø						
Si	5.0						
Sn	<1.0						
V	Ø						
Zn	<1.0						

PROCESS STAGES		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS

CHEMISTS: J. Kmiecykowski

LAB MANAGER MZ 11.14.91

REAGENT COST

006721

CONFIDENTIAL

Method: FM7701F Sample Name: SAMPLE # 14592 Operator: RM7
Run Time: 11/14/91 12:56:26
Comment: CC-55-90 SHIPMENT # 208
Mode: CONC Comm. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	14.42	2.555	.0499	.0330	.0532	41.73	<.0000
SDev	.18	.127	.2965	.0117	.0064	.36	.0120
%RSD	1.239	4.982	594.2	35.58	11.97	.8728	64.70
#1	14.31	2.602	<.0000	.0505	.0616	41.48	<.0000
#2	14.67	2.390	.4038	.0282	.0483	42.05	<.0000
#3	14.42	2.692	.1316	.0261	.0549	41.35	<.0000
#4	14.28	2.535	<.0000	.0271	.0483	42.03	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0064	3.079	44.84	21.75	45.90	.0604	642.5
SDev	.0110	.037	3.06	.74	.30	.0059	6.4
%RSD	172.1	1.204	6.822	3.401	.6621	9.827	1.001
#1	.0192	3.078	48.22	21.35	45.58	.0655	639.7
#2	.0107	3.103	43.15	22.33	46.01	.0552	649.3
#3	<.0000	3.027	41.51	22.40	45.75	.0655	634.9
#4	.0021	3.108	46.49	20.90	46.27	.0552	646.0

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2072	3.245	1.274	<.0000	4.952	.8342	<.0000
SDev	.0468	1.272	.121	.2661	.271	.0722	.0249
%RSD	22.60	39.20	9.499	132.6	5.477	8.654	326.6
#1	.2391	2.815	1.435	.1424	4.754	.8115	<.0000
#2	.2526	4.056	1.270	<.0000	4.685	.7466	<.0000
#3	.1849	4.459	1.141	<.0000	5.219	.8634	.0228
#4	.1524	1.652	1.251	<.0000	5.149	.9154	<.0000

Elem	Zn
Units	ppm
Avge	.1946
SDev	.0125
%RSD	6.415
#1	.2091
#2	.1995
#3	.1801
#4	.1898

006722

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ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA #227 | MID # 005136241 | LAB NO. CC 55-90
WASTE DESCRIPTION: PHOTOWASTE | VOLUME: 4833
WASTE CODE(S): D007 / D011 / D003 | LOAD # 3001 | DATE: 11-11-91

ICP	PRE-SCREEN	POST-TREATMENT	pH 6.1	COLOR GREY	F
	ppm	ppm	SD. GR. 1.02	PHASES S	CL
Ag	8.4		TOTAL CN-	ACIDITY N/A	NO2
Al	1.8		REAC. CN-	ALKALINITY N/A	Br
As	Ø		NH3 as N 230	ODOR M	NO3
Au	<0.1		TOC 249.9		PO4
Ba	<0.1		VOC N.D.		SO4
Ca	45.9				
Cd	Ø				
Co	<0.1				
Cr	9.6				
Cu	<1.0				
Fe	15.8				
Mg	13.0				
Mn	<0.0				
Na	565				
Ni	<1.0				
P	15.0				
Pb	1.1				
Se	Ø				
Si	2.7				
Sn	<1.0				
V	Ø				
Zn	<1.0				

PROCESS STAGES

	PARAMETERS		
	pH	REDOX	T°C
INITIAL			
100 mL			

COMMENTS:

CHEMISTS: H. Lwierzykowska

LAB MANAGER MZ 11-11-91

REAGENT COST
006723

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 14176 Operator: RMT
Run Time: 11/11/91 11:32:03
Comment: CC-55-90 SHIPMENT # 227
Mode: CONC Conv. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	8.374	1.756	<.0000	.0262	.0255	45.87	.0013
SDev	.060	243	.1107	.0119	.0083	.64	.0020
%RSD	.7107	13.81	52.83	45.25	10.94	1.389	526.0
#1	8.393	1.939	<.0000	.0297	.0738	45.20	.0113
#2	8.394	1.399	<.0000	.0286	.0673	45.62	<.0000
#3	8.374	1.838	<.0000	.0372	.0870	45.94	.0007
#4	8.435	1.869	<.0000	.0094	.0738	46.71	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0310	9.550	.6731	15.79	12.96	.4140	565.9
SDev	.0125	.123	.0227	.27	.15	.1015	8.6
%RSD	40.41	1.284	3.380	1.720	1.176	24.53	1.517
#1	.0133	9.413	.6797	15.77	12.88	.5325	556.1
#2	.0399	9.517	.6928	15.89	12.81	.4543	564.8
#3	.0399	9.561	.6797	16.08	13.16	.3710	565.7
#4	.0310	9.709	.6403	15.43	12.97	.2981	577.1

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1347	15.02	1.081	<.0000	2.690	.3385	<.0000
SDev	.0273	.21	.144	.1073	.077	.1615	.0197
%RSD	20.26	1.429	13.33	51.54	2.869	47.71	32.92
#1	.1709	15.08	1.096	<.0000	2.760	.5585	<.0000
#2	.1053	15.08	1.038	<.0000	2.690	.2471	<.0000
#3	.1354	15.20	1.269	<.0000	2.729	.3554	<.0000
#4	.1272	14.70	.9228	<.0000	2.583	.1930	<.0000

Elem	Zn
Units	ppm
Avge	.4258
SDev	.0106
%RSD	2.483
#1	.4111
#2	.4307
#3	.4356
#4	.4258

006724

CONFIDENTIAL

ENCYCLE/TEXAS, INC.
5500 UP RIVER ROAD • (512) 289-0300
P.O. BOX 4767 • CORPUS CHRISTI, TEXAS 78469

MARKETING / SHIPMENT REPORT

CLIENT: NASA/LBJ F231 BATCH # #2142 LAB No. CC [illegible]

WASTE DESCRIPTION: Photowaste VOLUME: 4,620G W.I.D. # CO513587

D007/D011

DATE: 11-6-91

LAB ANALYSIS:

COLOR Brown ACIDITY (if pH <4) N/A pH 8.2

ODOR Mild ALKALINITY (if pH >8) N/A Sp. Gr. 1.03

PHASES Single TSS N/A VOC <200

COMPATABILITY

CN (F)—(Alkaline wastes only) N.D.

CN (TOTAL)—(Alkaline wastes only)

SULFIDE—(Alkaline wastes only)

MOISTURE (wet sludges only)

NH_3 as N 1500 ppm

	TREATMENT ANALYSIS	
	BEFORE —	AFTER —
Ag	87.7	
AL	12,4	
As	Ø	
Ba	<1.0	
Cd	Ø	
Cr	62,4	
Cu	2,7	
Fe	396,7	
Hg	—	
Mn	1,2	
Ni	<1,0	
Pb	~~Ø~~ 1,8	
Se	Ø	
Sn	~~Ø~~ 1,8	
Zn	1,9	
TOC	4039	
An	Ø	
Co	2,2	
P	60,9	
Si	9,1	
V	Ø	

TREATMENT PROCEDURE

PROCESS STAGES		PARAMETERS		
		pH	REDOX	T°C
INITIAL	100 mL			

006725

REAGENT COSTS

CHEMIST: [signature]

TECH. MANAGER: [signature]

CONFIDENTIAL

DATE: 11-6-91

Method: ENCYCLE Sample Name: SAMPLE # 13993 Operator: HM7
Run Time: 11/05/91 12:02:58
Comment: CC-55-90 SHIPMENT # 226
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	87.69	12.36	<.0000	<.0000	.2260	52.64	<.0000
SDev	.33	.17	.5912	.0771	.0144	.40	.0155
%RSD	.3716	1.382	28.20	272.3	6.354	.7631	5.559
#1	87.24	12.20	<.0000	<.0000	.2459	53.17	<.0000
#2	87.69	12.54	<.0000	<.0000	.2194	52.60	<.0000
#3	87.81	12.47	<.0000	.0852	.2260	52.19	<.0000
#4	88.01	12.23	<.0000	<.0000	.2127	52.62	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.188	62.43	2.737	396.7	81.57	1.159	2514.
SDev	.025	.42	.035	2.4	.98	.015	17.
%RSD	1.141	.6690	1.264	.6152	1.206	1.254	.6712
#1	2.177	62.88	2.733	400.0	82.97	1.178	2519.
#2	2.161	62.50	2.707	396.3	81.52	1.163	2509.
#3	2.219	61.87	2.720	394.1	81.00	1.148	2493.
#4	2.194	62.45	2.786	396.3	80.79	1.148	2533.

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.8142	60.91	1.756	<.0000	9.130	1.759	<.0000
SDev	.0727	.99	.157	.4716	.384	.236	.0303
%RSD	8.923	1.623	8.921	35.14	4.201	13.42	8.846
#1	.8683	61.48	1.917	<.0000	8.565	1.557	<.0000
#2	.7247	62.00	1.830	<.0000	9.219	2.006	<.0000
#3	.7856	60.25	1.726	<.0000	9.383	1.557	<.0000
#4	.8781	59.92	1.552	<.0000	9.354	1.916	<.0000

Elem	Zn
Units	ppm
Avge	1.935
SDev	.020
%RSD	1.009
#1	1.960
#2	1.913
#3	1.932
#4	1.937

006726

CONFIDENTIAL

ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0330

P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78469

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA # 225 MFG # 00513623 LAB NO. CC 55

WASTE DESCRIPTION: PHOTOWASTE VOLUME: 4200 GAL

WASTE CODE(S): D007, D011 LEAD # 2924 DATE: 10-25-91

ICP	PRE-SCREEN	POST-TREATMENT:	pH 4.9	COLOR BLUE	F
	ppm	ppm	Sp. Gr. 1.00	PHASES S	Cl
Ag	17.5		Total CN-	ACIDITY	NO2
Al	6.9		Reac. CN-	ALKALINITY	Br
As	0		NH3 as N 1100	ODOR M	NO3
Au	<1.0		TOC 1146		PO4
Ba	<1.0		VOC <100		SO4
Ca	42.5				
Cd	0				
Co	<1.0				
Cr	11.9				
Cu	4.2				
Fe	126.7				
Mg	81.0				
Mn	1.1				
Na	1750				
Ni	4.1				
P	44.4				
Pb	6.2				
Se	0				
Si	5.9				
Sn	2.4				
V	0				
Zn	<1.0				

PROCESS STAGES

	PARAMETERS		
	pH	REDOX	T°C
INITIAL 100 mL			

COMMENTS:

CHEMISTS: [signature] [signature]

LAB MANAGER MZ 10/25/91

REAGENT COST 006727

CONFIDENTIAL

Method: ENC/C.F Sample Name: SAMPLE # 13495 Operator: HLW
Run Time: 10/25/91 08:53:00
Comment: [illegible]
Mode: TOTAL Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	17.50	6.909	<.0000	.0793	.0645	42.50	<.0000
SDev	.24	.203	.2440	.0575	.0083	.69	.0114
%RSD	1.345	2.936	14.23	72.58	12.91	1.633	3.111
#1	17.34	6.877	<.0000	.1197	.0727	41.78	<.0000
#2	17.27	6.662	<.0000	.0963	.0661	42.06	<.0000
#3	17.64	7.157	<.0000	.1070	.0661	42.87	<.0000
#4	17.77	6.952	<.0000	<.0000	.0529	43.27	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1405	11.93	4.218	126.7	80.98	1.059	1750.
SDev	.0161	.20	.033	.9	1.18	.006	23.
%RSD	11.45	1.673	.7922	.7161	1.463	.5477	1.317
#1	.1269	11.70	4.189	125.6	79.71	1.054	1727.
#2	.1503	11.82	4.189	126.4	80.47	1.058	1735.
#3	.1269	12.09	4.253	127.1	81.26	1.058	1764.
#4	.1581	12.10	4.240	127.8	82.48	1.067	1776.

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.061	44.35	6.222	<.0000	5.884	2.352	<.0000
SDev	.055	.33	.142	.2820	.279	.272	.0154
%RSD	1.345	.7442	2.286	256.3	4.746	11.55	53.29
#1	4.022	44.15	6.133	<.0000	5.550	2.270	<.0000
#2	4.027	44.27	6.168	<.0000	5.762	2.355	<.0000
#3	4.057	44.16	6.151	<.0000	6.158	2.066	<.0000
#4	4.140	44.84	6.434	.2548	6.065	2.716	<.0000

Elem	Zn
Units	ppm
Avge	.3187
SDev	.0389
%RSD	12.22
#1	.2760
#2	.3053
#3	.3248
#4	.3688

ENCYCLE / TEXAS, INC

5500 UP RIVER ROAD (512) 289-[illegible]
P.O. BOX 4767 CORPUS CHRISTI, TEXAS [illegible]

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA	# 226	WID # 00	LAB NO. CC 55-90
WASTE DESCRIPTION: PHOTOWASTE			VOLUME:
WASTE CODE(S): D007, D011		LOAD #	DATE: 10-29-91

ICP	PRE-SCREEN	POST-TREATMENT	pH	COLOR	F
	ppm	ppm	Sp. Gr.	PHASES	CL
Ag			Total CN-	ACIDITY	NO 2
Al			Reac. CN-	ALKALINITY	Br
As			NH3 as N	ODOR	NO 3
Au			TOC		PO 4
Ba			VOC		SO 4
Ca					
Cd					
Co					
Cr					
Cu					
Fe					
Mg					
Mn					
Na					
Ni					
P					
Pb					
Se					
Si					
Sn					
V					
Zn					

PROCESS STAGES

INITIAL 100 mL

PARAMETERS

pH	REDOX	T°C

COMMENTS

CHEMISTS:

LAB MANAGER

REAGENT COST

006729

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ENCYCLE / TEXAS, INC

5500 UP RIVER ROAD (512) 289-[illegible]

P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78469

SHIPMENT REPORT

LIQUIDS

CLIENT: NASA # 224 WID # 005513622 LAB NO. CC 55-90

WASTE DESCRIPTION: PHOTOWASTE VOLUME: 4,569 GAL

WASTE CODE(S): D007, D011 LOAD # 2887 DATE: 10-17-91

ICP	PRE-SCREEN	POST-TREATMENT					F
	ppm	ppm	pH	7.8	COLOR	GREY	CL
Ag	7.9		Sp. Gr.	1.00	PHASES	S	NO2
Al	4.5		Total CN-		ACIDITY	N/A	Br
As	Ø		Reac. CN-		ALKALINITY	N/A	NO3
Au	0.2		NH3 as N	700	ODOR	M	PO4
Ba	<0.1		TOC	637			SO4
Ca	40.4		VOC	<50.0			
Cd	Ø						
Co	<0.1						
Cr	2.0						
Cu	<1.0						
Fe	44.5						
Mg	45.3						
Mn	<1.0						
Na	1,097						
Ni	<1.0						
P	27.5						
Pb	11.0						
Se	Ø						
Si	5.1						
Sn	1.6						
V	<0.1						
Zn	<1.0						

PROCESS STAGES

PARAMETERS

		pH	REDOX	T°C
INITIAL	100 mL			

COMMENTS:

CHEMISTS: J. Zmierzchowska

LAB MANAGER M.Z. 10-17-91

REAGENT COST 006730

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 13085 Operator: HLW
Run Time: 10/17/91 07:57:11
Comment: CC-55-90 SHIPMENT # 224
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	7.927	4.527	<.0000	.2017	.0860	40.36	<.0000
SDev	.102	.451	.1911	.0923	.0413	.34	.0083
%RSD	1.293	9.960	35.48	45.76	48.06	.8309	35.14
#1	8.008	4.260	<.0000	.2601	.0892	40.82	<.0000
#2	7.941	4.565	<.0000	.1583	.1142	40.38	<.0000
#3	7.980	5.147	<.0000	.2946	.1142	40.13	<.0000
#4	7.779	4.135	<.0000	.0938	.0266	40.09	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0556	2.040	.3859	44.45	45.32	.1293	1097.
SDev	.0323	.043	.0417	.76	.35	.0088	16.
%RSD	58.07	2.114	10.81	1.718	.7754	6.804	1.497
#1	.0852	2.090	.4237	44.99	45.83	.1374	1119.
#2	.0435	2.043	.3772	44.59	45.09	.1293	1100.
#3	.0782	2.040	.4121	44.87	45.29	.1334	1085.
#4	.0156	1.985	.3308	43.33	45.09	.1171	1085.

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.3203	27.50	11.04	.2070	5.129	1.595	.0936
SDev	.0346	.52	.15	.1978	.179	.100	.0342
%RSD	10.80	1.881	1.387	95.57	3.496	6.295	36.56
#1	.3311	28.14	11.11	.1656	5.064	1.445	.1039
#2	.3559	27.43	11.02	.0621	5.169	1.653	.0624
#3	.3208	26.88	11.19	.4967	5.355	1.642	.1372
#4	.2734	27.56	10.84	.1035	4.930	1.642	.0707

Elem	Zn
Units	ppm
Avge	.3852
SDev	.0283
%RSD	7.356
#1	.3991
#2	.4163
#3	.3734
#4	.3519

006731

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5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

WID # 0051362)

CLIENT: NASA #223 BATCH # | LAB NO. CC 55-90
WASTE DESCRIPTION: PHOTONASTE | VOLUME: 4,623G
WASTE CODE(S): D007, D011 LOAD # | DATE: 10-11-91

LAB ANALYSIS

ICP ppm	PRESCREEN	POST TREATMENT
Ag	85.8	
Al	24.5	
As	⊖	
Au	⊖	
Ba	<1.0	
Ca	35.5	
Cd	⊖	
Co	<1.0	
Cr	20.8	
Cu	⊖	
Fe	530.3	
Mg	31.8	
Mn	1.3	
Na	1249	
Ni	<1.0	
P	14.9	
Pb	4.8	
Se	⊖	
Si	2.7	
Sn	⊖	
V	⊖	
Zn	<1.0	

pH	7.4	COLOR	BROWN
Sp. Gr.	1.01	PHASES	S
Total CN-		ODOR	M
Reactive CN-		ACIDITY	
NH3 as N	1550	ALKALINITY	
TOC	2852	TSS	
VOC	<300	Br	
F		NO_3	
Cl		PO_4	
NO2		SO_4	

TREATMENT PROCEDURE

PROCESS STAGES		PARAMETERS		
		pH	REDOX	T°C
INITIAL	100 mL			

CHEMISTS: [illegible]
H. Zmierzlikowska
LAB MANAGER: M.Z.

COMMENTS/COST
CN(F) N.D.

006732

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 12923 Operator: HLW
Run Time: 10/11/91 11:43:38
Comment: CC-55-90 SHIPMENT # 223
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	85.82	24.48	<.0000	<.0000	.0210	35.51	<.0000
SDev	1.32	.52	.2854	.0411	.0090	.61	.0151
%RSD	1.538	2.138	8.833	200.3	42.86	1.723	4.972
#1	84.41	23.85	<.0000	<.0000	.0346	34.84	<.0000
#2	85.04	24.30	<.0000	.0258	.0165	35.18	<.0000
#3	86.59	24.69	<.0000	<.0000	.0165	35.83	<.0000
#4	87.25	25.07	<.0000	<.0000	.0165	36.19	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1869	20.84	<.0000	530.3	31.77	1.281	1249.
SDev	.0258	.37	.0311	7.7	.47	.011	16.
%RSD	13.79	1.793	8.979	1.443	1.475	.8804	1.310
#1	.2219	20.38	<.0000	521.8	31.53	1.280	1230.
#2	.1619	20.73	<.0000	526.7	31.24	1.268	1242.
#3	.1752	20.99	<.0000	533.5	32.05	1.280	1257.
#4	.1886	21.26	<.0000	539.2	32.26	1.296	1267.

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.3370	14.94	4.786	<.0000	2.680	<.0000	<.0000
SDev	.0444	.13	.185	.3588	.178	.0539	.0186
%RSD	13.16	.8944	3.876	37.19	6.632	20.01	11.34
#1	.3997	14.82	4.723	<.0000	2.520	<.0000	<.0000
#2	.3222	15.12	4.652	<.0000	2.599	<.0000	<.0000
#3	.2957	14.87	4.708	<.0000	2.930	<.0000	<.0000
#4	.3304	14.94	5.060	<.0000	2.672	<.0000	<.0000

Elem	Zn
Units	ppm
Avge	.3420
SDev	.0071
%RSD	2.074
#1	.3359
#2	.3359
#3	.3482
#4	.3482

006733

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ENCYCLE/TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

WID # 00513620

CLIENT: NASA #222 BATCH # | LAB NO. CC 55-90

WASTE DESCRIPTION: PHOTONASTE | VOLUME: 4679 GAL

WASTE CODE(S): D007, D011 LOAD # 2839 | DATE: 10-9-91

LAB ANALYSIS

ICP ppm	PRESCREEN	POST TREATMENT
Ag	14.0	
Al	4.5	
As	Ø	
Au	<1.0	
Ba	<1.0	
Ca	383	
Cd	Ø	
Co	Ø	
Cr	9.9	
Cu	1.6	
Fe	72.6	
Mg	172.0	
Mn	<1.0	
Na	1761	
Ni	<1.0	
P	35.1	
Pb	1.8	
Se	Ø	
Si	4.4	
Sn	<1.0	
V	Ø	
Zn	Ø	

pH	6.2	COLOR	GREEN
Sp. Gr.	1.00	PHASES	S
Total CN-		ODOR	M
Reactive CN-		ACIDITY	
NH3 as N	560	ALKALINITY	
TOC	1029 ppm	TSS	
VOC	<100	Br	
F		NO_3	
Cl		PO_4	
NO2		SO_4	

TREATMENT PROCEDURE

PROCESS STAGES		PARAMETERS		
		pH	REDOX	T °C
INITIAL	100 mL			

CHEMISTS: [signature] G. Kwiecinski

LAB MANAGER: MZ.

COMMENTS/COST

006734

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 12802 Operator: HLW
Run Time: 10/09/91 08:06:59
Comment: CC-55-90 # 222
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	14.02	4.474	<.0000	.0642	.0391	38.29	<.0000
SDev	.17	.101	.2797	.0158	.0026	.55	.0048
%RSD	1.195	2.266	26.88	24.68	6.667	1.428	18.79
#1	13.88	4.421	<.0000	.0763	.0430	37.64	<.0000
#2	13.88	4.563	<.0000	.0420	.0378	38.04	<.0000
#3	14.13	4.358	<.0000	.0637	.0378	38.64	<.0000
#4	14.20	4.556	<.0000	.0749	.0378	38.83	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	<.0000	9.919	1.618	72.55	172.0	.0625	1761.
SDev	.0231	.133	.028	.79	2.4	.0043	15.
%RSD	221.3	1.339	1.702	1.091	1.384	6.895	.8732
#1	<.0000	9.758	1.635	72.16	169.0	.0684	1745.
#2	<.0000	9.865	1.577	71.69	171.2	.0582	1751.
#3	<.0000	10.01	1.625	72.86	173.5	.0616	1773.
#4	.0223	10.04	1.635	73.49	174.2	.0616	1776.

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0358	35.14	1.786	<.0000	4.383	.1786	<.0000
SDev	.0315	.49	.134	.1280	.336	.1392	.0075
%RSD	87.99	1.403	7.502	14.62	7.677	77.97	21.99
#1	.0289	34.48	1.895	<.0000	3.896	.3872	<.0000
#2	<.0000	35.09	1.599	<.0000	4.437	.1165	<.0000
#3	.0427	35.37	1.779	<.0000	4.654	.1015	<.0000
#4	.0737	35.63	1.869	<.0000	4.545	.1090	<.0000

Elem	Zn
Units	ppm
Avge	<.0000
SDev	.0051
%RSD	21.76
#1	<.0000
#2	<.0000
#3	<.0000
#4	<.0000

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P.O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

WID # 0051361?

CLIENT: NASA # 221 BATCH # | LAB NO. CC 55-90

WASTE DESCRIPTION: PHOTOWASTE | VOLUME: 4524 GAL

WASTE CODE(S): D007, D011 LOAD # 2823 | DATE: 10-4-91

LAB ANALYSIS

ICP ppm	PRESCREEN	POST TREATMENT
Ag	1.0	
Al	<1.0	
As	⊘	
Au	<1.0	
Ba	<1.0	
Ca	34.1	
Cd	⊘	
Co	<1.0	
Cr	<1.0	
Cu	<1.0	
Fe	43.1	
Mg	75.9	
Mn	<1.0	
Na	926.3	
Ni	<1.0	
P	33.4	
Pb	⊘	
Se	⊘	
Si	2.5	
Sn	<1.0	
V	<1.0	
Zn	<1.0	

pH	7.6	COLOR
Sp. Gr.	1.00	PHASES
Total CN-		ODOR
Reactive CN-		ACIDITY
NH3 as N	38	ALKALINITY
TOC	634	TSS
VOC	<10	Br
F		NO_3
Cl		PO_4
NO2		SO_4

TREATMENT PROCEDURE

PROCESS STAGES		PARAMETERS		
		pH	REDOX	T °C
INITIAL	100 mL			

CHEMISTS: [signature] J. Zmierzychowska

LAB MANAGER: M.E.

COMMENTS/COST

006736

CONFIDENTIAL

Method: ENCYCLE Sample Name: SAMPLE # 12546 Operator: HLW
Run Time: 10/04/91 11:09:27
Comment: CC-55-90 # 221
Mode: CONC Corr. Factor: 10

Elem	Ag	Al	As	Au	Ba	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9914	.7167	<.0000	.1188	.0417	34.14	<.0000
SDev	.0135	.2112	.0290	.0393	.0083	.08	.0122
%RSD	1.358	29.47	2.580	33.07	19.86	.2372	49.49
#1	.9973	.6063	<.0000	.1742	.0513	34.11	<.0000
#2	.9736	.7313	<.0000	.1121	.0449	34.10	<.0000
#3	1.005	.5230	<.0000	.0815	.0385	34.26	<.0000
#4	.9894	1.006	<.0000	.1073	.0321	34.09	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0016	.4268	.1287	43.14	75.89	.0359	926.3
SDev	.0218	.0418	.0800	.18	.17	.0048	5.7
%RSD	1400.	9.797	62.22	.4176	.2206	13.24	.6102
#1	.0249	.4838	.2259	43.16	75.75	.0415	930.1
#2	<.0000	.4320	.1572	43.10	75.79	.0378	925.7
#3	<.0000	.3906	.0886	42.92	76.12	.0304	930.9
#4	.0125	.4010	.0429	43.36	75.92	.0341	918.5

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1012	33.43	<.0000	<.0000	2.544	.4468	.0037
SDev	.0161	.32	.2201	.1290	.306	.1242	.0244
%RSD	15.90	.9684	17.34	24.42	12.03	27.80	660.8
#1	.1196	33.22	<.0000	<.0000	2.255	.6306	.0387
#2	.1099	33.22	<.0000	<.0000	2.949	.4144	<.0000
#3	.0868	33.39	<.0000	<.0000	2.371	.3711	<.0000
#4	.0887	33.90	<.0000	<.0000	2.602	.3711	.0018

Elem	Zn
Units	ppm
Avge	.0347
SDev	.0204
%RSD	58.88
#1	.0628
#2	.0328
#3	.0290
#4	.0141

006737

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ENCYCLE /TEXAS, INC.

5500 UP RIVER ROAD (512) 289-0300
P O. BOX 4767 CORPUS CHRISTI, TEXAS 78649

SHIPMENT REPORT

WIDE # 00513611

CLIENT: NASA #518+220 | BATCH # | LAB NO. CC 55-10
WASTE DESCRIPTION: Photo waste | VOLUME: 4,700G
WASTE CODE(S): D007, 11 | LOAD # 2804 | DATE: 10-2-91

LAB ANALYSIS

ICP ppm	PRESCREEN	POST TREATMENT
Ag	11.2	
Al	1.3	
As	<1.0	
Au	<0.1	
Ba	<0.1	
Ca	36.8	
Cd	⊖	
Co	⊖	
Cr	<1.000	
Cu	⊖	
Fe	38.2	
Mg	45.0	
Mn	<0.1	
Na	692.⊖	
Ni	⊖	
P	23.1	
Pb	2.2	
Se	⊖	
Si	2.7	
Sn	1.5	
V	⊖	
Zn	<0.1	

pH	7.4	COLOR	Grey
Sp. Gr.	1.01	PHASES	S
Total CN-		ODOR	M
Reactive CN-		ACIDITY	
NH3 as N	220	ALKALINITY	
TOC	473.9	TSS	
VOC	< 10 ppm	Br	
F		NO_3	~~220~~ ppm
Cl		PO_4	
NO2		SO_4	

TREATMENT PROCEDURE

PROCESS STAGES		PARAMETERS		
		pH	REDOX	T °C
INITIAL	100 mL			

CHEMISTS: H. Kilgore, H. Zwierzykowski
LAB MANAGER: M.Z.

COMMENTS/COST

006738

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Elem	Ag	Al	As	B	Ba	Be
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1114	1.720	.1000	.0000	.0000	.0000
SDev	.0000	.0000	.0000	.0000	.0000	.0000
%RSD	.0000	.0000	.0000	.0000	.0000	.0000
#1	.1117	1.720	.1000	.0000	.0000	.0000
#2	.1111	1.720	.1000	.0000	.0000	.0000
#3	.1115	1.720	.1000	.0000	.0000	.0000
#4	.1110	1.720	.1000	.0000	.0000	.0000

Elem	Ca	Cr	Cu	Fe	Mg	Mn	Mo
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	<.0000	.7906	<.0000	38.73	44.99	.0203	690.
SDev	.0747	.0150	.0474	.42	.33	.0064	3.
%RSD	96.65	1.896	15.54	1.110	.7296	31.55	.5605
#1	<.0000	.8033	<.0000	38.58	44.65	.0245	690.7
#2	<.0000	.7704	<.0000	37.88	45.14	.0211	695.7
#3	<.0000	.7967	<.0000	37.83	44.79	.0245	687.2
#4	<.0000	.8000	<.0000	38.60	45.38	.0110	694.6

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0000	23.08	2.219	<.0000	2.718	1.468	<.0000
SDev	.0377	.25	.522	.2837	.128	.124	.0026
%RSD	43.80	1.090	23.52	60.11	4.713	8.454	27.96
#1	<.0000	23.05	2.767	<.0000	2.607	1.598	<.0000
#2	<.0000	22.85	2.165	<.0000	2.607	1.506	<.000
#3	<.0000	22.98	2.231	<.0000	2.879	1.466	<.000
#4	<.0000	23.43	1.515	<.0000	2.829	1.301	<.000

Elem	Zn
Units	ppm
Avge	.0511
SDev	.0189
%RSD	37.01
#1	.0750
#2	.0486
#3	.0519
#4	.0288

ENCYCLE / TEXAS, INC.
5500 UP RIVER ROAD • (512) 289-0300
P.O. BOX 4767 • CORPUS CHRISTI TEXAS 78469

~~MARKETING~~ / SHIPMENT REPORT

CLIENT: NASA # 219 BATCH # 2790 LAB No. CC 55-90

WASTE DESCRIPTION: PHOTOWASTE VOLUME: 4737 W.I.D. # 00513610

DATE: 10-01-91

LAB ANALYSIS:

COLOR GREEN ACIDITY (if pH <4) N/A pH 7.4

ODOR M ALKALINITY (if pH >8) N/A Sp. Gr. 1.00

PHASES S TSS N/A VOC <100

COMPATABILITY N/A

CN (F)—(Alkaline wastes only)

CN (TOTAL)—(Alkaline wastes only)

SULFIDE—(Alkaline wastes only)

MOISTURE (wet sludges only)

NH_3 as N 3,900 ppm !

	TREATMENT ANALYSIS	
	BEFORE —	AFTER —
Ag	236.8	
AL	20.9	
As	~~0~~	
Ba	<1.0	
Cd	~~0~~	
Cr	12.2	
Cu	~~0~~	
Fe	78.7	
Hg	~~X~~	
Mn	<1.0	
Ni	<1.0	
Pb	<1.0	
Se	~~0~~	
Sn	<1.0	
Zn	<1.0	
TOC	1,322 ppm	
Au	<0.1	
Co	<1.0	
P	31.5	
Si	2.7	
V	~~0~~	

TREATMENT PROCEDURE

PROCESS STAGES		PARAMETERS		
		pH	REDOX	T °C
INITIAL	100 mL			

0067 40

REAGENT COSTS

CHEMIST: H. Wenderski N. Zwierzykowski

TECH. MANAGER: M.Z.

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DATE: 10-01-91

Method: [illegible] Sample # 12:15 Operator: [illegible]

[illegible]	Ag	Al	[illegible]	As	[illegible]	[illegible]	[illegible]
[illegible]	ppm	ppm	[illegible]	ppm	[illegible]	ppm	[illegible]
Avge	236.8	20.91	.0000	.1709	.0689	41.57	[illegible]
SDev	1.4	.26	.2082	.0664	.0104	.13	[illegible]
%RSD	.5920	1.271	10.17	171.8	15.06	.7880	[illegible]
#1	237.3	20.56	.0000	.1877	.0779	41.45	[illegible]
#2	235.4	21.21	.0000	.0838	.0719	41.50	[illegible]
#3	235.8	21.23	.0000	<.0000	.0540	41.49	<.0000
#4	238.5	20.35	.0000	.0570	.0719	42.05	<.0000

Elem	Co	Cr	Cu	Fe	Mg	Mn	Na
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0164	12.22	<.0000	78.69	45.54	.0818	1855.
SDev	.0317	.11	.0567	.66	.12	.0041	14.
%RSD	193.4	.8596	47.89	.8403	.2546	5.033	.7304
#1	.0573	12.17	<.0000	78.36	45.60	.0875	1859.
#2	.0246	12.13	<.0000	77.94	45.48	.0809	1845.
#3	<.0000	12.19	<.0000	79.39	45.42	.0777	1843.
#4	<.0000	12.37	<.0000	79.08	45.68	.0809	1872.

Elem	Ni	P	Pb	Se	Si	Sn	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0082	31.45	.5199	<.0000	2.743	.5552	<.0000
SDev	.0566	.29	.1442	.1122	.134	.0645	.0215
%RSD	689.6	.9123	27.73	9.923	4.887	11.61	71.15
#1	.0890	31.35	.4850	<.0000	2.557	.6115	<.0000
#2	<.0000	31.39	.6672	<.0000	2.770	.4796	<.0000
#3	<.0000	31.21	.5922	<.0000	2.876	.5236	<.0000
#4	<.0000	31.87	.3350	<.0000	2.770	.6060	<.0000

Elem	Zn
Units	ppm
Avge	.1615
SDev	.0126
%RSD	7.827
#1	.1685
#2	.1623
#3	.1717
#4	.1434

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