	IV	─1 1 1	1 /	$RTz^{\scriptscriptstyleTM}$	
	1	he gold nanopa	rticle for nanote	echnology	
Certificate	of Analys	rie			
Ocitinoate	Oi / tilaly s				
Product Family	,	Accurate Sn	herical Gold N	Nanoparticles	
Product Number		A11-1500-C		tarropartiolog	
Lot #		SPEC			
Form		Gold Colloid			
Capping Agent		Citrate			
Solution		18MEG DI W	Vater		
Source		11Y194			
D'			5 . 5	4500	
Diameter	nm	measured	Dark Field	1500	
SPR Abs	OD	measured	UV/VIS	0.075	
PDI	stddev/size		Dark Field	10%	
SPR Peak	nm	measured	UV/VIS	620	
pH	> /	measured	Orion	7	
Zeta Potential	mV	measured	DLS	-38	
Concentration	nps/mL	calc		1.10E+06	
Wt. conc.	mg/mL	calc		0.08	
ppm Wt. %	%	calc		75 0.0075%	
	uM	calc		1.84E-09	
Molarity Molar Ext.	M-1cm-1	calc		4.08E+13	
Citrate	mM	measured		4.06E+13	
Volume	mL	measured		25	
Volume	1111	measured		25	
Date				10/4/2019	
Exp Date				4/1/2020	
Alex Schoen, N	Manager				
Quality Control					
				1000	T TO
Absorbance (OD))			334.35	225 2226
0.08				272020	-616°
0.06		+ + 7		104150°	200000
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