Electronic Supplementary Information

For

"Crystal Engineering in Confined Spaces. A Novel Method to Grow Crystalline Metal Phosphonates in Alginate Gel Systems"

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Experimental Set-up

1		Metal Ion		Ligand	
		Ce		AMP	
	Experiment	Collection	Comments on gel	Sample	Comments on
pH value	Date	Date	appearance	Number	isolated solids
No pH	19 June	24 June	white amorphous-		
control	2010	2010	looking solid	1	-
	19 June	24 June	white amorphous-		
1.00	2010	2010	looking solid	2	-
	19 June	24 June	white amorphous-		
2.00	2010	2010	looking solid	3	-
	19 June	24 June	white amorphous-		
3.00	2010	2010	looking solid	4	-
	19 June	24 June	white small		
4.08	2010	2010	sphere-like solid	5	-
			destroyed gel-		
	19 June	24 June	amorphous white		
5.00	2010	2010	solid inside	6	-
		C 0			
	Experiment	Collection	Comments on gel	Sample	Comments on
pH value	Experiment Date	Collection Date	Comments on gel appearance	Sample Number	Comments on isolated solids
pH value No pH	Experiment Date 19 June	Collection Date 24 June	Comments on gel appearance white small	Sample Number	Comments on isolated solids
pH value No pH control	Experiment Date 19 June 2010	Collection Date 24 June 2010	Comments on gel appearance white small sphere-like solid	Sample Number 7	Comments on isolated solids
pH value No pH control	Experiment Date 19 June 2010	Collection Date 24 June 2010	Comments on gel appearance white small sphere-like solid yellow emulsion-	Sample Number 7	Comments on isolated solids -
pH value No pH control	Experiment Date 19 June 2010	Collection Date 24 June 2010	Comments on gel appearance white small sphere-like solid yellow emulsion- few small spherical	Sample Number 7	Comments on isolated solids -
pH value No pH control	Experiment Date 19 June 2010 19 June	Collection Date 24 June 2010 24 June	Comments on gel appearance white small sphere-like solid yellow emulsion- few small spherical particles at the	Sample Number 7	Comments on isolated solids -
pH value No pH control	Experiment Date 19 June 2010 19 June 2010	Collection Date 24 June 2010 24 June 2010	Comments on gel appearance white small sphere-like solid yellow emulsion- few small spherical particles at the bottom	Sample Number 7	Comments on isolated solids -
pH value No pH control 1.00	Experiment Date 19 June 2010 19 June 2010	Collection Date 24 June 2010 24 June 2010	Comments on gel appearance white small sphere-like solid yellow emulsion- few small spherical particles at the bottom white amorphous	Number 7 8	Comments on isolated solids - -
pH value No pH control 1.00	Experiment Date 19 June 2010 19 June 2010 19 June	Collection Date 24 June 2010 24 June 2010 24 June	Comments on gel appearance white small sphere-like solid yellow emulsion- few small spherical particles at the bottom white amorphous solid in	Sample Number 7	Comments on isolated solids - -
pH value No pH control 1.00 2.03	Experiment Date 19 June 2010 19 June 2010 19 June 2010	Collection Date 24 June 2010 24 June 2010 24 June 2010	Comments on gel appearance white small sphere-like solid yellow emulsion- few small spherical particles at the bottom white amorphous solid in sunspension	Sample Number 7 8	Comments on isolated solids - -
pH value No pH control 1.00 2.03	Experiment Date 19 June 2010 19 June 2010 19 June 2010	Collection Date 24 June 2010 24 June 2010 24 June 2010	Comments on gel appearance white small sphere-like solid yellow emulsion- few small spherical particles at the bottom white amorphous solid in sunspension white amorphous	Sample Number 7 8 9	Comments on isolated solids - -
pH value No pH control 1.00 2.03	Experiment Date 19 June 2010 19 June 2010 19 June 2010 19 June	Collection Date 24 June 2010 24 June 2010 24 June 2010 24 June 2010	Comments on gel appearance white small sphere-like solid yellow emulsion- few small spherical particles at the bottom white amorphous solid in sunspension white amorphous solid within the gel,	Sample Number 7 8 9	Comments on isolated solids - -
pH value No pH control 1.00 2.03 3.06	Experiment Date 19 June 2010 19 June 2010 19 June 2010	Collection Date 24 June 2010 24 June 2010 24 June 2010 24 June 2010	Comments on gel appearance white small sphere-like solid yellow emulsion- few small spherical particles at the bottom white amorphous solid in sunspension white amorphous solid within the gel, clear excess liquid	Sample Number 7 8 9	Comments on isolated solids - - -
pH value No pH control 1.00 2.03 3.06	Experiment Date 19 June 2010 19 June 2010 19 June 2010	Collection Date 24 June 2010 24 June 2010 24 June 2010 24 June 2010	Comments on gel appearance white small sphere-like solid yellow emulsion- few small spherical particles at the bottom white amorphous solid in sunspension white amorphous solid within the gel, clear excess liquid white amorphous	Sample Number 7 8 9 10	Comments on isolated solids - - -
pH value No pH control 1.00 2.03 3.06	Experiment Date 19 June 2010 19 June 2010 19 June 2010 19 June 2010 19 June	Collection Date 24 June 2010 24 June 2010 24 June 2010 24 June 2010 24 June 2010 24 June	Comments on gel appearance white small sphere-like solid yellow emulsion- few small spherical particles at the bottom white amorphous solid in sunspension white amorphous solid within the gel, clear excess liquid white amorphous solid within the gel,	Sample Number 7 8 9 10	Comments on isolated solids - - - -
pH value No pH control 1.00 2.03 3.06 4.01	Experiment Date 19 June 2010 19 June 2010 19 June 2010 19 June 2010 19 June 2010	Collection Date 24 June 2010 24 June 2010 24 June 2010 24 June 2010 24 June 2010	Comments on gel appearance white small sphere-like solid yellow emulsion- few small spherical particles at the bottom white amorphous solid in sunspension white amorphous solid within the gel, clear excess liquid white amorphous solid within the gel, clear excess liquid	Sample Number 7 8 9 10 11	Comments on isolated solids - - - - -
pH value No pH control 1.00 2.03 3.06 4.01	Experiment Date 19 June 2010 19 June 2010 19 June 2010 19 June 2010	Collection Date 24 June 2010 24 June 2010 24 June 2010 24 June 2010 24 June 2010	Comments on gel appearance white small sphere-like solid yellow emulsion- few small spherical particles at the bottom white amorphous solid in sunspension white amorphous solid within the gel, clear excess liquid white amorphous solid within the gel, clear excess liquid white amorphous	Sample Number 7 8 9 10 11	Comments on isolated solids - - - - -
pH value No pH control 1.00 2.03 3.06 4.01	Experiment Date 19 June 2010 19 June 2010 19 June 2010 19 June 2010 19 June 2010	Collection Date 24 June 2010 24 June 2010	Comments on gel appearance white small sphere-like solid yellow emulsion- few small spherical particles at the bottom white amorphous solid in sunspension white amorphous solid within the gel, clear excess liquid white amorphous solid within the gel, clear excess liquid white amorphous solid within the gel, clear excess liquid	Sample Number 7 8 9 10 11	Comments on isolated solids - - - - - -

		60		PUTDMD	
pH value	Experiment Date	Ce Collection Date	Comments on gel	Sample Number	Comments on isolated solids
			dark vellowish gel-		
			sediment at the		
NopH	20 June	24 June	bottom-probably		
control	2010	2010	Ligand	13	vellow alue+soft ael
			dark vellowish gel-		jenen gidereen gei
			sediment at the		
			bottom-probably		
			Ligand +		
	20 June	24 June	few white particles		
1.03	2010	2010	in the gel	14	vellow alue+soft ael
			white amorphous		<u> </u>
			material in the gel-		
			vellow amorphous		
			material within the		
			gel and yellow		
			amorphous		
	20 June	24 June	material in		Looks like
2.09	2010	2010	suspension	15	dehydrated gel
			white amorphous		
			material in the gel-		
			yellow amorphous		
			material within the		
			gel and yellow		
			amorphous		
	20 June	24 June	material in		Looks like
3.02	2010	2010	suspension	16	dehydrated gel
			white amorphous		
			material within the		
			gel-amorphous		
			yellow material		
			within the gel		
			and yellow		
			amorphous		
	20 June	24 June	material in		Looks like
4.02	2010	2010	suspension	17	dehydrated gel
			destroyed gel,		
			white amorphous		
	20 June	24 June	material on top of		many dried-up gel
5.01	2010	2010	the gel	18	pieces
		Се		EDTMP	
	Experiment	Collection	Comments on gel	Sample	Comments on
pH value	Date	Date	appearance	Number	isolated solids

I No nH	21 Juno				
no pri	21 Julie			27	
CONTION	2010			21	
	04.1		white powder		
4.00	21 June	24 June	within the gel and		nothing inside the
1.03	2010	2010	in the excess liquid	28	gel
					completely
			white powder		deformed/
	21 June	24 June	within the gel and		dehydrated/shrunk
2.02	2010	2010	in the excess liquid	29	gel
			white powder		
	21 June	24 June	within the gel and		
3.02	2010	2010	in the excess liquid	30	-
			white powder		
	21 June	24 June	within the gel and		
3.92	2010	2010	in the excess liquid	31	no
			white powder		
	21 June	24 June	within the gel and		
5.05	2010	2010	in the excess liquid	32	no
0.00	2010	2010		02	
		Ce		HDTMP	
	Experiment	Collection	Comments on gel	Sample	Comments on
pH value	Date	Date	appearance	Number	isolated solids
			few white particles		
			on the gel, few		
No pH	21 June	24 June	yellow particles		
control	0040		in the evene liquid	00	
00111101	2010	2010	In the excess liquid	33	-
	2010	2010	white powder in	33	-
	2010	2010	white powder in the gel, colorless	33	-
	2010 21 June	2010 24 June	white powder in the gel, colorless gel "balls" at the	33	-
1.01	2010 21 June 2010	2010 24 June 2010	white powder in the gel, colorless gel "balls" at the bottom	33	- colorless "glue"
1.01	2010 21 June 2010	2010 24 June 2010	white powder in the gel, colorless gel "balls" at the bottom white powder	33	- colorless "glue"
1.01	2010 21 June 2010	2010 24 June 2010	white powder in the gel, colorless gel "balls" at the bottom white powder within the gel.	33	- colorless "glue"
1.01	2010 21 June 2010	2010 24 June 2010	white powder in the gel, colorless gel "balls" at the bottom white powder within the gel, powdery	33	- colorless "glue"
1.01	2010 21 June 2010 21 June	2010 24 June 2010 24 June	white powder in the gel, colorless gel "balls" at the bottom white powder within the gel, powdery suspension in the	33	- colorless "glue" shrunk "dehvdrated"
1.01	2010 21 June 2010 21 June 2010	2010 24 June 2010 24 June 2010	white powder in the gel, colorless gel "balls" at the bottom white powder within the gel, powdery suspension in the excess liquid	33	- colorless "glue" shrunk "dehydrated"
1.01 2.00	2010 21 June 2010 21 June 2010	2010 24 June 2010 24 June 2010	white powder in the gel, colorless gel "balls" at the bottom white powder within the gel, powdery suspension in the excess liquid white powder	33 34 35	- colorless "glue" shrunk "dehydrated" gel
1.01 2.00	2010 21 June 2010 21 June 2010	2010 24 June 2010 24 June 2010	white powder in the gel, colorless gel "balls" at the bottom white powder within the gel, powdery suspension in the excess liquid white powder within the gel	33 34 35	- colorless "glue" shrunk "dehydrated" gel
1.01 2.00	2010 21 June 2010 21 June 2010	2010 24 June 2010 24 June 2010	white powder in the gel, colorless gel "balls" at the bottom white powder within the gel, powdery suspension in the excess liquid white powder within the gel, powdery	33 34 35	- colorless "glue" shrunk "dehydrated" gel
1.01 2.00	2010 21 June 2010 21 June 2010	2010 24 June 2010 24 June 2010	white powder in the gel, colorless gel "balls" at the bottom white powder within the gel, powdery suspension in the excess liquid white powder within the gel, powdery suspension in the	33 34 35	- colorless "glue" shrunk "dehydrated" gel
1.01 2.00	2010 21 June 2010 21 June 2010 21 June 2010	2010 24 June 2010 24 June 2010 24 June 2010	white powder in the gel, colorless gel "balls" at the bottom white powder within the gel, powdery suspension in the excess liquid white powder within the gel, powdery suspension in the excess liquid	33 34 35 36	- colorless "glue" shrunk "dehydrated" gel
1.01 2.00 3.00	2010 21 June 2010 21 June 2010 21 June 2010	2010 24 June 2010 24 June 2010 24 June 2010	white powder in the gel, colorless gel "balls" at the bottom white powder within the gel, powdery suspension in the excess liquid white powder within the gel, powdery suspension in the excess liquid	33 34 35 36	- colorless "glue" shrunk "dehydrated" gel shrunk "dehydrated" gel
1.01 2.00 3.00	2010 21 June 2010 21 June 2010 21 June 2010	2010 24 June 2010 24 June 2010 24 June 2010	white powder in the gel, colorless gel "balls" at the bottom white powder within the gel, powdery suspension in the excess liquid white powder within the gel, powdery suspension in the excess liquid white powder within the gel,	33 34 35 36	- colorless "glue" shrunk "dehydrated" gel shrunk "dehydrated" gel
1.01 2.00 3.00	2010 21 June 2010 21 June 2010 21 June 2010	2010 24 June 2010 24 June 2010 24 June 2010	white powder in the gel, colorless gel "balls" at the bottom white powder within the gel, powdery suspension in the excess liquid white powder within the gel, powdery suspension in the excess liquid white powder within the gel, powdery	33 34 35 36	- colorless "glue" shrunk "dehydrated" gel shrunk "dehydrated" gel
1.01 2.00 3.00	2010 21 June 2010 21 June 2010 21 June 2010	2010 24 June 2010 24 June 2010 24 June 2010	white powder in the gel, colorless gel "balls" at the bottom white powder within the gel, powdery suspension in the excess liquid white powder within the gel, powdery suspension in the excess liquid white powder within the gel, powdery suspension in the	33 34 35 36	- colorless "glue" shrunk "dehydrated" gel shrunk "dehydrated" gel
1.01 2.00 3.00	2010 21 June 2010 21 June 2010 21 June 2010 21 June	2010 24 June 2010 24 June 2010 24 June 2010 24 June	white powder in the gel, colorless gel "balls" at the bottom white powder within the gel, powdery suspension in the excess liquid white powder within the gel, powdery suspension in the excess liquid white powder within the gel, powdery suspension in the excess liquid	33 34 35 36	- colorless "glue" shrunk "dehydrated" gel shrunk "dehydrated" gel
1.01 2.00 3.00 4.12	21 June 2010 21 June 2010 21 June 2010 21 June 2010	2010 24 June 2010 24 June 2010 24 June 2010 24 June 2010	white powder in the gel, colorless gel "balls" at the bottom white powder within the gel, powdery suspension in the excess liquid white powder within the gel, powdery suspension in the excess liquid white powder within the gel, powdery suspension in the excess liquid	33 34 35 36 37	- colorless "glue" shrunk "dehydrated" gel shrunk "dehydrated" gel
1.01 2.00 3.00 4.12	2010 21 June 2010 21 June 2010 21 June 2010 21 June 2010 21 June	2010 24 June 2010 24 June 2010 24 June 2010 24 June 2010 24 June	white powder in the gel, colorless gel "balls" at the bottom white powder within the gel, powdery suspension in the excess liquid white powder within the gel, powdery suspension in the excess liquid white powder within the gel, powdery suspension in the excess liquid destroyed gel,	33 34 35 36 37	- colorless "glue" shrunk "dehydrated" gel shrunk "dehydrated" gel shrunk "dehydrated" gel shrunk "dehydrated"

			powder,yellow gel pieces		
		<u>1</u>			
		Се		DTPMP	
	Experiment	Collection	Comments on gel	Sample	Comments on
pH value	Date	Date	appearance	Number	isolated solids
No pH	21 June				
control	2010			39	-
			white powder		
	01 1		within the gel, a lot		
1.04	21 June	24 June	of precipitate in the	40	
1.04	2010	2010	excess liquid	40	-
			within the gel a lot		
	21 June	24 June	of precipitate in the		
2.02	2010	2010	excess liquid	41	-
	2010	2010	white powder		
			within the gel, a lot		
	21 June	24 June	of precipitate in the		
3.09	2010	2010	excess liquid	42	-
			white powder		
			within the gel, a lot		
	21 June	24 June	of precipitate in the		
4.01	2010	2010	excess liquid	43	-
			white powder		
	21 1000	24 1000	within the gel, a lot		
5.01	21 Julie 2010	24 June 2010		ΔΔ	_
0.01	2010	2010			
		Co		НДУУ	
	Experiment	Collection	Comments on gel	Sample	Comments on
pH value	Date	Date	appearance	Number	isolated solids
			Well-formed small		
			white spherical		yellow gel-white
No pH	21 June	24 June	particles on the gel		spheres made up
control	2010	2010	and at the bottom	45	from thin needles
			Well-formed small		
	04 I	0.4.1	white spherical		yellow gel-white
1.06	21 June	24 June	particles on the gel	46	spheres made up
00.1	2010	2010	And at the pottom	40	nom unin needles
			white spherical		vellow gel-white
	21 June	24 lune	narticles on the del		spheres made up
2.09	2010	2010	and at the bottom	47	from thin needles
	21 June	24 June	small white		vellow ael-white
3.17	2010	2010	spherical particles	48	spheres made up
L			7	-	

			on the gel and at		from thin needles
			the bottom		
			small white		
			spherical particles		
	21 June	24 June	on the gel and at		completely
4.12	2010	2010	the bottom	49	deformed gel
			small white		
			spherical particles		
	21 June	24 June	on the gel and at		
5.34	2010	2010	the bottom	50	-
	1				
		Се		PMIDA	
	Experiment	Collection	Comments on gel	Sample	Comments on
pH value	Date	Date	appearance	Number	isolated solids
			white powder		
			within the gel-few		
No pH	22 June	24 June	white particles at		
control	2010	2010	the bottom	51	-
			white powder		
			within the gel-few		
	22 June	24 June	white particles at		
3.50	2010	2010	the bottom	52	-
	22 June	24 June	white precipitate		
4.04	2010	2010	only on the gel	53	-
	22 June	24 June	white precipitate		
4.52	2010	2010	only on the gel	54	-
			destroyed gel,		
	22 June	24 June	white precipitate		
5.04	2010	2010	on the gel pieces	55	shrunk gel
	22 June	24 June	No product		
5.50	2010	2010	obtained		-
		<u> </u>			
	Exportmont	Collection	Commonto on gol	Alvir	Commonto on
	Experiment	Data	comments on ger	Sample	comments on
pri value	Dale	Dale	White envetole in	Number	15018160 501105
	10 1000	25 1000	the excess liquid		Crivetale formed
no pri	19 Julie 2010	25 Julie 2010	and on the gol	62	also inside the gol
CONTION	10 Juno	2010	and on the ger	03	also inside the ger
	2010			64	
	2010		White crystals in	04	
	10 lune	25 lune	the excess liquid		Crystals formed
2 04	2010	20 0010	and on the del	65	also inside the del
2.07	2010	2010	White	00	מוסט וווסוטב נווב עבו
			microcrystalling		
	19 lune	25 lune	nrecipitate in the		Crystals formed
2 99	2010	20 0010	excess liquid and	66	also inside the del
2.00	2010	2010			also moldo the gel

			on the gel		
	19 June		5		
	2010			67	
	19 June				
	2010			68	
	-	Ca	-	HEDP	
pH value	Experiment Date	Collection Date	Comments on gel appearance	Sample Number	Comments on isolated solids
No pH	19 June	25 June			
control	2010	2010		69	
1.05	19 June 2010	25 June 2010	Large pieces of white particles on the gel surface and in the excess liquid	70	nothing inside the gel
	19 June	25 June	white precipitate outside of and inside the gel and in the excess		
2.02	2010	2010		/1	Shrunk gel
3.02	19 June 2010	25 June	white microcrystalline balls on the gel surface and in the excess	72	Crystals formed
3.02	2010	2010	liquiu dostrovod gol	12	also inside the ger
4.14	19 June 2010	25 June 2010	looks like gelatinous liquid + incorporated pieces of precipitate all over the gel	73	powder, gel traces
	19 June	25 June	destroyed gel, looks like gelatinous liquid + incorporated pieces of precipitate all over		
5.12	2010	2010	the gel	74	powder, gel traces
		C -		DDTA	
	Exporimont	Collection	Commonte on cel	PBIC Sampla	Commonte on
pH value	Date	Date	appearance	Number	isolated solids
No pH			1. 1	~~~~~	
control	-	-	-	81	-
	-	-	-	82	-

	20 June	28 June	"mushrooms"		
2.06	2010	2010	inside- Thrown out	83	Thrown out
	20 June	28 June	"mushrooms"		
2.99	2010	2010	inside- Thrown out	84	Thrown out
	-	-	-	85	-
	20 June	28 June	"mushrooms"		
5.00	2010	2010	inside- Thrown out	86	Thrown out
		Ca		HDTMP	
	Experiment	Collection	Comments on gel	Sample	Comments on
pH value	Date	Date	appearance	Number	isolated solids
No pH	22 June				
control	2010	-		93	
			white powder, film		
4.00	22 June	25 June	and small		Crystals formed
1.09	2010	2010	spherical particles	94	also inside the gel
			Aggregated		
	22 Juno	25 Juno	al and in		"troo"-liko
2 00	22 30110	2010	surrounding liquid	95	addredates
2.00	2010	2010	Aggregated		uggrogatoo
			spherical crystals		
			within the gel and		
	22 June	25 June	in surrounding		
3.08	2010	2010	liquid	96	"balls" and "films"
			Aggregated		
			spherical crystals		
		05 June	within the gel and		
1 08	22 June 2010	25 June 2010	in surrounding	07	"halle" and "filme"
4.00	2010	2010	Ilquiu	51	
		Ca		HPAA	
	Experiment	Collection	Comments on gel	Sample	Comments on
pH value	Date	Date	appearance	Number	isolated solids
			white big spherical		
		05.1	aggregates within		<u> </u>
2.07	22 June	25 June	the gel and the	107	"balls" look very
2.07	2010	2010	excess liquid	107	compact
			andregates within		
	22 June	25 June	the del and the		"balls" look verv
3.03	2010	2010	excess liquid	108	compact
		0			crystals stuck
			destroyed gel,		strongly at the
			"balls" everywhere,		bottom of the vial.
	22 June	25 June	looks like two		1st product = the
4.05	2010	2010	products present	109A	powder on the gel
			the material from	109B	2nd product = the

			the bottom of		crystals
			experiment 109B		,
			Powdery		
	22 June	25 June	aggregates, look		
5.01	2010	2010	like leaves	110	destroyed gel
		Ba			
	Experiment	Ba	Commonto on gol	HEDP	Commonto on
pH value	Date	Date	appearance	Sample Number	isolated solids
No pH	23 June	02 July			
control	2010	2010	clear	129	through away
	23 June	02 July	white powdery		
2.07	2010	2010	microparticles	130	-
0.00	23 June	02 July	white powdery	4.04	
3.00	2010	2010	microparticles	131	-
			white powdery		
			malformed gol-fow		
			white amorphous		
	23 June	02 July	snhere-like		
4.01	2010	2010	particles in the gel	132	destroved ael
	2010		white powderv		doolloyou gol
			microparticles-		
			malformed gel-few		
			white amorphous		
	23 June	02 July	sphere-like		
5.03	2010	2010	particles in the gel	133	destroyed gel
			a lot of small		
			sphere-like		
			particles in the gel,		
	23 June	02 July	some of them well-		
5.99	2010	2010	formed	134	-
		De		DDTO	
	Exporimont	Ba	Commonto on rol	PBIC	Commente en
	Data	Date	comments on ger	Sample	comments on
No nH			appearance	Number	15010164 501145
control	20 00110	2010	clear	141	through away
	23 June	02. July	0.001		anough anuy
1.03	2010	2010	clear	142	through away
	2010	2010			
			white precipitate		
	23 June	02 July	on and inside the		
2.01	2010	2010	gel	143	-
			white precipitate		
	23 June	02 July	on and inside the		
3.04	2010	2010	gel	144	-
4.01	23 June	02 July	white powdery	145	destroyed gel

	2010	2010	microparticles		
	2010	2010	white powderv		
			microparticles in		
			the excess liquid.		
	23 June	02 July	no solid on, or		
5.00	2010	2010	inside the gel	146	-
			<u> </u>	_	
		Ba		EDTMP	
	Experiment	Collection	Comments on gel	Sample	Comments on
pH value	Date	Date	appearance	Number	isolated solids
No pH	23 June	12 July			
control	2010	2010	clear	147	thrown away
	23 June	12 July			
1.01	2010	2010	clear	148	thrown away
	23 June	12 July			
2.01	2010	2010	clear	149	thrown away
	23 June	12 July			
2.99	2010	2010	clear	150	thrown away
			white powder at		
	23 June	12 July	the bottom of the		
4.02	2010	2010	vial	151	-
	23 June	12 July			
5.01	2010	2010	clear	152	thrown away
	F um out	Ba	Commonto on rol	HDTMP	Commonto on
	Experiment	Ba Collection	Comments on gel	HDTMP Sample	Comments on
pH value	Experiment Date	Ba Collection Date	Comments on gel appearance	HDTMP Sample Number	Comments on isolated solids
pH value No pH	Experiment Date 21 June 2010	Ba Collection Date 12 July 2010	Comments on gel appearance	HDTMP Sample Number	Comments on isolated solids
pH value No pH control	Experiment Date 21 June 2010	Ba Collection Date 12 July 2010	Comments on gel appearance gel like product	HDTMP Sample Number 153	Comments on isolated solids -
pH value No pH control	Experiment Date 21 June 2010 21 June 2010	Ba Collection Date 12 July 2010 12 July 2010	Comments on gel appearance gel like product	HDTMP Sample Number 153	Comments on isolated solids -
pH value No pH control 1.03	Experiment Date 21 June 2010 21 June 2010 21 June	Ba Collection Date 12 July 2010 12 July 2010	Comments on gel appearance gel like product clear	HDTMP Sample Number 153 154	Comments on isolated solids - thrown away
pH value No pH control 1.03	Experiment Date 21 June 2010 21 June 2010 21 June 2010	Ba Collection Date 12 July 2010 12 July 2010 12 July 2010	Comments on gel appearance gel like product clear	HDTMP Sample Number 153 154	Comments on isolated solids - thrown away
pH value No pH control 1.03 2.03	Experiment Date 21 June 2010 21 June 2010 21 June 2010 21 June	Ba Collection Date 12 July 2010 12 July 2010 12 July 2010 12 July	Comments on gel appearance gel like product clear clear	HDTMP Sample Number 153 154 155	Comments on isolated solids - thrown away thrown away
pH value No pH control 1.03 2.03 2.86	Experiment Date 21 June 2010 21 June 2010 21 June 2010 21 June 2010	Ba Collection Date 12 July 2010	Comments on gel appearance gel like product clear clear	HDTMP Sample Number 153 154 155 156	Comments on isolated solids - thrown away thrown away
pH value No pH control 1.03 2.03 2.86	Experiment Date 21 June 2010 21 June 2010 21 June 2010 21 June 2010 21 June	Ba Collection Date 12 July 2010 12 July 2010 12 July 2010 12 July 2010 12 July	Comments on gel appearance gel like product clear clear clear	HDTMP Sample Number 153 154 155 155	Comments on isolated solids - thrown away thrown away thrown away
pH value No pH control 1.03 2.03 2.86 4.04	Experiment Date 21 June 2010 21 June 2010 21 June 2010 21 June 2010 21 June 2010	Ba Collection Date 12 July 2010	Comments on gel appearance gel like product clear clear clear	HDTMP Sample Number 153 154 155 156 156	Comments on isolated solids - thrown away thrown away thrown away thrown away
pH value No pH control 1.03 2.03 2.86 4.04	Experiment Date 21 June 2010 21 June 2010 21 June 2010 21 June 2010 21 June 2010 21 June 2010	Ba Collection Date 12 July 2010	Comments on gel appearance gel like product clear clear clear clear	HDTMP Sample Number 153 154 155 156 157	Comments on isolated solids - thrown away thrown away thrown away thrown away
pH value No pH control 1.03 2.03 2.86 4.04 5.04	Experiment Date 21 June 2010 21 June 2010 21 June 2010 21 June 2010 21 June 2010 21 June 2010	Ba Collection Date 12 July 2010	Comments on gel appearance gel like product clear clear clear clear	HDTMP Sample Number 153 154 155 156 156 157 158	Comments on isolated solids - thrown away thrown away thrown away thrown away thrown away
pH value No pH control 1.03 2.03 2.86 4.04 5.04	Experiment Date 21 June 2010 21 June 2010 21 June 2010 21 June 2010 21 June 2010 21 June 2010	Ba Collection Date 12 July 2010	Comments on gel appearance gel like product clear clear clear clear	HDTMP Sample Number 153 154 155 156 157 158	Comments on isolated solids - thrown away thrown away thrown away thrown away thrown away
pH value No pH control 1.03 2.03 2.86 4.04 5.04	Experiment Date 21 June 2010 21 June 2010 21 June 2010 21 June 2010 21 June 2010 21 June 2010	Ba Collection Date 12 July 2010	Comments on gel appearance gel like product clear clear clear clear	HDTMP Sample Number 153 154 155 156 156 157 158 HPAA	Comments on isolated solids - thrown away thrown away thrown away thrown away thrown away
pH value No pH control 1.03 2.03 2.86 4.04 5.04	Experiment Date 21 June 2010 21 June 2010 21 June 2010 21 June 2010 21 June 2010 21 June 2010	Ba Collection Date 12 July 2010 12 July 2010	Comments on gel appearance gel like product clear clear clear clear clear clear	HDTMP Sample Number 153 154 155 156 157 158 HPAA Sample	Comments on isolated solids - thrown away thrown away thrown away thrown away thrown away
pH value No pH control 1.03 2.03 2.86 4.04 5.04	Experiment Date 21 June 2010 21 June 2010 21 June 2010 21 June 2010 21 June 2010 21 June 2010 21 June 2010	Ba Collection Date 12 July 2010	Comments on gel appearance gel like product clear clear clear clear clear clear clear	HDTMP Sample Number 153 154 155 156 157 158 HPAA Sample Number	Comments on isolated solids - thrown away thrown away thrown away thrown away thrown away thrown away
pH value No pH control 1.03 2.03 2.86 4.04 5.04	Experiment Date 21 June 2010 21 June 2010	Ba Collection Date 12 July 2010	Comments on gel appearance gel like product clear clear clear clear clear clear clear clear black grains on the	HDTMP Sample Number 153 154 155 156 156 157 158 HPAA Sample Number	Comments on isolated solids - thrown away thrown away thrown away thrown away thrown away
pH value No pH control 1.03 2.03 2.86 4.04 5.04 pH value No pH No pH	Experiment Date 21 June 2010	Ba Collection Date 12 July 2010 12 July 2010	Comments on gel appearance gel like product clear clear clear clear clear clear clear black grains on the gel and excess	HDTMP Sample Number 153 154 155 156 157 158 HPAA Sample Number	Comments on isolated solids - thrown away thrown away thrown away thrown away thrown away chrown away
pH value No pH control 1.03 2.03 2.86 4.04 5.04 pH value No pH No pH control	Experiment Date 21 June 2010	Ba Collection Date 12 July 2010 500000000 12 July 2010 12 July 2010 12 July 2010 12 July 2010	Comments on gel appearance gel like product clear clear clear clear clear clear Comments on gel appearance black grains on the gel and excess liquid	HDTMP Sample Number 153 154 155 156 156 157 158 HPAA Sample Number	Comments on isolated solids - thrown away thrown away thrown away thrown away thrown away Comments on isolated solids
pH value No pH control 1.03 2.03 2.86 4.04 5.04	Experiment Date 21 June 2010	Ba Collection Date 12 July 2010	Comments on gel appearance gel like product clear clear clear clear clear clear clear black grains on the gel and excess liquid black grains on the	HDTMP Sample Number 153 154 155 156 157 158 HPAA Sample Number 165	Comments on isolated solids - thrown away thrown away thrown away thrown away thrown away thrown away

			liquid		
			black grains on the		
	21 June	12 Julv	gel and excess		
22	2010	2010	liquid	167	thrown away
2.2	21 Juno	02 1010	SINCLE	107	anownaway
0.04	21 Julie			400	in a la ta al
3.01	2010	2010	CRYSTALS	168	Isolated
	21 June	02 July	SINGLE		
4.01	2010	2010	CRYSTALS	169	isolated
			white powder		
			inside and on the		
	21 June	02 Julv	gel, some at the		
5.00	2010	2010	bottom of the vial	170	_
0.00	2010	2010	bottom of the via	170	
		Be			
		Ба			
	Experiment	Collection	Comments on gel	Sample	Comments on
pH value	Date	Date	appearance	Number	isolated solids
No pH	22 June	12 July			
control	2010	2010	clear	171	thrown away
	22 June	12 Julv			
3 53	2010	2010	clear	172	thrown away
0.00	22 Juno	12 July		112	anownaway
1 1 1	22 June	12 July	alaar	170	thrown owov
4.11	2010	2010	clear	173	thrown away
	22 June	12 July	pieces of		
4.5	2010	2010	destroyed gel	174	thrown away
	22 June	12 July			
5.02	2010	2010	clear	175	thrown away
			small crystals		
			inside and on the		
	22 June	12 July	gel and the bottom		
5 5	22 0010	2010	of the vial	176	_
5.5	2010	2010		170	_
				DM/ID A	
		Ca		PIVIIDA	
	Experiment	Collection	Comments on gel	Sample	Comments on
pH value	Date	Date	appearance	Number	isolated solids
			small crystals		
			inside and on the		
	22 June	12 Julv	gel and the bottom		
2 85	2010	2010	of the vial	177	isolated
2.00	2010	2010			loolatoa
		Ma			
	F				0
	Experiment	Collection	Comments on gel	Sample	Comments on
pH value	Date	Date	appearance	Number	isolated solids
			small crystals		
			inside and on the		
	22 June	12 Julv	gel and the bottom		
4.50	2010	2010	of the vial	178	isolated
	22 Juno	12 July			
F 00			nowdory product	170	
5.00	2010	2010	powdery product	179	-

	22 June	12 July			
5.50	2010	2010	powdery product	180	-