

	Activity Name	Original Ot	Finish	Clabal Lab C+ C'	I Non Lobo - C+	Clobal Tat-LO-			out-All Curre		on Lober Origin	Total Coat I - I	the New Coat Total Coat Labor Coat	Non Lohor Coot	1 2047 1 2040	2010 2000	09-May-
	Activity Name	Original Start Duration	Finish	Global Labor Cost Globa [USD]	Non Labor Cost [USD]	Global Total Cost [USD]	Labor Cost N USA [USD]	Non Labor Cost USA [USD]	Total Cost USA [USD]	Labor Cost No CAN [CAD]	on Labor Cost CAN [CAD]	Total Cost Labor Cos CAN [CAD] EU [EUR	t Non Labor Cost Total Cost Labor Cost EU [EUR] EU [EUR] UK [GBP]	Non Labor Cost UK [GBP] UK [GBP]	2017 2018 Q Q Q Q Q Q Q Q	2019 2020	2021
DS-120180	General Considerations of Clevios Coating Strategy	454 01-May-19*	27-Jul-20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00	4 4 4 4 4 4 4 4		2 4 4 4 4 4
DS-120220	Surface quality requirement certification	442 02-May-19*	16-Jul-20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
DS-120240	anode/cathode before coating clevios	442 03-May-19*	17-Jul-20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
DS-120260	anode flatness requirement	442 04-May-19*	18-Jul-20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
DS-120280	Wall Grooves	442 05-May-19*	19-Jul-20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
DS-120300	Anode and Cathode (how to coat)	442 06-May-19*	20-Jul-20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
DS-120320	Wall Field Ring Groove (how to coat)	442 07-May-19*	21-Jul-20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
DS-120340	Ground - bottom of vessel, external surface (how to coat)	442 08-May-19*	22-Jul-20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
DS-120360	Electrical contact connection certification	442 09-May-19*	23-Jul-20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
DS-120380	Maximum Thickness confirmation (at contact point and fie	442 10-May-19*	24-Jul-20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
DS-120400	Minimum Thickness Confirmation (anode/cathode)	442 11-May-19*	25-Jul-20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
DS-120420	How to Connect	442 12-May-19*		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
DS-120440	LAr/LN2 Thermal Cycle Tests	442 13-May-19*	27-Jul-20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
DarkSide,1.02.03	General Considerations of the TPB Coating	1 13-May-19	13-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00 0.00	0.00 0.00 0.00	0.00 0.00		▼	
	General Considerations of the TPB Coating	1 13-May-19*	13-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
DS-120480	TPB Screening	1 13-May-19*	13-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
DS-120500	Determine optimal TPB coating condition for bare acylic	1 13-May-19*	13-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
	Determine optimal TPB coating condition on Clevios	1 13-May-19*	13-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
	Reflector panels (or directly on ESR 3M foil)	1 13-May-19*	13-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
	Determine Optimal Coating Condition on ESR if Chosen	1 13-May-19*	13-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
	Anode and Cathode	1 13-May-19*	13-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
	Facility Development if for in Vacuum Coating (Requireme	1 13-May-19*	13-May-19	\$0.00	\$0.00	\$0.00		\$0.00	\$0.00			0.00	0.00	0.00			
	Proto-Proto TPC	186 10-May-19	,	\$0.00	\$116,000.00	\$116.000.00	\$0.00	\$50,000,00		0.00	0.00	0.00 0.00	0 60000.00 60000.00 0.00	0.00 0.00			
	TPC concuptual design	1 10-May-19*		\$0.00	\$0.00	\$0.00		\$0.00	\$0.00	0.00	0.00	0.00	0.00	0.00			
	HV feedthroughs	1 10-May-19*	10-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
	HV connectors and cabling	1 10-May-19*	10-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
	Optical fibers for signal (feedthroughs, warm fibers, cryoc	1 10-May-19*	10-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
	Optical feedthrough mounting tower	1 10-May-19*	10-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
	Laser system for SPE calibration	1 10-May-19*	10-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
	•		-											0.00			
	PT-1000s for temperature monitoring during filling	1 10-May-19*	10-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 \$0.00			0.00	0.00	0.00			
	DAQ System	1 10-May-19*	10-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00				0.00					
	Proto-Proto TPC	92 10-May-19*	09-Aug-19	\$0.00	\$106,000.00	\$106,000.00	\$0.00	\$40,000.00	\$40,000.00			0.00	60000.00 60000.00	0.00			
	TPC engineering design	1 11-May-19	11-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
	Radioactive source MC& design	1 11-May-19	11-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
	TPC wiring	1 11-May-19	11-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
	TPC supporting structure	1 12-May-19	12-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
	Anode diving bell machine and polish	1 12-May-19	12-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
	Acrylic field cage panels machine	1 12-May-19	12-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
DS-120860	Acrylic reflection panels machine	1 12-May-19	12-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
DS-120920	Acrylic cathode window machine	1 12-May-19	12-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
DS-121040	Resistor chain fabrication	1 12-May-19	12-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
DS-121080	Radioactive source holder machine	1 12-May-19	12-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
DS-121100	Radioactive source collimator machine	1 12-May-19	12-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
DS-121180	Motion feedthroughs	1 12-May-19	12-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
DS-121000	Wire frame fabrication	91 12-May-19	10-Aug-19	\$0.00	\$4,000.00	\$4,000.00	\$0.00	\$4,000.00	\$4,000.00			0.00	0.00	0.00			
DS-121020	WIre fabrication	184 12-May-19	11-Nov-19	\$0.00	\$6,000.00	\$6,000.00	\$0.00	\$6,000.00	\$6,000.00			0.00	0.00	0.00			
DS-120740	Anode diving bell annealing	1 13-May-19	13-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
DS-120820	Acrylic field cage panels annealing	1 13-May-19	13-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
	Acrylic relfection panels annealing		13-May-19	\$0.00	\$0.00	\$0.00		\$0.00	\$0.00			0.00	0.00	0.00			
	Acrylic cathode window annealing	1 13-May-19	13-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
	TPC integration	91 13-May-19		\$0.00	\$0.00	\$0.00		\$0.00	\$0.00			0.00	0.00	0.00			
	Anode diving bell Clevios coating	1 14-May-19		\$0.00	\$0.00	\$0.00		\$0.00	\$0.00			0.00	0.00	0.00			
	Acrylic field cage panels Clveios coating	1 14-May-19	14-May-19	\$0.00	\$0.00	\$0.00		\$0.00	\$0.00			0.00	0.00	0.00			
	ESR TPB coating	1 14-May-19	-	\$0.00	\$0.00	\$0.00		\$0.00	\$0.00			0.00	0.00	0.00			
	Acrylic cathode window Clevios coating	1 14-May-19		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
	Anode diving bell TPB coating	1 15-May-19		\$0.00	\$0.00	\$0.00		\$0.00	\$0.00			0.00	0.00	0.00			
	Acrylic cathode window TPB coating	1 15-May-19	-	\$0.00	\$0.00	\$0.00		\$0.00	\$0.00			0.00	0.00	0.00			
	Prototype TPC (mock up)	435 10-May-19		\$113,861.55	\$316,000.00		\$113,861.55			0.00	0.00	0.00		0.00			
	Prototype TPC (mock up)	1 10-May-19*		\$0.00	\$0.00	\$0.00		\$0.00		0.00	0.00	0.00	0.00	0.00			
	.05.01 Vessel (Acrylic)	435 10-May-19		\$4,597.73	\$0.00	\$4,597.73		\$0.00		0.00	0.00	0.00		0.00			
	Vessel (Acrylic)	1 10-May-19*		\$0.00	\$0.00	\$0.00		\$0.00		0.00	0.00	0.00	0.00	0.00			
	02.05.01.01 Top Plate (Anode)	1 10-May-19		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00 0.00		0.00 0.00			
	Top Plate (Anode)	1 10-May-19*		\$0.00	\$0.00	\$0.00		\$0.00	\$0.00	0.00	0.00	0.00	0.00	0.00			
	Conceptual desgin inherited from DS-20k	1 10-May-19*	-	\$0.00	\$0.00	\$0.00		\$0.00	\$0.00			0.00	0.00	0.00			
	Load Analysis	1 10-May-19*	-	\$0.00	\$0.00	\$0.00		\$0.00	\$0.00			0.00	0.00	0.00			
	Engineering Drawing	1 10-May-19*	-	\$0.00	\$0.00	\$0.00		\$0.00	\$0.00			0.00	0.00	0.00			
	Coating Clevios	1 10-May-19*		\$0.00	\$0.00	\$0.00		\$0.00	\$0.00			0.00	0.00	0.00			
	-		-	\$0.00					\$0.00			0.00	0.00	0.00			
	Coating TPB Flectrical Contact Point Masking	1 10-May-19*	-	\$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00	\$0.00			0.00	0.00	0.00			
	Electrical Contact Point Masking	1 10-May-19*						\$0.00		0.00	0.00			i-			
	02.05.01.02 Bottom Plate (cathode) Bottom Plate (cathode)	1 10-May-19 1 10-May-19*	-	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	0.00	0.00	0.00 0.00	0 0.00 0.00 0.00	0.00 0.00			
	Dollow France (Outriodo)	i io-iviay- 19	10 May-19	ψυ.υυ	Ψ0.00	φυ.υυ	ψυ.υυ	φυ.υυ	φυ.υυ			0.00	0.00	0.00			

Page 2 of 12 TASK filter: All Activities © Oracle Corporation

Side Current									ut-All Currencies												ay-19
A	Activity Name	Original Start Duration	Finish	Global Labor Cost [USD]	Global Non Labor Cost [USD]	Global Total Cost [USD]	Labor Cost USA [USD]	Non Labor Cost 1 USA [USD]	Total Cost USA Labor Cost [USD] CAN [CAD]			on Labor Cost Total Cost EU [EUR] EU [EUR]	Labor Cost Non La UK [GBP]	abor Cost Total (UK [GBP] UK [G	DD1	2017		18 2019 Q Q Q Q Q	2020		
DS-121 C	Conceptual desgin inherited from DS-20k	1 10-May-	9* 10-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0	.00	0.00			0.00	u u u	الالعالا		Talalalal.	م ام ام ام	x Q Q
	Load Analysis		9* 10-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0	.00	0.00			0.00						
DS-121 E	Engineering Drawing	1 10-May-	9* 10-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0	00	0.00			0.00						
	Coating Clevios	1 10-May-	9* 10-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		.00	0.00			0.00						
	Coating TPB		9* 10-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		.00	0.00			0.00						
	Electrical Contact Point Masking	1 10-May-	-	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		.00	0.00			0.00			. : <u> </u> :			
	12.05.01.03 Wall Panels (x8) Wall Panels (x8)		9 10-May-19 9* 10-May-19	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 0.00 \$0.00		.00 0.00	0.00 0.00			0.00						1
	Conceptual desgin inherited from DS-20k		9* 10-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		.00	0.00			0.00						
	Load Analys is		9* 10-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		.00	0.00			0.00						
	Engineering Drawing		9* 10-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		.00	0.00			0.00						
	Groove Cutting		9* 10-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		.00	0.00			0.00			.			
	After Cut Surface Treatment		9* 10-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0	.00	0.00			0.00			.			
DS-121 C	Coating Clevios	1 10-May-	9* 10-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0	.00	0.00			0.00	1111					
DarkSide.1.02	2.05.01.04 Access Port Certification (Inherited from	1 10-May-	9 10-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 0.00	0.00	.00 0.00	0.00 0.00	0.00	0.00	0.00			▼			
DS-121 A	Access Port Certification (Inherited from DS-20k)	1 10-May-	9* 10-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0	.00	0.00			0.00						
	2.05.01.05 Internal TPC Required Parts Installation	435 10-May-		\$4,597.73	\$0.00	\$4,597.73	\$4,597.73	\$0.00	\$4,597.73 0.00		0.00	0.00 0.00			0.00						
	nternal TPC Required Parts Installation		9* 10-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		.00	0.00			0.00						
	Instrumentation Connections (anode, grid, first field ring)		9* 10-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		.00	0.00			0.00			.			
	Bonding Strategy (Inherited from DS-20k)		9* 10-May-19	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		.00	0.00			0.00						
DS-121 R	Reflector Cage	1 11-May-	9 11-May-19 9 11-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		.00	0.00			0.00						
	JH Postdoc for Wire Frame Installation	15 03-Jul-2		\$4,597.73		\$4,597.73	\$4,597.73	\$0.00	\$4,597.73		.00	0.00			0.00						
	05.02 Field Cage (20k mockup)		9 03-Jul-19	\$4,597.73		\$0.00	\$4,597.73	\$0.00	\$0.00 0.00		.00 0.00	0.00			0.00		+		+		
	Field Cage (20k mockup)		9* 10-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		.00	0.00			0.00						
	HV Connection to Anode, Grid and First Field Ring		9* 10-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		.00	0.00			0.00						
	Assembly Steps and Details	1 10-May-	9* 10-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0	.00	0.00			0.00			.			
DS-121920 C	Conceptual desgin inherited from DS-20k	1 02-Jul-1	02-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0	.00	0.00			0.00			.			
DS-121940 Fi	Field Modeling and Optimization	1 03-Jul-1	03-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0	.00	0.00			0.00				1		-1
DS-121960 C	Clevios Polymer Coating	1 03-Jul-1	03-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0	.00	0.00			0.00			.			
DS-121980 R	Resistor Link	1 03-Jul-1	03-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0	.00	0.00			0.00			.			
DarkSide.1.02.05	05.03 Reflector Cage (20k mockup)	55 10-May-		\$0.00		\$0.00	\$0.00	\$0.00	\$0.00		0.00	0.00			0.00			₩ ₩			
DS-122040 R	Reflector Cage (20k mockup)	1 10-May-	9* 10-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		.00	0.00			0.00						
	Assembly Details	1 10-May-		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		.00	0.00			0.00						
	Conceptual desgin inherited from DS-20k	1 02-Jul-1		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		.00	0.00			0.00			.			
	Panel Mechanical Design	1 03-Jul-1		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		.00	0.00			0.00			.			
	Thermal Modeling	1 03-Jul-1		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		.00	0.00			0.00						
	Coating and Handling Details	1 03-Jul-1		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		.00	0.00			0.00						
	05.04 Bottom Ground (Inherited from DS-20k) Bottom Ground (Inherited from DS-20k)	1 10-May-	9 10-May-19 9* 10-May-19	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 0.00 \$0.00		.00 0.00	0.00 0.00			0.00			.			
	05.05 Extraction Grid (Wire and Frame)	368 01-Jul-1	-	\$109.263.82	\$316.000.00	\$425,263,82	\$109.263.82	\$316,000,00	\$425,263.82 0.00		0.00	0.00			0.00						
	Wire frame Design and FEA Modeling	61 01-Jul-1		\$0.00	\$10,000.00	\$10,000.00	\$0.00	\$10,000.00	\$10,000.00		.00	0.00			0.00						
	Extraction Grid (Wire and Frame)	336 01-Jul-1		\$0.00	\$158,000.00	\$158,000.00	\$0.00	\$158,000.00	\$158,000.00		.00	0.00			0.00			. ⋤			
	Houston Postdoc	336 01-Jul-1		\$109,263.82	\$0.00	\$109,263.82		\$0.00	\$109,263.82	0	.00	0.00			0.00				****		
	Wire Frame Fabrication	121 31-Aug-		\$0.00	\$45,000.00	\$45,000.00	\$0.00	\$45,000.00	\$45,000.00	0	.00	0.00			0.00			r			
DS-122220 W	Wire Winding Machine Parts	61 01-Sep-1	9* 31-Oct-19	\$0.00	\$25,000.00	\$25,000.00	\$0.00	\$25,000.00	\$25,000.00	0	.00	0.00			0.00			1 1 1	<u>ii </u>		
DS-122260 W	Wire Pins Fabrication	61 01-Sep-1	9* 31-Oct-19	\$0.00	\$15,000.00	\$15,000.00	\$0.00	\$15,000.00	\$15,000.00	0	.00	0.00			0.00				📥		
DS-122280 S	Stainless Steel Wire Procurement	61 01-Sep-	9* 31-Oct-19	\$0.00	\$4,000.00	\$4,000.00	\$0.00	\$4,000.00	\$4,000.00	0	.00	0.00			0.00			F	<u> </u>		
DS-122240 W	Wire Winding Machine As sembly	61 01-Nov-	9 31-Dec-19	\$0.00	\$5,000.00	\$5,000.00	\$0.00	\$5,000.00	\$5,000.00	0	.00	0.00			0.00						
DS-122300 W	Wire Tension Measurement	31 01-Jan-2	0 31-Jan-20	\$0.00	\$10,000.00	\$10,000.00	\$0.00	\$10,000.00	\$10,000.00	0	.00	0.00			0.00				1 1 1		
	Wrapped Wire Certification	15 01-Feb-2	0 15-Feb-20	\$0.00	\$5,000.00	\$5,000.00	\$0.00	\$5,000.00	\$5,000.00		.00	0.00			0.00				1		
	Wrapped Wire Production	61 16-Feb-2		\$0.00	\$20,000.00	\$20,000.00	\$0.00	\$20,000.00	\$20,000.00		.00	0.00			0.00				•		
	Vire Grid Assembly	31 17-Apr-2		\$0.00	\$6,000.00	\$6,000.00	\$0.00	\$6,000.00	\$6,000.00		00	0.00			0.00		4-4-4-)				
	Wire Grid Wire Tension Check	31 18-May-		\$0.00	\$6,000.00	\$6,000.00	\$0.00	\$6,000.00	\$6,000.00		.00	0.00			0.00						
	Shipping from Houston to CERN	15 18-Jun-2		\$0.00	\$7,000.00	\$7,000.00	\$0.00	\$7,000.00	\$7,000.00		.00	0.00			0.00			<u> </u>			
	05.06 Internal Argon Loop	1 01-Jul-1		\$0.00		\$0.00		\$0.00	\$0.00		0.00	0.00 0.00			0.00			Y			
	nternal Argon Loop 05.07 SiPM Related Interfacing	1 01-Jul-1	01-Jul-19	\$0.00 \$0.00		\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00 0.00		.00 0.00	0.00			0.00						
	SiPM Related Interracing		01-Jul-19 0* 01-Jul-19	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00		.00	0.00			0.00		+	·	+		
	05.08 Cathode HV System (TPC)	1 01-Jul-1		\$0.00		\$0.00		\$0.00	\$0.00 0.00		.00 0.00	0.00 0.00			0.00						
	Cathode HV System (TPC)		o* 01-Jul-19	\$0.00		\$0.00		\$0.00	\$0.00		.00	0.00			0.00						
DS-122500 C	05.09 TPC Instrumentation Cabling (in TPC)		01-Jul-19	\$0.00		\$0.00		\$0.00			0.00	0.00 0.00		0.00	0.00			♦			
	TPC Instrumentation Cabling (in TPC)	1 01-Jul-1)* 01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0	.00	0.00			0.00						
DarkSide.1.02.05			01-Jul-19	\$0.00		\$0.00		\$0.00	\$0.00 0.00		0.00	0.00 0.00			0.00			▼			
DarkSide.1.02.05 DS-122520 T DarkSide.1.02.05	05.10 Liquid Arg on Leveling Control	1 01- lul-19)* 01-Jul-19	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00		00	0.00			0.00						
DarkSide.1.02.05 DS-122520 Ti DarkSide.1.02.05 DS-122540 Li	Liquid Argon Leveling Control			\$0.00	\$3,910,000.00	\$3,910,000.00	\$0.00 \$0.00		10.070.000	The state of the s		200000.00 200000.00	10.00		0.00			. 🕇	7 : : :		
DarkSide.1.02.08 DS-122520 TI DarkSide.1.02.08 DS-122540 Li DarkSide.1.02.06 D	Liquid Argon Leveling Control DarkSide-20k TPC	181 01-Jul-1	28-Dec-19		** **		ሄበ በበ	\$0.00	\$0.00	0	.00	0.00	ų l		0.00	1 1	1 1 1 1		3 1 1 1 1		
DarkSide.1.02.05 DS-122520 TI DarkSide.1.02.05 DS-122540 Li DarkSide.1.02.06 DS-122560 D	.iquid Argon Le ve Ing Control DarkSide-20k TPC DarkSide-20k TPC	181 01-Jul-19 1 01-Jul-19)* 01-Jul-19	\$0.00	\$0.00	\$0.00			00.00	4500000-00 450000		0.00		0.00	0.00	1 1	1 1 1			1 1 1 1	
DarkSide.1.02.05 DS-122520 TI DarkSide.1.02.05 DS-122540 Li DarkSide.1.02.06 DS-122560 D DarkSide.1.02.06 D	Liquid Argon Leve Ing Control DarkSide-20k TPC DarkSide-20k TPC 16.01 Vessel (Acrylic)	181 01-Jul-19 1 01-Jul-19 1 01-Jul-19	01-Jul-19 01-Jul-19	\$0.00 \$0.00	\$3,150,000.00	\$3,150,000.00	\$0.00	\$0.00	\$0.00 0.00		0.00	0.00 0.00	0.00		0.00			*			
DarkSide.1.02.05 DS-122520 TI DarkSide.1.02.06 DS-122580 Li DS-122580 D DarkSide.1.02.06 DS-122580 V DS-122580 V	Liquid Argan Leveling Control DarkSide-20k TPC DarkSide-20k TPC 16.01 Vessel (Acrylic) Vessel (Acrylic)	181 01-Jul-19 1 01-Jul-19 1 01-Jul-19 1 01-Jul-19	01-Jul-19 01-Jul-19 01-Jul-19	\$0.00 \$0.00 \$0.00	\$3,150,000.00 \$3,150,000.00	\$3,150,000.00 \$3,150,000.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00	4500000.00 4500000	00.00	0.00	0.00		0.00						
DarkSide.1.02.05 DS-122520 TI DarkSide.1.02.05 DS-122540 Li DarkSide.1.02.06 DS-122560 D DarkSide.1.02.06 DS-122580 V DarkSide.1.02.06	Liquid Argan Leveling Control DarkSide-20k TPC DarkSide-20k TPC 16.01 Vessel (Acrylic) Vessel (Acrylic) 12.06.01.01 Top Plate (Anode)	181 01-Jul-19 1 01-Jul-19 1 01-Jul-19 1 01-Jul-19 1 01-Jul-19	01-Jul-19 01-Jul-19 01-Jul-19 01-Jul-19	\$0.00 \$0.00 \$0.00 \$0.00	\$3,150,000.00 \$3,150,000.00 \$0.00	\$3,150,000.00 \$3,150,000.00 \$0.00	\$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00	\$0.00 \$0.00 0.00	4500000.00 4500000 0.00 0	00 0.00 00 0.00	0.00 0.00 0.00	0.00	0.00	0.00			\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			
DarkSide.1.02.05 DS-122520 TI DarkSide.1.02.05 DS-122540 Li DarkSide.1.02.06 DS-122560 D DarkSide.1.02.06 DS-122580 V DarkSide.1.02.07 DS-122580 V DarkSide.1.02	Liquid Argan Leveling Control DarkSide-20k TPC DarkSide-20k TPC 16.01 Vessel (Acrylic) Vessel (Acrylic)	181 01-Jul-19 1 01-Jul-19 1 01-Jul-19 1 01-Jul-19 1 01-Jul-19 1 01-Jul-19	01-Jul-19 01-Jul-19 01-Jul-19 01-Jul-19	\$0.00 \$0.00 \$0.00	\$3,150,000.00 \$3,150,000.00 \$0.00 \$0.00	\$3,150,000.00 \$3,150,000.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00	4500000.00 4500000 0.00 0	00.00	0.00	0.00	0.00	0.00			*			

Remaining Level of Effort Actual Work Critical Remaining Work
Actual Level of Effort Remaining Work Milestone

Remaining Level of Effort Actual Work Milestone

TASK filter: All Activities

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DarkSide	e Current								ı	Urania Layout	t-All Currencies												09-Ma	ay-19 1	7:57
Activity ID		Activity Name	Original S Duration	Start	Finish	Global Labor Cost [USD]	Global Non Labor Cost [USD]	Global Total Cost [USD]	Labor Cost I USA [USD]	Non Labor Cost Tot USA [USD]	tal Cost USA Labor Cos [USD] CAN [CAD]		n Labor Co: EU [EUF	st Total Cost L R] EU [EUR]	abor Cost Non Labor C UK [GBP] UK [GI	ost Total C 3P] UK [GI	201			2018		202	0 2021 Q Q Q Q Q		2 J23
	DS-122	Load Analysis	1 0	01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0		-1-1-			3 3 3	12/2/2	2 2 2 2 3 3	121212	1212
		Coating Clevios			01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00			.00								
		Surface Preparation			01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00			.00								
		Tooling Drying Process			01-Jul-19 01-Jul-19	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	0.00		0.00			.00								
		Coating TPB			01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00			.00								
	DS-122	Segmented Coating or Large in Vacuum Coating	1 0	01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0	.00	117	1						1
		Contact Point Masking	1 0	01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00			.00								
		1.02.06.01.02 Bottom Plate (cathode)		01-Jul-19	01-Jul-19 01-Jul-19	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00	\$0.00 \$0.00	0 0.00 0.00 0.00 0.00	0.0	0.00	0.00	.00 0	.00				*				
		Bottom Plate (cathode) Engineering Drawing			01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00	0.00		0.00			.00								
		Load Analysis		01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00			.00								
	DS-122	Coating Clevios	1 0	01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0	.00				111				
	DS-122	Surface Preparation	1 0	01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00			.00								
		Tooling			01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00			.00								
		Drying Process			01-Jul-19 01-Jul-19	\$0.00 \$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0	.00								
		Coating TPB Segmented Coating or Large in Vacuum Coating			01-Jul-19 01-Jul-19	\$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	0.00		0.00			.00								
		Facility Requirements			01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00			.00								
		1.02.06.01.03 Wall Panels (x8)		01-Jul-19	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 0.00	0.00 0.00 0.00	0.0	0.00	0.00 0	.00 0	.00				▼				
		Wall Panels (x8)			01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00			.00					.			
		Engineering Drawing			01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00			.00								
		Load Analysis Groove Cutting		01-Jul-19* 01-Jul-19*	01-Jul-19 01-Jul-19	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	0.00		0.00			.00								+
		After Cut Surface Treatment			01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00			.00								
		Coating Clevios			01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00			.00								
	DS-123	Drying Process	1 0	01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0	.00		-11			1			
		1.02.06.01.04 Access Port Certification		01-Jul-19	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 0.00		0.0		0.00	.00 0					\ \				
		Access Port Certification Which method to transition from scrylic to SS flange			01-Jul-19 01-Jul-19	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	0.00		0.00			.00								
		Anode, grid, first field ring contact point			01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00			.00								
		Cathode HV access port or contact			01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00			.00								
	DS-123	TPC Instrumentation Cabling port	1 0	01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0	.00								
		1.02.06.01.05 Internal TPC Required Parts Installation		01-Jul-19	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 0.00		0.0		0.00		.00				\ \				
		Internal TPC Required Parts Installation Reflector Cage		01-Jul-19* 01-Jul-19*	01-Jul-19 01-Jul-19	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	0.00		0.00			.00								
		Field Cage		01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00			.00								
		Wire Frame			01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00			.00								
	DS-123	Instrumentation Connections (anode, grid, first field ring)	1 0	01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0	.00								
		1.02.06.01.06 Bonding Strategy			01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		0.0		0.00		.00				*				
	DS-123 DS-123	Bonding Strategy			01-Jul-19 01-Jul-19	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	0.00		0.00		0									
		Facility Requirements			01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00			.00								
		Annealing Plan			01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00			.00								
	DS-123	Wall Bonding (first)	1 0	01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0	.00								
		Bottom Plate Bonding (second)		01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00			.00					.1			
		Final Top Plate Bonding (last)		01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00			.00								
		Re-open Plan (Consider should re-opening be required) 2.06.02 Field Cage			01-Jul-19 01-Jul-19	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00 0.00	0.00	0.0	0.00	0.00 0	.00 0	.00								
	_	Field Cage			01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.0	0.00	0.00	0									
	DS-123520	Field Ring Groove Cross Section Determination	1 0	01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0	.00								
		Field Modeling and Optimization			01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0									
		Clevios Polymer Coating			01-Jul-19	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00	\$0.00 \$0.00	\$0.00 \$0.00	0.00		0.00			.00								
		Resistor Link Flexible PCB selection and screening			01-Jul-19 01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00	\$0.00	0.00		0.00			.00								
		Maximum Flexibility Tes ting			01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00			.00								
		Use thick Kapton and thick copper layer			01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0	.00				1-1-1-			11:11:11:	
		Mounting plan considering thermal expansion	1 0	01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00			.00								
		Optimize shape with thermal expansion consideration			01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00			.00								
		Resistor Size Determination			01-Jul-19	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00	\$0.00	\$0.00	\$0.00 \$0.00	0.00		0.00		0	.00								
		Resistor Screening Solder Flux selection and screening			01-Jul-19 01-Jul-19	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00	0.00		0.00			.00				+				
		HV Connection to Anode, Grid and First Field Ring			01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00			.00								
		Assembly Steps and Details		01-Jul-19*		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00			.00								
		2.06.03 Reflector Cage			01-Jul-19	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00 0.00		0.0		0.00	.00 0					*				
		Reflector Cage Determination of TPB on ESR directly or Acrylic			01-Jul-19 01-Jul-19	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	0.00		0.00		0	.00				 			+++	
		Determination of TPB on ESR directly or Acrylic Panel Mechanical Design			01-Jul-19 01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0	i								+
		Thermal Modeling			01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00			.00								
		Mock-up test and certification			01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00			.00								
	DS-123900	Coating and Handling Details	1 0	01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0	.00				<u> </u>	<u> </u>			
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Remaining Level of Effort

Actual Work

Critical Remaining Work

Actual Level of Effort

Remaining Work

Milestone

Page 4 of 12

TASK filter: All Activities

Activity Name	Original Start Duration	Finish	Global Labor Cost [USD]	lobal Non Labor Cost [USD]	Global Total Cost [USD]	Labor Cost N USA [USD]	Ion Labor Cost T USA [USD]	Total Cost USA Labor Cos [USD] CAN [CAD		Non Labor Cost Total Cost Labor Cost Non Labor EU [EUR] EU [EUR] UK [GBP] UK [C			2017	2018		2019		2020	2021 Q Q Q	
DS-123920 Assembly Details	1 01-Jul-19*	01-Jul-19		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00	ا تا ت	αιαια	الالمالا	ع لا لا لا	ααι	2 0 0	عامام	امامام	عاماما
DarkSide.1.02.06.04 Ground (bottom of bottom acrylic vessel)	1 01-Jul-19			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 0.0		0.00 0.00 0.00	0.00	4				*				
DS-123940 Ground (bottom of bottom acrylic vessel)	1 01-Jul-19*			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00	_ i i								
DS-123960 Clevios coating and handling details	1 01-Jul-19*			\$0.00	\$0.00 \$540.000.00	\$0.00	\$0.00	\$0.00 \$540.000.00 0.0	0.00	0.00	0.00						_			
Ds-123980 Extraction Grid (Wire and Frame) DS-123980 Extraction Grid (Wire and Frame)	181 01-Jul-19 1 01-Jul-19*			\$540,000.00 \$270,000.00	\$270,000.00	\$0.00 \$0.00	\$540,000.00 \$270,000.00	\$270,000.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00						7			
DS-124240 Wrapped Wire Certification	15 01-Jul-19*			\$10,000.00	\$10,000.00	\$0.00	\$10,000.00	\$10,000.00	0.00	0.00	0.00					1				
DS-124220 Wire Tension Measurement	31 01-Jul-19*	31-Jul-19	\$0.00	\$5,000.00	\$5,000.00	\$0.00	\$5,000.00	\$5,000.00	0.00	0.00	0.00	<u>ו</u> כ				•				
DS-124300 Wrapped Wire Shipping to LNGS	31 01-Jul-19*	31-Jul-19	\$0.00	\$7,000.00	\$7,000.00	\$0.00	\$7,000.00	\$7,000.00	0.00	0.00	0.00	ĵ				•				
DS-124360 Wire Frame Shipping to LNGS	31 01-Jul-19*			\$14,000.00	\$14,000.00	\$0.00	\$14,000.00	\$14,000.00	0.00	0.00	0.00								1	
DS-124400 Wire Grid tensions check at LNGS	31 01-Jul-19*			\$9,000.00	\$9,000.00	\$0.00	\$9,000.00	\$9,000.00	0.00	0.00	0.00									
DS-124000 Wire frame Design and FEA Modeling DS-124020 Frame Materials Screening	61 01-Jul-19* 61 01-Jul-19*			\$20,000.00 \$10,000.00	\$20,000.00 \$10,000.00	\$0.00 \$0.00	\$20,000.00 \$10,000.00	\$20,000.00 \$10,000.00	0.00	0.00	0.00	_i i								
DS-124040 Wire Materials Screening	61 01-Jul-19*			\$5,000.00	\$5,000.00	\$0.00	\$5,000.00	\$5,000.00	0.00	0.00	0.00									
DS-124060 Wire Pin Materials Screening	61 01-Jul-19*			\$5,000.00	\$5,000.00	\$0.00	\$5,000.00	\$5,000.00	0.00	0.00	0.00	_ i _ i				_				
DS-124080 Fabrication Plan (welding and annealing)	61 01-Jul-19*			\$5,000.00	\$5,000.00	\$0.00	\$5,000.00	\$5,000.00	0.00	0.00	0.00	ر							1	
DS-124100 Wire Fixture Method Determination	61 01-Jul-19*	30-Aug-1	9 \$0.00	\$5,000.00	\$5,000.00	\$0.00	\$5,000.00	\$5,000.00	0.00	0.00	0.00	ı l			1 1					
DS-124120 Wire Winding Machine Modifications	61 01-Jul-19*			\$5,000.00	\$5,000.00	\$0.00	\$5,000.00	\$5,000.00	0.00	0.00	0.00									
DS-124140 Wire Spool Design and Testing	61 01-Jul-19*			\$5,000.00	\$5,000.00	\$0.00	\$5,000.00	\$5,000.00	0.00	0.00	0.00	_ i i								
DS-124160 Wire Spool Procurement	61 01-Jul-19*			\$5,000.00	\$5,000.00	\$0.00	\$5,000.00	\$5,000.00	0.00	0.00	0.00	-6		1-1-1						
DS-124200 Stainless Steel Wire Procurement DS-124320 Stainless Steel Procurement	61 01-Jul-19* 61 01-Jul-19*			\$15,000.00 \$20,000.00	\$15,000.00 \$20,000.00	\$0.00 \$0.00	\$15,000.00 \$20,000.00	\$15,000.00 \$20,000.00	0.00	0.00	0.00									
DS-124320 Stainless Steel Procurement DS-124380 Wire Grid Assembly at LNGS	61 01-Jul-19*			\$20,000.00	\$20,000.00	\$0.00	\$20,000.00	\$20,000.00	0.00	0.00	0.00	_i i								
DS-124180 Wire Pin Fabrication	121 01-Jul-19*			\$25,000.00	\$25,000.00	\$0.00	\$25,000.00	\$25,000.00	0.00	0.00	0.00	1: 1:								
DS-124260 Wrapped Wire production	121 01-Jul-19*			\$30,000.00	\$30,000.00	\$0.00	\$30,000.00	\$30,000.00	0.00	0.00	0.00	1 1								
DS-124280 Wrapped Wire spooling and cleaning	121 01-Jul-19*	29-Oct-19	\$0.00	\$5,000.00	\$5,000.00	\$0.00	\$5,000.00	\$5,000.00	0.00	0.00	0.00]					1	TT		
DS-124340 Wire Frame Fabrication	181 01-Jul-19*	28-Dec-1	9 \$0.00	\$40,000.00	\$40,000.00	\$0.00	\$40,000.00	\$40,000.00	0.00	0.00	0.00)				-	4			
DarkSide.1.02.06.06 TPC itegration at LNGS	1 01-Jul-19			\$220,000.00	\$220,000.00	\$0.00	\$0.00	\$0.00 0.0			0.00	4				•				
DS-124420 TPC itegration at LNGS	1 01-Jul-19* 1 01-Jul-19			\$220,000.00 \$30,000.00	\$220,000.00 \$30,000.00	\$0.00 \$0.00	\$0.00	\$0.00 \$30,000.00 0.0	0.00	200000.00 200000.00 0.00	0.00	-				1				
DS-124440 Internal Argon Loop Planning and Testing DS-124440 Internal Argon Loop Planning and Testing	1 01-Jul-19*			\$30,000.00	\$30,000.00	\$0.00	\$30,000.00	\$30,000.00	0.00	0.00	0.00	4		+-+-+		Y +-		++		
DS-124460 UAr Flow Strategy within TPC	1 01-Jul-19*			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00									
DS-124480 Interfacing with field cage and reflector cage	1 01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00	[נ				- i				
DS-124500 Interfacing with external plumbing	1 01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00	ĵ.								
DS-124520 Interface with leveling system	1 01-Jul-19*			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00								1.1.1.	
DS-124540 Interface with acrylic vessel port	1 01-Jul-19*			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00	4								
DarkSide.1.02.08 SiPM Related Interfacing DS-124560 SiPM Related Interfacing	1 01-Jul-19 1 01-Jul-19*	0.00.10		\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 0.0 \$0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00	4				Y				
DS-124580 Detailed Drawings of mechanics to fit motherboard to TP(1 01-Jul-19*			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00									
DS-124600 Fabrication of the Support Structure	1 01-Jul-19*			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00	آر			111					
DS-124620 Integration of the PDM MB assembly	1 01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00						11	1-1-		
DS-124640 MotherBoard on Support Structure	1 01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00)				-				
DS-124660 PDM assembly to tpc	1 01-Jul-19*			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00									
DS-124680 Integration of the TPC full assembly with the cryostat top-	1 01-Jul-19*		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00	_ i i								
DS-124700 Penentration interfacing with Veto	1 01-Jul-19*		\$0.00 \$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00			1						
DS-124720 Penentration interfacing with Cryostat DS-124740 Heat issue of cold electronics and its mitigation for bubblir	1 01-Jul-19* 1 01-Jul-19*			\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	0.00	0.00	0.00	_ i _ i								
DS-124740 Interfacing with all SiPM related cabling	1 01-Jul-19*			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00	اار								+11
ParkSide.1.02.09 TPC Instrumentation Cabling (outside TPC)	1 01-Jul-19			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 0.0	0.00 0.00 0.00		0.00	1				*				
DS-124780 TPC Instrumentation Cabling (outside TPC)	1 01-Jul-19*			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00									
DS-124800 Acrylic port determination	1 01-Jul-19*			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00	_: : :								
DS-124820 Gas Pocket related	1 01-Jul-19*			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00									
DS-124840 TPC level sensor	1 01-Jul-19*	01-Jul-19 01-Jul-19		\$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00 0.0	0.00	0.00	0.00	- F 1				1				
DarkSide.1.02.10 HV System DS-124860 HV System	1 01-Jul-19 1 01-Jul-19*			\$0.00 \$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00					11				
DarkSide.1.02.10.01 Cathode HV System (outside TPC)	1 01-Jul-19			\$0.00		\$0.00	\$0.00	\$0.00			0.00			1-1-1-		•	+	1-1-	1-1-1-	
DS-124880 Cathode HV System (outside TPC)	1 01-Jul-19*			\$0.00		\$0.00	\$0.00	\$0.00	0.00	0.00	0.00	_! !								
DS-124900 Conceptual design	1 01-Jul-19*			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00	_ i _ i								
DS-124920 Field modeling and optimization	1 01-Jul-19*			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00	_: : :								
DS-124940 HV feedthrough engineer design	1 01-Jul-19*			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00			 -						
DS-124960 HV feedthrough fabrication DS-124980 HV power supply procurement	1 01-Jul-19* 1 01-Jul-19*			\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	0.00	0.00	0.00	_i i								
DS-125000 HV feedthrough stand-alone test	1 01-Jul-19*			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00	_: : :								
DS-125020 Cathode region mock-up and test at 150% of full HV	1 01-Jul-19*			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00									
DarkSide.1.02.10.02 HV system for S2	1 01-Jul-19	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 0.0	0.00 0.00 0.00	0.00 0.00 0.00	0.00	0				▼				
DS-125040 HV system for S2	1 01-Jul-19*			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00	_: :								
DS-125060 Determination of HV delivery method	1 01-Jul-19*			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00	_ i								
DS-125080 HV feedthrough design	1 01-Jul-19*			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00	_: :								
DS-125100 HV feedtrhough fabrication DS-125120 HV power supply procurement	1 01-Jul-19* 1 01-Jul-19*			\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	0.00	0.00	0.00									
DS-125140 HV feedthrough stand-alone test	1 01-Jul-19*			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00									
	. 51 641 19	J. Jul 19	ψ0.00	ψ0.00	ψ0.00	ψ3.00	Ç0.00		5.00	5.50	5.00	نـــــــــــــــــــــــــــــــــــــ	. i	<u> </u>	- + i	<u> </u>	<u> </u>	<u> </u>	<u></u>	

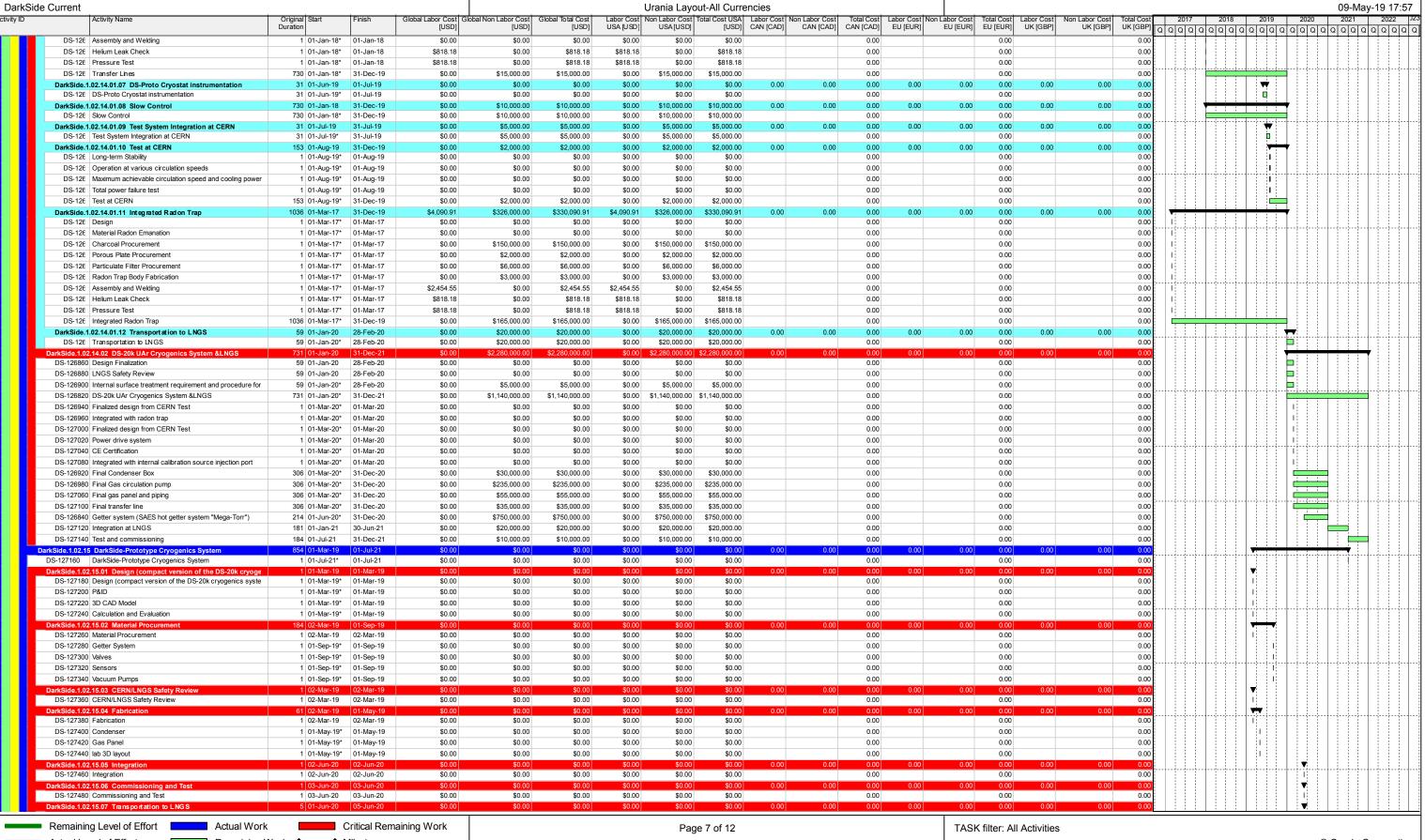
de Current	Original Start	Finish	Global Labor Cost G	Global Non Labor Cost	Global Total Cost			ut-All Currencies Total Cost USA Labor Cost	Non Labor Cost Total Cost Lab	abor Cost Non Lah	oor Cost Total Cost Lai	oor Cost Non Labor Co	ost Total Cos	t	2017	2018	2019		09-May	1y-19
, assis, raino	Duration	1	[USD]	[USD]	[USD]	USA [USD]	USA [USD]	[USD] CAN [CAD]				K [GBP] UK [GE						00000		
DS-125160 Anode HV (grounded)	1 01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00	_i i i						
DS-125180 Grid HV	1 01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00	_: : :						
DS-125200 First Field Cage Ring	1 01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00				<u> </u>			
DarkSide.1.02.11 Liquid Argon Leveling Control DS-125220 Liquid Argon Leveling Control	1 01-Jul-19 1 01-Jul-19*	01-Jul-19 01-Jul-19	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 0.00 \$0.00	0.00 0.00	0.00	0.00 0.00	0.00 0.	0.00				·			+
DarkSide.1.02.11.01 Leveling monitor	1 01-Jul-19	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		0.00	0.00	0.00 0.	0.00							
DS-125240 Leveling monitor	1 01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00	0.00	0.00							
DS-125260 Instrumental leveling sensor (outside TPC)	1 01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00	i i						
DS-125280 Intrinsic leveling sensor (S2 uniformity)	1 01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00	5						
DS-125300 Leveling software development	1 01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00	5						
DS-125320 Test and certification	1 01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00	<u> </u>						
DarkSide.1.02.11.02 Leveling control	1 01-Jul-19	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 0.00	0.00 0.00	0.00	0.00 0.00	0.00 0.	.00 0.00				▼			
DS-125340 Leveling control	1 01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00	0						
DS-125360 Conceptual design	1 01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00							
DS-125380 Engineering drawing	1 01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00							
DS-125400 FEA modeling	1 01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00							
DS-125420 Prototyping	1 01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00							
DS-125440 Interface with DS-20k cryostat	1 01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00							
DS-125460 Production	1 01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00	- ii		'				11
DS-125480 Test and certification	1 01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00							
DarkSide.1.02.13 Proto-Proto Cryogenics System	1 01-Jul-19	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 0.00		0.00	0.00 0.00	0.00 0.	.00 0.00	<u> </u>			🔻			
DS-125500 Proto-Proto Cryogenics System	1 01-Jul-19*	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00	_						
DS-125520 Using existing cryogenics system AT CERN	-	01-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00	0.00	0.00	<u> </u>	1 1					
DarkSide.1.02.14 DarkSide-20k UAr Cryogenics System DS-125540 DarkSide-20k UAr Cryogenics System	1767 01-Mar-17 1767 01-Mar-17*		\$11,454.55 \$0.00	\$5,339,846.50 \$1,630,000.00	\$5,351,301.05 \$1,630,000.00		\$5,276,500.00 \$1.630.000.00		90495.00 90495.00	0.00	0.00 0.00	0.00 0.	0.00							 -
DarkSide.1.02.14.01 Cryogenics test@CERN	1767 01-Mai-17	28-Feb-20	\$11,454.55	\$1,630,000.00	\$1,630,000.00	,	\$1,630,000.00	. ,,		0.00	0.00	0.00	0.00	_: :	: :	111	1 1 1	-		1
DS-125600 P&ID	1 01-Mar-17*		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	- 0.00	0.00	0.00	0.00	- i 'i						
DS-125620 3D CAD Model	1 01-Mar-17*	01-Mar-17	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00	_						
DS-125640 Calculation and evaluation	1 01-Mar-17*	01-Mar-17	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00	<u> </u>						
DS-125580 Overall Design	821 01-Mar-17*	30-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00	o -						1
DS-125560 Cryogenics test@CERN	1095 01-Mar-17*	28-Feb-20	\$0.00	\$490,000.00	\$490,000.00	\$0.00	\$490,000.00	\$490,000.00	0.00		0.00		0.00	o 🗎 🗎 🚊						
DarkSide.1.02.14.01.02 CERN Safety Review	242 01-Nov-18	30-Jun-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 0.00	0.00 0.00	0.00	0.00 0.00	0.00 0.	.00 0.00)		-	 :			
DS-125 CERN Safety Review	242 01-Nov-18*	30-Jun-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00	0						
DarkSide.1.02.14.01.03 Condenser Box	1036 01-Mar-17	31-Dec-19	\$5,727.27	\$203,346.50	\$209,073.77	\$5,727.27	\$140,000.00	\$145,727.27 0.00	90495.00 90495.00	0.00	0.00 0.00	0.00 0.	.00 0.00) 🕌			¥	'iiil		
DS-125 Customized Vacumm Vessel procurement	1 01-Mar-17*	01-Mar-17	\$0.00	\$27,000.00	\$27,000.00	\$0.00	\$27,000.00	\$27,000.00	0.00		0.00		0.00	_						
DS-125 Cryogenics Valves Procurement	1 01-Mar-17*	01-Mar-17	\$0.00	\$63,346.50	\$63,346.50	\$0.00	\$0.00	\$0.00	90495.00 90495.00		0.00		0.00	i i						
DS-125 Brazed plate heat exchangers procurement	1 01-Mar-17*	01-Mar-17	\$0.00	\$8,000.00	\$8,000.00	\$0.00	\$8,000.00	\$8,000.00	0.00		0.00		0.00							
DS-125 Pressure transducers procurement	1 01-Mar-17*	01-Mar-17	\$0.00	\$13,000.00	\$13,000.00	\$0.00	\$13,000.00	\$13,000.00	0.00		0.00		0.00	_i i						
DS-125 PT100 and readout circuit procurement	1 01-Mar-17*	01-Mar-17	\$0.00	\$10,000.00	\$10,000.00	\$0.00	\$10,000.00	\$10,000.00	0.00		0.00		0.00							
DS-125 Condenser Fabrication and tube cutting	1 01-Mar-17*	01-Mar-17	\$0.00	\$10,000.00	\$10,000.00	\$0.00	\$10,000.00	\$10,000.00	0.00		0.00		0.00	4 1 7						
DS-125 Welding and Assembly	1 01-Mar-17*	01-Mar-17	\$4,090.91	\$0.00	\$4,090.91	\$4,090.91	\$0.00	\$4,090.91	0.00		0.00		0.00	_B B						
DS-125 Helium Leak Check	1 01-Mar-17*		\$818.18	\$0.00	\$818.18	\$818.18	\$0.00	\$818.18	0.00		0.00		0.00	_! ! !						
DS-125 Pressure test	1 01-Mar-17*		\$818.18	\$0.00	\$818.18	\$818.18	\$0.00	\$818.18	0.00		0.00		0.00	_						
DS-125 Condenser Box	1036 01-Mar-17*	31-Dec-19 31-Dec-19	\$0.00 \$0.00	\$72,000.00 \$50,000.00	\$72,000.00 \$50,000.00	\$0.00 \$0.00	\$72,000.00 \$50,000.00	\$72,000.00 \$50,000.00 0.00	0.00	0.00	0.00	0.00 0.	0.00							+
DarkSide.1.02.14.01.04 Gas Circulation Pump DS-125 LiHan Motor As sembly Procurement	822 01-Oct-17 1 01-Oct-17*	01-Oct-17	\$0.00	\$50,000.00	\$50,000.00	\$0.00	\$50,000.00	\$0.00	0.00 0.00	0.00	0.00 0.00	0.00 0.	0.00	- I I			l i i i i			
DS-125 Reed Valve Procurement	1 01-Oct-17*	01-Oct-17	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00							
DS-125 Pump body fabrication	1 01-Oct-17*		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00	_ i i						
DS-125 Chilled Water Loop Fabrication	1 01-Oct-17*		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00	1: 1:						
DS-125 Power system procurement	1 01-Oct-17*		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00							1
DS-126 Operational monitor system fabrication	1 01-Oct-17*		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00	i i						
DS-126 Assembly	1 01-Oct-17*		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00							
DS-12€ Helium Leak Check	1 01-Oct-17*		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00	_						
DS-126 Pressure test	1 01-Oct-17*		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00	I I I	111					
DS-126 Test Running at various frequencies and volt			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00							113
DS-126 CE Certification	1 01-Oct-17*		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00	_i i						
DS-125 Gas Circulation Pump	822 01-Oct-17*	31-Dec-19	\$0.00	\$50,000.00	\$50,000.00	\$0.00	\$50,000.00	\$50,000.00	0.00		0.00		0.00	5		لخخف				
DarkSide.1.02.14.01.05 Gas Panel	730 01-Jan-18	31-Dec-19	\$0.00	\$297,500.00	\$297,500.00	\$0.00	\$297,500.00	\$297,500.00 0.00	0.00 0.00	0.00	0.00 0.00	0.00 0.	.00 0.00				 	.		
DS-126 Room Temperature Valves Procurement	1 01-Jan-18*	01-Jan-18	\$0.00	\$58,000.00	\$58,000.00	\$0.00	\$58,000.00	\$58,000.00	0.00		0.00		0.00							
DS-126 Sensors Procurement	1 01-Jan-18*		\$0.00	\$8,500.00	\$8,500.00	\$0.00	\$8,500.00	\$8,500.00	0.00		0.00		0.00	—I: I :						
DS-126 Relief valve procurement	1 01-Jan-18*		\$0.00	\$10,000.00	\$10,000.00	\$0.00	\$10,000.00	\$10,000.00	0.00		0.00		0.00							
DS-126 Vacuum Pumps Procurement			\$0.00	\$63,000.00	\$63,000.00	\$0.00	\$63,000.00	\$63,000.00	0.00		0.00		0.00	III II						
DS-126 Tube Cutting and Fabrication			\$0.00	\$7,000.00	\$7,000.00	\$0.00	\$7,000.00	\$7,000.00	0.00		0.00		0.00							
DS-126 Assembly and Welding	1 01-Jan-18*		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00							4
DS-126 Helium Leak Check			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00	! ! !						
DS-126 Pressure Test	1 01-Jan-18*		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00	_	1 1 1					
DS-126 Gas Panel	730 01-Jan-18*		\$0.00	\$151,000.00	\$151,000.00	\$0.00	\$151,000.00	\$151,000.00	0.00	0.00	0.00	0.00	0.00	-			1 1 1	.		
DarkSide.1.02.14.01.06 Transfer Lines	730 01-Jan-18		\$1,636.36 \$0.00	\$26,000.00 \$5,000.00	\$27,636.36 \$5,000,00	\$1,636.36	\$26,000.00 \$5,000.00	\$27,636.36 0.00 \$5,000.00	0.00 0.00	0.00	0.00 0.00	0.00 0.	0.00		T T					
DS-126 Bellows Procurement	1 01-Jan-18*		\$0.00	\$5,000.00	\$5,000.00 \$3,000.00	\$0.00 \$0.00	\$5,000.00	\$3,000.00	0.00		0.00		0.00	-Kennelson &						
DS-126 Flance Fabrication				φυ,υυυ.υυ	φ3,000.00	φυ.υυ	ψ3,000.00	ψυ,υυυ.υυ	0.00		0.00	I I						- 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1	1 1
DS-126 Flange Fabrication DS-126 Bayonet Fabrication	1 01-Jan-18* 1 01-Jan-18*		\$0.00	\$3,000.00	\$3,000.00	\$0.00	\$3,000.00	\$3,000.00	0.00		0.00		0.00					1111	1 1	

Actual Level of Effort Remaining Work ♦ Milestone

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TASK filter: All Activities

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Actual Level of Effort Remaining Work • Milestone © Oracle Corporation

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DS-127500 Transportation to LNGS	1	01-Jun-20*	01-Jun-20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00								
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DS-127680 Fabrication	1	01-Jun-20*	01-Jun-20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00	4							
DS-127700 Certification	1	01-Jun-20*	01-Jun-20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00								
DS-127720 Integration to cryogenics	1	01-Jun-20*	01-Jun-20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00			, ! ! !				- '	
DS-127740 Insulation vacuum port	1	01-Jun-20*	01-Jun-20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00			,					
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DS-127960 Interface with Cryostat	1	01-Jun-20*	01-Jun-20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00	1 1			'	+	4411		
DS-127980 interfacing with Ve to	1	01-Jun-20*	01-Jun-20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00			.					
DS-128000 interfacing with calibration	1	01-Jun-20*	01-Jun-20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00					.111.			
DS-128020 later	1	01-Jun-20*	01-Jun-20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00								
DarkSide.1.03 Materials	1736	01-Apr-17	31-Dec-21	\$38,500.00	\$989,800.00	\$1,028,300.00	\$0.00	\$150,000.00	\$150,000.00 0.00	0.00 0.00 35000.00	0.00	35000.00 0.00	646000.00	646000.00	/ † 	+++			+++	****	++++	†
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	1646	30-Jun-18*	31-Dec-22		\$147,000.00		\$245,000.00	\$147,000.00	\$392,000.00	0.00		0.00			4		. ! 🚞			1 1 1		<u> </u>
DS-141000 Sources	1369	01-Jul-18*	30-Mar-22	\$0.00	\$0.00	\$0.00		\$0.00	\$0.00	0.00		0.00		0.00	4		. : 🚞					∔ i :
DS-141001 Sources - Gas sources	1369	01-Jul-18*	30-Mar-22	\$7,000.00	\$40,000.00	\$47,000.00	\$7,000.00	\$40,000.00	\$47,000.00	0.00		0.00		0.00								
			30-Mar-22								5000.00			0.00								
DS-141003 Sources - ?-ray			30-Mar-22		\$30,000.00			\$30,000.00	\$35,000.00	0.00		0.00		0.00								
DS-141004 Sources - AmC, AmBe, AmLi			30-Mar-22	\$4,000.00	\$38,000.00	\$42,000.00	\$4,000.00	\$38,000.00	\$42,000.00	0.00		0.00		0.00			; ===					
DS-141005 Sources - 252Cf	1369	01-Jul-18*	30-Mar-22	\$11,000.00	\$22,000.00	\$33,000.00	\$0.00	\$0.00	\$0.00	0.00 10000.00	20000.00	30000.00		0.00			, 🛏			1 1 1		
DS-141006 Sources - UV led for VETO calibration			30-Mar-22	\$0.00	\$22,000.00	\$22,000.00	\$0.00	\$0.00	\$0.00	0.00	20000.00	20000.00		0.00			, 🚞					#
DS-141007 Sources - Pyroelectric neutron generator	1369	01-Jul-18*	30-Mar-22	\$110,000.00	\$165,000.00	\$275,000.00	\$0.00	\$0.00	\$0.00	0.00 100000.00	150000.00	250000.00		0.00								
DS-142000 TPC guide mechanics	1369	01-Jul-18*	30-Mar-22	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00		0.00		0.00								
DS-142001 TPC guide mechanics			30-Mar-22	\$0.00	\$16,500.00	\$16,500.00	\$0.00	\$0.00	\$0.00	0.00	15000.00			0.00	<u> </u>					1 1 1		
DarkSide.1.05 Outer Detector			30-Mar-22	\$0.00	\$2,460,200.00	\$2,460,200.00	\$0.00	\$0.00	\$0.00			1982000.00 0.00	0.00		- 1 1						+++	
DS-151000 Development of Gd loaded acrylic			30-Mar-20	\$0.00	\$116,600.00	\$116,600.00	\$0.00	\$0.00	\$0.00	0.00		106000.00		0.00	-1: 1 :		. ! 💻	 	 +	3		
DS-153000 Development of VETO Reflectors		30-Sep-19*		\$0.00	\$11,000.00	\$11,000.00	\$0.00	\$0.00	\$0.00	0.00		10000.00		0.00		4.4.4		ļļ				ļļi.
DS-155000 Developent of VETO electronics			31-Dec-20	\$0.00	\$209,000.00	\$209,000.00	\$0.00	\$0.00	\$0.00	0.00		190000.00		0.00	-16 1 1					1 1 1		
DS-155001 Developent of VETO electronics - radiopurity		30-Sep-19*		\$0.00	\$11,000.00	\$11,000.00	\$0.00	\$0.00	\$0.00	0.00		10000.00		0.00	-! ! !			'		1 1 1		
DS-156000 VETO Prototype			21-Dec-20	\$0.00	\$11,000.00	\$11,000.00	\$0.00	\$0.00	\$0.00	0.00	10000.00			0.00	-16 1 1				11		-1111	
DS-157000 VETO mechanics			31-Dec-20	\$0.00	\$352,000.00	\$352,000.00	\$0.00	\$0.00	\$0.00	0.00		320000.00		0.00	-1: 1 :						_	
DS-152000 Procurement of the VETO acrylic DS-154000 Procurement of VETO Reflectors			30-Mar-21	\$0.00	\$605,000.00	\$605,000.00	\$0.00	\$0.00	\$0.00	0.00	550000.00	550000.00		0.00				ļ			<u> </u>	
DS-154000 Procurement of VETO Reflectors			30-Jun-21	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	400000 00 400000 00		0.00		0.00	-1: 1 :				+		<u> </u>	
DC 154001 Proguroment of VETO Reflection CALCUIT			30-Jun-21	\$0.00	\$280,000.00	\$280,000.00	\$0.00	\$0.00	\$0.00 \$0.00	40000.00 40000.00	91000 00	0.00		0.00	-1 1 1						= '	
DS-154001 Procurement of VETO Reflectors - 3M foil	300	30-Jun-20*	30-Jun-21	\$0.00	\$89,100.00	\$89,100.00 \$137,500.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00	0.00		81000.00 125000.00		0.00	-li i		,				<u> </u>	
DS-154002 Procurement of VETO Reflectors - 3M foil		30- lun 20*	30_ lun 24								120000.00											1 1 1
DS-154002 Procurement of VETO Reflectors - 3M foil DS-154003 Procurement of VETO Reflectors - 3M foil	366		30-Jun-21	\$0.00	\$137,500.00 \$82,500.00										-1: 1 :		'				<u> </u>	1 1 1
DS-154002 Procurement of VETO Reflectors - 3M foil	366	30-Jun-20* 30-Jun-20*	-	\$0.00	\$82,500.00	\$82,500.00	\$0.00	\$0.00	\$0.00	0.00		75000.00		0.00	-1: 1 :		<u> </u>		Ш			

kSide Current	Activity Namo	Original Start	Einiah	Clobal shar Coot St	abal Nan Labar Cook	Clobal Tatal Carri		•	out-All Curre		Non Labor C+1	Total Co-1	Labor Cast No.	Labor Coatt Total Coatt	abor Cost	Non Lohor Coot T-1-10	`oot	2017 2010 2010		9-May-19
	Activity Name	Duration Start	Finish	Global Labor Cost Glo [USD]	[USD]	[USD]	USA [USD]	USA [USD]	Total Cost USA [USD]				Labor Cost Non I EU [EUR]		abor Cost UK [GBP]	Non Labor Cost UK [GBP] UK [GE	DD1	2017 2018 2019 QQQQQQQQQQQQ		2021 2
DS-154005	Procurement of VETO Reflectors - TPB	366 30-Jun-20*	30-Jun-21	\$0.00	\$137,500.00	\$137,500.00	\$0.00	\$0.00	\$0.00			0.00		125000.00 125000.00		0.	0.00			
DS-154006	Procurement of VETO Reflectors - Evaporation systems	366 30-Jun-20*	30-Jun-21	\$0.00	\$242,000.00	\$242,000.00	\$0.00	\$0.00	\$0.00			0.00		220000.00 220000.00		0.	0.00			4
DS-154007	Procurement of VETO Reflectors - Packaging	366 30-Jun-20*	30-Jun-21	\$0.00	\$11,000.00	\$11,000.00	\$0.00	\$0.00	\$0.00			0.00		10000.00 10000.00		0.	0.00			4
DS-158000	VETO installation nad commissioning	182 30-Sep-21*	30-Mar-22	\$0.00	\$165,000.00	\$165,000.00	\$0.00	\$0.00	\$0.00			0.00		150000.00 150000.00		0.	0.00			
DarkSide.1.06 El	LECTRONICS (DAQ, Trigger and Slow Control)	1736 01-Apr-17	31-Dec-21	\$1,019,000.00	\$3,151,400.00	\$4,170,400.00	\$0.00	\$50,000.00	\$50,000.00	1000000.00	3703000.00	4703000.00	290000.00	463000.00 753000.00	0.00	0.00 0.	0.00			
DarkSide.1.06.0		1736 01-Apr-17	31-Dec-21	\$1,019,000.00	\$2,507,900.00	\$3,526,900.00	\$0.00	\$0.00		1000000.00	3138000.00		290000.00	283000.00 573000.00	0.00	0.00 0.		Y		
DS-161000	Readout	1736 01-Apr-17*		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00				0.00		0.00			0.00			
DS-161001	Readout boards	1736 01-Apr-17*	_	\$0.00	\$311,300.00	\$311,300.00	\$0.00	\$0.00				0.00		283000.00 283000.00			0.00			
DS-161002	Readout boards	1736 01-Apr-17*	_	\$0.00	\$1,566,600.00	\$1,566,600.00	\$0.00	\$0.00			2238000.00			0.00			0.00		T : : : I :	<u> </u>
DS-161003	Readout boards	1736 01-Apr-17*		\$700,000.00	\$0.00	\$700,000.00	\$0.00	\$0.00		1000000.00		1000000.00		0.00			0.00			
DS-161004	Readout boards	1736 01-Apr-17*		\$159,500.00	\$0.00	\$159,500.00	\$0.00	\$0.00					145000.00	145000.00			0.00			
DS-161005	Readout boards for veto	1736 01-Apr-17*		\$159,500.00	\$630,000.00	\$789,500.00	\$0.00	\$0.00					145000.00	145000.00			0.00			
DarkSide.1.06.03 DS-162000		1460 01-Apr-17		\$0.00 \$0.00	\$285,500.00 \$0.00	\$285,500.00	\$0.00 \$0.00	\$0.00			125000.00	0.00	0.00	180000.00 180000.00	0.00		0.00			
	Trigger - clock distribution	1460 01-Apr-17* 1460 01-Apr-17*	_	\$0.00	\$87,500.00	\$0.00 \$87,500.00	\$0.00	\$0.00 \$0.00			125000.00	125000.00		0.00			0.00			
			_	\$0.00	\$198,000.00	\$198,000.00	\$0.00	\$0.00	-		125000.00	0.00		180000.00 180000.00			0.00			
DS-162002 DarkSide.1.06.03	Trigger - Event builder + Cluster	1460 01-Apr-17* 456 01-Apr-20		\$0.00	\$50,000.00	\$198,000.00	\$0.00			0.00	0.00	0.00	0.00	0.00 0.00	0.00	-			T	<u> </u>
	Slow Control	456 01-Apr-20*		\$0.00	\$50,000.00	\$50,000.00	\$0.00	\$50,000.00		0.00	0.00	0.00	0.00	0.00	0.00		0.00			<i>-</i> 7
	4 Infrastructure and Power supply	640 01-Apr-20		\$0.00	\$308,000,00	\$308,000.00	\$0.00	\$0.00		0.00	440000 00	440000 00	0.00	0.00 0.00	0.00	0.00				
_	Infrastructure and Power supply	640 01-Apr-20*		\$0.00	\$308,000.00	\$308,000.00	\$0.00	\$0.00		0.00	440000.00	440000.00	0.00	0.00	0.00		0.00			
DarkSide.1.07 O	offline	1644 01-Apr-18		\$214,500.00	\$0.00	\$214,500.00	\$0.00	\$0.00			0.00	0.00	195000.00	0.00 195000.00	0.00	0.00 0.	J.00			<u></u>
DS-175000	HW CPU and Storage	1644 01-Apr-18*		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00				0.00		0.00			0.00			
DS-174000	Physics and Analysis Interface	549 01-Jul-18*	31-Dec-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00				0.00		0.00		0.	0.00			
DS-171000	SW Package	640 01-Jul-18*	31-Mar-20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00				0.00		0.00			0.00			
DS-172000	Reconstruction software	548 01-Oct-18*	31-Mar-20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00		0.00		0.	0.00			
DS-172001	Reconstruction software	548 01-Oct-18*		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	-			0.00		0.00			0.00			TITT
DS-172002	Reconstruction software engineer	548 01-Oct-18*	31-Mar-20	\$104,500.00	\$0.00	\$104,500.00	\$0.00	\$0.00	\$0.00			0.00	95000.00	95000.00		0.	0.00			
DS-173000	Monte Carlo Simulations	456 01-Apr-20*	30-Jun-21	\$110,000.00	\$0.00	\$110,000.00	\$0.00	\$0.00	\$0.00			0.00	100000.00	100000.00		0.	0.00			i
DarkSide.1.08 R	teD	1095 01-Jan-17	31-Dec-19	\$0.00	\$938,900.00	\$938,900.00	\$0.00	\$500,000.00	\$500,000.00	0.00	0.00	0.00	0.00	399000.00 399000.00	0.00	0.00 0.	0.00	+ + + + + + + + + + + + + + + + + + + 	→ : : : :	
DS-180340	Offsite calibration	1 01-Jan-17*	01-Jan-17	\$0.00	\$500,000.00	\$500,000.00	\$0.00	\$500,000.00	\$500,000.00			0.00		0.00		0.	0.00			
DS-180500	nToF Spectrometer	273 01-Jan-17*	30-Sep-17	\$0.00	\$58,300.00	\$58,300.00	\$0.00	\$0.00	\$0.00			0.00		53000.00 53000.00		0.	0.00			
DS-180330	Slow Control	365 01-Jan-17*	31-Dec-17	\$0.00	\$15,400.00	\$15,400.00	\$0.00	\$0.00	\$0.00			0.00		14000.00 14000.00		0.	0.00			
DS-180310	TPC & Cryogenics	730 01-Jan-17*	31-Dec-18	\$0.00	\$185,900.00	\$185,900.00	\$0.00	\$0.00	\$0.00			0.00		169000.00 169000.00		0.	0.00			
DS-180400	Meutron Beam	730 01-Jan-17*	31-Dec-18	\$0.00	\$66,000.00	\$66,000.00	\$0.00	\$0.00	\$0.00			0.00		60000.00 60000.00		0.	0.00			
DS180200	ReD Photoelectronics	1003 01-Jan-17*	30-Sep-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00		0.00		0.	0.00			
DS-180300	GAP-TPC	1095 01-Jan-17*	31-Dec-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00		0.00		0.	0.00			11111
DS-180320	FE & DAQ	1095 01-Jan-17*	31-Dec-19	\$0.00	\$25,300.00	\$25,300.00	\$0.00	\$0.00	\$0.00			0.00		23000.00 23000.00		0.	0.00		=	
DS-180600	Commissioning & operation	822 01-Oct-17*	31-Dec-19	\$0.00	\$88,000.00	\$88,000.00	\$0.00	\$0.00	\$0.00			0.00		80000.00 80000.00		0.	0.00		=	
DS-180100	Simulations & Analysis	184 01-Jul-18*	31-Dec-18	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00		0.00		0.	0.00			
DarkSide.1.09 Da	arkSide Proto	1006 01-Apr-18	31-Dec-20	\$0.00	\$1,479,400.00	\$1,479,400.00	\$0.00	\$584,000.00	\$584,000.00	0.00	0.00	0.00	0.00	814000.00 814000.00	0.00	0.00 0.	0.00		+++++	
DS-196000	Cryostat	183 01-Apr-18*	30-Sep-18	\$0.00	\$72,600.00	\$72,600.00	\$0.00	\$0.00	\$0.00			0.00		66000.00 66000.00		0.	0.00			
DS-197000	Cryogenics	731 01-Apr-18*	31-Mar-20	\$0.00	\$584,000.00	\$584,000.00	\$0.00	\$584,000.00	\$584,000.00			0.00		0.00		0.	0.00		<u> </u>	
DS-191000	Integration	669 01-Sep-18*	30-Jun-20	\$0.00	\$67,100.00	\$67,100.00	\$0.00	\$0.00	\$0.00			0.00		61000.00 61000.00		0.	0.00			
DS-192000	DAQ	457 01-Apr-19*	30-Jun-20	\$0.00	\$132,000.00	\$132,000.00	\$0.00	\$0.00	\$0.00			0.00		120000.00 120000.00		0.	0.00			
DS-193000	Calibration Setup	305 01-Jun-19*	31-Mar-20	\$0.00	\$60,500.00	\$60,500.00	\$0.00	\$0.00	\$0.00			0.00		55000.00 55000.00		0.	0.00	: : : : : : : 		
DS-194000	Commissioning	366 01-Oct-19*	30-Sep-20	\$0.00	\$55,000.00	\$55,000.00	\$0.00	\$0.00	\$0.00			0.00		50000.00 50000.00		0.	0.00			
DS-195000	Operation	366 01-Jan-20*	31-Dec-20	\$0.00	\$508,200.00	\$508,200.00	\$0.00	\$0.00	\$0.00			0.00		462000.00 462000.00		0.	0.00			
DarkSide.1.10 O	Outer Cryostat	1297 11-Oct-18	29-Apr-22	\$0.00	\$9,011,200.00	\$9,011,200.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00	0.00	3192000.00 8192000.00	0.00	0.00 0.	J.00		+++++	++++
DS-110100	Warm Structure	614 11-Oct-18*	15-Jun-20	\$0.00	\$2,299,000.00	\$2,299,000.00	\$0.00	\$0.00	\$0.00			0.00	2	2090000.00 2090000.00		0.	0.00			
DS-110200	Cold Cryostat	962 15-May-19*	31-Dec-21	\$0.00	\$4,160,200.00	\$4,160,200.00	\$0.00	\$0.00	\$0.00			0.00	3	3782000.00 3782000.00		0.	0.00			
DS-110400	Argon 5.0	1 01-Jun-20*	01-Jun-20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00		0.00		0.	0.00			TITI
DS-110300	Cryogenics System	698 01-Jun-20*	29-Apr-22	\$0.00	\$2,552,000.00	\$2,552,000.00	\$0.00	\$0.00	\$0.00			0.00	2	2320000.00 2320000.00		0.	0.00			1 1 1
DarkSide.2 Ura	nia	1341 01-Jul-17	12-Nov-22	\$6,045,674.98	\$23,017,733.06	\$29,063,408.04	\$5,429,674.98	\$11,779,633.06	\$17,209,308.04	880000.00	3406000.00	4286000.00	0.00	8049000.00 8049000.00	0.00	0.00 0.	0.00	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 		
	rania Project Management Oversight	751 01-Oct-19	30-Sep-22	\$1,856,044.47	\$57,377.80	\$1,913,422.27	\$1,856,044.47	\$57,377.80	\$1,913,422.27	0.00	0.00	0.00	0.00	0.00 0.00	0.00	0.00 0.	0.00	1111111	+++++	+++
DS-200000	Project Management for FY20	251 01-Oct-19*		\$330,551.68	\$0.00	\$330,551.68			\$330,551.68			0.00		0.00			0.00			
DS-200010	Project Controls for FY20	251 01-Oct-19*		\$86,245.15	\$0.00	\$86,245.15		\$0.00	\$86,245.15			0.00		0.00		0.	0.00			THE
DS-200020	Safety Oversight for FY20	251 01-Oct-19*	30-Sep-20	\$183,776.87	\$0.00	\$183,776.87	\$183,776.87	\$0.00	\$183,776.87			0.00		0.00		0.	0.00			
DS-200030	Travel for FY20	251 01-Oct-19*		\$0.00	\$18,692.71	\$18,692.71	\$0.00	\$18,692.71				0.00		0.00		0.	0.00			+
DS-200040	Project Management for FY21	250 01-Oct-20	30-Sep-21	\$340,798.78	\$0.00	\$340,798.78	\$340,798.78	\$0.00	\$340,798.78			0.00		0.00		0.	0.00			#
DS-200050	Project Controls for FY21	250 01-Oct-20	30-Sep-21	\$88,228.79	\$0.00	\$88,228.79	\$88,228.79	\$0.00	\$88,228.79			0.00		0.00		0.	0.00			i
DS-200060	Safety Oversight for FY21	250 01-Oct-20	30-Sep-21	\$189,473.95	\$0.00	\$189,473.95	\$189,473.95	\$0.00	\$189,473.95			0.00		0.00		0.	0.00			
DS-200070	Travel for FY21	250 01-Oct-20	30-Sep-21	\$0.00	\$19,122.64	\$19,122.64	\$0.00	\$19,122.64	\$19,122.64			0.00		0.00		0.	0.00			🚚 i
DS-200080	Project Management for FY22	250 01-Oct-21	30-Sep-22	\$351,363.55	\$0.00	\$351,363.55	\$351,363.55	\$0.00	\$351,363.55			0.00		0.00		0.	0.00			
DS-200090	Project Controls for FY22	250 01-Oct-21	30-Sep-22	\$90,258.05	\$0.00	\$90,258.05	\$90,258.05	\$0.00	\$90,258.05			0.00		0.00		0.	0.00			
DS-200100	Safety Oversight for FY22	250 01-Oct-21	30-Sep-22	\$195,347.64	\$0.00	\$195,347.64	\$195,347.64	\$0.00	\$195,347.64			0.00		0.00		0.	0.00			
DS-200110	Travel for FY22	250 01-Oct-21	30-Sep-22	\$0.00	\$19,562.46	\$19,562.46	\$0.00	\$19,562.46				0.00		0.00		0.	0.00			
DarkSide.2.02 U	rania Plant Fabrication and Delivery	1161 01-Jul-17	03-Sep-20	\$0.00	\$9,253,900.00	\$9,253,900.00	\$0.00	\$400,000.00	\$400,000.00	0.00	0.00	0.00	0.00	8049000.00 8049000.00	0.00	0.00 0.	0.00	 	 	
DS-200200	R&D activitty in support of PSA design	853 01-Jul-17*	31-Oct-19	\$0.00	\$110,000.00	\$110,000.00	\$0.00	\$0.00	\$0.00			0.00		100000.00 100000.00		0.	0.00		1	
DS-200210	PI for 2.01 Plant	1099 01-Sep-17*	03-Sep-20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00		0.00		0.	0.00			
DS-200220	Feed Characterization	484 05-Jul-18*	31-Oct-19	\$0.00	\$400,000.00	\$400,000.00	\$0.00	\$400,000.00	\$400,000.00			0.00		0.00		0.	0.00		1	+ $+$ $+$ $+$ $+$
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See Sub-tume	DS-200230 Plant Design DS-200240 Plant Construction DS-200260 Plant Shipment Ds-200260 Plant Shipment Ds-200300 Pl for 2.02 Site Prep and DarkSide_2.03. Urania Cortez Site Prep DS-200300 Pl for 2.02 Site Prep and DarkSide_2.03.01 Project Management DS-200310 Field Operations Enginee DS-200320 Extraction Operations Enginee DS-200330 Process Engineering Sup DS-200340 Plant Operations Support DarkSide_2.03.02 Preliminary Site Work DS-200350 Pl for 2.02.02 Preliminary DS-200360 Gas Sampling and Shippi DS-200370 Gas Sample Analysis DS-200380 Feed Optimization DS-200390 Procurement of Control Fill DS-200390 Procurement of Control Fill DS-200400 Plant, electrical, storage at DS-200400 Plant, electrical, storage at DS-200400 Plant electrical Installation DS-200400 Plant Electrical Installation DS-200400 Plant Electrical Installation DS-200440 Land development for sia DS-200440 Plant Electrical Installation DS-200440 Plant Electrical Installation DS-200440 Plant Ell Installation DS-200440 Plant Ell Installation DS-200490 Phase Ill Installation DS-200490 Phase Ill Installation DS-200590 Pouring of concrete slabs DS-200590 Plant Installation DS-200590 Plant Consumables for St DarkSide_2.04.01 Project Management DS-200690 Production and Installation DS-200690 Production and Installation DS-200690 Production of first batch DS-200770 Production of first batch DS-200770 Production of second bat DS-200770 Production of second bat DS-200770 Production of second bat DS-200770 Production of fourth batch DS-200770 Production of fourth batch DS-200770 Production of fourth batch	te Prep & Plant Installation Prep and Installation Prep and Installation ement E Engineering Support ations Engineering and PNNL Support ering Support es Support ework reliminary Site Work not Shipping alysis con Control Room storage and truck building materials and soli Room ion ent for slabs Oversight ation Oversight	Duration 210 01-Nov-19 70 29-May-20 6 01-Aug-20 28 07-Aug-20 1007 01-Sep-17 1474 01-Sep-17* 485 04-Oct-19* 485 04-Oct-19* 485 04-Oct-19* 255 04-Sep-20* 2419 07-Jan-19* 200 17-Jan-19* 200 17-Jan-19* 201 17-Jan-19* 202 01-Jul-19* 203 01-Jul-19* 205 01-Aug-19* 207 01-Jul-19* 207 01-Jul-19* 208 01-Jul-19* 209 01-Jul-19*	28-May-20 06-Aug-20 06-Aug-20 06-Aug-20 03-Sep-20 13-Sep-21 13-Sep-20 03-Sep-20 03-Sep-20 31-Oct-19 30-Apr-20 30-Apr-20 03-Sep-20 13-Jan-20 31-Mar-20 31-Mar-20	[USD] \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$1,915,800,25 \$0.00 \$1,431,399,85 \$844,011.07 \$0.00 \$246,400,00 \$340,988,79 \$238,000,40 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	[USD] \$550,000.00 \$8,193,900.00 \$0.00 \$5,780,400.00 \$750,000.00 \$750,000.00 \$750,000.00 \$1,716,000.00 \$1,716,000.00 \$15,000.00 \$35,000.00 \$1,700.00 \$0.00 \$1,700.00 \$0.00	[USD] \$550,000.00 \$8,193,900.00 \$0.00 \$7,696,200.25 \$0.00 \$2,181,399.85 \$844,011.07 \$750,000.00 \$246,400.00 \$340,988.79 \$1,954,000.40 \$0.00	\$0.00 \$0.00 \$0.00 \$0.00 \$1,423,000.25 \$0.00 \$1,424,999.85 \$844,011.07 \$0.00 \$340,988.79 \$238,000.40	USA[USD] \$0.00 \$0.00 \$0.00 \$0.00 \$5,548,000.00 \$750,000.00 \$750,000.00 \$0.00 \$0.00 \$0.00 \$0.00	[USD] \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$1.934,9985 \$344,011.07 \$750,000.00 \$0.00	704000.00 352000.00	CAN [CAD] CAN [CAN CAN CAN	DD EU (EUR) 1 000 5 000 74 000 000 000 000 000 000 000 000 000 00	EU [EUR] EU [EUR] UH 000000.00 500000.00 49000.00 7449000.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	C [GBP] UK [GBP] UK [GBP] 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	0000000		
No. 1	DS-200240	te Prep & Plant Installation Prep and Installation Prep and Installation ement E Engineering Support ations Engineering and PNNL Support ering Support es Support ework reliminary Site Work not Shipping alysis con Control Room storage and truck building materials and soli Room ion ent for slabs Oversight ation Oversight	70 29-May-20 6 01-Aug-20 28 07-Aug-20 1007 01-Sep-17 1474 01-Sep-17 485 04-Oct-19 485 04-Oct-19 485 04-Oct-19 255 04-Sep-20 419 07-Jan-19 200 17-Jan-19 200 17-Jan-19 200 17-Jan-19 201 17-Jan-19 209 01-Jul-19 209 01-Jul-19 207 01-Jul-19 209 04-Oct-19 120 04-Oct-19 142 04-Oct-19	06-Aug-20 06-Aug-20 06-Aug-20 03-Sep-20 13-Sep-21 13-Sep-21 13-Sep-21 13-Sep-21 13-Sep-21 13-Sep-21 13-Sep-21 13-Sep-20 03-Sep-20 31-Oct-19 31-Oct-19 30-Apr-20 30-Apr-20 30-Apr-20 30-Sep-20 13-Jan-20 31-Mar-20	\$0.00 \$0.00 \$1,915,800.25 \$0.00 \$1,431,399.85 \$844,011.07 \$0.00 \$246,400.00 \$340,988.79 \$238,000.40 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$8,193,900.00 \$0.00 \$0.00 \$5,780,400.00 \$750,000.00 \$750,000.00 \$750,000.00 \$0.00 \$1,716,000.00 \$15,000.00 \$15,000.00 \$15,000.00 \$15,000.00 \$15,000.00 \$15,000.00 \$15,000.00	\$8,193,900.00 \$0.00 \$0.00 \$7,696,200.25 \$0.00 \$2,181,399.85 \$844,011.07 \$750,000.00 \$246,400.00 \$340,988.79 \$1,954,000.40 \$0.00 \$15,000.00	\$0.00 \$0.00 \$0.00 \$1,423,000.25 \$0.00 \$1,184,999.85 \$844,011.07 \$0.00 \$0.00 \$340,988.79 \$238,000.40	\$0.00 \$0.00 \$0.00 \$5,548,000.00 \$0.00 \$750,000.00 \$750,000.00 \$750,000.00 \$0.00	\$0.00 \$0.00 \$0.00 \$6,971,000.25 \$0.00 \$1,934,999.85 \$844,011.07 \$750,000.00 \$0.00	704000.00	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	000 5 000 74 000 000 000 0.00 000 000 0.00 000	.49000.00 7449000.00 0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0			
Control Cont	DS-200250 Plant Performance Check DS-200260 Plant Shipment DarkSide. 2.03 Urania Cortez Site Prep and DarkSide. 2.03.01 Project Management DS-200300 Field Operations Enginee DS-200310 Field Operations Enginee DS-200320 Extraction Operations Enginee DS-200320 Project Management DS-200320 Project Management DS-200320 Extraction Operations Enginee DS-200330 Process Engineering Sup DS-200340 Plant Operations Support DarkSide. 2.03.02 Proliminary Site Work DS-200350 Pl for 2.02.02 Preliminary DS-200360 Gas Sampling and Shippi DS-200370 Gas Sample Analys is DS-200380 Feed Optimization DS-200380 Feed Optimization DS-200390 Procurement of Control Rosm DS-200400 Plant, electrical, storage a DS-200410 Buildings/Control Rosm DS-200420 Postdoc DS-200440 Land development for sla DS-200440 Land development for sla DS-200440 Concrete Work Oversigh DS-200460 Electrical Installation Ove DS-200460 Pipe Work DS-200460 Pipe Work DS-200460 Pipe Work DS-200460 Pipe Work DS-200460 Phase II Installation DS-200500 Pouring of concrete slabs DS-200540 Control Room Installation DS-200500 Plant, electrical, storage a DS-200540 Control Room Installation DS-200500 Plant (selectrical Sy DarkSide. 2.03.03 Plant & Site Integration DS-200550 Plant Installation DS-200550 Plant Installation DS-200550 Plant Installation DS-200550 Plant start-up and commit DS-200560 Plant start-up and commit DS-200660 Extraction Operations Enginee PS-200660 Production and Installation DS-200660 Production and Installation DS-200660 Production of first batch in DS-200700 Production of first batch in DS-200700 Production of first batch in DS-200700 Production of for the batch DS-200700 Production of for the batch DS-200700 Production of for the batch Production of for the b	te Prep & Plant Installation Prep and Installation Prep and Installation ement E Engineering Support ations Engineering and PNNL Support ering Support es Support ework reliminary Site Work not Shipping alysis con Control Room storage and truck building materials and soli Room ion ent for slabs Oversight ation Oversight	6 01-Aug-20 28 07-Aug-20 1007 01-Sep-17 1474 01-Sep-17 485 04-Oct-19 485 04-Oct-19 485 04-Oct-19 485 04-Oct-19 255 04-Sep-20 419 07-Jan-19 200 17-Jan-19 200 17-Jan-19 200 17-Jan-19 200 01-Jul-19 207 01-Jul-19 207 01-Jul-19 207 01-Jul-19 208 01-Jul-19 209 01-Jul-19	06-Aug-20 03-Sep-20 13-Sep-21 13-Sep-21 13-Sep-21 13-Sep-21 13-Sep-21 13-Sep-21 13-Sep-21 13-Sep-21 13-Sep-20 03-Sep-20 31-Oct-19 30-Apr-20 30-Apr-20 30-Apr-20 30-Sep-20 13-Jan-20 31-Mar-20 31-Mar-20	\$0.00 \$1,915,800.25 \$0.00 \$1,431,399.85 \$844,011.07 \$0.00 \$246,400.00 \$340,988.79 \$238,000.40 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$5,780,400.00 \$0.00 \$750,000.00 \$0.00 \$750,000.00 \$0.00 \$1,716,000.00 \$1,000.00 \$15,000.00 \$35,000.00	\$0.00 \$0.00 \$7,696,200.25 \$0.00 \$2,181,399.85 \$844,011.07 \$750,000.00 \$246,400.00 \$340,988.79 \$1,954,000.40 \$0.00 \$15,000.00	\$0.00 \$0.00 \$1,423,000.25 \$0.00 \$1,184,999.85 \$844,011.07 \$0.00 \$0.00 \$340,988.79 \$238,000.40	\$0.00 \$0.00 \$5,548,000.00 \$0.00 \$750,000.00 \$750,000.00 \$0.00 \$0.00	\$0.00 \$0.00 \$6,971,000.25 \$0.00 \$1,934,999.85 \$844,011.07 \$750,000.00 \$0.00	704000.00	0 0 332000.00 1036000 0 0.00 352000 0	000 000 000 000 000 000 000	0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00			
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Secretary of the control of the cont	DarkSide.2.03 Urania Cortez Site Prep.	Prep and Installation ement Engineering Support ations Engineering and PNNL Support ering Support s Support e Work eliminary Site Work nd Shipping alys is on Control Room storage and truck building materials and ele of Room ion ent for slabs Oversight ation Oversight	1007 01-Sep-17 1474 01-Sep-17* 485 04-Oct-19* 485 04-Oct-19* 485 04-Oct-19* 485 04-Oct-19* 255 04-Sep-20* 419 07-Jan-19* 200 17-Jan-19* 200 17-Jan-19* 209 01-Jul-19* 209 01-Jul-19* 207 01-Jul-19* 207 01-Jul-19* 208 04-Oct-19* 209 04-Oct-19*	13-Sep-21 13-Sep-21 13-Sep-21 13-Sep-21 13-Sep-21 13-Sep-21 13-Sep-21 13-Sep-20 03-Sep-20 03-Sep-20 31-Oct-19 31-Oct-19 30-Apr-20 30-Apr-20 03-Sep-20 03-Sep-20 13-Jan-20 31-Mar-20	\$1,915,800.25 \$0.00 \$1,431,399.85 \$844,011.07 \$0.00 \$246,400.00 \$340,988.79 \$238,000.40 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$5,780,400.00 \$0.00 \$750,000.00 \$0.00 \$50.00 \$750,000.00 \$0.00 \$0.00 \$0.00 \$1,716,000.00 \$0.00 \$15,000.00 \$35,000.00 \$35,000.00	\$7,696,200.25 \$0.00 \$2,181,399.85 \$844,011.07 \$750,000.00 \$246,400.00 \$340,988.79 \$1,954,000.40 \$0.00 \$15,000.00	\$1,423,000.25 \$0.00 \$1,184,999.85 \$844,011.07 \$0.00 \$0.00 \$340,988.79 \$238,000.40	\$5,548,000.00 \$0.00 \$750,000.00 \$0.00 \$750,000.00 \$0.00	\$6,971,000.25 \$0.00 \$1,934,999.85 \$844,011.07 \$750,000.00 \$0.00	704000.00 352000.00	332000.00 1036000 0 0.00 352000 0	00 0.00 00 0.00 00 0.00	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00			
Property	DS-200300	Prep and Installation ement Engineering Support ations Engineering and PNNL Support ering Support s Support e Work eliminary Site Work nd Shipping alys is on Control Room storage and truck building materials and ele of Room ion ent for slabs Oversight ation Oversight	1474 01-Sep-17* 485 04-Oct-19* 485 04-Oct-19* 485 04-Oct-19* 485 04-Oct-19* 255 04-Sep-20* 419 07-Jan-19* 200 17-Jan-19* 200 17-Jan-19* 200 17-Jan-19* 209 01-Jul-19* 297 01-Jul-19* 297 01-Jul-19* 297 01-Jul-19* 297 01-Jul-19* 120 04-Oct-19* 120 04-Oct-19*	13-Sep-21 13-Sep-21 13-Sep-21 13-Sep-21 13-Sep-21 13-Sep-21 13-Sep-21 13-Sep-20 03-Sep-20 03-Sep-20 31-Oct-19 30-Apr-20 30-Apr-20 03-Sep-20 03-Sep-20 03-Sep-20 03-Sep-20 13-Jan-20 31-Mar-20	\$0.00 \$1,431,399.85 \$844,011.07 \$0.00 \$246,400.00 \$340,988.79 \$238,000.40 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$750,000.00 \$0.00 \$750,000.00 \$0.00 \$0.00 \$1,716,000.00 \$0.00 \$15,000.00 \$35,000.00 \$35,000.00	\$0.00 \$2,181,399.85 \$844,011.07 \$750,000.00 \$246,400.00 \$340,988.79 \$1,954,000.40 \$0.00	\$0.00 \$1,184,999.85 \$844,011.07 \$0.00 \$0.00 \$340,988.79 \$238,000.40	\$0.00 \$750,000.00 \$0.00 \$750,000.00 \$0.00	\$0.00 \$1,934,999.85 \$844,011.07 \$750,000.00 \$0.00	352000.00	0.00 352000 0	00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00			
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Second S	DS-200310	s Engineering Support ations Engineering and PNNL Support ering Support s Support te Work reliminary Site Work ad Shipping alys is con Control Room storage and truck building materials and solid Room ion ent for slabs Oversight ation Oversight	485 04-Oct-19* 485 04-Oct-19* 485 04-Oct-19* 255 04-Sep-20* 419 07-Jan-19* 200 17-Jan-19* 201 17-Jan-19* 202 01-Jul-19* 203 01-Jul-19* 205 01-Jul-19* 207 01-Jul-19* 208 04-Oct-19* 209 04-Oct-19* 209 04-Oct-19*	13-Sep-21 13-Sep-21 13-Sep-21 13-Sep-21 13-Sep-20 03-Sep-20 31-Oct-19 31-Oct-19 20-Dec-19 30-Apr-20 30-Apr-20 03-Sep-20 13-Jan-20 31-Mar-20	\$844,011.07 \$0.00 \$246,400.00 \$340,988.79 \$238,000.40 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$750,000.00 \$0.00 \$0.00 \$1,716,000.00 \$0.00 \$15,000.00 \$35,000.00	\$844,011.07 \$750,000.00 \$246,400.00 \$340,988.79 \$1,954,000.40 \$0.00 \$15,000.00	\$844,011.07 \$0.00 \$0.00 \$340,988.79 \$238,000.40	\$0.00 \$750,000.00 \$0.00 \$0.00	\$844,011.07 \$750,000.00 \$0.00		0	00	0.00	0.00			
Column C	DS-200340	ering Support s Support s Support te Work reliminary Site Work nd Shipping alysis on Control Room storage and truck building materials and s ol Room ion ent for slabs Oversight ation Oversight	485 04-Oct-19* 255 04-Sep-20* 419 07-Jan-19 419 07-Jan-19* 200 17-Jan-19* 203 17-Jan-19* 209 01-Jul-19* 209 01-Jul-19* 275 01-Aug-19* 66 04-Oct-19* 120 04-Oct-19* 120 04-Oct-19*	13-Sep-21 13-Sep-20 03-Sep-20 03-Sep-20 31-Oct-19 31-Oct-19 20-Dec-19 30-Apr-20 03-Sep-20 03-Sep-20 03-Sep-20 13-Jan-20 31-Mar-20	\$246,400.00 \$340,988.79 \$238,000.40 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$1,716,000.00 \$0.00 \$15,000.00 \$35,000.00 \$0.00	\$246,400.00 \$340,988.79 \$1,954,000.40 \$0.00 \$15,000.00	\$0.00 \$340,988.79 \$238,000.40	\$0.00 \$0.00	\$0.00	352000 00	0	00			: 1 : : : 1 :		
March Marc	DS-200340	s Support te Work reliminary Site Work nd Shipping alys is on Control Room storage and truck building materials and s il Room ion ant for slabs Oversight ation Oversight	255 04-Sep-20* 419 07-Jan-19 419 07-Jan-19* 200 17-Jan-19* 201 17-Jan-19* 203 17-Jan-19* 209 01-Jul-19* 209 01-Jul-19* 207 01-Jul-19* 207 01-Jul-19* 207 01-Jul-19* 208 04-Oct-19* 120 04-Oct-19* 230 04-Oct-19*	13-Sep-21 03-Sep-20 03-Sep-20 31-Oct-19 31-Oct-19 20-Dec-19 30-Apr-20 03-Sep-20 03-Sep-20 13-Jan-20 31-Mar-20	\$340,988.79 \$238,000.40 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$1,716,000.00 \$0.00 \$15,000.00 \$35,000.00 \$0.00	\$340,988.79 \$1,954,000.40 \$0.00 \$15,000.00	\$340,988.79 \$238,000.40	\$0.00		352000.00		UU	0.00	0.00			
Section Control Section	DarkSide.2.03.02 Proliminary Site Work DS-200350 PI for 2.02.02 Preliminary DS-200360 Gas Sampling and Shippi DS-200370 Gas Sampling and Shippi DS-200380 Feed Optimization DS-200390 Procurement of Control Rom DS-200400 Plant, electrical, storage at Discovering procurement of Control Rom DS-200410 Buildings/Control Room DS-200420 Postdoc DS-200430 Phase I Installation DS-200440 Land development for sla DS-200450 Concrete Work Oversigh DS-200460 Electrical Installation Ove DS-200470 Tools and Equipment for sla DS-200480 Pipe Work DS-200490 Phase II Installation DS-200590 Pouring of concrete slabs DS-200590 Pouring of concrete slabs <tr< td=""><td>e Work reliminary Site Work and Shipping alysis on Control Room storage and truck building materials and a al Room ion ent for slabs Oversight ation Oversight</td><th> 419 07-Jan-19 419 07-Jan-19* 200 17-Jan-19* 200 17-Jan-19* 233 17-Jan-19* 209 01-Jul-19* 209 01-Jul-19* 209 01-Jul-19* 207 01-Jul-19* 207 01-Jul-19* 207 01-Jul-19* 207 01-Jul-19* 207 01-Jul-19* 207 04-Oct-19* 200 04-Oct-19* 200 04-Oct-19* 200 04-Oct-19* 200 04-Oct-19* 200 04-Oct-19* 200 207-Jan-19* 207-Jan-19*</th><td>03-Sep-20 03-Sep-20 31-Oct-19 31-Oct-19 20-Dec-19 30-Apr-20 03-Sep-20 03-Sep-20 13-Jan-20 31-Mar-20</td><td>\$238,000.40 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00</td><td>\$1,716,000.00 \$0.00 \$15,000.00 \$35,000.00 \$0.00</td><td>\$1,954,000.40 \$0.00 \$15,000.00</td><td>\$238,000.40</td><td></td><td>\$340,988.79</td><td>002000.00</td><td>352000</td><td>00</td><td>0.00</td><td>0.00</td><td></td><td></td><td></td></tr<>	e Work reliminary Site Work and Shipping alysis on Control Room storage and truck building materials and a al Room ion ent for slabs Oversight ation Oversight	419 07-Jan-19 419 07-Jan-19* 200 17-Jan-19* 200 17-Jan-19* 233 17-Jan-19* 209 01-Jul-19* 209 01-Jul-19* 209 01-Jul-19* 207 01-Jul-19* 207 01-Jul-19* 207 01-Jul-19* 207 01-Jul-19* 207 01-Jul-19* 207 04-Oct-19* 200 04-Oct-19* 200 04-Oct-19* 200 04-Oct-19* 200 04-Oct-19* 200 04-Oct-19* 200 207-Jan-19* 207-Jan-19*	03-Sep-20 03-Sep-20 31-Oct-19 31-Oct-19 20-Dec-19 30-Apr-20 03-Sep-20 03-Sep-20 13-Jan-20 31-Mar-20	\$238,000.40 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$1,716,000.00 \$0.00 \$15,000.00 \$35,000.00 \$0.00	\$1,954,000.40 \$0.00 \$15,000.00	\$238,000.40		\$340,988.79	002000.00	352000	00	0.00	0.00			
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3 3 5 4 7 7 7 9 9 9 9 9 9 9	DS-200410 Buildings/Control Room	on l Room ent for slabs Oversight ation Oversight	297 01-Jul-19* 275 01-Aug-19* 66 04-Oct-19* 120 04-Oct-19* 142 04-Oct-19* 230 04-Oct-19*	03-Sep-20 03-Sep-20 13-Jan-20 31-Mar-20	\$0.00		\$56,000.00	\$0.00	\$56,000.00	\$56,000.00		0	00	0.00	0.00			
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0.900.00 Control Review methods 0 0 1 1 1 2 0 0 0 0 0 0 0 0 0	DS-200520 Control Room Installation	rete slabs	22 01-Apr-20	30-Apr-20	· · · · · · · · · · · · · · · · · · ·													
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De 2007 Column Selection 1 of Column Selection 1	DS-200570 Coupling Between KM an																	
Second Column 1 World	DarkSide.2.03.04 Full System Start-up & DS-200580 Plant start-up and commit DS-200590 Plant consumables for St DarkSide.2.03.05 QA/QC Instrumentation DS-200600 Procure gas analysis inst DS-200600 Procure gas analysis inst DS-200620 Installation and character DS-200630 Production and Installation DS-200630 Production and Installation DS-200640 Project Management DS-200660 Extraction DS-200660 Extraction Operations Engineer DS-200660 Extraction Operations Engineer DS-200660 Plant Operations Engineer DS-200690 Plant Operations Support DarkSide.2.04.02 Plant Operations DS-200690 Plant Operations DS-200700 Precision gas analysis DS-200710 Utilities, Consumables an DS-200720 Large Volume Sample CoDarkSide.2.04.03 Production DS-200730 Production DS-200740 Pl for 2.03.03 Production DS-200760 Production of second bat DS-200760 Production of second bat DS-200770 Production of second bat DS-200770 Production of fourth batch	ant and Site Integration	354 04-Sep-20*	23-Aug-21	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		0	00	0.00	0.00			
10 10 10 10 10 10 10 10	DS-200580 Plant start-up and comming DS-200590 Plant consumables for Start-up and comming DS-200590 Plant consumables for Start-up and comming DS-200600 Procure gas analysis instance DS-200601 Pl for 2.02.05 QA/QC Installation and character DS-200630 Production and Installation DarkSide.2.04 Extraction DS-200640 Pl for 2.03 Extraction DS-200660 Project Management DS-200660 Extraction Operations Engineer DS-200660 Extraction Operations Engineer DS-200690 Process Engineer DS-200690 Plant Operations Support DarkSide.2.04.02 Plant Operations DS-200700 Precision gas analysis DS-200710 Utilities, Consumables an DS-200720 Large Volume Sample Co DarkSide.2.04.03 Production DS-200730 Production of first batch for DS-200750 Production of second bat DS-200760 Production of second bat DS-2007700 Production of fourth batch Production of four	en KM and Urania			\$0.00				\$121,000.00	\$121,000.00		0	00		0.00			0
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DS-200505 Pela Coparations Engineering Support 251 14-Sep-21 14-Sep-22 54-98-225	DS-200650 Field Operations Enginee DS-200660 Extraction Operations En DS-200670 Process Engineer DS-200680 Technical Engineer DS-200680 Plant Operations Support DarkSide.2.04.02 Plant Operations DS-200700 Precision gas analysis DS-200710 Utilities, Consumables an DS-200720 Large Volume Sample Co DarkSide.2.04.03 Production DS-200730 Production DS-200740 Pl for 2.03.03 Production DS-200750 Production of second bat DS-200760 Production of third batch DS-200770 Production of fourth batch																	
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DarkSide.2.05 Storage and Shipping 1194 08-Jul-19 13-Oct-22 \$0.00 \$2.082,500.00 \$0.00		nables and Plant Maintenance ample Collection st batch for shipment roduction scond batch for shipment and batch for shipment urth batch for shipment th batch for shipment	42 18-Jan-22 42 01-Mar-22		\$0.00							0	00	0.00	0.00			
DS-200820 PI for 2.04 Storage and Shipping 1194 08-Jul-19* 13-Oct-22 \$0.00 \$0.	DS-200810 Production of eight batch	nables and Plant Maintenance ample Collection st batch for shipment roduction brond batch for shipment rd batch for shipment urth batch for shipment th batch for shipment th batch for shipment	42 18-Jan-22 42 01-Mar-22 42 12-Apr-22	14-Sen. 22		\$0.00												
DarkSide.2.05.01 Shipping and Storage Vessels Procurement 1194 08-Jul-19 13-Oct-22 \$0.00 \$1,729,000.00 \$0.00 \$0.00 \$0.00 0.00		nables and Plant Maintenance ample Collection st batch for shipment roduction troduction trod batch for shipment trid batch for shipment urth batch for shipment th batch for shipment th batch for shipment th batch for shipment when the batch for shipment the batch for shipment	42 18-Jan-22 42 01-Mar-22 42 12-Apr-22 42 24-May-22 72 05-Jul-22															
DS-200830 Procurement of shipping vessels 1-2 602 08-Jul-19* 28-Feb-21 \$0.00 \$420,000.00 \$		nables and Plant Maintenance ample Collection set batch for shipment coduction cond batch for shipment urth batch for shipment th batch for shipment th batch for shipment cht batch for shipment cht batch for shipment cht batch for shipment cyclet batch for shipment	42 18-Jan-22 42 01-Mar-22 42 12-Apr-22 42 24-May-22 72 05-Jul-22 1194 08-Jul-19	13-Oct-22														
		nables and Plant Maintenance ample Collection st batch for shipment roduction recond batch for shipment ird batch for shipment urth batch for shipment th batch for shipment dh batch for shipment dh batch for shipment goe and Shipping	42 18-Jan-22 42 01-Mar-22 42 12-Apr-22 42 24-May-22 72 05-Jul-22 1194 08-Jul-19 1194 08-Jul-19*	13-Oct-22 13-Oct-22														
		nables and Plant Maintenance ample Collection st batch for shipment roduction record batch for shipment ird batch for shipment urth batch for shipment th batch for shipment th batch for shipment the batch for shipment shipment shipment the batch for shipment ght batch for shipment ght batch for shipment ght batch for shipment ght batch for shipment spring ge and Shipping Storage Vessels Procurement	42 18-Jan-22 42 01-Mar-22 42 12-Apr-22 42 24-May-22 72 05-Jul-22 1194 08-Jul-19 1194 08-Jul-19* 1194 08-Jul-19*	13-Oct-22 13-Oct-22 13-Oct-22	so on												+	
		nables and Plant Maintenance ample Collection st batch for shipment roduction second batch for shipment and batch for shipment arth batch for shipment th batch for shipment th batch for shipment when the batch for shipment eventh batch for shipment got batch for shipment syenth batch for shipment got batch for shipment got batch for shipment syenth satch for shipment syenth sat	42 18-Jan-22 42 01-Mar-22 42 12-Apr-22 42 24-May-22 72 05-Jul-22 1194 08-Jul-19 1194 08-Jul-19 602 08-Jul-19*	13-Oct-22 13-Oct-22 13-Oct-22 28-Feb-21		⊕+♡.いい.け!	ツマン,(パパリ.(パリ)	,00.00		\$0.00			UU	0.00	1 0.00	<u> </u>		

de Current	Activity Name	Original	Start	Finish	Global Labor Cost I G	lobal Non Labor Cost	Global Total Cost		<u>, , , , , , , , , , , , , , , , , , , </u>	-All Currencies al Cost USA Labor Cost	Non Labor Cost	Total Cost	Labor Cost N	Ion Labor Cost	Total Cost Labor Cost Non Labor Co	st Total	Cost	201	7	2018	2	019	2020	2021	-May-19
	•	Duration			[USD]	[USD]	[USD]	USA [USD]	USA [USD]	[USD] CAN [CAD]		CAN [CAD]	EU [EUR]	EU [EUR]			[GBP] Q	QQ	a a c	200				2000	Q Q Q C
DS-200850	PI for 2.04.01 Shipping and Storage Vessels Procuremen		08-Jul-19*	10-Sep-21	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		0.00			0.00		0.00						+++	-	
	Procurement of shipping vessels 3-5			21-Dec-21	\$0.00	\$630,000.00	\$630,000.00	\$0.00	\$0.00	\$0.00	900000.00	900000.00			0.00		0.00				.				-
DS-200870	Procurement of shipping vessels 6-8	296	22-Dec-21	13-Oct-22	\$0.00	\$630,000.00	\$630,000.00	\$0.00	\$0.00	\$0.00	900000.00	900000.00			0.00		0.00								
DarkSide.2.05.02				13-Oct-22	\$0.00	\$353,500.00	\$353,500.00	\$0.00	\$0.00	\$0.00	505000.00	505000.00	0.00	0.00		_	0.00			-441		.			
	PI for 2.04.04 Ship Product		14-Oct-21*	13-Oct-22	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		0.00			0.00		0.00				.				
	Shipment of first batch to Sardinia			05-Dec-21	\$0.00	\$44,187.50	\$44,187.50	\$0.00	\$0.00	\$0.00	63125.00	63125.00			0.00		0.00				.				
	Shipment of Second batch to Sardinia		07-Dec-21	17-Jan-22	\$0.00	\$44,187.50	\$44,187.50	\$0.00	\$0.00	\$0.00	63125.00	63125.00			0.00		0.00				.				. ! 🖣 !
DS-200910	Shipment of third batch to Sardinia			28-Feb-22	\$0.00	\$44,187.50	\$44,187.50	\$0.00	\$0.00	\$0.00	63125.00	63125.00			0.00		0.00								
	Shipment of fourth batch to Sardinia		01-Mar-22	11-Apr-22	\$0.00	\$44,187.50	\$44,187.50	\$0.00	\$0.00	\$0.00	63125.00	63125.00			0.00		0.00	1		-444		.			ļļļ
	Shipment of fifth batch to Sardinia			23-May-22	\$0.00	\$44,187.50	\$44,187.50	\$0.00	\$0.00	\$0.00	63125.00	63125.00			0.00		0.00			111					
	Shipment of sixth batch to Sardinia		24-May-22	04-Jul-22	\$0.00	\$44,187.50	\$44,187.50	\$0.00	\$0.00	\$0.00	63125.00	63125.00			0.00		0.00				.				
DS-200950	Shipment of seventh batch to Sardinia	42	05-Jul-22	15-Aug-22	\$0.00	\$44,187.50	\$44,187.50	\$0.00	\$0.00	\$0.00	63125.00	63125.00			0.00		0.00			+					
DS-200960	Shipment of eigth batch to Sardinia	59	16-Aug-22	13-Oct-22	\$0.00	\$44,187.50	\$44,187.50	\$0.00	\$0.00	\$0.00	63125.00	63125.00			0.00		0.00				.				
rkSide.2.06 Sh	utdown	30	14-Oct-22	12-Nov-22	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00	0.00	0.00 0.00 0.0		0.00					.1			
DS-200970	PI for Shutdown	30	14-Oct-22	12-Nov-22	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		0.00			0.00		0.00				.				
Side.3 ARIA	\+ DArT	1769	01-Feb-16	28-Feb-23	\$1,385,507.20	\$11,285,572.00	\$12,671,079.20	\$0.00	\$0.00	\$0.00 0.00	8000.00	8000.00	1259552.00	10254520.00	11514072.00 0.00 0.0	00	0.00		\rightarrow	111	+		+		
rkSide.3.0 Aria	Project Management Oversight	1394	07-May-19	28-Feb-23	\$835,507.20	\$305,800.00	\$1,141,307.20	\$0.00	\$0.00	\$0.00	0.00	0.00	759552.00	278000.00	1037552.00 0.00 0.0	00	0.00				₩.	+++	+++	+++	+++
	Personnel Spent	1	07-May-19*	07-May-19	\$34,100.00	\$0.00	\$34,100.00	\$0.00	\$0.00	\$0.00		0.00	31000.00		31000.00		0.00				. -				
	Personnel Spent			07-May-19	\$46,481.60	\$0.00	\$46,481.60	\$0.00	\$0.00	\$0.00		0.00	42256.00		42256.00		0.00			+ $+$ $+$	1 1	; i l			
	Personner spent		07-May-19*		\$39,925.60	\$0.00	\$39,925.60	\$0.00	\$0.00	\$0.00		0.00	36296.00		36296.00		0.00	mm			77777	11	1-1-1-	1111	
	Travel		07-May-19*	-	\$0.00	\$18,700.00	\$18,700.00	\$0.00	\$0.00	\$0.00		0.00		17000.00			0.00			111		لخنين	ففف	خنب	
	Travel		07-May-19*		\$0.00	\$55,000.00	\$55,000.00	\$0.00	\$0.00	\$0.00		0.00		50000.00			0.00				.				
	Travel			28-Feb-23	\$0.00	\$67,100.00	\$67,100.00	\$0.00	\$0.00	\$0.00		0.00		61000.00			0.00			111					
	Travel		07-May-19*		\$0.00	\$55,000.00	\$55,000.00	\$0.00	\$0.00	\$0.00		0.00		50000.00			0.00								
	Personnel			28-Feb-23	\$165,000.00	\$0.00	\$165,000.00	\$0.00	\$0.00	\$0.00		0.00	150000.00		150000.00		0.00	1							
	Personnel RAS4		07-May-19*		\$550,000.00	\$0.00	\$550,000.00	\$0.00	\$0.00	\$0.00		0.00	500000.00		50000.00		0.00							1 : :	
	Safety		-	28-Feb-23	\$0.00	\$110,000.00	\$110,000.00	\$0.00	\$0.00	\$0.00		0.00		100000.00			0.00							1 : :	
	ruci-0 and Seruci-1 Material		-	31-Jan-23	\$550,000.00	\$10,500,072.00	\$11,050,072.00	\$0.00	\$0.00	\$0.00 0.00	0.00	0.00	500000.00		10045520.00 0.00 0.0	00	0.00	1 : :							
	Column Sections Construction and Tests			31-Dec-18	1 1	\$6,301,372.00	\$6,301,372.00	\$0.00	\$0.00	\$0.00 0.00		0.00	0.00	5728520.00			0.00								
	Column Sections Construction		01-Feb-16*	15-Dec-18	\$0.00	\$4,290,000.00	\$4,290,000.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00		3900000.00		0.00	'							
	Column Sections Construction			15-Dec-18	\$0.00	\$880,000.00	\$880,000.00	\$0.00	\$0.00	\$0.00		0.00			80000.00		0.00	1 : :			<u> </u>				
	Column Sections Construction		01-Feb-16*	15-Dec-18	\$0.00	\$503,518.40	\$503,518.40	\$0.00	\$0.00	\$0.00		0.00			457744.00		0.00			1 1 1	_				
	Column Construction			15-Dec-18	\$0.00	\$481,553.60	\$481,553.60	\$0.00	\$0.00	\$0.00		0.00			437776.00		0.00	1 : :	\equiv		<u> </u>				
	Leak Test at Polaris (travel)			15-Nov-18	\$0.00	\$35,200.00	\$35,200.00	\$0.00	\$0.00	\$0.00		0.00		32000.00			0.00	1 : :		111	_				
	Leak Test at CERN (travel)		02-Aug-16*		\$0.00	\$44,000.00	\$44,000.00	\$0.00	\$0.00	\$0.00		0.00		40000.00			0.00				<u></u>				
	Leak Test at CERN (measurement)			31-Dec-18	\$0.00	\$67,100.00	\$67,100.00	\$0.00	\$0.00	\$0.00		0.00		61000.00			0.00	1 1 1		111	.TI				
DarkSide.3.01.02	, ,			31-May-19	\$0.00	\$222,200.00	\$222,200.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00		202000.00 0.00 0.0		0.00			-		,			
	Electrical and Vacuum Components			31-May-19	\$0.00	\$31,900.00	\$31,900.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00	29000.00			0.00			1 🗀					
	Nitrogen Recovery (Stirling) (Inkind)		01-Sep-18*	15-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		0.00			0.00		0.00				\equiv				
	Nitrogen Storage for Seruci-0			31-Mar-19	\$0.00	\$44,000.00	\$44,000.00	\$0.00	\$0.00	\$0.00		0.00		40000.00			0.00			+++-7	 -				
	Water Cooling System for Seruci-0			31-Mar-19	\$0.00	\$55,000.00	\$55,000.00	\$0.00	\$0.00	\$0.00		0.00		50000.00			0.00			11 7					
	Chiller			31-May-19	\$0.00	\$47,300.00	\$47,300.00	\$0.00	\$0.00	\$0.00		0.00		43000.00			0.00				ı				
	Leak Detector			04-May-19	\$0.00	\$44,000.00	\$44,000.00	\$0.00	\$0.00	\$0.00		0.00		40000.00			0.00			111	TH				
DarkSide.3.01.03			· .	30-Jun-20	\$0.00	\$1,496,000.00	\$1,496,000.00	\$0.00	\$0.00	\$0.00 0.00	0.00	0.00	0.00				0.00			1		+++			
	Electrical and Vacuum Components 2	670	01-Jul-18*	30-Apr-20	\$0.00	\$33,000.00	\$33,000.00	\$0.00	\$0.00	\$0.00		0.00		30000.00			0.00								
DS-3124	Engineering and Review	516	01-Feb-19*	30-Jun-20	\$0.00	\$88,000.00	\$88,000.00	\$0.00	\$0.00	\$0.00		0.00		80000.00	80000.00		0.00			+		<u> </u>			
DS-3123	Service Gas for Installation	61	01-Apr-19*	31-May-19	\$0.00	\$55,000.00	\$55,000.00	\$0.00	\$0.00	\$0.00		0.00		50000.00	50000.00		0.00								
DS-31341	Fine Tuning System	261	15-Apr-19*	31-Dec-19	\$0.00	\$66,000.00	\$66,000.00	\$0.00	\$0.00	\$0.00		0.00		60000.00	60000.00		0.00								
	Residual Gas Analyzer		01-May-19*	-	\$0.00	\$134,200.00	\$134,200.00	\$0.00	\$0.00	\$0.00		0.00			122000.00		0.00								
DS-3136	Nitrogen Storage for Seruci-1			30-May-20	\$0.00	\$209,000.00	\$209,000.00	\$0.00	\$0.00	\$0.00		0.00			190000.00		0.00	TIT					#111		
	Piller (UPS)		01-Sep-19*	-	\$0.00	\$605,000.00	\$605,000.00	\$0.00	\$0.00	\$0.00		0.00			550000.00		0.00			+ $+$ $+$		1 11			
DS-3132	Cables and Installation for Seruci-1		01-Sep-19*		\$0.00	\$66,000.00	\$66,000.00	\$0.00	\$0.00	\$0.00		0.00		60000.00	60000.00		0.00								
	Cryogenic Trasnfer Lines for Seruci-1		01-Sep-19*		\$0.00	\$199,100.00	\$199,100.00	\$0.00	\$0.00	\$0.00		0.00			181000.00		0.00			+					
	Water Cooling System for Seruci-1 (Vacuum system)		01-Oct-19*		\$0.00	\$40,700.00	\$40,700.00	\$0.00	\$0.00	\$0.00		0.00			37000.00		0.00					📥	<u> </u>		
	Installation Commissioning & Running		01-Jan-19			\$2,480,500.00	\$3,030,500.00	\$0.00	\$0.00	\$0.00	0.00		500000.00	2255000.00			0.00			1111	+			++++	
	Energy and Maintenance for Seruci-0		01-Jan-19*		\$0.00	\$220,000.00	\$220,000.00	\$0.00	\$0.00	\$0.00		0.00			200000.00		0.00				-				
DS-3141	Installation Commissioning & Running Seruci-0	214	01-Jun-19*	31-Dec-19	\$0.00	\$110,000.00	\$110,000.00	\$0.00	\$0.00	\$0.00		0.00		100000.00	100000.00		0.00				. г				
DS-3144	argon storage facilities at Seruci		01-Jun-19*		\$0.00	\$55,000.00	\$55,000.00	\$0.00	\$0.00	\$0.00		0.00			50000.00		0.00			+ $+$ $+$, r	+++	+++	+++	++
	Personnel on Shift			31-Jan-23	\$550,000.00	\$0.00	\$550,000.00	\$0.00	\$0.00	\$0.00			500000.00		500000.00		0.00				, I				+++
DS-3135	Disassembling Seruci-0 + Reassembling in Seruci-1		01-Mar-20*	30-May-20	\$0.00	\$110,000.00	\$110,000.00	\$0.00	\$0.00	\$0.00		0.00		100000.00	100000.00		0.00	mi		777		1-1-1-			
	Commissioning & Running Seruci-1			31-Dec-22	\$0.00	\$335,500.00	\$335,500.00	\$0.00	\$0.00	\$0.00		0.00			305000.00		0.00							+++	
DS-3145	Energy and Maintenance for Seruci-1 purification mode			31-Dec-22	\$0.00	\$1,320,000.00	\$1,320,000.00	\$0.00	\$0.00	\$0.00		0.00			1200000.00		0.00			+	.		:		
	Was te dis po sa l			31-Dec-22	\$0.00	\$110,000.00	\$110,000.00	\$0.00	\$0.00	\$0.00		0.00		100000.00	100000.00		0.00					1			
DS-3147	Shipping from Seruci to LNGS		01-Jan-22*	31-Jan-23	\$0.00	\$220,000.00	\$220,000.00	\$0.00	\$0.00	\$0.00		0.00		200000.00	200000.00		0.00				.				
rkSide.3.02 DA				30-Dec-22	\$0.00	\$479,700.00	\$479,700.00	\$0.00	\$0.00	\$0.00	8000.00	8000.00	0.00	431000.00			0.00	mit							
	Simulation and sensitivity studies (Inkind)		30-Apr-18*		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		0.00			0.00		0.00			11 1 1	.				
	Mechanical drawings with CAD (inkind)		01-May-18*		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		0.00			0.00		0.00			411		; i l			
	Acrylic machining		28-Feb-19*	-	\$0.00	\$1,400.00	\$1,400.00	\$0.00	\$0.00	\$0.00	2000.00	2000.00			0.00		0.00				<u> </u>				
	machining DART (inkind)		30-Apr-19*		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		0.00			0.00		0.00			+	. 5				.
	Front-end DART		30-Apr-19*	-	\$0.00	\$11,000.00	\$11,000.00	\$0.00	\$0.00	\$0.00		0.00		10000.00			0.00	1-1-1		1-1-1		 -		1-1-1-	
				-	· ·											'									
Dom: 11	g Level of Effort Actual Work			Suittin - I T	maining Work				_	1 of 12				_	K filter: All Activities										

arkSide Curren	t							Urania Layo	ut-All Curre	encies												09-	-May-19 17
ity ID	Activity Name	Original Start Duration	Finish	Global Labor Cost ([USD]	Global Non Labor Cost [USD]	Global Total Cost [USD]	Labor Cost USA [USD]	Non Labor Cost USA [USD]	Total Cost USA [USD]	Labor Cost CAN [CAD]	Non Labor Cost CAN [CAD]		Labor Cost Non EU [EUR]		otal Cost EU [EUR]	Labor Cost UK [GBP]	Non Labor Cost UK [GBP]	Total Cost UK [GBP]	2017 :	2018 201		020 202	
DS-331	Cryogenics and gas system DART	31 30-Apr-19*	30-May-19	\$0.00	\$132,000.00	\$132,000.00	\$0.00	\$0.00	\$0.00			0.00		120000.00 12	20000.00			0.00	4 4 4 4 4				-1-1-1-
DS-334	purchases DART integration	31 30-Apr-19*	30-May-19	\$0.00	\$11,000.00	\$11,000.00	\$0.00	\$0.00	\$0.00			0.00		10000.00	10000.00			0.00					
DS-335	purchases DART integration	31 30-Apr-19*	30-May-19	\$0.00	\$11,000.00	\$11,000.00	\$0.00	\$0.00	\$0.00			0.00		10000.00	10000.00			0.00					
DS-325	Slow Control DART	62 30-Apr-19*	30-Jun-19	\$0.00	\$16,500.00	\$16,500.00	\$0.00	\$0.00	\$0.00			0.00		15000.00	15000.00			0.00					
DS-333	new single phase setup design and assembly ArDM	62 30-Apr-19*	30-Jun-19	\$0.00	\$38,500.00	\$38,500.00	\$0.00	\$0.00	\$0.00			0.00		35000.00	35000.00			0.00					
DS-338	trigger integration	92 30-Apr-19*	30-Jul-19	\$0.00	\$5,500.00	\$5,500.00	\$0.00	\$0.00	\$0.00			0.00		5000.00	5000.00			0.00			ı I I		
DS-339	DAQ integration	92 30-Apr-19*	30-Jul-19	\$0.00	\$37,400.00	\$37,400.00	\$0.00	\$0.00	\$0.00			0.00		34000.00	34000.00			0.00			1		
DS-349	Feasibilility study Gas Detector Proposal (inkind)	154 30-Apr-19*	30-Sep-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00			0.00			0.00			= ;		
DS-340	Lead purchase inkind	245 30-Apr-19*	30-Dec-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00			0.00			0.00					
DS-324	cleaning DART (in kind)	31 01-May-19*	31-May-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00			0.00			0.00		•			
DS-328	Clean TPB-coatings	62 01-May-19*	01-Jul-19	\$0.00	\$1,400.00	\$1,400.00	\$0.00	\$0.00	\$0.00		2000.00	2000.00			0.00			0.00					
DS-332	infrastructure update at LSC (inkind)	31 30-Jun-19*	30-Jul-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00			0.00			0.00			1		
DS-336	travel from INFN DART integration	57 02-Jul-19*	27-Aug-19	\$0.00	\$11,000.00	\$11,000.00	\$0.00	\$0.00	\$0.00			0.00		10000.00	10000.00			0.00			•		
DS-3331	DART Integration and tests	119 02-Jul-19*	23-Dec-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00			0.00			0.00					
DS-346	Inkind operation electricity costs and atmospheric argon v	154 30-Jul-19*	30-Dec-19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00			0.00			0.00					
DS-343	travel from CIEMAT to LSC	1250 30-Jul-19*	30-Dec-22	\$0.00	\$5,500.00	\$5,500.00	\$0.00	\$0.00	\$0.00			0.00		5000.00	5000.00			0.00			\Rightarrow		+++
DS-344	travel from INFN TO LSC	1250 30-Jul-19*	30-Dec-22	\$0.00	\$55,000.00	\$55,000.00	\$0.00	\$0.00	\$0.00			0.00		50000.00	50000.00			0.00					
DS-345	argon shipping from Aria	1250 30-Jul-19*	30-Dec-22	\$0.00	\$8,800.00	\$8,800.00	\$0.00	\$0.00	\$0.00			0.00		8000.00	8000.00			0.00					
DS-350	Construction and operation Gas Detector Proposal	1188 30-Sep-19*	30-Dec-22	\$0.00	\$110,000.00	\$110,000.00	\$0.00	\$0.00	\$0.00			0.00		100000.00	00.0000			0.00					
DS-329	Acrylic machining radio-pure	31 30-Nov-19*	30-Dec-19	\$0.00	\$1,400.00	\$1,400.00	\$0.00	\$0.00	\$0.00		2000.00	2000.00			0.00			0.00			•		
DS-337	Transportation to LSC DART	6 23-Dec-19*	29-Dec-19	\$0.00	\$13,200.00	\$13,200.00	\$0.00	\$0.00	\$0.00			0.00		12000.00	12000.00			0.00			111		
DS-347	argon shipping from DS50	32 30-Dec-19*	30-Jan-20	\$0.00	\$2,200.00	\$2,200.00	\$0.00	\$0.00	\$0.00			0.00		2000.00	2000.00			0.00					
DS-348	Inkind operation electricity costs and atmospheric argon	1097 30-Dec-19*	30-Dec-22	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00			0.00			0.00					
DS-330	Clean TPB-coatings radio-pure	31 31-Dec-19*	30-Jan-20	\$0.00	\$1,400.00	\$1,400.00	\$0.00	\$0.00	\$0.00		2000.00	2000.00			0.00			0.00					
DS-341	Leadstructure and belt installation	31 31-Dec-19*		\$0.00	\$5,500.00	\$5,500.00	\$0.00	\$0.00	\$0.00			0.00			5000.00			0.00			P :		
DarkSide.4 In	nfrastructures	1 01-Jan-16	01-Jan-16	\$0.00	\$601,100.00	\$601,100.00	\$0.00	\$0.00	\$0.00	0.00	458000.00	458000.00	0.00	255000.00 25	55000.00	0.00	0.00	0.00					
DS-411000	Safety Analysis	1 01-Jan-16*	01-Jan-16	\$0.00	\$55,000.00	\$55,000.00	\$0.00	\$0.00	\$0.00			0.00		50000.00	50000.00			0.00					
DS-412000	Facilities	1 01-Jan-16*	01-Jan-16	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			0.00			0.00			0.00					
DS-412100	Building	1 01-Jan-16*	01-Jan-16	\$0.00	\$225,500.00	\$225,500.00	\$0.00	\$0.00	\$0.00			0.00		205000.00 20				0.00					
DS-412500	Storage @ LNGS	1 01-Jan-16*		\$0.00	\$320,600.00	\$320,600.00	\$0.00	\$0.00	\$0.00		458000.00	458000.00			0.00			0.00					
DarkSide.5 N	OA	1646 30-Jun-18	31-Dec-22	\$4,470,400.00	\$9,368,700.00	\$13,839,100.00	\$0.00	\$0.00	\$0.00	0.00	0.00	0.00 4	064000.00	8517000.00 125	81000.00	0.00	0.00	0.00		Y			
DS-510000	Faculty personnel (PS)	1463 30-Jun-18*	01-Jul-22	\$396,000.00	\$0.00	\$396,000.00	\$0.00	\$0.00	\$0.00			0.00	360000.00	36	60000.00			0.00				1 1 1 1	
DS-505000	Mechanical-3D	1646 30-Jun-18*	31-Dec-22	\$0.00	\$268,400.00	\$268,400.00	\$0.00	\$0.00	\$0.00			0.00		244000.00 24	44000.00			0.00					
DS-505001	Mechanical-3D	1646 30-Jun-18*	31-Dec-22	\$157,300.00	\$0.00	\$157,300.00	\$0.00	\$0.00	\$0.00			0.00	143000.00	14	43000.00			0.00				-1	
DS-508000	Trav els	1646 30-Jun-18*	31-Dec-22	\$0.00	\$66,000.00	\$66,000.00	\$0.00	\$0.00	\$0.00			0.00		60000.00	60000.00			0.00					-
DS-506000	NOA Infrastructures	365 01-Jan-19*	31-Dec-19	\$0.00	\$220,000.00	\$220,000.00	\$0.00	\$0.00	\$0.00			0.00		200000.00 20	00.0000			0.00		11			
DS-507000	Web sie & Outreach	1461 01-Jan-19*	31-Dec-22	\$0.00	\$44,000.00	\$44,000.00	\$0.00	\$0.00	\$0.00			0.00		40000.00	40000.00			0.00					+++
DS-509000	Administrative personnel	1097 01-Jul-19*	01-Jul-22	\$140,800.00	\$0.00	\$140,800.00	\$0.00	\$0.00	\$0.00			0.00	128000.00	12	28000.00			0.00					
DS-504000	LA-ICPMS	1 01-Oct-19*	01-Oct-19	\$157,300.00	\$0.00	\$157,300.00	\$0.00	\$0.00	\$0.00				143000.00		43000.00			0.00		.]			
DS-502000	Packaging facility, housing, refurbishing, gas and electricit	1096 01-Oct-19*	30-Sep-22	\$0.00	\$2,665,300.00	\$2,665,300.00	\$0.00	\$0.00	\$0.00			0.00	2	2423000.00 242	23000.00			0.00					
DS-503000	Silicon packaging equipments	1096 01-Oct-19*	30-Sep-22	\$0.00	\$3,795,000.00	\$3,795,000.00	\$0.00	\$0.00	\$0.00			0.00	3	3450000.00 345	50000.00			0.00				1 1 1 1	
DS-503001	Silicon packaging equipments	1096 01-Oct-19*	30-Sep-22	\$0.00	\$220,000.00	\$220,000.00	\$0.00	\$0.00	\$0.00			0.00		200000.00 20	00.0000			0.00				1 1 1 1	+++
DS-511000	Faculty personnel, engineers, technicians	1188 01-Oct-19*	31-Dec-22	\$3,619,000.00	\$0.00	\$3,619,000.00	\$0.00	\$0.00	\$0.00			0.00 3	290000.00	329	90000.00			0.00			+		++++
DS-501000	Clean Room	1005 01-Apr-20*	31-Dec-22	\$0.00	\$2,090,000.00	\$2,090,000.00	\$0.00	\$0.00	\$0.00			0.00	1	1900000.00 190	00.0000			0.00					++++