

Rebaseline Schedule PY5-PY8



L2	WBS	Task Name	NSF	L1 Milestone	L2 Milestone	Internal Milestone	Duration	Start Date	End Date	Predecessor WBS
9	1	IceCube Phase 1 Upgrade Project					2078d	08/01/18	08/01/26	
10	1.1	Project Office					1982d	10/01/18	08/01/26	
11	1.1.1	Project Management					1982d	10/01/18	08/01/26	
12	1.1.1.1.1	Project Administration (B)					1825d	05/22/19	06/01/26	253FF, 255SS
13	1.1.1.1.1.2	Annual Report					1558d	10/01/19	08/28/25	
18	1.1.1.1.1.2.5	Annual Report 5					0	09/29/23	09/29/23	
19	1.1.1.1.1.2.6	Annual Report 6					0	09/29/24	09/29/24	
20	1.1.1.1.1.2.7	Annual Report 7					0	09/29/25	09/29/25	
22	1.1.1.1.1.4	Project Execution Plan (PEP)					1569d	10/01/18	08/25/24	
28	1.1.1.1.1.4.6	Project Execution Plan (PEP) 6					0	09/25/23	09/25/23	
29	1.1.1.1.1.4.7	Project Execution Plan (PEP) 7					0	09/25/24	09/25/24	
30	1.1.1.1.1.5	Project Reviews					1808d	03/13/19	03/01/26	
31	1.1.1.1.1.5.1	Annual NSF Review					1808d	03/13/19	03/01/26	
36	1.1.1.1.1.5.1.5	Annual NSF Review 5					0	03/10/23	03/10/23	
37	1.1.1.1.1.5.1.6	Annual NSF Review 6					0	03/10/24	03/10/24	
38	1.1.1.1.1.5.1.7	Annual NSF Review 7					0	03/10/25	03/10/25	
39	1.1.1.1.1.5.1.8	Annual NSF Review 8					0	03/01/26	03/01/26	
41	1.1.1.1.1.5.3	Instrumentation Deployment Readiness Review					0	10/28/22	10/28/22	
42	1.1.1.1.2	Project Controls					1982d	10/01/18	08/01/26	
43	1.1.1.1.2.1	Project Controls and Finance (B)					1825d	05/22/19	06/01/26	253FF, 255SS
44	1.1.1.1.2.2	EVMS					1988d	10/05/18	08/01/26	
45	1.1.1.1.2.2.1	EVMS Operational					1825d	05/22/19	06/01/26	253FF, 255SS
46	1.1.1.1.2.2.2	Project Financial and EV Monthly Report					1988d	10/05/18	05/05/26	
95	1.1.1.1.2.2.2.49	Project Financial and EV Monthly Report 49					0	10/05/22	10/05/22	
96	1.1.1.1.2.2.2.50	Project Financial and EV Monthly Report 50					0	11/05/22	11/05/22	
97	1.1.1.1.2.2.2.51	Project Financial and EV Monthly Report 51					0	12/05/22	12/05/22	
98	1.1.1.1.2.2.2.52	Project Financial and EV Monthly Report 52					0	01/05/23	01/05/23	
99	1.1.1.1.2.2.2.53	Project Financial and EV Monthly Report 53					0	02/05/23	02/05/23	
100	1.1.1.1.2.2.2.54	Project Financial and EV Monthly Report 54					0	03/05/23	03/05/23	
101	1.1.1.1.2.2.2.55	Project Financial and EV Monthly Report 55					0	04/05/23	04/05/23	
102	1.1.1.1.2.2.2.56	Project Financial and EV Monthly Report 56					0	05/05/23	05/05/23	
103	1.1.1.1.2.2.2.57	Project Financial and EV Monthly Report 57					0	06/05/23	06/05/23	
104	1.1.1.1.2.2.2.58	Project Financial and EV Monthly Report 58					0	07/05/23	07/05/23	
105	1.1.1.1.2.2.2.59	Project Financial and EV Monthly Report 59					0	08/05/23	08/05/23	
106	1.1.1.1.2.2.2.60	Project Financial and EV Monthly Report 60					0	09/05/23	09/05/23	
107	1.1.1.1.2.2.2.61	Project Financial and EV Monthly Report 61					0	10/05/23	10/05/23	
108	1.1.1.1.2.2.2.62	Project Financial and EV Monthly Report 62					0	11/05/23	11/05/23	
109	1.1.1.1.2.2.2.63	Project Financial and EV Monthly Report 63					0	12/05/23	12/05/23	
110	1.1.1.1.2.2.2.64	Project Financial and EV Monthly Report 64					0	01/05/24	01/05/24	
111	1.1.1.1.2.2.2.65	Project Financial and EV Monthly Report 65					0	02/05/24	02/05/24	
112	1.1.1.1.2.2.2.66	Project Financial and EV Monthly Report 66					0	03/05/24	03/05/24	
113	1.1.1.1.2.2.2.67	Project Financial and EV Monthly Report 67					0	04/05/24	04/05/24	
114	1.1.1.1.2.2.2.68	Project Financial and EV Monthly Report 68					0	05/05/24	05/05/24	
115	1.1.1.1.2.2.2.69	Project Financial and EV Monthly Report 69					0	06/05/24	06/05/24	
116	1.1.1.1.2.2.2.70	Project Financial and EV Monthly Report 70					0	07/05/24	07/05/24	
117	1.1.1.1.2.2.2.71	Project Financial and EV Monthly Report 71					0	08/05/24	08/05/24	
118	1.1.1.1.2.2.2.72	Project Financial and EV Monthly Report 72					0	09/05/24	09/05/24	
119	1.1.1.1.2.2.2.73	Project Financial and EV Monthly Report 73					0	10/05/24	10/05/24	
120	1.1.1.1.2.2.2.74	Project Financial and EV Monthly Report 74					0	11/05/24	11/05/24	
121	1.1.1.1.2.2.2.75	Project Financial and EV Monthly Report 75					0	12/05/24	12/05/24	
122	1.1.1.1.2.2.2.76	Project Financial and EV Monthly Report 76					0	01/05/25	01/05/25	
123	1.1.1.1.2.2.2.77	Project Financial and EV Monthly Report 77					0	02/05/25	02/05/25	
124	1.1.1.1.2.2.2.78	Project Financial and EV Monthly Report 78					0	03/05/25	03/05/25	
125	1.1.1.1.2.2.2.79	Project Financial and EV Monthly Report 79					0	04/05/25	04/05/25	
126	1.1.1.1.2.2.2.80	Project Financial and EV Monthly Report 80					0	05/05/25	05/05/25	
127	1.1.1.1.2.2.2.81	Project Financial and EV Monthly Report 81					0	06/05/25	06/05/25	
128	1.1.1.1.2.2.2.82	Project Financial and EV Monthly Report 82					0	07/05/25	07/05/25	
129	1.1.1.1.2.2.2.83	Project Financial and EV Monthly Report 83					0	08/05/25	08/05/25	
130	1.1.1.1.2.2.2.84	Project Financial and EV Monthly Report 84					0	09/05/25	09/05/25	
131	1.1.1.1.2.2.2.85	Project Financial and EV Monthly Report 85					0	10/05/25	10/05/25	
132	1.1.1.1.2.2.2.86	Project Financial and EV Monthly Report 86					0	11/05/25	11/05/25	
133	1.1.1.1.2.2.2.87	Project Financial and EV Monthly Report 87					0	12/05/25	12/05/25	
134	1.1.1.1.2.2.2.88	Project Financial and EV Monthly Report 88					0	01/05/26	01/05/26	
135	1.1.1.1.2.2.2.89	Project Financial and EV Monthly Report 89					0	02/05/26	02/05/26	
136	1.1.1.1.2.2.2.90	Project Financial and EV Monthly Report 90					0	03/05/26	03/05/26	
137	1.1.1.1.2.2.2.91	Project Financial and EV Monthly Report 91					0	04/05/26	04/05/26	
138	1.1.1.1.2.2.2.92	Project Financial and EV Monthly Report 92					0	05/05/26	05/05/26	
139	1.1.1.1.2.3	Subaward Management					1821d	10/01/18	10/01/26	
141	1.1.1.1.2.3.2	Distributed Funding to Sub-Awardees					1821d	10/01/18	10/01/26	
147	1.1.1.1.2.3.2.6	Distributed Funding to Sub-Awardees 6					0	10/01/23	10/01/23	
148	1.1.1.1.2.3.2.7	Distributed Funding to Sub-Awardees 7					0	10/01/24	10/01/24	
149	1.1.1.1.2.3.2.8	Distributed Funding to Sub-Awardees 8					0	10/01/25	10/01/25	
150	1.1.1.1.2.3.3	Monthly Tracking					1777d	11/03/18	08/03/25	
198	1.1.1.1.2.3.3.48	Monthly Tracking 48					0	10/03/22	10/03/22	
199	1.1.1.1.2.3.3.49	Monthly Tracking 49					0	11/03/22	11/03/22	
200	1.1.1.1.2.3.3.50	Monthly Tracking 50					0	12/03/22	12/03/22	
201	1.1.1.1.2.3.3.51	Monthly Tracking 51					0	01/03/23	01/03/23	

L2	WBS	Task Name	NSF	L1 Milestone	L2 Milestone	Internal Milestone	Duration	Start Date	End Date	Predecessor WBS	
202	1.1	1.1.2.3.3.52	Monthly Tracking 52	☑	☐	☐	☑	0	02/03/23	02/03/23	
203	1.1	1.1.2.3.3.53	Monthly Tracking 53	☑	☐	☐	☑	0	03/03/23	03/03/23	
204	1.1	1.1.2.3.3.54	Monthly Tracking 54	☑	☐	☐	☑	0	04/03/23	04/03/23	
205	1.1	1.1.2.3.3.55	Monthly Tracking 55	☑	☐	☐	☑	0	05/03/23	05/03/23	
206	1.1	1.1.2.3.3.56	Monthly Tracking 56	☑	☐	☐	☑	0	06/03/23	06/03/23	
207	1.1	1.1.2.3.3.57	Monthly Tracking 57	☑	☐	☐	☑	0	07/03/23	07/03/23	
208	1.1	1.1.2.3.3.58	Monthly Tracking 58	☑	☐	☐	☑	0	08/03/23	08/03/23	
209	1.1	1.1.2.3.3.59	Monthly Tracking 59	☑	☐	☐	☑	0	09/03/23	09/03/23	
210	1.1	1.1.2.3.3.60	Monthly Tracking 60	☑	☐	☐	☑	0	09/29/23	09/29/23	
211	1.1	1.1.2.3.3.61	Monthly Tracking 61	☑	☐	☐	☑	0	10/03/23	10/03/23	
212	1.1	1.1.2.3.3.62	Monthly Tracking 62	☑	☐	☐	☑	0	11/03/23	11/03/23	
213	1.1	1.1.2.3.3.63	Monthly Tracking 63	☑	☐	☐	☑	0	12/03/23	12/03/23	
214	1.1	1.1.2.3.3.64	Monthly Tracking 64	☑	☐	☐	☑	0	01/03/24	01/03/24	
215	1.1	1.1.2.3.3.65	Monthly Tracking 65	☑	☐	☐	☑	0	02/03/24	02/03/24	
216	1.1	1.1.2.3.3.66	Monthly Tracking 66	☑	☐	☐	☑	0	03/03/24	03/03/24	
217	1.1	1.1.2.3.3.67	Monthly Tracking 67	☑	☐	☐	☑	0	04/03/24	04/03/24	
218	1.1	1.1.2.3.3.68	Monthly Tracking 68	☑	☐	☐	☑	0	05/03/24	05/03/24	
219	1.1	1.1.2.3.3.69	Monthly Tracking 69	☑	☐	☐	☑	0	06/03/24	06/03/24	
220	1.1	1.1.2.3.3.70	Monthly Tracking 70	☑	☐	☐	☑	0	07/03/24	07/03/24	
221	1.1	1.1.2.3.3.71	Monthly Tracking 71	☑	☐	☐	☑	0	08/03/24	08/03/24	
222	1.1	1.1.2.3.3.72	Monthly Tracking 72	☑	☐	☐	☑	0	09/03/24	09/03/24	
223	1.1	1.1.2.3.3.73	Monthly Tracking 73	☑	☐	☐	☑	0	10/29/24	10/29/24	
224	1.1	1.1.2.3.3.74	Monthly Tracking 74	☑	☐	☐	☑	0	11/03/24	11/03/24	
225	1.1	1.1.2.3.3.75	Monthly Tracking 75	☑	☐	☐	☑	0	12/03/24	12/03/24	
226	1.1	1.1.2.3.3.76	Monthly Tracking 76	☑	☐	☐	☑	0	01/03/25	01/03/25	
227	1.1	1.1.2.3.3.77	Monthly Tracking 77	☑	☐	☐	☑	0	02/03/25	02/03/25	
228	1.1	1.1.2.3.3.78	Monthly Tracking 78	☑	☐	☐	☑	0	03/03/25	03/03/25	
229	1.1	1.1.2.3.3.79	Monthly Tracking 79	☑	☐	☐	☑	0	04/03/25	04/03/25	
230	1.1	1.1.2.3.3.80	Monthly Tracking 80	☑	☐	☐	☑	0	05/03/25	05/03/25	
231	1.1	1.1.2.3.3.81	Monthly Tracking 81	☑	☐	☐	☑	0	06/03/25	06/03/25	
232	1.1	1.1.2.3.3.82	Monthly Tracking 82	☑	☐	☐	☑	0	07/03/25	07/03/25	
233	1.1	1.1.2.3.3.83	Monthly Tracking 83	☑	☐	☐	☑	0	08/03/25	08/03/25	
234	1.1	1.1.2.3.3.84	Monthly Tracking 84	☑	☐	☐	☑	0	09/03/25	09/03/25	
235	1.1	1.1.2.4	Financial Reporting	☑	☐	☐	☐	1825d	05/22/19	06/01/26	253FF, 255SS
236	1.1	1.1.3	Quality and Safety	☑	☐	☐	☐	1825d	05/22/19	06/01/26	
237	1.1	1.1.3.1	Quality, Safety Management, Document Control Systems (B)	☑	☐	☐	☐	1825d	05/22/19	06/01/26	253FF, 255SS
238	1.1	1.1.4	Polar Operations	☑	☐	☐	☐	1825d	05/22/19	06/01/26	
239	1.1	1.1.4.1	Logistics (B)	☑	☐	☐	☐	1825d	05/22/19	06/01/26	253FF, 255SS
240	1.1	1.1.4.2	Antarctic Support Contractor	☑	☐	☐	☐	1825d	05/22/19	06/01/26	253FF, 255SS
241	1.1	1.1.4.3	Environment, Health, and Safety	☑	☐	☐	☐	1825d	05/22/19	06/01/26	253FF, 255SS
242	1.1	1.1.4.4	ICL Readied by ASC for Upgrade String Commissioning	☑	☐	☐	☐	0	12/01/22	12/01/22	
243	1.1	1.1.5	Project Engineering	☑	☐	☐	☐	1904d	01/31/19	06/01/26	
244	1.1	1.1.5.1	Systems Engineering (B)	☑	☐	☐	☐	1825d	05/22/19	06/01/26	253FF, 255SS
245	1.1	1.1.5.2	System Engineering	☑	☐	☐	☐	1904d	01/31/19	06/01/26	
246	1.1	1.1.5.2.1	System Engineering Support	☑	☐	☐	☐	1825d	05/22/19	06/01/26	253FF, 255SS
250	1.1	1.1.5.3	Production Management	☑	☐	☐	☐	1825d	05/22/19	06/01/26	253FF, 255SS
251	1.1	1.1.5.4	Risk Management	☑	☐	☐	☐	1825d	05/22/19	06/01/26	253FF, 255SS
252	1.1	1.1.5.5	Reliability and Quality Assurance	☑	☐	☐	☐	1825d	05/22/19	06/01/26	253FF, 255SS
253	1.1	1.1.6	Upgrade Project Closeout	☑	☐	☐	☑	40d	04/07/26	06/01/26	254
254	1.1	1.1.7	Detector complete and handed off to M&O	☑	☑	☑	☑	0	04/06/26	04/06/26	3571, 3565
256	1.2	1.2	Upgrade Implementation	☑	☐	☐	☐	1973d	10/01/18	05/05/26	
257	1.2	1.2.1	Implementation Management & Systems Engineering	☑	☐	☐	☐	1973d	10/01/18	05/05/26	
258	1.2	1.2.1.1	Implementation Management and Controls	☑	☐	☐	☐	1951d	10/01/18	04/03/26	
259	1.2	1.2.1.2	Drill Management & Systems Engineering	☑	☐	☐	☐	1973d	10/01/18	05/05/26	
270	1.2	1.2.1.2.5	2022-23 Drill Management & Systems Engineering	☑	☐	☐	☐	261d	10/01/22	09/28/23	
271	1.2	1.2.1.2.5.1	2022-23 Management & Systems Engineering	☑	☐	☐	☐	261d	10/01/22	09/29/23	
272	1.2	1.2.1.2.5.2	Drill Procedure Review	☑	☐	☐	☐	120d	04/15/23	09/28/23	
273	1.2	1.2.1.2.5.3	Drill Hole Modeling	☑	☐	☐	☐	21d	06/15/23	07/13/23	
274	1.2	1.2.1.2.5.4	Drill Documentation Support	☑	☐	☐	☐	120d	02/15/23	08/01/23	
275	1.2	1.2.1.2.6	2023-24 Drill Management & Systems Engineering	☑	☐	☐	☐	262d	10/01/23	10/03/24	
276	1.2	1.2.1.2.6.1	2023-24 Management & Systems Engineering	☑	☐	☐	☐	262d	10/01/23	10/03/24	
277	1.2	1.2.1.2.6.2	PY6 Season Debrief	☑	☐	☐	☐	1d	03/15/24	03/15/24	
278	1.2	1.2.1.2.6.3	Drill Procedure Review	☑	☐	☐	☐	120d	04/15/24	09/27/24	
279	1.2	1.2.1.2.6.4	PY6 Drill Advisory Panel	☑	☐	☐	☐	2d	05/01/24	05/02/24	
280	1.2	1.2.1.2.6.5	Drill Hole Modeling	☑	☐	☐	☐	21d	06/15/24	07/12/24	
281	1.2	1.2.1.2.6.6	Drill Documentation Support	☑	☐	☐	☐	120d	02/15/24	07/31/24	
282	1.2	1.2.1.2.7	2024-25 Drill Management & Systems Engineering	☑	☐	☐	☐	261d	10/01/24	10/03/25	
283	1.2	1.2.1.2.7.1	2024-25 Management & Systems Engineering	☑	☐	☐	☐	261d	10/01/24	10/03/25	
284	1.2	1.2.1.2.7.2	PY7 Season Debrief	☑	☐	☐	☐	1d	03/15/25	03/15/25	
285	1.2	1.2.1.2.7.3	Drill Procedure Review	☑	☐	☐	☐	100d	03/15/25	07/31/25	
286	1.2	1.2.1.2.7.4	PY7 Drill Advisory Panel	☑	☐	☐	☐	2d	05/01/25	05/02/25	
287	1.2	1.2.1.2.7.5	Drill Hole Modeling	☑	☐	☐	☐	21d	06/15/25	07/11/25	
288	1.2	1.2.1.2.7.6	Drill Readiness Review (PSL)	☑	☑	☑	☑	2d	07/01/25	07/02/25	
289	1.2	1.2.1.2.7.7	Drill Documentation Support	☑	☐	☐	☐	120d	02/15/25	07/31/25	
290	1.2	1.2.1.2.8	2025-26 Drill Management & Systems Engineering	☑	☐	☐	☐	153d	08/30/25	05/05/26	
291	1.2	1.2.1.2.8.1	2025-26 Management & Systems Engineering	☑	☐	☐	☐	153d	09/30/25	05/05/26	
292	1.2	1.2.1.2.8.2	PY8 Season Debrief	☑	☐	☐	☐	1d	03/15/26	03/15/26	
293	1.2	1.2.1.2.8.3	Final Drill Completion Report	☑	☐	☑	☑	0	04/30/26	04/30/26	

L2	WBS	Task Name	NSF	L1 Milestone	L2 Milestone	Internal Milestone	Duration	Start Date	End Date	Predecessor WBS
294	1.2	1.2.1.3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1189d	10/01/21	05/05/26	
299	1.2	1.2.1.3.2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	261d	10/01/22	08/28/23	
300	1.2	1.2.1.3.2.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	261d	10/01/22	09/29/23	
301	1.2	1.2.1.3.2.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	261d	10/01/22	09/29/23	
302	1.2	1.2.1.3.2.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	261d	10/01/22	09/29/23	
303	1.2	1.2.1.3.3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	262d	10/01/23	10/03/24	
304	1.2	1.2.1.3.3.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	262d	10/01/23	10/03/24	
305	1.2	1.2.1.3.3.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	262d	10/01/23	10/03/24	
306	1.2	1.2.1.3.3.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	262d	10/01/23	10/03/24	
307	1.2	1.2.1.3.4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	261d	10/01/24	10/03/25	
308	1.2	1.2.1.3.4.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	261d	10/01/24	10/03/25	
309	1.2	1.2.1.3.4.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	261d	10/01/24	10/03/25	
310	1.2	1.2.1.3.4.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	261d	10/01/24	10/03/25	
311	1.2	1.2.1.3.5	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	162d	10/01/25	05/05/26	
312	1.2	1.2.1.3.5.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	152d	10/01/25	05/05/26	
313	1.2	1.2.1.3.5.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	152d	10/01/25	05/05/26	
314	1.2	1.2.1.3.5.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	152d	10/01/25	05/05/26	
315	1.2	1.2.1.3.5.4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	04/30/26	04/30/26	
316	1.2	1.2.1.4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1955d	10/01/18	04/08/26	
321	1.2	1.2.1.4.5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	261d	10/03/22	10/02/23	320
322	1.2	1.2.1.4.6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	261d	10/03/23	10/04/24	321
323	1.2	1.2.1.4.7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	260d	10/07/24	10/08/25	322
324	1.2	1.2.1.4.8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	130d	10/07/25	04/09/26	
325	1.2	1.2.1.5	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1827d	10/01/18	10/08/25	
330	1.2	1.2.1.5.5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	260d	10/03/22	09/29/23	329
331	1.2	1.2.1.5.6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	195d	01/05/24	10/03/24	330FS +66d
332	1.2	1.2.1.5.7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	195d	01/09/25	10/08/25	331FS +66d
333	1.2	1.2.1.6	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1229d	11/08/20	08/01/25	
334	1.2	1.2.1.6.1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	724d	10/15/22	08/01/25	
335	1.2	1.2.1.6.1.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	10/15/22	10/15/22	
336	1.2	1.2.1.6.1.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	08/01/23	08/01/23	
337	1.2	1.2.1.6.1.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	10/15/23	10/15/23	
338	1.2	1.2.1.6.1.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	08/01/24	08/01/24	
339	1.2	1.2.1.6.1.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	10/15/24	10/15/24	
340	1.2	1.2.1.6.1.4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	08/01/25	08/01/25	
341	1.2	1.2.1.6.2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1223d	11/08/20	07/23/25	
352	1.2	1.2.1.6.2.11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5d	10/03/22	10/07/22	522, 525, 534, 631,
361	1.2	1.2.1.6.2.20	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6d	10/01/22	10/07/22	
363	1.2	1.2.1.6.2.22	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7d	06/20/23	06/28/23	
364	1.2	1.2.1.6.2.30	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7d	07/15/25	07/23/25	
365	1.2	1.2.1.6.2.31	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7d	07/15/25	07/23/25	
366	1.2	1.2.1.6.2.28	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7d	07/15/24	07/23/24	
367	1.2	1.2.1.6.2.29	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6d	07/03/24	07/10/24	
368	1.2	1.2.1.6.2.24	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15d	06/13/24	07/03/24	
369	1.2	1.2.1.6.2.25	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7d	06/15/24	06/24/24	
370	1.2	1.2.1.6.2.26	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10d	06/15/24	06/27/24	
371	1.2	1.2.1.6.2.27	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8d	05/13/24	05/22/24	407
372	1.2	1.2.1.6.2.23	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3d	07/28/23	08/01/23	649
373	1.2	1.2.1.6.3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	724d	10/15/22	08/01/25	
374	1.2	1.2.1.6.3.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	10/15/22	10/15/22	352, 354, 362, 361,
375	1.2	1.2.1.6.3.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	08/01/23	08/01/23	372, 336
376	1.2	1.2.1.6.3.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	08/01/24	08/01/24	650, 338
377	1.2	1.2.1.6.3.4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	08/01/25	08/01/25	651, 340
378	1.2	1.2.1.6.4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	733d	08/07/22	07/07/25	
380	1.2	1.2.1.6.4.2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14d	06/21/23	07/10/23	1916
381	1.2	1.2.1.6.4.3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5d	06/21/23	06/27/23	1916
382	1.2	1.2.1.6.4.4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5d	06/06/24	06/12/24	1934, 1945
383	1.2	1.2.1.6.4.5	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5d	07/01/25	07/07/25	
384	1.2	1.2.1.6.5	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	724d	10/15/22	08/01/25	
385	1.2	1.2.1.6.5.1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	10/15/22	10/15/22	379, 335SS
386	1.2	1.2.1.6.5.2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	10/15/23	10/15/23	380, 337SS
387	1.2	1.2.1.6.5.3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	10/15/23	10/15/23	381, 337SS
388	1.2	1.2.1.6.5.4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	08/01/24	08/01/24	382, 338SS
389	1.2	1.2.1.6.5.5	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	08/01/25	08/01/25	383, 340SS
390	1.2	1.2.2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	991d	10/01/20	07/23/24	
391	1.2	1.2.2.1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	901d	02/04/21	07/23/24	
397	1.2	1.2.2.1.6	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	30d	04/12/23	05/23/23	
398	1.2	1.2.2.1.7	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	30d	05/01/24	06/11/24	
399	1.2	1.2.2.1.8	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	30d	06/12/24	07/23/24	398
401	1.2	1.2.2.1.10	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5d	04/15/24	04/19/24	
402	1.2	1.2.2.2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	554d	03/24/22	08/10/24	
406	1.2	1.2.2.2.4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	30d	03/01/24	04/11/24	
407	1.2	1.2.2.2.5	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	30d	04/01/24	05/10/24	
408	1.2	1.2.2.3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	919d	10/01/20	04/12/24	
416	1.2	1.2.2.3.8	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10d	02/28/23	03/13/23	
417	1.2	1.2.2.3.9	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10d	02/28/23	03/13/23	416SS
418	1.2	1.2.2.3.10	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10d	03/30/24	04/11/24	
419	1.2	1.2.2.3.11	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10d	04/01/24	04/12/24	418SS

	L2	WBS	Task Name	NSF	L1 Milestone	L2 Milestone	Internal Milestone	Duration	Start Date	End Date	Predecessor WBS
420	1.2	1.2.3	Tower Operations Site (TOS) - Off-Ice	✓				1758d	10/01/16	07/01/25	
421	1.2	1.2.3.1	TOS and Tower	✓				1647d	03/01/19	07/01/25	
426	1.2	1.2.3.1.5	Centric Emergency Repair Kit Assembly (PY6)	✓				35d	02/01/24	03/20/24	
427	1.2	1.2.3.1.6	Examine Interface between Dust Logger and Tower & Address as Needed	✓				30d	07/01/23	08/10/23	
428	1.2	1.2.3.1.7	TOS Load Cells	✓				281d	03/15/22	03/14/23	
430	1.2	1.2.3.1.7.2	Calibration Load Cell	✓				20d	02/01/23	02/28/23	
431	1.2	1.2.3.1.7.3	Calibration Load Cell Rigging	✓				10d	03/01/23	03/14/23	430
432	1.2	1.2.3.1.8	Identify/Procure: TOS & Tower Hardware, Repair Parts (PY5)	✓				35d	06/14/23	08/01/23	
433	1.2	1.2.3.1.9	Identify/Procure: TOS & Tower Hardware, Repair Parts (PY6)	✓				35d	06/12/24	07/30/24	
434	1.2	1.2.3.1.10	Identify/Procure: TOS & Tower Hardware, Repair Parts (PY7)	✓				35d	05/14/25	07/01/25	
446	1.2	1.2.3.3	Reels & Winches	✓				919d	11/02/20	05/14/24	
449	1.2	1.2.3.3.3	Main Supply Hose Reel (Big Red at NPX) - Procure Replacement Parts	✓				582d	01/05/22	04/02/24	448
450	1.2	1.2.3.3.4	Return Water Hose Reel (at NPX) - Procure Replacement Parts	✓				612d	01/05/22	05/14/24	449SS
453	1.2	1.2.3.3.7	Main Drill Cable Reel/Main Hose Reel Load Sharing (PY4)	✓				390d	12/20/21	06/16/23	
458	1.2	1.2.3.3.7.5	Load Sharing: Full-scale Testing - Load Share & Tuning (PY5)	✓				90d	02/13/23	06/16/23	457FS + 100d
459	1.2	1.2.3.3.8	Reels & Winches: Reel Load Sharing Testing Complete	✓			✓	0	06/16/23	06/16/23	454, 455, 456, 457,
460	1.2	1.2.3.3.9	Reels & Winches: Drill Reels Slings - Final Testing & Prep	✓				10d	06/10/23	06/22/23	
461	1.2	1.2.3.3.10	Reels & Winches: TU20 Slings - Spec, Procure, Test	✓				8w	03/30/23	05/24/23	
462	1.2	1.2.3.3.11	Reels & Winches: Reel Components & Spares (PY6), TU20 brakes	✓				8w	03/01/24	04/25/24	
482	1.2	1.2.3.6	Design and Construct Main Hose Reel Heating System	✓				160d	02/27/22	10/06/22	
483	1.2	1.2.3.6.1	Design, Fabricate and Test Hose Reel Heating System	✓				125d	04/15/22	10/06/22	
484	1.2	1.2.3.6.1.1	Connectorize Heated Blankets	✓				1w	10/01/22	10/06/22	
500	1.2	1.2.3.6.7	Prepare for Shipment	✓				3d	09/30/22	10/04/22	498
501	1.2	1.2.4	Computing and Control System - Off-Ice	✓				1898d	01/02/19	04/23/26	
502	1.2	1.2.4.1	Architecture	✓				1898d	01/02/19	04/23/26	
510	1.2	1.2.4.1.8	Coordination with USAP IT (PY5)	✓				4w	06/01/23	06/28/23	
511	1.2	1.2.4.1.9	CS Drawings & Documentation (PY5)	✓				12w	07/03/23	09/22/23	
512	1.2	1.2.4.1.10	CS Drawings & Documentation (PY6)	✓				12w	08/03/24	10/24/24	
513	1.2	1.2.4.1.11	CS Drawings & Documentation (PY7)	✓				12w	08/03/25	10/23/25	
514	1.2	1.2.4.1.12	CS Drawings & Documentation (PY8)	✓				8w	03/01/26	04/23/26	
515	1.2	1.2.4.2	Control System Hardware	✓				904d	11/01/21	04/25/25	
521	1.2	1.2.4.2.2	Sensors	✓				102d	05/28/22	10/17/22	
526	1.2	1.2.4.2.2.5	Procure System Sensors (PY5)	✓				2w	10/04/22	10/17/22	524FS + 2d, 525
532	1.2	1.2.4.2.6	Return Water Pump Noise Mitigation Subsys. Testing	✓				314d	04/01/22	06/14/23	
533	1.2	1.2.4.2.7	TOS pendant I/O box Rebuild & Testing - (one finished, 7 remaining)	✓				314d	04/01/22	06/14/23	532FF
540	1.2	1.2.4.2.11	Computing Equipment - Production	✓				103d	02/01/23	06/23/23	
541	1.2	1.2.4.2.11.1	CS HW Production Ignition Servers (3x: DCC, TOS1, TOS2)	✓				65d	02/01/23	05/02/23	
542	1.2	1.2.4.2.11.2	CS HW Production Database Server (1x: DCC)	✓				65d	02/01/23	05/02/23	
543	1.2	1.2.4.2.11.3	CS HW Production Peripherals (3x sets: DCC, TOS1, TOS2)	✓				8w	03/01/23	04/25/23	
544	1.2	1.2.4.2.11.4	CS HW DCC Core Switch & Security Appliance	✓				8w	03/15/23	05/09/23	
545	1.2	1.2.4.2.11.5	CS HW Production Main PLC - PLC (redundant), I/O, network, UPS, in a box (3x: DCC, TOS1, TOS2)	✓				60d	04/03/23	06/23/23	
547	1.2	1.2.4.2.13	CS HW PY6 Resupply	✓				40d	03/03/24	04/25/24	
548	1.2	1.2.4.2.14	CS HW PY7 Resupply	✓				40d	03/03/25	04/25/25	
549	1.2	1.2.4.3	Control System Software	✓				1228d	11/04/20	07/24/25	
557	1.2	1.2.4.3.4	PLC & Software Development (w/sub-tasks)	✓				897d	04/22/21	10/02/24	550FF + 520d
558	1.2	1.2.4.3.5	SCADA Monitoring Software and Server Procurement	✓				151d	04/01/22	10/28/22	
559	1.2	1.2.4.3.6	SCADA Screen Development	✓				100d	10/31/22	03/17/23	558
568	1.2	1.2.4.3.9	CS SW SES Operator Screen development	✓				387d	04/03/23	08/27/24	
569	1.2	1.2.4.3.9.1	Develop MHP-MDS UI Screens [x4]	✓				277d	04/03/23	04/28/24	
570	1.2	1.2.4.3.9.1.1	Local-Panel MDS-specific HMI (PY5)	✓				2w	04/03/23	04/14/23	
571	1.2	1.2.4.3.9.1.2	Local-Panel MDS-specific HMI (PY6)	✓				2w	04/01/24	04/12/24	
572	1.2	1.2.4.3.9.1.3	DCC-based SCADA UI (PY5)	✓				2w	04/17/23	04/28/23	570
573	1.2	1.2.4.3.9.1.4	DCC-based SCADA UI (PY6)	✓				2w	04/15/24	04/26/24	571
574	1.2	1.2.4.3.9.2	Develop FuelSystem-MDS UI Screens	✓				279d	05/01/23	05/28/24	
575	1.2	1.2.4.3.9.2.1	Local-Panel MDS-specific HMI (PY5)	✓				2w	05/01/23	05/12/23	
576	1.2	1.2.4.3.9.2.2	Local-Panel MDS-specific HMI (PY6)	✓				2w	05/01/24	05/14/24	
577	1.2	1.2.4.3.9.2.3	DCC-based SCADA (PY5)	✓				2w	05/15/23	05/26/23	575
578	1.2	1.2.4.3.9.2.4	DCC-based SCADA (PY6)	✓				2w	05/15/24	05/28/24	576
579	1.2	1.2.4.3.9.3	Develop GenSets-MDS UI Screens [x5]	✓				279d	06/01/23	06/28/24	
580	1.2	1.2.4.3.9.3.1	Local-Panel MDS-specific HMI (PY5)	✓				2w	06/01/23	06/14/23	
581	1.2	1.2.4.3.9.3.2	Local-Panel MDS-specific HMI (PY6)	✓				2w	06/03/24	06/14/24	
582	1.2	1.2.4.3.9.3.3	DCC-based SCADA (PY5)	✓				2w	06/15/23	06/28/23	580
583	1.2	1.2.4.3.9.3.4	DCC-based SCADA (PY6)	✓				2w	06/17/24	06/28/24	581
584	1.2	1.2.4.3.9.4	Develop Rodwell System UI Screens	✓				277d	07/03/23	07/26/24	
585	1.2	1.2.4.3.9.4.1	Local-Panel MDS-specific HMI (PY5)	✓				2w	07/03/23	07/14/23	
586	1.2	1.2.4.3.9.4.2	Local-Panel MDS-specific HMI (PY6)	✓				2w	07/01/24	07/12/24	
587	1.2	1.2.4.3.9.4.3	DCC-based SCADA (PY5)	✓				2w	07/17/23	07/28/23	585
588	1.2	1.2.4.3.9.4.4	DCC-based SCADA (PY6)	✓				2w	07/15/24	07/26/24	586
589	1.2	1.2.4.3.9.5	Develop HPP-MDS UI Screens	✓				279d	08/01/23	08/28/24	
590	1.2	1.2.4.3.9.5.1	Local-Panel MDS-specific HMI (PY5)	✓				2w	08/01/23	08/14/23	
591	1.2	1.2.4.3.9.5.2	Local-Panel MDS-specific HMI (PY6)	✓				2w	08/01/24	08/14/24	
592	1.2	1.2.4.3.9.5.3	DCC-based SCADA (PY5)	✓				2w	08/15/23	08/28/23	590
593	1.2	1.2.4.3.9.5.4	DCC-based SCADA (PY6)	✓				2w	08/15/24	08/28/24	591
594	1.2	1.2.4.3.9.6	Develop PHS-MDS UI Screens	✓				279d	08/01/23	08/27/24	
595	1.2	1.2.4.3.9.6.1	Local-Panel MDS-specific HMI (PY5)	✓				2w	09/01/23	09/14/23	
596	1.2	1.2.4.3.9.6.2	Local-Panel MDS-specific HMI (PY6)	✓				2w	09/02/24	09/13/24	
597	1.2	1.2.4.3.9.6.3	DCC-based SCADA (PY5)	✓				2w	09/15/23	09/28/23	595
598	1.2	1.2.4.3.9.6.4	DCC-based SCADA (PY6)	✓				2w	09/16/24	09/27/24	596

L2	WBS	Task Name	NSF	L1 Milestone	L2 Milestone	Internal Milestone	Duration	Start Date	End Date	Predecessor WBS
599	1.2 1.2.4.3.10	CS SW TOS Operator Screen Development					379d	05/01/23	10/15/24	
600	1.2 1.2.4.3.10.1	SCADA - DrillHead (PY5)					3w	05/01/23	05/19/23	
601	1.2 1.2.4.3.10.2	SCADA - DrillHead (PY6)					3w	05/01/24	05/21/24	
602	1.2 1.2.4.3.10.3	SCADA - Drill_Settings (PY5)					3w	05/22/23	06/09/23	600
603	1.2 1.2.4.3.10.4	SCADA - Drill_Settings (PY6)					3w	05/22/24	06/11/24	601
604	1.2 1.2.4.3.10.5	SCADA - Drilling_Drill Control (PY5)					3w	06/12/23	06/30/23	602
605	1.2 1.2.4.3.10.6	SCADA - Drilling_Drill Control (PY6)					3w	06/12/24	07/02/24	603
606	1.2 1.2.4.3.10.7	SCADA - Drilling_Cable Level Wind (PY5)					3w	07/03/23	07/21/23	604
607	1.2 1.2.4.3.10.8	SCADA - Drilling_Cable Level Wind (PY6)					3w	07/03/24	07/23/24	605
608	1.2 1.2.4.3.10.9	SCADA - Drilling_Hose Level Wind (PY5)					3w	07/24/23	08/11/23	606
609	1.2 1.2.4.3.10.10	SCADA - Drilling_Hose Level Wind (PY6)					3w	07/24/24	08/13/24	607
610	1.2 1.2.4.3.10.11	SCADA - Return Water Pump (PY5)					3w	08/14/23	09/01/23	608
611	1.2 1.2.4.3.10.12	SCADA - Return Water Pump (PY6)					3w	08/14/24	09/03/24	609
612	1.2 1.2.4.3.10.13	SCADA - Deployment - Cable (PY5)					3w	09/04/23	09/22/23	610
613	1.2 1.2.4.3.10.14	SCADA - Deployment - Cable (PY6)					3w	09/04/24	09/24/24	611
614	1.2 1.2.4.3.10.15	SCADA - Deployment Settings (PY5)					3w	09/25/23	10/13/23	612
615	1.2 1.2.4.3.10.16	SCADA - Deployment Settings (PY6)					3w	09/25/24	10/15/24	613
616	1.2 1.2.4.3.11	CS SW dB Design, my SQL					319d	04/05/23	06/27/24	
617	1.2 1.2.4.3.11.1	Build DCC dB schema (PY5)					4w	04/05/23	05/02/23	
618	1.2 1.2.4.3.11.2	Build DCC dB schema (PY6)					4w	04/05/24	05/02/24	
619	1.2 1.2.4.3.11.3	Build Drill dB schema (PY5)					4w	05/03/23	05/30/23	617
620	1.2 1.2.4.3.11.4	Build Drill dB schema (PY6)					4w	05/03/24	05/30/24	618
621	1.2 1.2.4.3.11.5	Build Deploy dB schema (PY5)					4w	05/31/23	06/27/23	619
622	1.2 1.2.4.3.11.6	Build Deploy dB schema (PY6)					4w	05/31/24	06/27/24	620
623	1.2 1.2.4.3.12	CS SW Standup Production Computing Hardware, Configure, Verify before Shipment (3x systems) (PY6)					20w	03/01/24	07/18/24	
624	1.2 1.2.4.3.13	CS SW MDS-specific HMI Refinement (PY7)					16w	04/05/25	07/24/25	
625	1.2 1.2.4.3.14	CS SW DCC-based SCADA Refinement (PY7)					16w	04/05/25	07/24/25	
626	1.2 1.2.4.3.15	CS SW TOS-based SCADA Refinement (PY7)					16w	04/05/25	07/24/25	
627	1.2 1.2.4.3.16	CS SW dB Refinement (PY7)					16w	04/05/25	07/24/25	
628	1.2 1.2.4.4	Motor Drives					840d	03/09/22	06/04/25	
632	1.2 1.2.4.4.4	Programming and Testing at PSL					776d	06/07/22	06/04/25	631SS -43d
634	1.2 1.2.4.5	E-Stop System					1143d	01/29/21	06/25/25	
640	1.2 1.2.4.5.6	E-Stop Resupply (PY6)					8w	05/01/24	06/25/24	
641	1.2 1.2.4.5.7	E-Stop Resupply (PY7)					8w	05/01/25	06/25/25	
642	1.2 1.2.4.6	Drill Control Center					586d	04/29/21	07/27/23	
643	1.2 1.2.4.6.1	Computing System					586d	04/29/21	07/27/23	
645	1.2 1.2.4.6.3	Update Workspace (desk, chairs), Procure Printer & Accessories					30d	02/01/23	03/14/23	
646	1.2 1.2.4.7	Outdoor Cables					838d	01/15/22	04/08/25	
649	1.2 1.2.4.7.3	Fabricate and Test SES & SES to TOS Cables - Signal					305d	05/27/22	07/27/23	648FS +42d
650	1.2 1.2.4.7.4	CS Cabling Resupply (PY6)					2w	03/27/24	04/09/24	
651	1.2 1.2.4.7.5	CS Cabling Resupply (PY7)					2w	03/27/25	04/09/25	
652	1.2 1.2.4.8	Control Subsystems (PY5-PY8)					672d	01/03/22	08/02/24	
653	1.2 1.2.4.8.1	CS MHPs					250d	06/02/22	04/14/23	
658	1.2 1.2.4.8.1.2	CS MHP HW2-3: Heater Controller Temp Displays & Controllers					140d	10/03/22	04/14/23	
659	1.2 1.2.4.8.1.2.1	Procure sample temperature display and digital thermostat, install in test bed heater, test					6w	10/03/22	11/11/22	
660	1.2 1.2.4.8.1.2.2	Select and procure temperature display units for heater controls, conversion hardware					6w	11/14/22	12/23/22	659
661	1.2 1.2.4.8.1.2.3	Replace temperature display units, remove RTD DGHs, transfer net connections, test					8w	12/26/22	02/17/23	660
662	1.2 1.2.4.8.1.2.4	Select and procure digital thermostats for heater controls, conversion hardware					6w	02/20/23	03/31/23	661
663	1.2 1.2.4.8.1.2.5	Write thermostat field replacement procedure					2w	04/03/23	04/14/23	662
664	1.2 1.2.4.8.1.3	CS MHP HW4-6: Maintain Documentation, Prepare Field Plans					80d	11/01/22	02/20/23	
665	1.2 1.2.4.8.1.3.1	Write rewriting and test instructions for MHP E-stop boxes (fixes switch contact selections made in Gen 1)					4w	11/01/22	11/28/22	
666	1.2 1.2.4.8.1.3.2	Write test procedures for dry heater tests					4w	11/29/22	12/26/22	665
667	1.2 1.2.4.8.1.3.3	Assemble equipment to test flow meters (excitation coil and portable pulse generator)					4w	12/27/22	01/23/23	666
668	1.2 1.2.4.8.1.3.4	Write flow meter test procedure and assemble test kit					4w	01/24/23	02/20/23	667
670	1.2 1.2.4.8.1.5	CS MHP SW: Develop PLC-MHP MDS SW Functionality [Entire MHP system]					196d	07/13/22	04/14/23	
671	1.2 1.2.4.8.1.5.1	Develop heater-based sensor readout; (heater temp/flow manifold pressures)					3w	01/02/23	01/20/23	
672	1.2 1.2.4.8.1.5.2	Develop environmental sensor readout; (bldg temps, smoke, e-stop)					3w	01/23/23	02/10/23	671
673	1.2 1.2.4.8.1.5.3	Develop heater control; (ON/OFF, Thermostat setpoint)					3w	02/13/23	03/03/23	672
677	1.2 1.2.4.8.1.5.7	Implement interlocks					4w	03/06/23	03/31/23	673, 676
678	1.2 1.2.4.8.1.5.8	Document Subsystem					2w	04/03/23	04/14/23	677
679	1.2 1.2.4.8.1.6	CS MHP HW ready to pack for shipment					0	04/14/23	04/14/23	654, 658, 669, 674,
680	1.2 1.2.4.8.2	CS PHS & WT2					300d	05/01/22	08/22/23	
681	1.2 1.2.4.8.2.1	CS PHS HW1: Motor Drive Config & Install Kits					80d	07/01/22	10/20/22	
683	1.2 1.2.4.8.2.1.2	Configure VFDs with accessories, connection pigtails, document					6w	08/26/22	10/06/22	682
684	1.2 1.2.4.8.2.1.3	Develop VFD installation strategy & document, procure materials					2w	10/07/22	10/20/22	683
688	1.2 1.2.4.8.2.3	CS PHS HW3: Network Box Refurb & Config					100d	08/01/22	01/18/23	
690	1.2 1.2.4.8.2.3.2	Select and procure new power supplies for the network box, procure one RS-485 gateway					4w	09/29/22	10/26/22	689
691	1.2 1.2.4.8.2.3.3	Redesign and rebuild PHS network box with new I/O, document as-built configuration					4w	10/27/22	11/23/22	690
692	1.2 1.2.4.8.2.3.4	Indicate where approximately 20 sensor and network cables terminate in PHS and document config. plans					4w	11/24/22	12/21/22	691
693	1.2 1.2.4.8.2.3.5	Configure heater-mounted DGH modules, develop and document DGH installation and test plans					4w	12/22/22	01/18/23	692
694	1.2 1.2.4.8.2.4	CS PHS HW4: New E-stop Slap Switch & Box for Outdoor Location					2w	01/19/23	02/01/23	693
695	1.2 1.2.4.8.2.5	CS PHS HW5: Develop heater test procedures, configure test tools, document test plans					4w	02/02/23	03/01/23	694
701	1.2 1.2.4.8.2.7	CS PHS HW7-8: Maintain Documentation, Prepare Field Plans					60d	04/01/23	06/22/23	
702	1.2 1.2.4.8.2.7.1	Develop and document test plans for all PHS system components					8w	04/01/23	05/25/23	
703	1.2 1.2.4.8.2.7.2	Review Gen-1 docs, identify where sensor connections terminated, plan for reconnection and test					4w	05/26/23	06/22/23	702
704	1.2 1.2.4.8.2.8	Develop PLC-PHS MDS SW Functionality					172d	06/29/22	05/26/23	
705	1.2 1.2.4.8.2.8.1	Develop heater-based sensor readout; (heater temp/flow manifold pressures)					4w	01/02/23	01/27/23	
706	1.2 1.2.4.8.2.8.2	Develop environmental sensor readout; (bldg temps, smoke, e-stop)					2w	01/30/23	02/10/23	705

L2	WBS	Task Name	NSF	L1 Milestone	L2 Milestone	Internal Milestone	Duration	Start Date	End Date	Predecessor WBS
707	1.2	1.2.4.8.2.8.3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3w	02/13/23	03/03/23	706
708	1.2	1.2.4.8.2.8.4		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2w	03/06/23	03/17/23	707
709	1.2	1.2.4.8.2.8.5		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4w	03/20/23	04/14/23	708
710	1.2	1.2.4.8.2.8.6		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2w	09/29/22	10/12/22	689
711	1.2	1.2.4.8.2.8.7		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2w	10/13/22	10/26/22	710
712	1.2	1.2.4.8.2.8.8		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2w	10/27/22	11/09/22	711
713	1.2	1.2.4.8.2.8.9		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2w	11/10/22	11/23/22	712
714	1.2	1.2.4.8.2.8.10		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4w	04/17/23	05/12/23	713, 709
715	1.2	1.2.4.8.2.8.11		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2w	05/15/23	05/26/23	714
716	1.2	1.2.4.8.2.9		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	01/18/23	01/18/23	681, 685, 688, 696,
717	1.2	1.2.4.8.3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	460d	01/03/22	08/22/23	
718	1.2	1.2.4.8.3.1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	130d	08/01/22	01/27/23	
720	1.2	1.2.4.8.3.1.2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6w	08/29/22	10/07/22	719
721	1.2	1.2.4.8.3.1.3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8w	10/10/22	12/02/22	720
722	1.2	1.2.4.8.3.1.4		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4w	12/05/22	12/30/22	721
723	1.2	1.2.4.8.3.1.5		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4w	01/02/23	01/27/23	722
724	1.2	1.2.4.8.3.2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	210d	08/01/22	08/21/23	
726	1.2	1.2.4.8.3.2.2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4w	09/15/22	10/12/22	725
727	1.2	1.2.4.8.3.2.3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4w	10/13/22	11/09/22	726
728	1.2	1.2.4.8.3.2.4		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8w	11/10/22	01/04/23	727
729	1.2	1.2.4.8.3.2.5		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12w	01/05/23	03/29/23	728
730	1.2	1.2.4.8.3.2.6		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12w	03/30/23	06/21/23	729
731	1.2	1.2.4.8.3.3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	180d	12/01/22	07/12/23	
732	1.2	1.2.4.8.3.3.1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6w	12/01/22	01/11/23	
733	1.2	1.2.4.8.3.3.2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4w	01/12/23	02/08/23	732
734	1.2	1.2.4.8.3.3.3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6w	02/09/23	03/22/23	733
735	1.2	1.2.4.8.3.3.4		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8w	03/23/23	05/17/23	734
736	1.2	1.2.4.8.3.3.5		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8w	05/18/23	07/12/23	735
737	1.2	1.2.4.8.3.4		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	190d	05/02/22	01/20/23	
739	1.2	1.2.4.8.3.4.2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8w	08/22/22	10/14/22	738
740	1.2	1.2.4.8.3.4.3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8w	10/17/22	12/09/22	739
741	1.2	1.2.4.8.3.4.4		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6w	12/12/22	01/20/23	740
742	1.2	1.2.4.8.3.5		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	40d	01/02/23	02/24/23	
743	1.2	1.2.4.8.3.5.1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4w	01/02/23	01/27/23	
744	1.2	1.2.4.8.3.5.2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4w	01/30/23	02/24/23	743
745	1.2	1.2.4.8.3.6		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	280d	01/03/22	12/30/22	
747	1.2	1.2.4.8.3.6.2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8w	11/07/22	12/30/22	746FS +36w
748	1.2	1.2.4.8.3.7		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8w	01/02/23	02/24/23	747
749	1.2	1.2.4.8.3.8		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4w	02/27/23	03/24/23	748
750	1.2	1.2.4.8.3.9		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10w	03/27/23	06/02/23	749
751	1.2	1.2.4.8.3.10		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	180d	01/02/23	08/22/23	
752	1.2	1.2.4.8.3.10.1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10w	01/02/23	03/10/23	
753	1.2	1.2.4.8.3.10.2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6w	03/13/23	04/21/23	752
754	1.2	1.2.4.8.3.10.3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12w	04/24/23	07/14/23	753
755	1.2	1.2.4.8.3.10.4		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4w	07/17/23	08/11/23	754
756	1.2	1.2.4.8.3.10.5		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2w	02/09/23	02/22/23	733
757	1.2	1.2.4.8.3.10.6		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2w	02/23/23	03/08/23	756
758	1.2	1.2.4.8.3.10.7		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2w	03/09/23	03/22/23	757
759	1.2	1.2.4.8.3.10.8		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4w	08/14/23	09/08/23	758, 755
760	1.2	1.2.4.8.3.10.9		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2w	09/11/23	09/22/23	759
761	1.2	1.2.4.8.3.11		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	07/12/23	07/12/23	719, 720, 721, 722,
762	1.2	1.2.4.8.4		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	110d	05/01/23	08/28/23	
763	1.2	1.2.4.8.4.1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8w	05/01/23	06/23/23	
764	1.2	1.2.4.8.4.2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	70d	08/28/23	08/28/23	783
765	1.2	1.2.4.8.4.2.1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6w	06/26/23	08/04/23	
766	1.2	1.2.4.8.4.2.2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6w	08/07/23	09/15/23	765
767	1.2	1.2.4.8.4.2.3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2w	09/18/23	09/29/23	766
768	1.2	1.2.4.8.4.3		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	09/29/23	09/29/23	763, 764
769	1.2	1.2.4.8.5		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	185d	01/02/23	08/28/23	
770	1.2	1.2.4.8.5.1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16w	01/02/23	04/21/23	
771	1.2	1.2.4.8.5.2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6w	04/24/23	06/02/23	770
772	1.2	1.2.4.8.5.3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3w	06/05/23	06/23/23	771
773	1.2	1.2.4.8.5.4		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8w	06/26/23	08/18/23	772
774	1.2	1.2.4.8.5.5		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2w	08/21/23	09/01/23	773
775	1.2	1.2.4.8.5.6		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4w	09/04/23	09/29/23	774
776	1.2	1.2.4.8.5.7		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	80d	08/01/23	08/20/23	
777	1.2	1.2.4.8.5.7.1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6w	06/01/23	07/12/23	
778	1.2	1.2.4.8.5.7.2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4w	07/13/23	08/09/23	777
779	1.2	1.2.4.8.5.7.3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2w	08/10/23	08/23/23	778
780	1.2	1.2.4.8.5.7.4		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4w	08/24/23	09/20/23	779
781	1.2	1.2.4.8.5.8		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	09/29/23	09/29/23	770, 771, 772, 773,
782	1.2	1.2.4.8.6		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	100d	03/18/24	08/02/24	
783	1.2	1.2.4.8.6.1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10w	03/18/24	05/24/24	
784	1.2	1.2.4.8.6.2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	80d	04/15/24	08/02/24	
785	1.2	1.2.4.8.6.2.1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4w	04/15/24	05/10/24	
786	1.2	1.2.4.8.6.2.2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4w	05/13/24	06/07/24	785
787	1.2	1.2.4.8.6.2.3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2w	06/10/24	06/21/24	786
788	1.2	1.2.4.8.6.2.4		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2w	06/24/24	07/05/24	787

L2	WBS	Task Name	NSF	L1 Milestone	L2 Milestone	Internal Milestone	Duration	Start Date	End Date	Predecessor WBS
789	1.2	1.2.4.8.6.2.5					2w	07/08/24	07/19/24	788
790	1.2	1.2.4.8.6.2.6					2w	07/22/24	08/02/24	789
791	1.2	1.2.4.8.6.3					0	08/02/24	08/02/24	783, 784
792	1.2	1.2.4.8.7					213d	10/03/22	07/26/23	
793	1.2	1.2.4.8.7.1					100d	10/03/22	02/17/23	
794	1.2	1.2.4.8.7.1.1					8w	10/03/22	11/25/22	
795	1.2	1.2.4.8.7.1.2					4w	11/28/22	12/23/22	794
796	1.2	1.2.4.8.7.1.3					4w	12/26/22	01/20/23	795
797	1.2	1.2.4.8.7.1.4					4w	01/23/23	02/17/23	796
798	1.2	1.2.4.8.7.2					50d	10/03/22	12/06/22	
799	1.2	1.2.4.8.7.2.1					4w	10/03/22	10/28/22	
800	1.2	1.2.4.8.7.2.2					4w	10/31/22	11/25/22	799
801	1.2	1.2.4.8.7.2.3					2w	11/28/22	12/09/22	800
802	1.2	1.2.4.8.7.3					130d	11/01/22	05/01/23	
803	1.2	1.2.4.8.7.3.1					6w	11/01/22	12/12/22	
804	1.2	1.2.4.8.7.3.2					4w	12/13/22	01/09/23	803
805	1.2	1.2.4.8.7.3.3					8w	01/10/23	03/06/23	804
806	1.2	1.2.4.8.7.3.4					8w	03/07/23	05/01/23	805
807	1.2	1.2.4.8.7.4					110d	12/01/22	05/03/23	
808	1.2	1.2.4.8.7.4.1					8w	12/01/22	01/25/23	
809	1.2	1.2.4.8.7.4.2					10w	01/26/23	04/05/23	808
810	1.2	1.2.4.8.7.4.3					4w	04/06/23	05/03/23	809
811	1.2	1.2.4.8.7.5					80d	01/02/23	04/21/23	
812	1.2	1.2.4.8.7.5.1					8w	01/02/23	02/24/23	
813	1.2	1.2.4.8.7.5.2					4w	02/27/23	03/24/23	812
814	1.2	1.2.4.8.7.5.3					4w	03/27/23	04/21/23	813
815	1.2	1.2.4.8.7.5.4					8w	02/01/23	03/28/23	
816	1.2	1.2.4.8.7.6					60d	04/03/23	06/09/23	
817	1.2	1.2.4.8.7.6.1					4w	04/03/23	04/28/23	
818	1.2	1.2.4.8.7.6.2					6w	05/01/23	06/09/23	817
819	1.2	1.2.4.8.7.7					130d	12/01/22	05/31/23	
820	1.2	1.2.4.8.7.7.1					4w	12/01/22	12/28/22	
821	1.2	1.2.4.8.7.7.2					4w	12/29/22	01/25/23	820
822	1.2	1.2.4.8.7.7.3					12w	01/26/23	04/19/23	821
823	1.2	1.2.4.8.7.7.4					6w	04/20/23	05/31/23	822
824	1.2	1.2.4.8.7.8					40d	06/01/23	07/28/23	
825	1.2	1.2.4.8.7.8.1					4w	06/01/23	06/28/23	
826	1.2	1.2.4.8.7.8.2					4w	06/29/23	07/26/23	825
827	1.2	1.2.4.8.7.9					130d	01/02/23	06/30/23	
828	1.2	1.2.4.8.7.9.1					4w	01/02/23	01/27/23	
829	1.2	1.2.4.8.7.9.2					2w	01/30/23	02/10/23	828
830	1.2	1.2.4.8.7.9.3					4w	02/13/23	03/10/23	829
831	1.2	1.2.4.8.7.9.4					4w	03/13/23	04/07/23	830
832	1.2	1.2.4.8.7.9.5					2w	04/10/23	04/21/23	831
833	1.2	1.2.4.8.7.9.6					2w	04/24/23	05/05/23	832
834	1.2	1.2.4.8.7.9.7					2w	05/08/23	05/19/23	833
835	1.2	1.2.4.8.7.9.8					2w	05/22/23	06/02/23	834
836	1.2	1.2.4.8.7.9.9					2w	06/05/23	06/16/23	835
837	1.2	1.2.4.8.7.9.10					2w	06/19/23	06/30/23	836
838	1.2	1.2.4.8.7.10					0	07/26/23	07/26/23	793, 798, 802, 807,
839	1.2	1.2.4.8.8					251d	05/02/22	04/17/23	
840	1.2	1.2.4.8.8.1					140d	05/02/22	11/11/22	
841	1.2	1.2.4.8.8.1.5					4w	09/19/22	10/14/22	844
842	1.2	1.2.4.8.8.1.6					4w	10/17/22	11/11/22	845
843	1.2	1.2.4.8.8.2					120d	11/01/22	04/17/23	
844	1.2	1.2.4.8.8.2.1					4w	11/01/22	11/28/22	
845	1.2	1.2.4.8.8.2.2					6w	11/29/22	01/09/23	848
846	1.2	1.2.4.8.8.2.3					4w	01/10/23	02/06/23	849
847	1.2	1.2.4.8.8.2.4					2w	02/07/23	02/20/23	850
848	1.2	1.2.4.8.8.2.5					2w	02/21/23	03/06/23	851
849	1.2	1.2.4.8.8.2.6					2w	03/07/23	03/20/23	852
850	1.2	1.2.4.8.8.2.7					2w	03/21/23	04/03/23	853
851	1.2	1.2.4.8.8.2.8					2w	04/04/23	04/17/23	854
852	1.2	1.2.4.8.8.3					0	03/20/23	03/20/23	840, 848, 849, 850,
853	1.2	1.2.5					1884d	01/24/19	03/30/26	
854	1.2	1.2.5.2					1228d	03/18/19	11/30/23	
855	1.2	1.2.5.2.6					5d	10/01/22	10/06/22	
856	1.2	1.2.5.2.7					44d	11/15/22	01/13/23	
857	1.2	1.2.5.2.8					5d	07/01/23	07/06/23	
858	1.2	1.2.5.2.9					44d	10/01/23	11/30/23	
859	1.2	1.2.5.2.10					44d	08/01/23	09/29/23	
860	1.2	1.2.5.4					1381d	12/01/20	03/30/26	
861	1.2	1.2.5.4.3					8d	10/20/22	10/31/22	
862	1.2	1.2.5.4.5					96d	12/01/22	04/13/23	886, 885S +30d
863	1.2	1.2.5.4.6					12d	03/01/23	03/16/23	
864	1.2	1.2.5.4.7					12d	03/15/24	04/01/24	
865	1.2	1.2.5.4.8					7d	04/15/24	04/23/24	
866	1.2	1.2.5.4.9					12d	03/15/25	03/31/25	

L2	WBS	Task Name	NSF	L1 Milestone	L2 Milestone	Internal Milestone	Duration	Start Date	End Date	Predecessor WBS
892	1.2 1.2.5.4.10	System Electrical Resupply (PY7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7d	04/15/25	04/23/25	
893	1.2 1.2.5.4.11	System Electrical Drawings & Documentation (PY8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12d	03/15/26	03/30/26	
894	1.2 1.2.6	Water Handling Systems - Off-Ice	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1253d	08/13/19	07/05/24	
895	1.2 1.2.6.1	Water Tanks	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	857d	01/04/21	04/18/24	
898	1.2 1.2.6.1.3	Procure Repair Parts, Replacements (PY6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5d	04/15/24	04/19/24	
899	1.2 1.2.6.2	Pumps	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	877d	12/04/20	04/18/24	
904	1.2 1.2.6.2.5	Procure Repair/Replacement Components (PY5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14d	04/01/23	04/19/23	
905	1.2 1.2.6.2.6	Procure Repair/Replacement Components (PY6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14d	04/01/24	04/18/24	
906	1.2 1.2.6.3	Filtration and Condensate Management	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	557d	11/01/20	12/19/22	
911	1.2 1.2.6.3.5	Procure Filtration Upgrade-Replacement Components	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	60d	09/27/22	12/19/22	910
916	1.2 1.2.6.4	Interconnects - External	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1253d	08/13/19	07/05/24	
923	1.2 1.2.6.4.7	Procure Gen Water Loop Materials & Assemble	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	32d	05/23/24	07/05/24	922, 925
925	1.2 1.2.6.4.9	Procure External Interconnect Materials (PY6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15d	05/02/24	05/22/24	
926	1.2 1.2.6.5	MDS Internal Hoses	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	40d	04/01/24	05/24/24	
927	1.2 1.2.6.5.1	Identify Replacement Water Hoses (1-1/2", 3/4", and 1/2" Hose)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20d	04/01/24	04/26/24	
928	1.2 1.2.6.5.2	Identify Replacement Fuel Hoses	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20d	04/01/24	04/26/24	927SS
929	1.2 1.2.6.5.3	Procure Replacements and Spares	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20d	04/29/24	05/24/24	927, 928
956	1.2 1.2.7	Support Equipment - Off-Ice	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1948d	10/01/18	03/31/22	
957	1.2 1.2.7.1	Independent Firm Drill	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	935d	04/01/19	10/28/22	
964	1.2 1.2.7.1.7	IFD Follow-up Tasks (PY5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15d	10/10/22	10/28/22	
965	1.2 1.2.7.2	Maintenance/Repair Inventory	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	883d	01/01/22	08/11/25	
966	1.2 1.2.7.2.1	Identify Spares and Replacements	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	300d	01/01/22	02/23/23	
967	1.2 1.2.7.2.2	Procure Spares and Replacements	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	851d	03/01/22	06/11/25	966SS +41d
969	1.2 1.2.7.2.4	Procure Hose Stock and Fittings (FY5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	30d	05/01/23	06/09/23	
970	1.2 1.2.7.2.5	Spare Parts Inventory and Catalog - Electrical/Controls	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	170d	05/01/23	12/26/23	969SS
971	1.2 1.2.7.3	Shops (MECC, SEW, TOW, OML)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	313d	06/01/22	08/11/23	
972	1.2 1.2.7.3.1	Identify Upgrade-Replacements, Spares	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	281d	06/01/22	06/28/23	
973	1.2 1.2.7.3.2	Procure Upgrade-Replacements, Spares	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	204d	11/01/22	08/11/23	972SS +109d
974	1.2 1.2.7.4	TestBed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1948d	10/01/18	03/31/22	
981	1.2 1.2.7.4.7	Commission/Maintenance/Decommission (PY5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	260d	10/03/22	09/29/23	
982	1.2 1.2.7.4.8	Commission/Maintenance/Decommission (PY6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	258d	10/02/23	09/30/24	
983	1.2 1.2.7.4.9	Commission/Maintenance/Decommission (PY7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	258d	10/01/24	09/30/25	
984	1.2 1.2.7.4.10	Commission/Maintenance/Decommission (PY8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	127d	10/01/25	03/31/26	
985	1.2 1.2.7.5	Tools and Equipment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1689d	03/01/19	07/31/25	
990	1.2 1.2.7.5.5	Procure Tools & Equipment, & Consumables	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1689d	03/01/19	07/31/25	989SS
992	1.2 1.2.8	Drill Field Seasons - Antarctica	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1904d	11/02/18	03/03/26	
993	1.2 1.2.8.1	Seasonal Staffing & Training, Off-Ice Coordination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1777d	11/02/18	08/02/25	
995	1.2 1.2.8.1.2	FS1 Off-Ice Safety Training & PPE Procurement - 10 FTE Drillers (10-primary 2-alternates) & 1 Safety Officer	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	60d	05/31/23	08/22/23	
996	1.2 1.2.8.1.3	FS2 Off-Ice Safety Training & PPE Procurement - 16 Drillers (14 - Primary 2 - alternates) & 1 Safety Officer	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	60d	05/31/24	08/22/24	
997	1.2 1.2.8.1.4	FS3 Off-Ice Safety Training & PPE Procurement - 32 Drillers (28 - primary 4 - alternates) & 1 Safety Officer	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	60d	05/28/25	08/19/25	
998	1.2 1.2.8.1.5	FS3 Off-Ice Logging Winch Training with IDP (3 Drillers 1 day)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1d	08/19/25	08/19/25	997FF
1001	1.2 1.2.8.1.8	FS1 Field Season Readiness Review	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1d	09/02/23	09/02/23	
1002	1.2 1.2.8.1.9	FS2 Field Season Readiness Review	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1d	09/02/24	09/02/24	
1003	1.2 1.2.8.1.10	FS3 Field Season Readiness Review	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1d	09/02/25	09/02/25	
1037	1.2 1.2.8.4	USAP Field Season 0 (FY23)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	189d	08/01/22	05/23/23	
1038	1.2 1.2.8.4.1	Milestones	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	108d	10/01/22	03/01/23	
1040	1.2 1.2.8.4.1.2	South Pole Season Begins (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/01/22	11/01/22	
1041	1.2 1.2.8.4.1.3	Pole Season Ends (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	02/15/23	02/15/23	
1042	1.2 1.2.8.4.1.4	MCM Season Ends (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	03/01/23	03/01/23	
1043	1.2 1.2.8.4.2	Cargo Movements (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	97d	10/01/22	02/13/23	
1044	1.2 1.2.8.4.2.1	Pole (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	75d	11/01/22	02/13/23	
1045	1.2 1.2.8.4.2.1.1	LC130 - Pole (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	75d	11/01/22	02/13/23	
1046	1.2 1.2.8.4.2.1.1.1	Fuel - 2 Missions, 6000 gallons (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	75d	11/01/22	02/13/23	1040
1047	1.2 1.2.8.4.2.1.2	SPOT1 (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	12/01/22	12/01/22	
1048	1.2 1.2.8.4.2.1.2.1	Fuel Tower Arrives (Bermed at SPOTSA) (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	12/01/22	12/01/22	
1049	1.2 1.2.8.4.2.1.2.2	8' Refit Container Arrives (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	12/01/22	12/01/22	
1050	1.2 1.2.8.4.2.1.2.3	Generator Hoods (SPOTSA Bermed) Arrives (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	12/01/22	12/01/22	
1051	1.2 1.2.8.4.2.1.2.4	Weight Stack (SPOTSA Bermed) Arrives (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	12/01/22	12/01/22	
1052	1.2 1.2.8.4.2.1.2.5	Generator Hoods (Intake) Arrives (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	12/01/22	12/01/22	
1053	1.2 1.2.8.4.2.1.2.6	Generator Hoods (Exhaust) Arrives (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	12/01/22	12/01/22	
1054	1.2 1.2.8.4.2.1.2.7	Container Skis Arrives (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	12/01/22	12/01/22	
1055	1.2 1.2.8.4.2.1.2.8	ARA Trailer Arrives (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	12/01/22	12/01/22	
1056	1.2 1.2.8.4.2.1.2.9	Traverse Accelerometer Logger Arrives (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	12/01/22	12/01/22	
1057	1.2 1.2.8.4.2.1.3	SPOT2 (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1d	01/01/23	01/01/23	
1058	1.2 1.2.8.4.2.1.3.1	Generator Module 1 Arrives (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	01/01/23	01/01/23	
1059	1.2 1.2.8.4.2.1.3.2	Generator Module 3 Arrives (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	01/01/23	01/01/23	
1060	1.2 1.2.8.4.2.1.3.3	Fim Drill Arrives (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	01/01/23	01/01/23	
1061	1.2 1.2.8.4.2.1.3.4	Refit Container A (20' ISO) Arrives (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	01/01/23	01/01/23	
1062	1.2 1.2.8.4.2.1.3.5	Refit Container B (20' ISO) Arrives (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	01/01/23	01/01/23	
1063	1.2 1.2.8.4.2.1.3.6	Main Cable Reel (MCR) Arrives (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	01/01/23	01/01/23	
1064	1.2 1.2.8.4.2.1.3.7	Return Water Cable Reel (RWCR) Arrives (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	01/01/23	01/01/23	
1065	1.2 1.2.8.4.2.1.3.8	Traverse Accelerometer Logger Arrives (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1d	01/01/23	01/01/23	
1066	1.2 1.2.8.4.2.1.4	SPOT3 (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	02/01/23	02/01/23	
1067	1.2 1.2.8.4.2.1.4.1	HPU2 Arrives (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	02/01/23	02/01/23	
1068	1.2.8.4.2.2	McMurodo (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	92d	10/01/22	02/06/23	
1069	1.2 1.2.8.4.2.2.1	SAAM (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17d	10/01/22	10/25/22	
1071	1.2 1.2.8.4.1.2.1.2	Northbound: Generator 2 (Destined for Terra Cat)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	10/25/22	10/25/22	
1072	1.2 1.2.8.4.2.2.1.1	Traverse Accelerometer Logger Shipment (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1d	10/18/22	10/18/22	

L2	WBS	Task Name	NSF	L1 Milestone	L2 Milestone	Internal Milestone	Duration	Start Date	End Date	Predecessor WBS
1073	1.2	1.2.8.4.2.2.2					2d	02/05/23	02/06/23	
		Vessel (USAP)								
1074	1.2	1.2.8.4.1.2.2.1					1d	02/05/23	02/05/23	
1075	1.2	1.2.8.4.2.2.2.1					1d	02/06/23	02/06/23	
1076	1.2	1.2.8.4.2.2.2.2					1d	02/06/23	02/06/23	
1077	1.2	1.2.8.4.2.2.2.3					1d	02/06/23	02/06/23	
1078	1.2	1.2.8.4.2.2.2.4					1d	02/06/23	02/06/23	
1079	1.2	1.2.8.4.2.2.2.5					1d	02/06/23	02/06/23	
1080	1.2	1.2.8.4.3					189d	08/01/22	05/23/23	
		USAP Deliverables								
1082	1.2	1.2.8.4.3.2					159d	10/03/22	05/11/23	
1083	1.2	1.2.8.4.3.3					90d	10/05/22	02/07/23	
1084	1.2	1.2.8.4.3.4					75d	11/01/22	02/13/23	1039, 1040
1085	1.2	1.2.8.4.3.5					40d	11/10/22	01/04/23	
1086	1.2	1.2.8.4.3.6					21d	12/01/22	12/29/22	
1087	1.2	1.2.8.4.3.7					21d	12/01/22	12/29/22	
1088	1.2	1.2.8.4.3.8					1d	12/06/22	12/06/22	1039, 1040FS +25d
1089	1.2	1.2.8.4.3.15					2w	05/10/23	05/23/23	1041FS +60d
1090	1.2	1.2.8.4.3.9					7d	01/03/23	01/11/23	
1091	1.2	1.2.8.4.3.10					0	01/11/23	01/11/23	1090
1092	1.2	1.2.8.4.3.11					1d	11/08/22	11/08/22	1039, 1040FS +5d
1093	1.2	1.2.8.4.3.12					3d	01/25/23	01/27/23	
1094	1.2	1.2.8.4.3.13					1d	02/06/23	02/06/23	
1095	1.2	1.2.8.4.3.14					1d	12/15/22	12/15/22	1087SS +10d
1096	1.2	1.2.8.5					279d	02/01/23	02/28/24	
		USAP Field Season 1 (FY24)								
1097	1.2	1.2.8.5.1					193d	02/15/23	11/12/23	
		FS1 Milestones								
1098	1.2	1.2.8.5.1.1					0	10/01/23	10/01/23	
1099	1.2	1.2.8.5.1.2					0	11/01/23	11/01/23	
1100	1.2	1.2.8.5.1.3					0	11/12/23	11/12/23	
1101	1.2	1.2.8.5.1.4					0	02/15/23	02/15/23	
1102	1.2	1.2.8.5.1.5					0	03/01/23	03/01/23	
1103	1.2	1.2.8.5.2					192d	06/02/23	02/29/24	
1104	1.2	1.2.8.5.3					70d	11/01/23	02/12/24	
		USAP Cargo Movements (FY24)								
1105	1.2	1.2.8.5.3.1					80d	11/15/23	02/12/24	
		Pole (USAP)								
1106	1.2	1.2.8.5.3.1.1					80d	11/15/23	02/12/24	
		LC130 - Pole (USAP)								
1107	1.2	1.2.8.5.3.1.1.1					0	11/15/23	11/15/23	
1108	1.2	1.2.8.5.3.1.1.2					0	11/15/23	11/15/23	
1109	1.2	1.2.8.5.3.1.1.3					0	11/15/23	11/15/23	
1110	1.2	1.2.8.5.3.1.1.4					1d	02/06/24	02/06/24	
1111	1.2	1.2.8.5.3.1.1.5					0	02/12/24	02/12/24	
1112	1.2	1.2.8.5.3.1.2					0	12/01/23	12/01/23	
1113	1.2	1.2.8.5.3.1.2.1					0	12/01/23	12/01/23	
1114	1.2	1.2.8.5.3.1.2.2					0	12/01/23	12/01/23	
1115	1.2	1.2.8.5.3.1.3					0	01/01/24	01/01/24	
		SPOT2 - Pole (USAP)								
1116	1.2	1.2.8.5.3.1.3.1					0	01/01/24	01/01/24	
1117	1.2	1.2.8.5.3.1.4					0	02/01/24	02/01/24	
		SPOT3 - Pole (USAP)								
1118	1.2	1.2.8.5.3.1.4.1					0	02/01/24	02/01/24	
1119	1.2	1.2.8.5.3.2					85d	11/01/23	02/05/24	
		MCM (USAP)								
1120	1.2	1.2.8.5.3.2.1					0	11/01/23	11/01/23	
		SAAM (ComSur) (USAP)								
1121	1.2	1.2.8.5.3.2.1.1					0	11/01/23	11/01/23	
1122	1.2	1.2.8.5.3.2.2					0	02/05/24	02/05/24	
		Vessel - MCM (USAP)								
1123	1.2	1.2.8.5.3.2.2.1					0	02/05/24	02/05/24	
1124	1.2	1.2.8.5.3.3					0	02/05/24	02/05/24	
1125	1.2	1.2.8.5.3.4					0	11/01/23	11/01/23	
1126	1.2	1.2.8.5.4					86d	11/07/23	02/13/24	
		Early Season Kick-off Testing								
1127	1.2	1.2.8.5.4.1					5d	11/07/23	11/13/23	
1128	1.2	1.2.8.5.4.2					3d	11/09/23	11/13/23	
1129	1.2	1.2.8.5.4.3					5d	11/07/23	11/13/23	
1130	1.2	1.2.8.5.4.4					3d	11/14/23	11/16/23	1128
1131	1.2	1.2.8.5.4.5					8d	11/21/23	12/01/23	
1132	1.2	1.2.8.5.4.6					62d	11/15/23	02/13/24	
1133	1.2	1.2.8.5.4.7					1d	11/15/23	11/15/23	
1134	1.2	1.2.8.5.4.8					1d	11/15/23	11/15/23	
1135	1.2	1.2.8.5.4.9					3d	11/13/23	11/15/23	1100SS
		SEW Season Prep Activities								
1136	1.2	1.2.8.5.4.9.1					3d	11/13/23	11/15/23	1100SS
1137	1.2	1.2.8.5.4.9.2					2d	11/13/23	11/14/23	1100SS
1138	1.2	1.2.8.5.5					21d	11/22/23	12/22/23	
		Generators & PDM								
1139	1.2	1.2.8.5.5.1					1d	12/01/23	12/01/23	1113
1140	1.2	1.2.8.5.5.2					0	11/24/23	11/24/23	
1141	1.2	1.2.8.5.5.3					0	11/22/23	11/22/23	1127FS +7d
1142	1.2	1.2.8.5.5.4					5d	12/05/23	12/11/23	1141FS +7d
1143	1.2	1.2.8.5.5.5					7d	11/24/23	12/04/23	1140
1144	1.2	1.2.8.5.5.8					2d	11/24/23	11/27/23	1140
1145	1.2	1.2.8.5.5.9					2d	12/01/23	12/04/23	1143FF
1146	1.2	1.2.8.5.5.10					2d	12/05/23	12/06/23	1143, 1144, 1145
1147	1.2	1.2.8.5.5.11					2d	12/05/23	12/06/23	1143, 1144, 1145
1148	1.2	1.2.8.5.5.12					4d	12/07/23	12/12/23	1147
1149	1.2	1.2.8.5.5.13					4d	12/05/23	12/08/23	1147SS
1150	1.2	1.2.8.5.5.14					3d	12/11/23	12/13/23	1149
1151	1.2	1.2.8.5.5.15					2d	12/21/23	12/22/23	1150FS +5d

L2	WBS	Task Name	NSF	L1 Milestone	L2 Milestone	Internal Milestone	Duration	Start Date	End Date	Predecessor WBS
1152	1.2 1.2.8.5.6	EHWD: Upgrade & Replacement Work	✓				54d	11/13/23	01/31/24	
1153	1.2 1.2.8.5.6.1	Global Computing & Controls	✓				6d	01/05/24	01/12/24	
1154	1.2 1.2.8.5.6.1.1	Assess SES/TOS Interconnect Inventory	✓				3d	01/10/24	01/12/24	
1155	1.2 1.2.8.5.6.1.2	Install and Test Modbus DGH Modules	✓				2d	01/05/24	01/08/24	
1156	1.2 1.2.8.5.6.2	Drill Control Center (DCC)	✓				2d	11/13/23	11/15/23	
1157	1.2 1.2.8.5.6.2.1	DCC Relocated to Cryo (USAP)	✓			✓	0	11/13/23	11/13/23	1127
1158	1.2 1.2.8.5.6.2.2	Replace Electric Heater in Electrical Closet	✓				2d	11/14/23	11/15/23	1157
1159	1.2 1.2.8.5.6.2.3	Clean-up Workspace & Configure	✓				2d	11/14/23	11/15/23	1157
1160	1.2 1.2.8.5.6.3	Main Heating Plants (MHP)	✓				16d	11/14/23	12/08/23	
1161	1.2 1.2.8.5.6.3.1	MHP Relocation Support (USAP)	✓				1d	11/14/23	11/14/23	1127
1162	1.2 1.2.8.5.6.3.2	Install MHP Fall Restraint Towers (USAP)	✓				1d	11/15/23	11/15/23	1161
1163	1.2 1.2.8.5.6.3.3	MHP1	✓				14d	11/14/23	12/05/23	
1164	1.2 1.2.8.5.6.3.3.1	Mechanical Refit & Repairs (MHP1)	✓				12d	11/14/23	12/01/23	
1165	1.2 1.2.8.5.6.3.3.1.1	Heater Flush and Pressure Test	✓				e4d	11/14/23	11/18/23	1161
1166	1.2 1.2.8.5.6.3.3.1.2	Plumbing Upgrades & Repairs	✓				e3d	11/27/23	11/30/23	1183
1167	1.2 1.2.8.5.6.3.3.1.3	Fuel System Upgrades and Repairs	✓				e1d	11/14/23	11/15/23	1161
1168	1.2 1.2.8.5.6.3.3.1.4	Exhaust System Upgrades and Repairs	✓				e1d	11/15/23	11/16/23	1161, 1162
1169	1.2 1.2.8.5.6.3.3.1.5	MHP Subsystem Evaluation	✓				e1d	11/30/23	12/01/23	1166, 1168, 1165,
1170	1.2 1.2.8.5.6.3.3.1.6	MHP1 Mechanical Complete	✓			✓	0	12/01/23	12/01/23	1169
1171	1.2 1.2.8.5.6.3.3.2	Electrical/Controls Refit & Repairs (MHP1)	✓				14d	11/14/23	12/05/23	
1172	1.2 1.2.8.5.6.3.3.2.1	Install PLC-to-DGH Gateway in Network Box, Install M-DGHs, & Test	✓				e1d	11/17/23	11/18/23	1189
1173	1.2 1.2.8.5.6.3.3.2.2	Install Refurbished Heater Control Assemblies on All Heaters (M-DGHs pre-installed)	✓				e3d	11/14/23	11/17/23	1161
1174	1.2 1.2.8.5.6.3.3.2.3	Replace Thermostats in Heaters & Test	✓				e2d	12/02/23	12/04/23	1191
1175	1.2 1.2.8.5.6.3.3.2.4	Reconfigure MHP E-stop Panel to Function with N.C. Slap Switch Contacts	✓				e1d	11/18/23	11/19/23	1172
1176	1.2 1.2.8.5.6.3.3.2.5	Test E-stop and Heater Controls with No Water	✓				e2d	11/19/23	11/21/23	1175
1177	1.2 1.2.8.5.6.3.3.2.6	Test Flow Sensor Operation with No Water	✓				e1d	12/04/23	12/05/23	1174
1178	1.2 1.2.8.5.6.3.3.2.7	Install Ethernet Switch, Connect to Network Box, Route Cable to DCC & Test	✓				e1d	11/30/23	12/01/23	1194
1179	1.2 1.2.8.5.6.3.3.2.8	MHP1 Controls Complete	✓			✓	0	12/05/23	12/05/23	1172, 1173, 1174,
1180	1.2 1.2.8.5.6.3.4	MHP2	✓				14d	11/15/23	12/08/23	
1181	1.2 1.2.8.5.6.3.4.1	Mechanical Refit & Repairs (MHP2)	✓				8d	11/15/23	11/28/23	
1182	1.2 1.2.8.5.6.3.4.1.1	Heater Flush and Pressure Test	✓				e3d	11/18/23	11/21/23	1165
1183	1.2 1.2.8.5.6.3.4.1.2	Plumbing Upgrades & Repairs	✓				e3d	11/24/23	11/27/23	1199
1184	1.2 1.2.8.5.6.3.4.1.3	Fuel System Upgrades and Repairs	✓				e1d	11/15/23	11/16/23	1167
1185	1.2 1.2.8.5.6.3.4.1.4	Exhaust System Upgrades and Repairs	✓				e1d	11/16/23	11/17/23	1168
1186	1.2 1.2.8.5.6.3.4.1.5	MHP2 Subsystem Evaluation	✓				e1d	11/27/23	11/28/23	1182, 1183, 1185,
1187	1.2 1.2.8.5.6.3.4.1.6	MHP2 Mechanical Complete	✓			✓	0	11/28/23	11/28/23	1186
1188	1.2 1.2.8.5.6.3.4.2	Electrical/Controls Refit & Repairs (MHP2)	✓				13d	11/16/23	12/08/23	
1189	1.2 1.2.8.5.6.3.4.2.1	Install PLC-to-DGH Gateway in Network Box, Install M-DGHs, & Test	✓				e1d	11/16/23	11/17/23	1205
1190	1.2 1.2.8.5.6.3.4.2.2	Install Refurbished Heater Control Assemblies on All Heaters (M-DGHs pre-installed)	✓				e3d	11/17/23	11/20/23	1173
1191	1.2 1.2.8.5.6.3.4.2.3	Replace Thermostats in Heaters & Test	✓				e2d	11/30/23	12/02/23	1207
1192	1.2 1.2.8.5.6.3.4.2.4	Test E-stop and Heater Controls with No Water	✓				e2d	11/21/23	11/23/23	1176
1193	1.2 1.2.8.5.6.3.4.2.5	Test Flow Sensor Operation with No Water	✓				e1d	12/05/23	12/06/23	1177
1194	1.2 1.2.8.5.6.3.4.2.6	Install Ethernet Switch, Connect to Network Box, Route Cable to DCC & Test	✓				e1d	11/29/23	11/30/23	1210
1195	1.2 1.2.8.5.6.3.4.2.7	MHP2 Controls Complete	✓			✓	0	12/06/23	12/06/23	1189, 1190, 1191,
1196	1.2 1.2.8.5.6.3.5	MHP3	✓				15d	11/15/23	12/07/23	
1197	1.2 1.2.8.5.6.3.5.1	Mechanical Refit & Repairs (MHP3)	✓				5d	11/16/23	11/25/23	
1198	1.2 1.2.8.5.6.3.5.1.1	Heater Flush and Pressure Test	✓				e3d	11/21/23	11/24/23	1182
1199	1.2 1.2.8.5.6.3.5.1.2	Plumbing Upgrades & Repairs	✓				e3d	11/21/23	11/24/23	1215
1200	1.2 1.2.8.5.6.3.5.1.3	Fuel System Upgrades and Repairs	✓				e1d	11/16/23	11/17/23	1184
1201	1.2 1.2.8.5.6.3.5.1.4	Exhaust System Upgrades and Repairs	✓				e1d	11/17/23	11/18/23	1185
1202	1.2 1.2.8.5.6.3.5.1.5	MHP3 Subsystem Evaluation	✓				e1d	11/24/23	11/25/23	1198, 1199, 1201,
1203	1.2 1.2.8.5.6.3.5.1.6	MHP3 Mechanical Complete	✓			✓	0	11/25/23	11/25/23	1202
1204	1.2 1.2.8.5.6.3.5.2	Electrical/Controls Refit & Repairs (MHP3)	✓				15d	11/15/23	12/07/23	
1205	1.2 1.2.8.5.6.3.5.2.1	Install PLC-to-DGH Gateway in Network Box, Install M-DGHs, & Test	✓				e1d	11/15/23	11/16/23	1221
1206	1.2 1.2.8.5.6.3.5.2.2	Install Refurbished Heater Control Assemblies on All Heaters (M-DGHs pre-installed)	✓				e3d	11/20/23	11/23/23	1190
1207	1.2 1.2.8.5.6.3.5.2.3	Replace Thermostats in Heaters & Test	✓				e2d	11/28/23	11/30/23	1223
1208	1.2 1.2.8.5.6.3.5.2.4	Test E-stop and Heater Controls with No Water	✓				e2d	11/23/23	11/25/23	1192
1209	1.2 1.2.8.5.6.3.5.2.5	Test Flow Sensor Operation with No Water	✓				e1d	12/06/23	12/07/23	1193
1210	1.2 1.2.8.5.6.3.5.2.6	Install Ethernet Switch, Connect to Network Box, Route Cable to DCC & Test	✓				e1d	11/28/23	11/29/23	1226
1211	1.2 1.2.8.5.6.3.5.2.7	MHP3 Controls Complete	✓			✓	0	12/07/23	12/07/23	1205, 1206, 1207,
1212	1.2 1.2.8.5.6.3.6	MHP4	✓				17d	11/14/23	12/08/23	
1213	1.2 1.2.8.5.6.3.6.1	Mechanical Refit & Repairs (MHP4)	✓				5d	11/17/23	11/27/23	
1214	1.2 1.2.8.5.6.3.6.1.1	Heater Flush and Pressure Test	✓				e2d	11/24/23	11/26/23	1198
1215	1.2 1.2.8.5.6.3.6.1.2	Plumbing Upgrades & Repairs	✓				e3d	11/18/23	11/21/23	1216
1216	1.2 1.2.8.5.6.3.6.1.3	Fuel System Upgrades and Repairs	✓				e1d	11/17/23	11/18/23	1200
1217	1.2 1.2.8.5.6.3.6.1.4	Exhaust System Upgrades and Repairs	✓				e1d	11/18/23	11/19/23	1201
1218	1.2 1.2.8.5.6.3.6.1.5	MHP4 Subsystem Evaluation	✓				e1d	11/26/23	11/27/23	1214, 1215, 1216,
1219	1.2 1.2.8.5.6.3.6.1.6	MHP4 Mechanical Complete	✓			✓	0	11/27/23	11/27/23	1218
1220	1.2 1.2.8.5.6.3.6.2	Electrical/Controls Refit & Repairs (MHP4)	✓				17d	11/14/23	12/08/23	
1221	1.2 1.2.8.5.6.3.6.2.1	Install PLC-to-DGH Gateway in Network Box, Install M-DGHs, & Test	✓				e1d	11/14/23	11/15/23	1161
1222	1.2 1.2.8.5.6.3.6.2.2	Install Refurbished Heater Control Assemblies on All Heaters (M-DGHs pre-installed)	✓				e3d	11/23/23	11/26/23	1206
1223	1.2 1.2.8.5.6.3.6.2.3	Replace Thermostats in Heaters & Test	✓				e2d	11/26/23	11/28/23	1222
1224	1.2 1.2.8.5.6.3.6.2.4	Test E-stop and Heater Controls with No Water	✓				e2d	11/25/23	11/27/23	1208
1225	1.2 1.2.8.5.6.3.6.2.5	Test Flow Sensor Operation with No Water	✓				e1d	12/07/23	12/08/23	1209
1226	1.2 1.2.8.5.6.3.6.2.6	Install Ethernet Switch, Connect to Network Box, Route Cable to DCC & Test	✓				e1d	11/27/23	11/28/23	1224
1227	1.2 1.2.8.5.6.3.6.2.7	MHP4 Controls Complete	✓			✓	0	12/08/23	12/08/23	1221, 1222, 1223,
1228	1.2 1.2.8.5.6.4	Pre-Heat System (PHS)	✓				12d	11/27/23	12/12/23	
1229	1.2 1.2.8.5.6.4.1	PHS Relocation Support (USAP)	✓				1d	11/27/23	11/27/23	

L2	WBS	Task Name	NSF	L1 Milestone	L2 Milestone	Internal Milestone	Duration	Start Date	End Date	Predecessor WBS
1230	1.2	1.2.8.5.6.4.2					1d	11/28/23	11/28/23	1229
1231	1.2	1.2.8.5.6.4.3	☑				11d	11/28/23	12/12/23	
		☐ Mechanical Refit & Repairs (PHS)								
1232	1.2	1.2.8.5.6.4.3.1	☑				2d	11/28/23	11/29/23	1229
1233	1.2	1.2.8.5.6.4.3.2	☑				1d	11/30/23	11/30/23	1232
1234	1.2	1.2.8.5.6.4.3.3	☑				1d	12/01/23	12/01/23	1233
1235	1.2	1.2.8.5.6.4.3.4	☑				1d	11/29/23	11/29/23	1230
1236	1.2	1.2.8.5.6.4.3.5	☑				6d	12/01/23	12/08/23	1233
1237	1.2	1.2.8.5.6.4.3.6	☑				6d	12/01/23	12/08/23	1233
1238	1.2	1.2.8.5.6.4.3.7	☑			☑	1d	12/12/23	12/12/23	1248, 1237
1239	1.2	1.2.8.5.6.4.3.8	☑			☑	0	12/12/23	12/12/23	1232, 1233, 1235,
1240	1.2	1.2.8.5.6.4.4	☑				11d	11/28/23	12/12/23	
		☐ Electrical/Controls Refit & Repairs (PHS)								
1241	1.2	1.2.8.5.6.4.4.1	☑				4d	11/28/23	12/01/23	1229
1242	1.2	1.2.8.5.6.4.4.2	☑				2d	12/04/23	12/05/23	1241
1243	1.2	1.2.8.5.6.4.4.3	☑				3d	12/04/23	12/06/23	1241
1244	1.2	1.2.8.5.6.4.4.4	☑				0.5d	12/07/23	12/07/23	1243
1245	1.2	1.2.8.5.6.4.4.5	☑				2d	12/06/23	12/07/23	1242
1246	1.2	1.2.8.5.6.4.4.6	☑				2d	12/07/23	12/11/23	1244
1247	1.2	1.2.8.5.6.4.4.7	☑				3d	12/08/23	12/12/23	1245
1248	1.2	1.2.8.5.6.4.4.8	☑				2d	12/08/23	12/11/23	1245
1249	1.2	1.2.8.5.6.4.4.9	☑			☑	1d	12/12/23	12/12/23	1248, 1237
1250	1.2	1.2.8.5.6.4.4.10	☑			☑	0	12/12/23	12/12/23	1241, 1242, 1243,
1251	1.2	1.2.8.5.6.5	☑				21d	12/08/23	01/09/24	
		☐ HPP								
1252	1.2	1.2.8.5.6.5.1	☑				1d	12/08/23	12/08/23	1425
1253	1.2	1.2.8.5.6.5.2	☑				1d	12/11/23	12/11/23	1252
1254	1.2	1.2.8.5.6.5.3	☑				6d	12/11/23	12/18/23	
		☐ Mechanical Refit & Repairs (HPP)								
1255	1.2	1.2.8.5.6.5.3.1	☑				2d	12/11/23	12/12/23	1425FS +1d
1256	1.2	1.2.8.5.6.5.3.2	☑				1d	12/11/23	12/11/23	1252
1257	1.2	1.2.8.5.6.5.3.3	☑				1d	12/12/23	12/12/23	1253
1258	1.2	1.2.8.5.6.5.3.4	☑				3d	12/13/23	12/15/23	1255
1259	1.2	1.2.8.5.6.5.3.5	☑				1d	12/18/23	12/18/23	1258
1260	1.2	1.2.8.5.6.5.3.6	☑			☑	0	12/15/23	12/15/23	1258
1261	1.2	1.2.8.5.6.5.4	☑				18d	12/13/23	01/09/24	
		☐ Electrical/Controls Refit & Repairs (HPP)								
1262	1.2	1.2.8.5.6.5.4.1	☑				4d	12/13/23	12/18/23	1255
1263	1.2	1.2.8.5.6.5.4.2	☑				2d	12/19/23	12/20/23	1262
1264	1.2	1.2.8.5.6.5.4.3	☑				4d	12/13/23	12/18/23	1255
1265	1.2	1.2.8.5.6.5.4.4	☑				2d	12/19/23	12/20/23	1264
1266	1.2	1.2.8.5.6.5.4.5	☑				2d	12/21/23	12/22/23	1263
1267	1.2	1.2.8.5.6.5.4.6	☑				2d	12/21/23	12/22/23	1265
1268	1.2	1.2.8.5.6.5.4.7	☑				2d	12/26/23	12/27/23	1266
1269	1.2	1.2.8.5.6.5.4.8	☑				3d	12/26/23	12/28/23	1267
1270	1.2	1.2.8.5.6.5.4.9	☑				5d	12/28/23	01/04/24	1269FS -1d
1271	1.2	1.2.8.5.6.5.4.10	☑				2d	01/05/24	01/08/24	1270
1272	1.2	1.2.8.5.6.5.4.11	☑				2d	12/26/23	12/27/23	1252FS +10d
1273	1.2	1.2.8.5.6.5.4.12	☑				1d	01/09/24	01/09/24	1262, 1263, 1264,
1274	1.2	1.2.8.5.6.5.4.13	☑			☑	0	01/09/24	01/09/24	1273
1275	1.2	1.2.8.5.6.6	☑				6d	12/12/23	12/21/23	
		☐ Water Tanks & Handling Systems (VT & Submersible)								
1276	1.2	1.2.8.5.6.6.1	☑				1d	12/13/23	12/13/23	1426, 1427
1277	1.2	1.2.8.5.6.6.2	☑				6d	12/12/23	12/21/23	
		☐ Water Tanks Mechanical Refit & Repairs (VT & Submersible)								
1278	1.2	1.2.8.5.6.6.2.1	☑				4d	12/14/23	12/19/23	1276
1279	1.2	1.2.8.5.6.6.2.2	☑				4d	12/18/23	12/21/23	1278FS -2d
1280	1.2	1.2.8.5.6.6.2.3	☑				1d	12/20/23	12/20/23	1279SS +2d
1281	1.2	1.2.8.5.6.6.2.4	☑				7d	12/12/23	12/20/23	1279FF -1d
1282	1.2	1.2.8.5.6.6.2.5	☑				1d	12/21/23	12/21/23	1279FF
1283	1.2	1.2.8.5.6.6.2.6	☑			☑	0	12/21/23	12/21/23	1278, 1279, 1280,
1284	1.2	1.2.8.5.6.6.3	☑				1d	12/21/23	12/21/23	
		☐ Water Tanks Electrical/Controls Refit & Repairs (VT & Submersible)								
1285	1.2	1.2.8.5.6.6.3.1	☑				1d	12/21/23	12/21/23	1279FF
1286	1.2	1.2.8.5.6.6.3.2	☑			☑	0	12/21/23	12/21/23	1278, 1279, 1280,
1287	1.2	1.2.8.5.6.7	☑				34d	12/01/23	01/20/24	
		☐ TOS & Towers								
1288	1.2	1.2.8.5.6.7.1	☑				1d	12/01/23	12/01/23	
1289	1.2	1.2.8.5.6.7.2	☑				5d	12/01/23	12/10/23	
		☐ TOS Team 1								
1290	1.2	1.2.8.5.6.7.2.1	☑				e1d	12/01/23	12/02/23	1288
1291	1.2	1.2.8.5.6.7.2.2	☑				e1d	12/01/23	12/02/23	1288
1292	1.2	1.2.8.5.6.7.2.3	☑				e2d	12/02/23	12/04/23	1291
1293	1.2	1.2.8.5.6.7.2.4	☑				e2d	12/04/23	12/06/23	1292
1294	1.2	1.2.8.5.6.7.2.5	☑				e1d	12/06/23	12/07/23	1293
1295	1.2	1.2.8.5.6.7.2.6	☑				e1d	12/07/23	12/08/23	1294
1296	1.2	1.2.8.5.6.7.2.7	☑				e1d	12/08/23	12/09/23	1295
1297	1.2	1.2.8.5.6.7.2.8	☑				e1d	12/09/23	12/10/23	1296
1298	1.2	1.2.8.5.6.7.2.9	☑			☑	0	12/10/23	12/10/23	1290, 1291, 1292,
1299	1.2	1.2.8.5.6.7.3	☑				33d	12/02/23	01/20/24	
		☐ TOS Team 2								
1300	1.2	1.2.8.5.6.7.3.1	☑				e8d	12/02/23	12/10/23	1291
1301	1.2	1.2.8.5.6.7.3.2	☑				e8d	12/10/23	12/18/23	1300
1302	1.2	1.2.8.5.6.7.3.3	☑				e4d	12/18/23	12/22/23	1301
1303	1.2	1.2.8.5.6.7.3.4	☑				e4d	12/22/23	12/26/23	1302
1304	1.2	1.2.8.5.6.7.3.5	☑				3d	12/27/23	12/29/23	1303
1305	1.2	1.2.8.5.6.7.3.6	☑				e4d	12/29/23	01/02/24	1304
1306	1.2	1.2.8.5.6.7.3.7	☑				e4d	01/02/24	01/06/24	1305
1307	1.2	1.2.8.5.6.7.3.8	☑				e4d	01/06/24	01/10/24	1306

L2	WBS	Task Name	NSF	L1 Milestone	L2 Milestone	Internal Milestone	Duration	Start Date	End Date	Predecessor WBS
1308	1.2	1.2.8.5.6.7.3.9					e4d	01/10/24	01/14/24	1307
1309	1.2	1.2.8.5.6.7.3.10					e3d	01/14/24	01/17/24	1308
1310	1.2	1.2.8.5.6.7.3.11					e3d	01/17/24	01/20/24	1309
1311	1.2	1.2.8.5.6.7.3.12					0	01/20/24	01/20/24	1300, 1301, 1302,
1312	1.2	1.2.8.5.6.7.4					33d	12/02/23	01/19/24	
		TOS/Tower Team 3								
1313	1.2	1.2.8.5.6.7.4.1					e3d	12/02/23	12/05/23	1300SS
1314	1.2	1.2.8.5.6.7.4.2					e3d	12/05/23	12/08/23	1313
1315	1.2	1.2.8.5.6.7.4.3					e4d	12/08/23	12/12/23	1314
1316	1.2	1.2.8.5.6.7.4.4					e4d	12/12/23	12/16/23	1315
1317	1.2	1.2.8.5.6.7.4.5					e4d	12/14/23	12/18/23	1316SS +1d
1318	1.2	1.2.8.5.6.7.4.6					e4d	12/16/23	12/20/23	1316
1319	1.2	1.2.8.5.6.7.4.7					e4d	12/20/23	12/24/23	1318
1320	1.2	1.2.8.5.6.7.4.8					e2d	12/24/23	12/26/23	1319
1321	1.2	1.2.8.5.6.7.4.9					e2d	12/26/23	12/28/23	1320
1322	1.2	1.2.8.5.6.7.4.10					e2d	12/28/23	12/30/23	1321
1323	1.2	1.2.8.5.6.7.4.11					e2d	12/30/23	01/01/24	1322
1324	1.2	1.2.8.5.6.7.4.12					e2d	01/01/24	01/03/24	1323
1325	1.2	1.2.8.5.6.7.4.13					e2d	01/03/24	01/05/24	1324
1326	1.2	1.2.8.5.6.7.4.14					e2d	01/05/24	01/07/24	1325
1327	1.2	1.2.8.5.6.7.4.15					e2d	01/07/24	01/09/24	1326
1328	1.2	1.2.8.5.6.7.4.16					e2d	01/09/24	01/11/24	1327
1329	1.2	1.2.8.5.6.7.4.17					e4d	01/11/24	01/15/24	1328
1330	1.2	1.2.8.5.6.7.4.18					e4d	01/15/24	01/19/24	1329
1331	1.2	1.2.8.5.6.7.4.19					0	01/19/24	01/19/24	1313, 1314, 1315,
1332	1.2	1.2.8.5.6.7.5					0	01/20/24	01/20/24	1298, 1311, 1331
1333	1.2	1.2.8.5.6.7.6					0	01/20/24	01/20/24	1332
1334	1.2	1.2.8.5.6.8					21d	12/22/23	01/23/24	
		Reels								
1335	1.2	1.2.8.5.6.8.1					20d	12/22/23	01/22/24	
		Main Supply Hose Reel (MSHR)								
1336	1.2	1.2.8.5.6.8.1.1					1d	12/22/23	12/22/23	1431FS -1d
1337	1.2	1.2.8.5.6.8.1.2					4d	01/11/24	01/16/24	1307, 1336
1338	1.2	1.2.8.5.6.8.1.3					2d	01/17/24	01/18/24	1337
1339	1.2	1.2.8.5.6.8.1.4					2d	01/19/24	01/22/24	1336, 1337, 1338
1340	1.2	1.2.8.5.6.8.2					8d	01/01/24	01/10/24	
		Return Water Hose Reel (RWHR)								
1341	1.2	1.2.8.5.6.8.2.1					1d	01/01/24	01/01/24	
1342	1.2	1.2.8.5.6.8.2.2					2d	01/02/24	01/03/24	1341
1343	1.2	1.2.8.5.6.8.2.3					1d	01/04/24	01/04/24	1342
1344	1.2	1.2.8.5.6.8.2.4					2d	01/05/24	01/08/24	1343
1345	1.2	1.2.8.5.6.8.2.5					2d	01/09/24	01/10/24	1344
1346	1.2	1.2.8.5.6.8.2.6					0	01/10/24	01/10/24	1341, 1342, 1343,
1347	1.2	1.2.8.5.6.8.4					6d	01/01/24	01/08/24	
		Return Water Cable Reel (RWCR)								
1348	1.2	1.2.8.5.6.8.4.1					1d	01/01/24	01/01/24	
1349	1.2	1.2.8.5.6.8.4.2					3d	01/02/24	01/04/24	1348
1350	1.2	1.2.8.5.6.8.4.3					2d	01/05/24	01/08/24	1349
1351	1.2	1.2.8.5.6.8.4.4					0	01/08/24	01/08/24	1349, 1350
1352	1.2	1.2.8.5.6.8.5					12d	12/22/23	01/10/24	
		Main Cable Reel (MCR)								
1353	1.2	1.2.8.5.6.8.5.1					1d	12/22/23	12/22/23	1431FS -1d
1354	1.2	1.2.8.5.6.8.5.2					1d	12/26/23	12/26/23	1353
1355	1.2	1.2.8.5.6.8.5.3					3d	01/08/24	01/10/24	1306, 1353
1356	1.2	1.2.8.5.6.8.5.4					0	01/10/24	01/10/24	1353, 1354, 1355
1357	1.2	1.2.8.5.6.8.6					1d	01/23/24	01/23/24	1339, 1346, 1351,
1358	1.2	1.2.8.5.6.9					7d	01/08/24	01/17/24	
		Winches (TU-15, TU-20s)								
1359	1.2	1.2.8.5.6.9.2					4d	01/09/24	01/12/24	
1360	1.2	1.2.8.5.6.9.3					2d	01/15/24	01/16/24	1359
1361	1.2	1.2.8.5.6.9.4					2d	01/12/24	01/15/24	
1362	1.2	1.2.8.5.6.9.5					3d	01/12/24	01/16/24	
1363	1.2	1.2.8.5.6.9.6					2d	01/12/24	01/15/24	
1364	1.2	1.2.8.5.6.9.7					0	01/16/24	01/16/24	1359, 1360, 1361,
1365	1.2	1.2.8.5.6.9.8					1d	01/17/24	01/17/24	1364
1366	1.2	1.2.8.5.6.10					13d	01/08/24	01/23/24	
		Independent Firm Drill (IFD)								
1367	1.2	1.2.8.5.6.10.1					9d	01/08/24	01/17/24	
		Refit, Repairs, & Testing (IFD)								
1368	1.2	1.2.8.5.6.10.1.1					1d	01/06/24	01/06/24	
1369	1.2	1.2.8.5.6.10.1.2					3d	01/08/24	01/10/24	1141, 1368
1370	1.2	1.2.8.5.6.10.1.10					2d	01/08/24	01/09/24	1368
1371	1.2	1.2.8.5.6.10.1.3					2d	01/10/24	01/11/24	1370
1372	1.2	1.2.8.5.6.10.1.4					2d	01/10/24	01/11/24	1370
1373	1.2	1.2.8.5.6.10.1.5					1d	01/08/24	01/08/24	1368
1374	1.2	1.2.8.5.6.10.1.6					2d	01/08/24	01/09/24	1368
1375	1.2	1.2.8.5.6.10.1.7					1d	01/12/24	01/12/24	1371
1376	1.2	1.2.8.5.6.10.1.8					0	01/08/24	01/08/24	1369SS
1377	1.2	1.2.8.5.6.10.1.9					1d	01/08/24	01/08/24	1376
1378	1.2	1.2.8.5.6.10.1.11					3d	01/15/24	01/17/24	1369, 1371, 1372,
1379	1.2	1.2.8.5.6.10.2					2d	01/18/24	01/19/24	1378
1380	1.2	1.2.8.5.6.10.2					2d	01/22/24	01/23/24	1379
1381	1.2	1.2.8.5.6.11					17d	01/01/24	01/23/24	
		Integrate ARA Drill (Rod/Wall system)								
1382	1.2	1.2.8.5.6.11.1					1d	01/01/24	01/01/24	
1383	1.2	1.2.8.5.6.11.2					3d	01/02/24	01/04/24	
		White Generator - Commission								
1384	1.2	1.2.8.5.6.11.2.1					1d	01/02/24	01/02/24	1382
1385	1.2	1.2.8.5.6.11.2.2					2d	01/02/24	01/03/24	1382

L2	WBS	Task Name	NSF	L1 Milestone	L2 Milestone	Internal Milestone	Duration	Start Date	End Date	Predecessor WBS
1386	1.2	1.2.8.5.6.11.2.3	Electrician Support for White Gen Rework (USAP)	☑	☐	☐	2d	01/02/24	01/03/24	1385SS
1387	1.2	1.2.8.5.6.11.2.4	Install Control Interface Panel, Downhole Pump Controller, Ext. E-stop Slap, & Power up from Cryo	☑	☐	☐	1d	01/04/24	01/04/24	1386
1388	1.2	1.2.8.5.6.11.3	☐ Sled 2 Water Tank Sled - Precommission	☑	☐	☐	3d	01/03/24	01/05/24	
1389	1.2	1.2.8.5.6.11.3.1	Warm-up & Inspect, Check HMW Sheets, & Tie-offs, Glycol Tank, Glycol Heater, Hoses & Connections	☑	☐	☐	1d	01/03/24	01/03/24	1384
1390	1.2	1.2.8.5.6.11.3.2	Install ePump, Accessories, & ePump Controller (DNF-requires power)	☑	☐	☐	1d	01/04/24	01/04/24	1389
1391	1.2	1.2.8.5.6.11.3.3	Checkout & Testing Sled 2	☑	☐	☐	1d	01/05/24	01/05/24	1390
1392	1.2	1.2.8.5.6.11.4	☐ Sled 3 Drilling Sled - Precommission	☑	☐	☐	10d	01/05/24	01/18/24	
1393	1.2	1.2.8.5.6.11.4.1	Warm-up & Inspect Components, Install Stacks, Install Hoist, Top-off Fuel Tank, Reel Brake, Heat Trace	☑	☐	☐	2d	01/08/24	01/09/24	1391
1394	1.2	1.2.8.5.6.11.4.2	Plumbing Upgrades & Repairs	☑	☐	☐	2d	01/10/24	01/11/24	1393
1395	1.2	1.2.8.5.6.11.4.3	ARA DCC Upgrades & Install	☑	☐	☐	2d	01/05/24	01/08/24	1387
1396	1.2	1.2.8.5.6.11.4.4	Hose Cable Bundle Replace	☑	☐	☐	5d	01/12/24	01/18/24	1394
1397	1.2	1.2.8.5.6.11.5	☐ Rodwell Drill Head Commissioning	☑	☐	☐	2d	01/19/24	01/22/24	
1398	1.2	1.2.8.5.6.11.5.1	Locate Components, Set-up Drillheads on Bench, Inspect, Sensor tests	☑	☐	☐	1d	01/19/24	01/19/24	1396
1399	1.2	1.2.8.5.6.11.5.2	Drillhead Chain Testing & Verification	☑	☐	☐	1d	01/22/24	01/22/24	1398
1400	1.2	1.2.8.5.6.11.6	☐ System Commissioning	☑	☐	☐	11d	01/09/24	01/23/24	
1401	1.2	1.2.8.5.6.11.6.1	System Commissioning Set-up Tasks & Global Tests	☑	☐	☐	1d	01/23/24	01/23/24	1399
1402	1.2	1.2.8.5.6.11.6.2	Hose Reel Commissioning	☑	☐	☐	2d	01/09/24	01/10/24	1395
1403	1.2	1.2.8.5.6.11.6.3	Circulation Testing, w/ Glycol - Staged Approach	☑	☐	☐	1d	01/11/24	01/11/24	1402
1404	1.2	1.2.8.5.6.11.6.4	Heater Commissioning	☑	☐	☐	1d	01/12/24	01/12/24	1403
1405	1.2	1.2.8.5.6.11.6.5	Global Controls & E-stop Testing	☑	☐	☐	1d	01/11/24	01/11/24	1402
1406	1.2	1.2.8.5.6.11.6.6	System Testing in Test Well	☑	☐	☐	1d	01/15/24	01/15/24	1404
1407	1.2	1.2.8.5.6.11.7	☐ System Winterize and Store	☑	☐	☐	3d	01/16/24	01/18/24	
1408	1.2	1.2.8.5.6.11.7.1	Drain & Blow-out System	☑	☐	☐	1d	01/16/24	01/16/24	1406
1409	1.2	1.2.8.5.6.11.7.2	Remove and Store DNF Hardware	☑	☐	☐	1d	01/17/24	01/17/24	1408
1410	1.2	1.2.8.5.6.11.7.3	Tarp, Cover, & Plug	☑	☐	☐	1d	01/18/24	01/18/24	1409
1411	1.2	1.2.8.5.6.12	☐ Fuel Tower	☑	☐	☐	10d	11/27/23	12/08/23	
1412	1.2	1.2.8.5.6.12.1	Fuel Tower Relocation Support (USAP)	☑	☐	☐	1d	11/27/23	11/27/23	1229FF
1413	1.2	1.2.8.5.6.12.2	Mechanical Repairs & Upgrades	☑	☐	☐	2d	12/01/23	12/04/23	1412FS +3d
1414	1.2	1.2.8.5.6.12.3	Test Existing Local Hardware, Control Functionality, Document	☑	☐	☐	2d	12/07/23	12/08/23	1413FS +2d
1415	1.2	1.2.8.5.6.12.4	Fill Fuel Tower with Fuel	☑	☐	☐	1d	12/07/23	12/07/23	1413FS +2d
1416	1.2	1.2.8.5.6.12.5	Fuel Tower Ready to Supply Fuel	☑	☐	☑	0	12/07/23	12/07/23	1413FS +2d, 1415
1417	1.2	1.2.8.5.6.13	☐ Heat Pump Unit 2 (HPU2)	☑	☐	☐	37d	12/08/23	01/31/24	Tie to Gen complete
1418	1.2	1.2.8.5.6.13.1	HPU Relocation Support (USAP)	☑	☐	☐	4d	12/08/23	12/13/23	1425
1419	1.2	1.2.8.5.6.13.2	Initial Evaluation & Refit (HPU2)	☑	☐	☐	10d	01/18/24	01/31/24	
1420	1.2	1.2.8.5.7	☐ Seasonal Equipment Site (SES) Setup	☑	☐	☐	26d	12/07/23	01/17/24	
1421	1.2	1.2.8.5.7.1	☐ MHP Relocation to SES	☑	☐	☐	24d	12/07/23	01/11/24	
1422	1.2	1.2.8.5.7.1.1	Deliver Warm-up Shack Kuma Heated (USAP)	☑	☐	☐	1d	12/12/23	12/12/23	1427
1423	1.2	1.2.8.5.7.1.2	Driller Support for MHP Relocation (Driller)	☑	☐	☐	4d	12/19/23	12/22/23	1424SS, 1431FF
1424	1.2	1.2.8.5.7.1.3	MHP1 Relocation to SES (USAP)	☑	☐	☐	1d	12/08/23	12/08/23	1170, 1179, 1425,
1425	1.2	1.2.8.5.7.1.4	MHP2 Relocation to SES (USAP)	☑	☐	☐	1d	12/07/23	12/07/23	1187, 1195, 1131FS
1426	1.2	1.2.8.5.7.1.5	MHP3 Relocation to SES (USAP)	☑	☐	☐	1d	12/12/23	12/12/23	1203, 1211, 1131,
1427	1.2	1.2.8.5.7.1.6	MHP4 Relocation to SES (USAP)	☑	☐	☐	1d	12/11/23	12/11/23	1219, 1227, 1131
1428	1.2	1.2.8.5.7.1.7	PHS Relocation to SES (USAP)	☑	☐	☐	1d	01/11/24	01/11/24	1239, 1250, 1131,
1429	1.2	1.2.8.5.7.1.8	Fuel Tower Relocation to SES (USAP)	☑	☐	☐	1d	01/11/24	01/11/24	1416, 1428FF
1430	1.2	1.2.8.5.7.1.9	HPP Relocation to SES (USAP)	☑	☐	☐	1d	01/10/24	01/10/24	1260, 1274, 1131
1431	1.2	1.2.8.5.7.1.10	Water Tanks Relocation to SES (USAP)	☑	☐	☐	1d	12/22/23	12/22/23	1283, 1131
1432	1.2	1.2.8.5.7.1.11	Gen1 Relocation to SES (USAP)	☑	☐	☐	1d	12/18/23	12/18/23	#REF
1433	1.2	1.2.8.5.7.1.12	Gen2 Relocation to SES (USAP)	☑	☐	☐	1d	12/18/23	12/18/23	#REF
1434	1.2	1.2.8.5.7.1.13	Gen3 Relocation to SES (USAP)	☑	☐	☐	1d	12/18/23	12/18/23	#REF
1435	1.2	1.2.8.5.7.1.14	PDM Relocation to SES (USAP)	☑	☐	☐	1d	12/18/23	12/18/23	#REF
1436	1.2	1.2.8.5.7.2	Provide Temp Small Temp Generator for SES and Establish (USAP)	☑	☐	☐	1d	12/12/23	12/12/23	1427
1437	1.2	1.2.8.5.7.3	☐ Interconnect Evaluation - Hoses, Cables & Cable Trays for SES	☑	☐	☐	4d	01/12/24	01/17/24	
1438	1.2	1.2.8.5.7.3.1	Cable Trays - Mount/Install	☑	☐	☐	4d	01/12/24	01/17/24	1424, 1425, 1426,
1439	1.2	1.2.8.5.7.3.2	Hoses - Layout, Inventory, Repair & Test	☑	☐	☐	4d	01/12/24	01/17/24	1438SS
1440	1.2	1.2.8.5.7.3.3	Cables - Layout, Inventory, Repair & Test	☑	☐	☐	4d	01/12/24	01/17/24	1438SS
1441	1.2	1.2.8.5.7.4	Establish Fuel Tower at SES	☑	☐	☐	2d	01/12/24	01/15/24	1429
1442	1.2	1.2.8.5.7.5	SES Initial Setup Complete	☑	☐	☑	0	01/10/24	01/10/24	
1443	1.2	1.2.8.5.8	☐ End of NPX Season Close-Out Work	☑	☐	☐	11d	01/17/24	01/31/24	
1444	1.2	1.2.8.5.8.1	Document, Photograph Equip & Upgrade Work, Further Req's	☑	☐	☐	4d	01/23/24	01/26/24	
1445	1.2	1.2.8.5.8.2	Remove DNF (Computer Equip, Drives, & Capacitors) & Store	☑	☐	☐	4d	01/22/24	01/25/24	1333, 1408
1446	1.2	1.2.8.5.8.3	Winterize/Close/Store all EHWD Equipment	☑	☐	☐	e4d	01/24/24	01/28/24	
1447	1.2	1.2.8.5.8.4	Setup & Connect Hose Heating Controller, test over FS1-FS2 winter	☑	☐	☐	2d	01/24/24	01/25/24	
1448	1.2	1.2.8.5.8.5	Crate, Pack and Deliver Retro to Cargo	☑	☐	☐	7d	01/17/24	01/25/24	1445FF
1449	1.2	1.2.8.5.8.6	Winter Storage Support: TOS 1 & 2 (USAP)	☑	☐	☐	9d	01/20/24	01/31/24	
1450	1.2	1.2.8.5.8.7	Setup and Connect Hose Heating Controller, Test over FS1-FS2 Winter	☑	☐	☐	2d	01/22/24	01/23/24	
1451	1.2	1.2.8.5.9	☐ Other Field Activities (FS1)	☑	☐	☐	246d	02/01/23	01/15/24	
1452	1.2	1.2.8.5.9.1	MCM Logistics Rep (Driller)	☑	☐	☐	18d	10/25/23	11/17/23	
1453	1.2	1.2.8.5.9.2	GPR Re-survey: Cable Routes & Hole Locations (USAP)	☑	☐	☐	12d	12/01/23	12/18/23	
1454	1.2	1.2.8.5.9.3	Electrician Support - ICL Overwinter Storage & Rack Feeders (USAP)	☑	☐	☐	22d	12/05/23	01/05/24	
1455	1.2	1.2.8.5.9.4	Logistics Support - MCM & Pole (USAP)	☑	☐	☐	44d	10/15/23	12/14/23	
1456	1.2	1.2.8.5.9.5	Surface Cable, Hose, & Reels Over-Winter Storage - MCM (USAP)	☑	☐	☐	1d	01/15/24	01/15/24	
1457	1.2	1.2.8.5.9.6	Drill Hose & Main/RWCR Over-Winter Storage - MCM (USAP)	☑	☐	☐	5d	02/01/23	02/07/23	
1458	1.2	1.2.8.5.10	ICU Field Team Redeployed	☑	☐	☑	0	01/29/24	01/29/24	1445, 1446, 1447FS
1459	1.2	1.2.8.5.11	On-Ice Labor (FS1)	☑	☐	☐	192d	06/02/23	02/29/24	
1460	1.2	1.2.8.5.12	END NPX FS1 Season	☑	☐	☑	0	01/31/24	01/31/24	1443FF
1461	1.2	1.2.8.6	☐ USAP Field Season 2 (FY25)	☑	☐	☐	511d	02/12/24	02/03/26	
1462	1.2	1.2.8.6.1	☐ FS2 Milestones	☑	☐	☐	193d	02/15/24	11/12/24	
1463	1.2	1.2.8.6.1.1	MCM Mainbody Season Begins (USAP)	☑	☐	☑	0	10/01/24	10/01/24	

L2	WBS	Task Name	NSF	L1 Milestone	L2 Milestone	Internal Milestone	Duration	Start Date	End Date	Predecessor WBS
1464	1.2	1.2.8.6.1.2		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/01/24	11/01/24	
1465	1.2	1.2.8.6.1.3		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/12/24	11/12/24	
1466	1.2	1.2.8.6.1.4		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	02/15/24	02/15/24	
1467	1.2	1.2.8.6.1.5		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	03/01/24	03/01/24	
1468	1.2	1.2.8.6.2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	157d	07/01/24	02/07/25	
1469	1.2	1.2.8.6.3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	252d	02/12/24	02/01/25	
1470	1.2	1.2.8.6.3.1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	252d	02/12/24	02/01/25	
1471	1.2	1.2.8.6.3.1.1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	199d	02/12/24	11/15/24	
1472	1.2	1.2.8.6.3.1.1.1		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/15/24	11/15/24	
1473	1.2	1.2.8.6.3.1.1.2		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/15/24	11/15/24	
1474	1.2	1.2.8.6.3.1.1.3		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/15/24	11/15/24	
1475	1.2	1.2.8.6.3.1.1.4		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	02/12/24	02/12/24	
1476	1.2	1.2.8.6.3.1.2		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	12/01/24	12/01/24	
1477	1.2	1.2.8.6.3.1.2.1		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	12/01/24	12/01/24	
1478	1.2	1.2.8.6.3.1.3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	01/01/25	01/01/25	
1479	1.2	1.2.8.6.3.1.3.1		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	01/01/25	01/01/25	
1480	1.2	1.2.8.6.3.1.3.2		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	01/01/25	01/01/25	
1481	1.2	1.2.8.6.3.1.4		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	02/01/25	02/01/25	
1482	1.2	1.2.8.6.3.1.4.1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	02/01/25	02/01/25	
1483	1.2	1.2.8.6.3.2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	60d	11/01/24	01/15/25	
1484	1.2	1.2.8.6.3.2.1		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/01/24	11/01/24	
1485	1.2	1.2.8.6.3.2.1.1		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/01/24	11/01/24	
1486	1.2	1.2.8.6.3.2.1.2		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/01/24	11/01/24	
1487	1.2	1.2.8.6.3.2.1.3		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/01/24	11/01/24	
1488	1.2	1.2.8.6.3.2.2		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	01/15/25	01/15/25	
1489	1.2	1.2.8.6.3.2.2.1		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	01/15/25	01/15/25	
1490	1.2	1.2.8.6.3.3		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	01/15/25	01/15/25	
1491	1.2	1.2.8.6.3.4		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	51d	11/01/24	01/15/25	
1492	1.2	1.2.8.6.4		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	55d	11/08/24	01/28/25	
1493	1.2	1.2.8.6.4.1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7d	11/08/24	11/18/24	
1494	1.2	1.2.8.6.4.2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12d	11/15/24	12/03/24	
1495	1.2	1.2.8.6.4.3		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/15/24	11/15/24	
1496	1.2	1.2.8.6.4.4		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	50d	11/15/24	01/28/25	
1497	1.2	1.2.8.6.4.5		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5d	11/08/24	11/14/24	
1498	1.2	1.2.8.6.4.6		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5d	11/14/24	11/20/24	
1499	1.2	1.2.8.6.4.7		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5d	11/15/24	11/21/24	
1500	1.2	1.2.8.6.4.8		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3d	11/16/24	11/19/24	
1501	1.2	1.2.8.6.4.9		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/17/24	11/17/24	
1502	1.2	1.2.8.6.4.10		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1d	11/20/24	11/20/24	
1503	1.2	1.2.8.6.4.11		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2d	11/21/24	11/22/24	
1504	1.2	1.2.8.6.4.12		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9d	11/14/24	11/26/24	
1505	1.2	1.2.8.6.4.13		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5d	11/14/24	11/20/24	
1506	1.2	1.2.8.6.4.14		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3d	11/14/24	11/18/24	
1507	1.2	1.2.8.6.4.15		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2d	12/08/24	12/09/24	
1508	1.2	1.2.8.6.4.16		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/15/24	11/15/24	
1509	1.2	1.2.8.6.4.17		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/15/24	11/15/24	
1510	1.2	1.2.8.6.4.18		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9d	11/15/24	11/27/24	
1511	1.2	1.2.8.6.4.19		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9d	11/15/24	11/27/24	
1512	1.2	1.2.8.6.4.20		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/15/24	11/15/24	
1513	1.2	1.2.8.6.5		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	63d	11/15/24	01/8/25	
1514	1.2	1.2.8.6.5.1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	53d	11/15/24	01/31/25	1506FS -2d
1515	1.2	1.2.8.6.5.2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9d	11/15/24	11/27/24	1494SS
1516	1.2	1.2.8.6.5.3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	52d	11/15/24	01/30/25	
1517	1.2	1.2.8.6.5.4		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2d	12/12/24	12/13/24	
1518	1.2	1.2.8.6.5.5		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17d	12/15/24	01/08/25	
1519	1.2	1.2.8.6.5.6		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5d	12/01/24	12/05/24	
1520	1.2	1.2.8.6.5.7		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1d	12/01/24	12/01/24	
1521	1.2	1.2.8.6.5.8		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1d	12/01/24	12/01/24	
1522	1.2	1.2.8.6.5.9		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1d	12/01/24	12/01/24	
1523	1.2	1.2.8.6.6		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	60d	11/14/24	01/28/25	
1524	1.2	1.2.8.6.6.1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	e1d	11/14/24	11/15/24	1497
1525	1.2	1.2.8.6.6.2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	e2d	11/15/24	11/17/24	1524
1526	1.2	1.2.8.6.6.3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	e2d	11/15/24	11/17/24	1525FF
1527	1.2	1.2.8.6.6.4		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/21/24	1509SS +1d, 1499	
1528	1.2	1.2.8.6.6.5		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	e2d	11/21/24	11/23/24	1509SS +1d, 1499
1529	1.2	1.2.8.6.6.6		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	e2d	11/21/24	11/23/24	1528SS
1530	1.2	1.2.8.6.6.7		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/23/24	11/23/24	
1531	1.2	1.2.8.6.6.8		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	e2d	11/23/24	11/25/24	1528, 1529
1532	1.2	1.2.8.6.6.9		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	e3d	11/25/24	11/28/24	1530, 1531
1533	1.2	1.2.8.6.6.10		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	e2d	11/29/24	12/01/24	1531FS +2d
1534	1.2	1.2.8.6.6.11		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	e2d	12/01/24	12/03/24	1533
1535	1.2	1.2.8.6.6.12		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	12/03/24	12/03/24	1534
1536	1.2	1.2.8.6.6.13		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4d	12/03/24	12/06/24	1535
1537	1.2	1.2.8.6.6.14		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	e20d	12/12/24	01/01/25	1535FS +7d
1538	1.2	1.2.8.6.6.15		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	e2d	01/26/25	01/28/25	1660FF
1539	1.2	1.2.8.6.7		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	51d	11/12/24	01/24/25	
1540	1.2	1.2.8.6.7.1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	36d	11/12/24	01/03/25	
1541	1.2	1.2.8.6.7.1.1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1d	11/12/24	11/12/24	

L2	WBS	Task Name	NSF	L1 Milestone	L2 Milestone	Internal Milestone	Duration	Start Date	End Date	Predecessor WBS
1542	1.2	1.2.8.6.7.1.2	Electrical Closet Rework (USAP)	☑	☐	☐	2d	11/13/24	11/14/24	1541
1543	1.2	1.2.8.6.7.1.3	Install New Fuel Day Tank System Controls	☑	☐	☐	1d	11/15/24	11/15/24	1542
1544	1.2	1.2.8.6.7.1.4	Install and Wire 2x Motor Drives for WT1 VT Pumps	☑	☐	☐	1d	11/18/24	11/18/24	1543
1545	1.2	1.2.8.6.7.1.5	Install New E-Stop Controller Equipment	☑	☐	☐	2d	11/19/24	11/20/24	1544
1546	1.2	1.2.8.6.7.1.6	Install Racks & Computing Equipment	☑	☐	☐	2d	11/21/24	11/22/24	1545
1547	1.2	1.2.8.6.7.1.7	Install Core PLC System in DCC	☑	☐	☐	2d	11/25/24	11/26/24	1546
1548	1.2	1.2.8.6.7.1.8	Connect and Configure Hub and Spoke Elements, including Motor Drives	☑	☐	☐	2d	11/27/24	11/29/24	1547
1549	1.2	1.2.8.6.7.1.9	Relocate DCC to SES & Position (USAP)	☑	☐	☐	3d	12/02/24	12/04/24	1548
1550	1.2	1.2.8.6.7.1.10	Install and Commission Latest Software, SCADA, and Database	☑	☐	☐	3d	12/02/24	12/04/24	1548
1551	1.2	1.2.8.6.7.1.11	QA on Controls By SES Subsystem - Wet System	☑	☐	☐	10d	12/19/24	01/03/25	1550, 1517, 1631
1552	1.2	1.2.8.6.7.1.12	Global Control System Online	☑	☐	☑	0	01/03/25	01/03/25	1551
1553	1.2	1.2.8.6.7.2	▣ Main Heating Plants	☑	☐	☐	9d	11/21/24	12/04/24	
1554	1.2	1.2.8.6.7.2.1	▣ Mechanical Refit & Repairs (MHP)	☑	☐	☐	9d	11/21/24	12/04/24	
1555	1.2	1.2.8.6.7.2.1.1	Final Upgrade & Replacement Activities	☑	☐	☐	5d	11/21/24	11/27/24	1505
1556	1.2	1.2.8.6.7.2.1.2	System Evaluation	☑	☐	☐	5d	11/27/24	12/04/24	1555FS -1d
1557	1.2	1.2.8.6.7.2.2	▣ Electrical/Controls Refit & Repairs (MHP)	☑	☐	☐	9d	11/21/24	12/04/24	
1558	1.2	1.2.8.6.7.2.2.1	Final Upgrade & Replacement Activities	☑	☐	☐	5d	11/21/24	11/27/24	1505
1559	1.2	1.2.8.6.7.2.2.2	System Evaluation and Final Testing	☑	☐	☐	5d	11/27/24	12/04/24	1558FS -1d
1560	1.2	1.2.8.6.7.3	▣ Pre-Heat System	☑	☐	☐	9d	11/21/24	12/04/24	
1561	1.2	1.2.8.6.7.3.1	▣ Mechanical Refit & Repairs (PHS)	☑	☐	☐	9d	11/21/24	12/04/24	
1562	1.2	1.2.8.6.7.3.1.1	Install Filters in H2O System	☑	☐	☐	1d	11/21/24	11/21/24	1563SS
1563	1.2	1.2.8.6.7.3.1.2	Final Upgrade & Replacement Activities	☑	☐	☐	5d	11/21/24	11/27/24	1505
1564	1.2	1.2.8.6.7.3.1.3	System Evaluation	☑	☐	☐	5d	11/27/24	12/04/24	1563FS -1d
1565	1.2	1.2.8.6.7.3.2	▣ Electrical/Controls Refit & Repairs (PHS)	☑	☐	☐	9d	11/21/24	12/04/24	
1566	1.2	1.2.8.6.7.3.2.1	Final Upgrade & Replacement Activities	☑	☐	☐	5d	11/21/24	11/27/24	1505
1567	1.2	1.2.8.6.7.3.2.2	System Evaluation and Final Testing	☑	☐	☐	5d	11/27/24	12/04/24	1566FS -1d
1568	1.2	1.2.8.6.7.4	▣ Water Tanks & Handling Systems (VT & Submersible)	☑	☐	☐	9d	11/21/24	12/04/24	
1569	1.2	1.2.8.6.7.4.1	Final Upgrade & Replacement Activities	☑	☐	☐	5d	11/21/24	11/27/24	1505
1570	1.2	1.2.8.6.7.4.2	System Evaluation and Final Testing	☑	☐	☐	5d	11/27/24	12/04/24	1569FS -1d
1571	1.2	1.2.8.6.7.5	▣ Water Tanks & Handling Systems (VT & Submersible)	☑	☐	☐	9d	11/21/24	12/04/24	
1572	1.2	1.2.8.6.7.5.1	▣ Mechanical Refit & Repairs (HPP)	☑	☐	☐	9d	11/21/24	12/04/24	
1573	1.2	1.2.8.6.7.5.1.1	Final Upgrade & Replacement Activities	☑	☐	☐	5d	11/21/24	11/27/24	1505
1574	1.2	1.2.8.6.7.5.1.2	Pump Testing & System Evaluation	☑	☐	☐	5d	11/27/24	12/04/24	1573FS -1d
1575	1.2	1.2.8.6.7.5.2	▣ Electrical/Controls Refit & Repairs (HPP)	☑	☐	☐	9d	11/21/24	12/04/24	
1576	1.2	1.2.8.6.7.5.2.1	Final Upgrade & Replacement Activities	☑	☐	☐	5d	11/21/24	11/27/24	1505
1577	1.2	1.2.8.6.7.5.2.2	System Evaluation and Final Testing	☑	☐	☐	5d	11/27/24	12/04/24	1573FS -1d
1578	1.2	1.2.8.6.7.6	▣ HPU2	☑	☐	☐	12d	11/21/24	12/08/24	
1579	1.2	1.2.8.6.7.6.1	Relocate HPU2 to SES, Position	☑	☐	☐	1d	11/21/24	11/21/24	1498
1580	1.2	1.2.8.6.7.6.2	Supply Power to HPU2, Warm Up	☑	☐	☐	1d	11/22/24	11/22/24	1505, 1579
1581	1.2	1.2.8.6.7.6.3	Initiate final Refit/Integration (HPU2)	☑	☐	☐	10d	11/25/24	12/09/24	1580
1582	1.2	1.2.8.6.7.7	▣ Fuel Tower	☑	☐	☐	5d	12/02/24	12/08/24	
1583	1.2	1.2.8.6.7.7.1	Install New Point I/O, connect to DCC, and configure/troubleshoot	☑	☐	☐	1d	12/02/24	12/02/24	1472FS +10d
1584	1.2	1.2.8.6.7.7.2	Fuel Tower: Commission - NPX	☑	☐	☐	4d	12/03/24	12/06/24	1583
1585	1.2	1.2.8.6.7.8	▣ Shops, MECC (SEW, TOW, OML)	☑	☐	☐	6d	11/14/24	11/21/24	
1586	1.2	1.2.8.6.7.8.1	Final Upgrade/Retrofit Shops, MECC	☑	☐	☐	6d	11/14/24	11/21/24	
1587	1.2	1.2.8.6.7.9	▣ Reels	☑	☐	☐	33d	12/08/24	01/24/25	
1588	1.2	1.2.8.6.7.9.1	▣ Main Supply Hose Reel (MSHR)	☑	☐	☐	30d	12/12/24	01/24/25	
1589	1.2	1.2.8.6.7.9.1.1	Install Inner Insulation Layer & RTDs	☑	☐	☐	2d	12/12/24	12/13/24	1498FS +14d
1590	1.2	1.2.8.6.7.9.1.2	Install Drill Hose on Reel	☑	☐	☐	5d	12/16/24	12/20/24	1589, 1477FS +5d
1591	1.2	1.2.8.6.7.9.1.3	Final Upgrades & Testing (MSHR)	☑	☐	☐	2d	12/23/24	12/24/24	1590
1592	1.2	1.2.8.6.7.9.1.4	Install Hose Heating Blankets & RTDs & Install Outer Cover	☑	☐	☐	2d	01/21/25	01/22/25	1650SS +2d
1593	1.2	1.2.8.6.7.9.1.5	Install Hose Heating Controller, Connect to Power, & Test	☑	☐	☐	2d	01/23/25	01/24/25	1651, 1592
1594	1.2	1.2.8.6.7.9.2	▣ Return Water Hose Reel (RWHR)	☑	☐	☐	6d	12/08/24	12/16/24	
1595	1.2	1.2.8.6.7.9.2.1	Install Return Hose on Reel	☑	☐	☐	5d	12/09/24	12/13/24	1477FS +5d
1596	1.2	1.2.8.6.7.9.2.2	Final Upgrades & Testing	☑	☐	☐	5d	12/10/24	12/16/24	
1597	1.2	1.2.8.6.7.9.3	▣ Return Water Cable Reel (RWCR)	☑	☐	☐	5d	12/10/24	12/16/24	
1598	1.2	1.2.8.6.7.9.3.1	Final Upgrades & Testing	☑	☐	☐	5d	12/10/24	12/16/24	
1599	1.2	1.2.8.6.7.9.4	▣ Main Cable Reel (MCR)	☑	☐	☐	5d	12/10/24	12/16/24	
1600	1.2	1.2.8.6.7.9.4.1	Final Upgrades & Testing	☑	☐	☐	5d	12/10/24	12/16/24	
1601	1.2	1.2.8.6.7.10	▣ Winches	☑	☐	☐	12d	12/15/24	12/31/24	
1602	1.2	1.2.8.6.7.10.1	Winches Final Integration & Testing (TU-20, TU-15)	☑	☐	☐	12d	12/15/24	12/31/24	
1603	1.2	1.2.8.6.7.11	▣ TOS/Tower	☑	☐	☐	22d	11/22/24	12/24/24	
1604	1.2	1.2.8.6.7.11.1	▣ TOS1 - Core Controls Install, Commissioning & Check Out	☑	☐	☐	11d	11/22/24	12/08/24	
1605	1.2	1.2.8.6.7.11.1.1	TOS1 - Install Racks & Computing Equipment	☑	☐	☐	2d	11/22/24	11/25/24	1498FS +1d, 1472
1606	1.2	1.2.8.6.7.11.1.2	TOS1 - Install Core PLC System	☑	☐	☐	1d	11/26/24	11/26/24	1605
1607	1.2	1.2.8.6.7.11.1.3	TOS1 - Connect & Configure I/O & Motor Drives	☑	☐	☐	2d	11/27/24	11/29/24	1606
1608	1.2	1.2.8.6.7.11.1.4	TOS1 - Install & Commission Latest Software, SCADA	☑	☐	☐	2d	12/02/24	12/03/24	1607
1609	1.2	1.2.8.6.7.11.1.5	TOS1 - Connect Reels & Perform QA on Controls	☑	☐	☐	2d	12/04/24	12/05/24	1608
1610	1.2	1.2.8.6.7.11.1.6	TOS1 - Install Drill Head Power Supply	☑	☐	☐	1d	12/06/24	12/06/24	1609
1611	1.2	1.2.8.6.7.11.1.7	TOS1 - Test Drill Head Data Chain With Actual Drill Head	☑	☐	☐	1d	12/09/24	12/09/24	1610
1612	1.2	1.2.8.6.7.11.1.8	TOS1 - TOS Control System Online	☑	☐	☑	0	12/09/24	12/09/24	1611
1613	1.2	1.2.8.6.7.11.2	▣ TOS2 - Core Controls Install, Commissioning & Check Out	☑	☐	☐	11d	12/10/24	12/24/24	
1614	1.2	1.2.8.6.7.11.2.1	TOS2 - Install Racks & Computing Equipment	☑	☐	☐	2d	12/10/24	12/11/24	1498FS +1d, 1612,
1615	1.2	1.2.8.6.7.11.2.2	TOS2 - Install Core PLC System	☑	☐	☐	1d	12/12/24	12/12/24	1614
1616	1.2	1.2.8.6.7.11.2.3	TOS2 - Connect & Configure I/O & Motor Drives	☑	☐	☐	2d	12/13/24	12/16/24	1615
1617	1.2	1.2.8.6.7.11.2.4	TOS2 - Install & Commission Latest Software, SCADA	☑	☐	☐	2d	12/17/24	12/18/24	1616
1618	1.2	1.2.8.6.7.11.2.5	TOS2 - Connect Reels & Perform QA on Controls	☑	☐	☐	2d	12/19/24	12/20/24	1617
1619	1.2	1.2.8.6.7.11.2.6	TOS2 - Install Drill Head Power Supply	☑	☐	☐	1d	12/23/24	12/23/24	1618

L2	WBS	Task Name	NSF	L1 Milestone	L2 Milestone	Internal Milestone	Duration	Start Date	End Date	Predecessor WBS
1620	1.2	1.2.8.6.7.11.2.7					1d	12/24/24	12/24/24	1619
1621	1.2	1.2.8.6.7.11.2.8					0	12/24/24	12/24/24	1620
1622	1.2	1.2.8.6.7.12					41d	11/22/24	01/22/25	
		Rodwell System (ARA)								
1623	1.2	1.2.8.6.7.12.1					4d	11/22/24	11/27/24	1497FS +5d
1624	1.2	1.2.8.6.7.12.2					4d	11/29/24	12/04/24	1623
1625	1.2	1.2.8.6.7.12.3					4d	12/05/24	12/10/24	1624
1626	1.2	1.2.8.6.7.12.4					3d	12/11/24	12/13/24	1623, 1624, 1625
1627	1.2	1.2.8.6.7.12.5					1d	12/11/24	12/11/24	1626SS
1628	1.2	1.2.8.6.7.12.6					3d	01/20/25	01/22/25	1650SS +1d
1629	1.2	1.2.8.6.8					20d	12/16/24	01/14/25	
		Rodwell System (ARA) Ops - Condensate Bulbs								
1630	1.2	1.2.8.6.8.1					1d	12/16/24	12/16/24	1626
1631	1.2	1.2.8.6.8.2					2d	12/17/24	12/18/24	1630
1632	1.2	1.2.8.6.8.3					1d	12/20/24	12/20/24	1631FS +1d
1633	1.2	1.2.8.6.8.4					1d	12/23/24	12/23/24	1632
1634	1.2	1.2.8.6.8.5					4d	12/24/24	12/30/24	1633
1635	1.2	1.2.8.6.8.6					10d	12/31/24	01/14/25	1634
1636	1.2	1.2.8.6.9					40d	11/15/24	01/14/25	
		Fin Drilling - Independent Fin Drill (IFD)								
1637	1.2	1.2.8.6.9.1					1d	11/15/24	11/15/24	1497
1638	1.2	1.2.8.6.9.2					6d	11/18/24	11/25/24	1637
1639	1.2	1.2.8.6.9.3					2d	11/18/24	11/19/24	1638SS
1640	1.2	1.2.8.6.9.4					2d	11/18/24	11/19/24	1639SS
1641	1.2	1.2.8.6.9.5					25d	11/29/24	01/06/25	1638FS +2d
1642	1.2	1.2.8.6.9.6					25d	11/29/24	01/06/25	1641SS
1643	1.2	1.2.8.6.9.7					0	01/06/25	01/06/25	1641
1644	1.2	1.2.8.6.9.8					6d	01/07/25	01/14/25	1641
1645	1.2	1.2.8.6.10					32d	12/06/24	01/22/25	
		EHWD: Full Systems Wet-Test								
1646	1.2	1.2.8.6.10.1					3d	12/06/24	12/10/24	1641SS +5d
1647	1.2	1.2.8.6.10.2					7d	12/26/24	01/06/25	1646FS +3d, 1590,
1648	1.2	1.2.8.6.10.3					1d	01/07/25	01/07/25	1647
1649	1.2	1.2.8.6.10.4					7d	01/08/25	01/16/25	1648, 1551, 1635SS
1650	1.2	1.2.8.6.10.5					4d	01/17/25	01/22/25	1649
1651	1.2	1.2.8.6.10.6					0	01/22/25	01/22/25	1650
1652	1.2	1.2.8.6.11					9d	12/04/24	12/16/24	2038SS
		Installation Support Activities								
1653	1.2	1.2.8.6.11.1					9d	12/04/24	12/16/24	2038SS
1654	1.2	1.2.8.6.12					29d	12/24/24	02/04/25	
		Season Close-Out Work								
1655	1.2	1.2.8.6.12.1					2d	12/24/24	12/26/24	1206SS,
1656	1.2	1.2.8.6.12.2					2d	01/23/25	01/24/25	1651
1657	1.2	1.2.8.6.12.3					7d	12/24/24	01/03/25	1655SS
1658	1.2	1.2.8.6.12.4					1d	01/23/25	01/23/25	1651
1659	1.2	1.2.8.6.12.5					10d	01/22/25	02/04/25	
		Winterize EHWD								
1660	1.2	1.2.8.6.12.5.1					4d	01/23/25	01/28/25	1651
1661	1.2	1.2.8.6.12.5.2					6d	01/22/25	01/29/25	1660FS -5d
1662	1.2	1.2.8.6.12.5.3					3d	01/30/25	02/03/25	1661
1663	1.2	1.2.8.6.12.5.4					1d	02/04/25	02/04/25	1660, 1661, 1662
1664	1.2	1.2.8.6.13					77d	10/15/25	02/03/26	
		Other Field Activities (FS2)								
1665	1.2	1.2.8.6.13.1					44d	10/15/25	12/16/25	
1666	1.2	1.2.8.6.13.2					65d	11/01/25	02/03/26	
1667	1.2	1.2.8.6.14					1d	01/30/25	01/30/25	1660, 1661, 1657FS
1668	1.2	1.2.8.6.15					60d	11/08/24	02/04/25	
1669	1.2	1.2.8.6.16					0	02/04/25	02/04/25	1663, 1667
1670	1.2	1.2.8.7					292d	01/15/25	03/03/26	
		USAP Field Season 3 (FY26)								
1671	1.2	1.2.8.7.1					202d	02/15/25	11/25/25	
		FS3 Milestones								
1672	1.2	1.2.8.7.1.1					0	10/01/25	10/01/25	
1673	1.2	1.2.8.7.1.2					0	11/01/25	11/01/25	
1674	1.2	1.2.8.7.1.3					10d	11/11/25	11/25/25	
		ICU Team Arrives [Headcount 28]								
1675	1.2	1.2.8.7.1.3.1					0	11/11/25	11/11/25	
1676	1.2	1.2.8.7.1.3.2					0	11/18/25	11/18/25	
1677	1.2	1.2.8.7.1.3.3					0	11/25/25	11/25/25	
1678	1.2	1.2.8.7.1.4					0	02/15/25	02/15/25	
1679	1.2	1.2.8.7.1.5					0	03/01/25	03/01/25	
1680	1.2	1.2.8.7.2					195d	06/01/25	03/03/26	
		PQ, ECW & Deployment Travel Costs (FS3)								
1681	1.2	1.2.8.7.3					68d	11/01/25	02/06/26	
		USAP Cargo Movements (FY26)								
1682	1.2	1.2.8.7.3.1					53d	11/15/25	02/01/26	
		Pole (USAP)								
1683	1.2	1.2.8.7.3.1.1					30d	11/15/25	12/29/25	
		LC130 - Pole (USAP)								
1684	1.2	1.2.8.7.3.1.1					30d	11/15/25	12/29/25	
		Fuel 10,161 Gallons (USAP)								
1685	1.2	1.2.8.7.3.1.2					0	12/01/25	12/01/25	
		SPOT1 - Pole (USAP)								
1686	1.2	1.2.8.7.3.1.3					0	01/01/26	01/01/26	
		SPOT2 - Pole (USAP)								
1687	1.2	1.2.8.7.3.1.4					0	02/01/26	02/01/26	
		SPOT3 - Pole (USAP)								
1688	1.2	1.2.8.7.3.2					66d	11/01/25	02/05/26	
		MCM (USAP)								
1689	1.2	1.2.8.7.3.2.1					0	11/01/25	11/01/25	
		SAAM - ComSur (USAP)								
1690	1.2	1.2.8.6.3.2.1.1					0	11/01/25	11/01/25	
		Driller Resupply/Refit Container (8' ISO) (USAP)								
1691	1.2	1.2.8.6.3.2.1.2					0	11/01/25	11/01/25	
		Drill Refit Components Crate - DNF (USAP)								
1692	1.2	1.2.8.7.3.2.2					0	02/05/26	02/05/26	
		Vessel (USAP)								
1693	1.2	1.2.8.7.3.2.2.1					0	02/05/26	02/05/26	
		Placeholder								
1694	1.2	1.2.8.7.3.3					2d	01/15/26	01/16/26	
		Retrograde (USAP)								
1695	1.2	1.2.8.7.3.3.1					2d	01/15/26	01/16/26	
		Drill Hose - SPOT 3 (USAP)								
1696	1.2	1.2.8.7.3.4					58d	11/15/25	02/06/26	
		Cargo Storage Support Pole & MCM (USAP)								
1697	1.2	1.2.8.7.4					64d	11/07/25	02/06/26	
		Opening Activities & Seasonal Equipment Site (SES) Setup								

L2	WBS	Task Name	NSF	L1 Milestone	L2 Milestone	Internal Milestone	Duration	Start Date	End Date	Predecessor WBS
1698	1.2	1.2.8.7.4.1	Excavate Winter Storage Berms (USAP)	☑	☐	☐	8d	11/07/25	11/18/25	
1699	1.2	1.2.8.7.4.2	Excavate and Groom SES (USAP)	☑	☐	☐	8d	11/07/25	11/18/25	
1700	1.2	1.2.8.7.4.3	SES Dig-out (Driller)	☑	☐	☐	3d	11/14/25	11/18/25	#REF
1701	1.2	1.2.8.7.4.4	Groom & Compact Roads/Drill Pad (USAP)	☑	☐	☐	2d	11/17/25	11/18/25	1700SS +1d
1702	1.2	1.2.8.7.4.5	Build Water Tank Ramp (USAP)	☑	☐	☐	2d	11/17/25	11/18/25	1700SS +1d
1703	1.2	1.2.8.7.4.6	Deliver TOS1, TOS2, Drill Towers, DCC (to SES), Main Hose Reel (ASC), Reels (TU-20, TU-15)	☑	☐	☐	3d	12/01/25	12/03/25	
1704	1.2	1.2.8.7.4.7	IT Integration Activities for SES (USAP)	☑	☐	☐	4d	11/18/25	11/21/25	
1705	1.2	1.2.8.7.4.8	SES & Drill Pad Excavated & Established	☑	☐	☑	0	11/15/25	11/15/25	
1706	1.2	1.2.8.7.4.9	Provide Heaters (PolarTherm) (USAP)	☑	☐	☐	59d	11/13/25	02/06/26	
1707	1.2	1.2.8.7.4.10	Provide Support Generators (CRREL / Onan Genset) (USAP)	☑	☐	☐	58d	11/13/25	02/05/26	
1708	1.2	1.2.8.7.4.11	Provide 953 Loader, 287B Skidsteer, Pax Van, & Snomo's (USAP)	☑	☐	☐	1d	11/13/25	11/13/25	
1709	1.2	1.2.8.7.4.12	Begin Delivery - Sk Fuel Tanks (USAP)	☑	☐	☐	1d	11/20/25	11/20/25	
1710	1.2	1.2.8.7.4.13	Make Ready all SES Modules (DCC, PHS, MHPs, MECC, WTs, All)	☑	☐	☐	9d	11/17/25	11/28/25	1700SS +1d
1711	1.2	1.2.8.7.4.14	Furnace Checkout & Fire Up (All modules)	☑	☐	☐	4d	11/17/25	11/20/25	1710SS
1712	1.2	1.2.8.7.4.15	SES and Equipment Maintenance Activities	☑	☐	☐	51d	11/17/25	01/29/26	1711SS
1713	1.2	1.2.8.7.4.16	SES IT Integration (USAP)	☑	☐	☐	4d	11/18/25	11/21/25	
1714	1.2	1.2.8.7.4.17	Drill Control Center Set-up, Integration, & Commissioning	☑	☐	☐	6d	11/18/25	11/25/25	1713SS
1715	1.2	1.2.8.7.4.18	Seed Water Delivery (3000 gallons) (USAP)	☑	☐	☐	1d	11/24/25	11/24/25	
1716	1.2	1.2.8.7.4.19	Deliver Compressor to SES (USAP)	☑	☐	☐	1d	12/01/25	12/01/25	
1717	1.2	1.2.8.7.4.20	Deliver & Warm Up Glycol Tank (USAP)	☑	☐	☐	1d	12/01/25	12/01/25	
1718	1.2	1.2.8.7.4.21	T&L Support - Cargo Deliveries (USAP)	☑	☐	☐	59d	11/15/25	02/09/26	
1719	1.2	1.2.8.7.4.22	Ready Antarctic Rodwell Apparatus (ARA) for Service	☑	☐	☐	5d	12/01/25	12/05/25	1711FS +5d
1720	1.2	1.2.8.7.4.23	Create SES Snow Stockpile (USAP)	☑	☐	☐	36d	12/08/25	01/28/26	1719
1721	1.2	1.2.8.7.4.24	Perform Emergency Incident Drill & Safety Training	☑	☐	☐	3d	11/26/25	12/01/25	1714
1722	1.2	1.2.8.7.4.25	Perform Emergency Incident Drill & Safety Training Complete	☑	☐	☑	0	12/01/25	12/01/25	1721
1723	1.2	1.2.8.7.4.26	Final SES Readiness Assessment	☑	☐	☐	2d	12/08/25	12/09/25	1709, 1710, 1711,
1724	1.2	1.2.8.7.4.27	SES Ready	☑	☐	☑	0	12/09/25	12/09/25	1723
1725	1.2	1.2.8.7.5	Generators & PDM	☑	☐	☐	5d	11/18/25	11/24/25	
1726	1.2	1.2.8.7.5.1	Generator & PDM: Commission - NPX	☑	☐	☐	5d	11/18/25	11/24/25	
1727	1.2	1.2.8.7.5.2	Electrician Support for Power Generation (USAP)	☑	☐	☐	3d	11/19/25	11/21/25	
1728	1.2	1.2.8.7.5.3	Generators Ready	☑	☐	☑	0	11/24/25	11/24/25	1726FS -1d, 1727FS -
1729	1.2	1.2.8.7.5.4	Change from Temp Power to Generators (USAP)	☑	☐	☑	0	11/24/25	11/24/25	1728SS
1730	1.2	1.2.8.7.6	TOS1 / Tower1 Setup	☑	☐	☐	16d	11/19/25	12/11/25	
1731	1.2	1.2.8.7.6.1	Uncover Hole 1 / String 87	☑	☐	☐	1h	11/19/25	11/19/25	1701
1732	1.2	1.2.8.7.6.2	Relocate TOS1 and Main Hose Reel to Hole 1 / String 87	☑	☐	☐	1d	11/19/25	11/20/25	1731
1733	1.2	1.2.8.7.6.3	Heavy Equipment Support for TOS1 and Main Hose Reel Relocation to Hole 1 / String 87 (USAP)	☑	☐	☐	1d	11/19/25	11/20/25	1732SS
1734	1.2	1.2.8.7.6.4	Position Sensor Handling Structure	☑	☐	☐	1d	11/20/25	11/21/25	1732
1735	1.2	1.2.8.7.6.5	Trench & Install Reel Anchors (Hole 1 & 2)	☑	☐	☐	1d	11/20/25	11/21/25	1732
1736	1.2	1.2.8.7.6.6	Position Hose & Cable Reels (Hole 1)	☑	☐	☐	2d	11/20/25	11/24/25	1735FS -1d
1737	1.2	1.2.8.7.6.7	Hose & Cable Delivery & Layout SES-TOS	☑	☐	☐	3d	11/24/25	11/28/25	1736
1738	1.2	1.2.8.7.6.8	TOS1 Network/Comms Set-up	☑	☐	☐	3d	11/24/25	11/28/25	1736
1739	1.2	1.2.8.7.6.9	Make TOS1 Operational, Deliver Fuel, Fire Furnace	☑	☐	☐	2d	11/28/25	12/02/25	1732, 1724FS -8d,
1740	1.2	1.2.8.7.6.10	Prepare MCA (Mount on TU20, test slip ring), Setup both TU20 (Hole 1 & 2)	☑	☐	☐	2d	12/04/25	12/05/25	1703
1741	1.2	1.2.8.7.6.11	Connect Hose Loop & Circulate Water	☑	☐	☐	2d	12/01/25	12/03/25	1739FS -1d
1742	1.2	1.2.8.7.6.12	Pull Drill Heads from ICL & Final Testing in TOS	☑	☐	☐	4d	12/08/25	12/11/25	
1743	1.2	1.2.8.7.6.13	TOS1/Tower1 Site Ready for Drilling	☑	☑	☑	0	12/11/25	12/11/25	1742, 1741, 1739,
1744	1.2	1.2.8.7.7	TOS2 / Tower2 Setup	☑	☐	☐	5.125d	11/19/25	11/28/25	
1745	1.2	1.2.8.7.7.1	Uncover Hole 2 / String 88	☑	☐	☐	1h	11/19/25	11/19/25	1701
1746	1.2	1.2.8.7.7.2	Relocate TOS2 to Hole 2 / String 88	☑	☐	☐	1d	11/19/25	11/20/25	1745
1747	1.2	1.2.8.7.7.3	Heavy Support for TOS2 Relocation to Hole 2 / String 88 (USAP)	☑	☐	☐	1d	11/19/25	11/20/25	1746SS
1748	1.2	1.2.8.7.7.4	Cable Layout SES to TOS2	☑	☐	☐	3d	11/20/25	11/25/25	1746
1749	1.2	1.2.8.7.7.5	TOS2 Network/Comms Install	☑	☐	☐	3d	11/20/25	11/25/25	1748SS
1750	1.2	1.2.8.7.7.6	Make TOS2 Operational, Deliver Fuel, Fire Furnace	☑	☐	☐	1d	11/25/25	11/26/25	1748
1751	1.2	1.2.8.7.7.7	TOS2/Tower2 Site Ready for Drilling	☑	☑	☑	0	11/26/25	11/26/25	1750
1752	1.2	1.2.8.7.8	EHWD: Drill Commissioning	☑	☐	☐	14d	11/25/25	12/15/25	
1753	1.2	1.2.8.7.8.1	Begin Circulation of Water & Fire Boilers	☑	☐	☐	5d	11/25/25	12/02/25	1715, 1709
1754	1.2	1.2.8.7.8.2	Develop & Establish Rodwell	☑	☐	☐	e14d	12/01/25	12/15/25	1753SS +3d
1755	1.2	1.2.8.7.8.3	New Driller Training	☑	☐	☐	5d	12/03/25	12/09/25	1753, #REF
1756	1.2	1.2.8.7.8.4	Emergency & Safety Systems Tests	☑	☐	☐	4d	12/03/25	12/08/25	1753
1757	1.2	1.2.8.7.8.5	Perform Complete Systems Testing (Wet-test & Comm)	☑	☐	☐	e4d	12/08/25	12/12/25	1756
1758	1.2	1.2.8.7.8.6	Readiness Review/Safety Refresher	☑	☐	☐	e3d	12/12/25	12/15/25	1757
1759	1.2	1.2.8.7.8.7	EHWD System Ready for Drilling	☑	☑	☑	0	12/15/25	12/15/25	1758, 1757, 1756
1760	1.2	1.2.8.7.9	Deep Drilling FSS	☑	☐	☐	19d	12/15/25	01/13/26	
1761	1.2	1.2.8.7.9.1	DRILL HOLE 1 / String 87	☑	☐	☐	4d	12/15/25	12/20/25	
1762	1.2	1.2.8.7.9.1.1	Drill Hole 1 / String 87	☑	☐	☐	e52h	12/15/25	12/17/25	1759
1763	1.2	1.2.8.7.9.1.2	Hole 1 Drilling Complete, Turn Over to Installation Team	☑	☑	☑	0	12/17/25	12/17/25	1762
1764	1.2	1.2.8.7.9.1.3	Installation - Hole 1 / String 87 - Driller Supported	☑	☐	☐	e48h	12/17/25	12/19/25	2148FF
1765	1.2	1.2.8.7.9.1.4	Relocate Hose, Cable Reels to Hole 2 / String 88	☑	☐	☐	e12h	12/17/25	12/18/25	1763, 1735
1766	1.2	1.2.8.7.9.1.5	Heavy Support for Main Hose Reel Relocation (USAP) to Hole 2 / String 88	☑	☐	☐	e4h	12/17/25	12/18/25	1765SS
1767	1.2	1.2.8.7.9.1.6	Relocate Sensor Handling Structure to Hole 2 / String 88	☑	☐	☐	e2h	12/19/25	12/19/25	2149FF
1768	1.2	1.2.8.7.9.1.7	Uncover Hole 3 / String 89	☑	☐	☐	e1h	12/20/25	12/20/25	1769SF
1769	1.2	1.2.8.7.9.1.8	Closeout & Relocate Tower & TOS-1 to Hole 3 / String 89	☑	☐	☐	e8h	12/20/25	12/20/25	2151SS
1770	1.2	1.2.8.7.9.1.9	Heavy Support to Relocate Tower & TOS-1 to Hole 3 / String 89 (USAP)	☑	☐	☐	e2h	12/20/25	12/20/25	1769SS
1771	1.2	1.2.8.7.9.1.10	Trench & Install Reel Anchors at Hole 3 / String 89	☑	☐	☐	e4h	12/20/25	12/20/25	1770
1772	1.2	1.2.8.7.9.1.11	Trenching Support at Hole 3 / String 89 (USAP)	☑	☐	☐	e4h	12/20/25	12/20/25	1771SS
1773	1.2	1.2.8.7.9.1.12	Prepare MCA Cable (Mount on TU20, test slip ring) for Hole 3 / String 89	☑	☐	☐	e8h	12/20/25	12/20/25	2151
1774	1.2	1.2.8.7.9.1.13	Heavy Support for Main Cable Loading (USAP) for Hole 3 / String 89	☑	☐	☐	e2h	12/20/25	12/20/25	1773SS
1775	1.2	1.2.8.7.9.2	Operational Debrief/Drill Maintenance	☑	☐	☐	e24h	12/20/25	12/21/25	1769

L2	WBS	Task Name	NSF	L1 Milestone	L2 Milestone	Internal Milestone	Duration	Start Date	End Date	Predecessor WBS
1776	1.2	1.2.8.7.8.3					3.125d	12/21/25	12/28/25	
		DRILL HOLE 2 / String 88								
1777	1.2	1.2.8.7.9.3.1					e52h	12/21/25	12/23/25	1775
1778	1.2	1.2.8.7.9.3.2					0	12/23/25	12/23/25	1777
1779	1.2	1.2.8.7.9.3.3					e24h	12/23/25	12/24/25	2164FF
1780	1.2	1.2.8.7.9.3.4					e12h	12/23/25	12/24/25	1778, 1771
1781	1.2	1.2.8.7.9.3.5					e4h	12/23/25	12/24/25	1780SS
1782	1.2	1.2.8.7.9.3.6					e2h	12/24/25	12/24/25	2165FF
1783	1.2	1.2.8.7.9.3.7					e1h	12/25/25	12/25/25	1786SF
1784	1.2	1.2.8.7.9.3.12					e8h	12/26/25	12/26/25	2168
1785	1.2	1.2.8.7.9.3.13					e2h	12/26/25	12/26/25	1784SS
1786	1.2	1.2.8.7.9.3.8					e8h	12/25/25	12/26/25	2167
1787	1.2	1.2.8.7.9.3.9					e2h	12/25/25	12/26/25	1786SS
1788	1.2	1.2.8.7.9.3.10					e4h	12/26/25	12/26/25	1787
1789	1.2	1.2.8.7.9.3.11					e4h	12/26/25	12/26/25	1788SS
1790	1.2	1.2.8.7.9.4					1.75d	12/24/25	12/28/25	
		DRILL HOLE 3 / String 89								
1791	1.2	1.2.8.7.9.4.1					e52h	12/24/25	12/26/25	1780, 1769, 1772
1792	1.2	1.2.8.7.9.4.2					0	12/26/25	12/26/25	1791
1793	1.2	1.2.8.7.9.4.3					e24h	12/26/25	12/27/25	2180FF
1794	1.2	1.2.8.7.9.4.4					e12h	12/26/25	12/27/25	1792, 1788
1795	1.2	1.2.8.7.9.4.5					e4h	12/26/25	12/26/25	1794SS
1796	1.2	1.2.8.7.9.4.6					e2h	12/27/25	12/27/25	2182FF
1797	1.2	1.2.8.7.9.4.12					e8h	12/28/25	12/28/25	2184
1798	1.2	1.2.8.7.9.4.13					e2h	12/28/25	12/28/25	1797SS
1799	1.2	1.2.8.7.9.4.7					e1h	12/28/25	12/28/25	1800SF
1800	1.2	1.2.8.7.9.4.8					e8h	12/28/25	12/28/25	2184SS
1801	1.2	1.2.8.7.9.4.9					e2h	12/28/25	12/28/25	1800SS
1802	1.2	1.2.8.7.9.4.10					e4h	12/28/25	12/28/25	1801
1803	1.2	1.2.8.7.9.4.11					e4h	12/28/25	12/28/25	1802SS
1804	1.2	1.2.8.7.9.5					e24h	12/28/25	12/29/25	1789, 1794, 1800
1805	1.2	1.2.8.7.9.6					3.5d	12/29/25	01/02/26	
		DRILL HOLE 4 / String 90								
1806	1.2	1.2.8.7.9.6.1					e52h	12/29/25	12/31/25	1804
1807	1.2	1.2.8.7.9.6.2					0	12/31/25	12/31/25	1806
1808	1.2	1.2.8.7.9.6.3					e24h	12/31/25	01/01/26	2197FF
1809	1.2	1.2.8.7.9.6.4					e12h	12/31/25	01/01/26	1807
1810	1.2	1.2.8.7.9.6.5					e4h	12/31/25	12/31/25	1809SS
1811	1.2	1.2.8.7.9.6.6					e2h	01/01/26	01/01/26	2198FF
1812	1.2	1.2.8.7.9.6.12					e8h	01/02/26	01/02/26	2200
1813	1.2	1.2.8.7.9.6.13					e2h	01/02/26	01/02/26	1812SS
1814	1.2	1.2.8.7.9.6.7					e1h	01/02/26	01/02/26	1815SF
1815	1.2	1.2.8.7.9.6.8					e8h	01/02/26	01/02/26	2200SS
1816	1.2	1.2.8.7.9.6.9					e2h	01/02/26	01/02/26	1815SS
1817	1.2	1.2.8.7.9.6.10					e4h	01/02/26	01/02/26	1816
1818	1.2	1.2.8.7.9.6.11					e4h	01/02/26	01/02/26	1817SS
1819	1.2	1.2.8.7.9.7					2.001d	01/01/26	01/05/26	
		DRILL HOLE 5 / String 91								
1820	1.2	1.2.8.7.9.7.1					e52h	01/01/26	01/03/26	1801, 1803, 1809
1821	1.2	1.2.8.7.9.7.2					0	01/03/26	01/03/26	1820
1822	1.2	1.2.8.7.9.7.3					e24h	01/03/26	01/04/26	2217FF
1823	1.2	1.2.8.7.9.7.4					e12h	01/03/26	01/03/26	1821
1824	1.2	1.2.8.7.9.7.5					e4h	01/03/26	01/03/26	1823SS
1825	1.2	1.2.8.7.9.7.6					e2h	01/04/26	01/04/26	2218FF
1826	1.2	1.2.8.7.9.7.7					e1h	01/04/26	01/04/26	1830SF
1827	1.2	1.2.8.7.9.7.11					e4h	01/04/26	01/05/26	1832SS
1828	1.2	1.2.8.7.9.7.12					e8h	01/05/26	01/05/26	2220
1829	1.2	1.2.8.7.9.7.13					e2h	01/05/26	01/05/26	1828SS
1830	1.2	1.2.8.7.9.7.8					e8h	01/04/26	01/05/26	2220SS
1831	1.2	1.2.8.7.9.7.9					e2h	01/04/26	01/04/26	1830SS
1832	1.2	1.2.8.7.9.7.10					e4h	01/04/26	01/05/26	1831
1833	1.2	1.2.8.7.9.8					e1d	01/05/26	01/06/26	1832, 1823, 1830
1834	1.2	1.2.8.7.9.9					4d	01/06/26	01/10/26	
		DRILL HOLE 6 / String 92								
1835	1.2	1.2.8.7.9.9.1					e52h	01/06/26	01/08/26	1833
1836	1.2	1.2.8.7.9.9.2					0	01/08/26	01/08/26	1835
1837	1.2	1.2.8.7.9.9.3					e12h	01/08/26	01/08/26	2234FF
1838	1.2	1.2.8.7.9.9.4					e24h	01/08/26	01/09/26	2236FF
1839	1.2	1.2.8.7.9.9.5					e12h	01/08/26	01/08/26	1836
1840	1.2	1.2.8.7.9.9.6					e4h	01/08/26	01/08/26	1839SS
1841	1.2	1.2.8.7.9.9.7					e2h	01/09/26	01/09/26	2237
1842	1.2	1.2.8.7.9.9.8					e8h	01/10/26	01/10/26	2239SS
1843	1.2	1.2.8.7.9.9.9					e4h	01/10/26	01/10/26	1842SS
1844	1.2	1.2.8.7.9.10					2d	01/06/26	01/13/26	
		DRILL HOLE 7 / String 93								
1845	1.2	1.2.8.7.9.10.1					e52h	01/08/26	01/11/26	1830, 1832, 1839
1846	1.2	1.2.8.7.9.10.2					0	01/11/26	01/11/26	1845
1847	1.2	1.2.8.7.9.10.3					e24h	01/11/26	01/12/26	2249FF
1848	1.2	1.2.8.7.9.10.4					e12h	01/12/26	01/13/26	2252SS
1849	1.2	1.2.8.7.9.10.5					e6h	01/12/26	01/12/26	1848SS
1850	1.2	1.2.8.7.9.11					0	01/13/26	01/13/26	1848
1851	1.2	1.2.8.7.9.12					1d	01/13/26	01/13/26	1848
1852	1.2	1.2.8.7.9.13					0	01/13/26	01/13/26	1850
1853	1.2	1.2.8.7.10					284d	01/24/25	02/02/26	
		Decommission and Store EHW								

	L2	WBS	Task Name	NSF	L1 Milestone	L2 Milestone	Internal Milestone	Duration	Start Date	End Date	Predecessor WBS
1854	1.2	1.2.8.7.10.1	Create Storage Berms - End-of-the-World Site (USAP)	✓				22d	12/15/25	01/15/26	
1855	1.2	1.2.8.7.10.2	Drain and Decommission EHW Components	✓				4d	01/14/26	01/19/26	1852FS +1d
1856	1.2	1.2.8.7.10.3	Remove & Retro/Store All DNF	✓				5d	01/14/26	01/20/26	1855SS
1857	1.2	1.2.8.7.10.4	Disconnect all Interconnect Cables & Hoses (All including SES to TOS)	✓				6d	01/14/26	01/21/26	1855SS
1858	1.2	1.2.8.7.10.5	Decommission SES	✓				6d	01/14/26	01/21/26	1855SS
1859	1.2	1.2.8.7.10.6	Decommission TOS	✓				6d	01/15/26	01/22/26	
1860	1.2	1.2.8.7.10.7	Winterize all EHW Equipment	✓				5d	01/23/26	01/29/26	1859, 1858
1861	1.2	1.2.8.7.10.8	Removal of Snow Ramp (USAP)	✓				2d	01/30/26	02/02/26	1860
1862	1.2	1.2.8.7.10.9	Tow and Place EHW onto Berms for Long-Term Storage (USAP)	✓				2d	01/30/26	02/02/26	1861SS
1863	1.2	1.2.8.7.10.10	Remove Drill Hose from MSHR, Respool & Ship to ZCM	✓				9d	01/16/26	01/26/26	
1864	1.2	1.2.8.7.10.10.1	Remove Drill Hose from MSHR and Respool Individually	✓				4d	01/16/26	01/21/26	1855SS +2d
1865	1.2	1.2.8.7.10.10.2	Drill Hose Respoled	✓			✓	0	01/21/26	01/21/26	1864
1866	1.2	1.2.8.7.10.10.3	Deliver to Cargo Yard and Prepare for Shipping (Driller & USAP)	✓				5d	01/22/26	01/28/26	1865
1867	1.2	1.2.8.7.10.10.4	Drill Hose Shipped to MCM (USAP)	✓			✓	0	01/28/26	01/28/26	1866
1868	1.2	1.2.8.7.10.11	Winterization and Storage of EHW Equipment Complete	✓			✓	0	02/02/26	02/02/26	1867, 1862, 1860
1869	1.2	1.2.8.7.10.12	Inventory & Photograph EHW, Document Repairs Needed	✓				3d	01/20/26	01/22/26	1866FS -1d
1870	1.2	1.2.8.7.10.13	UNL Equipment - Deliver to Cargo for Retro or Redistribution	✓				3d	01/22/26	01/26/26	1869FS -1d
1871	1.2	1.2.8.7.10.14	Crate and Deliver EHW Equipment to Cargo for Retrograde or Redistribution	✓				5d	01/24/25	01/30/25	
1872	1.2	1.2.8.7.10.15	Storage and Retrograde Complete	✓			✓	0	01/31/25	01/31/25	1871FS +1d
1873	1.2	1.2.8.7.10.16	Pole and MCM Cargo Retro Support (USAP)	✓				18d	01/24/25	02/18/25	1871SS
1874	1.2	1.2.8.7.10.17	MCM Receive and Berm Drill Hose at the MCM (USAP)	✓			✓	0	01/28/26	01/28/26	1867
1875	1.2	1.2.8.7.11	Other Field Activities (FS3 Season)	✓				278d	01/15/25	02/08/26	
1876	1.2	1.2.8.7.11.1	MCM Field Logistics Rep (PSL)	✓				30d	11/11/25	12/23/25	
1877	1.2	1.2.8.7.11.2	Electrician Support for Power Generation (USAP)	✓				3d	11/21/25	11/25/25	1700FS +2d
1878	1.2	1.2.8.7.11.3	MCM and Pole Logistics Support (USAP)	✓				44d	10/15/25	12/16/25	
1879	1.2	1.2.8.7.11.4	Equipment Ops Support - Moves, TU-20 Loading, Season Snow Removal, Road Maint. (USAP)	✓				59d	11/15/25	02/09/26	
1880	1.2	1.2.8.7.11.5	Season Fuel Delivery - 5k Fuel Tanks (USAP)	✓				1d	11/20/25	11/20/25	
1881	1.2	1.2.8.7.11.6	Survey Support for As-Built Drawing (USAP)	✓				6d	01/15/25	01/22/25	
1882	1.2	1.2.8.7.12	ICU Field Team Redeployed	✓			✓	0	02/03/26	02/03/26	1872, 1860, 1856,
1883	1.2	1.2.8.7.13	On-Ice Labor (FS3)	✓				64d	10/31/25	02/02/26	1868FF
1884	1.2	1.2.8.7.14	NPX Activities Complete (FS3 Season)	✓			✓	0	02/02/26	02/02/26	1868
1885	1.2	1.2.9	Installation - Off-Ice	✓				884d	11/01/21	02/28/25	
1886	1.2	1.2.9.1	Sensor Handling & Testing: Process & Equipment	✓				656d	01/02/22	07/10/24	
1888	1.2	1.2.9.1.2	South Pole Acceptance Testing (SPAT) Ready to be shipped from UW	✓			✓	0	07/10/24	07/10/24	3415FS +7d
1889	1.2	1.2.9.1.3	Sensor Handling Equipment	✓				46d	08/15/22	10/17/22	
1891	1.2	1.2.9.1.3.2	Procure Sensor Handling Equipment	✓				20d	09/16/22	10/13/22	1890
1892	1.2	1.2.9.1.3.3	Procure ESD Mitigation Equipment	✓				20d	09/20/22	10/17/22	1891SS +2d
1905	1.2	1.2.9.2	Rigging Hardware for String Installation	✓				427d	11/01/21	08/20/23	
1911	1.2	1.2.9.2.6	Finalize Installation Hardware and Procedure	✓				21d	09/16/22	10/14/22	1910
1912	1.2	1.2.9.2.7	Installation Hardware and Procedure Finalized	✓			✓	0	10/14/22	10/14/22	1911
1913	1.2	1.2.9.2.8	Procure Installation Hardware	✓				62d	11/04/22	01/30/23	1912FS +14d
1914	1.2	1.2.9.2.9	Procure Installation Weights	✓				44d	11/04/22	01/04/23	1912FS +14d
1915	1.2	1.2.9.2.10	Receive, & Inspect Installation Materials	✓				20d	03/01/23	03/28/23	1914SS +83d
1916	1.2	1.2.9.2.11	Assemble Installation Kits	✓				60d	03/29/23	06/20/23	1915
1917	1.2	1.2.9.3	Installation Monitor Equipment: Depth Monitor & Handheld Connectivity Testers	✓				652d	04/01/22	10/03/24	
1918	1.2	1.2.9.3.1	IME TOS Connectivity Tester	✓				545d	06/01/22	07/05/24	
1920	1.2	1.2.9.3.1.2	IME TOS Connectivity Tester Development and System Integration (2022-23)	✓				261d	10/03/22	10/02/23	1919
1921	1.2	1.2.9.3.1.3	IME TOS Connectivity Tester Final Procurement and System Integration (2023-24)	✓				457d	10/03/22	07/05/24	1920SS
1922	1.2	1.2.9.3.1.4	IME TOS Connectivity Tester Fabrication Complete	✓			✓	0	07/05/24	07/05/24	1921
1923	1.2	1.2.9.3.2	IME ICL Quad Connectivity Tester Design, Prototype, Production (2023-24)	✓				282d	10/01/23	10/03/24	
1924	1.2	1.2.9.3.2.1	IME ICL Quad Connectivity Tester Design, Prototype, Production (2023-24)	✓				262d	10/01/23	10/03/24	
1925	1.2	1.2.9.3.2.2	IME ICL Quad Connectivity Tester Fabrication Complete	✓			✓	0	10/03/24	10/03/24	1924
1926	1.2	1.2.9.3.3	IME Depth Readout	✓				587d	04/01/22	07/04/24	
1928	1.2	1.2.9.3.3.2	IME Depth Readout Development and System Integration (2022-23)	✓				261d	10/03/22	10/02/23	1927
1929	1.2	1.2.9.3.3.3	IME Depth Readout System Final Integration (2023-24)	✓				197d	10/01/23	07/04/24	
1930	1.2	1.2.9.3.3.4	IME Depth Readout Fabrication Complete	✓			✓	0	07/04/24	07/04/24	1929
1933	1.2	1.2.9.3.3.7	Procure Pressure Sensors	✓				60d	02/01/24	04/24/24	
1934	1.2	1.2.9.3.3.8	Pressure Sensors Received	✓			✓	0	05/22/24	05/22/24	1933FS +20d
1935	1.2	1.2.9.4	Logging & Calibration Support	✓				627d	03/01/22	07/28/24	
1936	1.2	1.2.9.4.1	Logging Coordination	✓				178d	03/01/22	11/01/22	
1939	1.2	1.2.9.4.1.3	Coordinate Winch Training	✓				22d	10/03/22	11/01/22	1938
1940	1.2	1.2.9.4.2	Logbook & Geometry Support	✓				141d	01/15/24	07/28/24	
1941	1.2	1.2.9.4.2.1	Define Logbook Requirements	✓				22d	01/15/24	02/13/24	
1942	1.2	1.2.9.4.2.2	Develop Logbook	✓				60d	04/17/24	07/09/24	1941FS +45d
1943	1.2	1.2.9.4.2.3	Procure Logbook Tablets	✓				60d	04/17/24	07/09/24	1942SS
1944	1.2	1.2.9.4.2.4	Logbook Complete	✓			✓	0	07/29/24	07/29/24	1942FS +14d
1945	1.2	1.2.9.4.2.5	Procure Laser Rangefinders, Tape Measures, Shop Lights, Helmets for Installation	✓				90d	02/01/24	06/05/24	
1946	1.2	1.2.9.5	Develop Installation Training Package	✓				33d	01/15/25	02/28/25	
1947	1.2	1.2.10	Installation Field Seasons - Antarctica	✓				962d	06/01/22	02/18/26	
1948	1.2	1.2.10.1	Seasonal Staffing & Training, Off-Ice Coordination	✓				585d	06/07/23	08/13/25	
1949	1.2	1.2.10.1.1	FS1 Off-Ice Installation Training (Installers, including alternates) - Place Holder	✓				5d	06/07/23	06/13/23	995SS +5d
1950	1.2	1.2.10.1.2	FS2 Off-Ice Installation Training (Installers, including alternates)	✓				5d	06/07/24	06/13/24	996SS +5d
1951	1.2	1.2.10.1.3	FS3 Off-Ice Installation Training (Drillers, Installers, Management, including alternates)	✓				8d	08/04/25	08/13/25	
1952	1.2	1.2.10.1.4	FS3 Off-Ice Logging Winch Training (Installation Manager)	✓				1d	05/27/25	05/27/25	997SS -1d
1953	1.2	1.2.10.2	USAP Field Season 0 (FY23)	✓				188d	06/01/22	02/15/23	
1954	1.2	1.2.10.2.1	Installation Team FS0 Arrives (Placeholder)	✓			✓	0	11/15/22	11/15/22	
1955	1.2	1.2.10.2.2	PQ, ECW, Deployment Travel Costs Installation Team FS0 (Placeholder)	✓				186d	06/01/22	02/15/23	
1956	1.2	1.2.10.2.3	Cargo Movements (USAP)	✓				5d	02/06/23	02/10/23	

	L2	WBS	Task Name	NSF	L1 Milestone	L2 Milestone	Internal Milestone	Duration	Start Date	End Date	Predecessor WBS
1957	1.2	1.2.10.2.3.1	Pole (USAP) Placeholder	✓			✓	0	02/06/23	02/06/23	
1958	1.2	1.2.10.2.3.2	MCM (USAP)	✓			✓	0	02/06/23	02/06/23	
1959	1.2	1.2.10.2.3.2.1	MCM SAAM - ComSur (USAP)	✓			✓	0	02/06/23	02/06/23	
1960	1.2	1.2.10.2.3.2.1.1	MCM SAAM - ComSur (USAP)	✓			✓	0	02/06/23	02/06/23	
1961	1.2	1.2.10.2.3.2.2	Vessel FY23 (USAP)	✓			✓	0	02/06/23	02/06/23	
1962	1.2	1.2.10.2.3.2.2.1	Surface Cables Assemblies (SCAs) Arrive (USAP)	✓			✓	0	02/06/23	02/06/23	
1963	1.2	1.2.10.2.3.2.2.2	SJBs Arrive (USAP)	✓			✓	0	02/06/23	02/06/23	
1964	1.2	1.2.10.2.3.2.2.3	Sensor Handling Facility Arrives (USAP)	✓			✓	0	02/06/23	02/06/23	
1965	1.2	1.2.10.2.3.3	Retrograde (USAP)	✓				1d	02/06/23	02/06/23	
1966	1.2	1.2.10.2.3.4	Cargo Storage Support Pole & MCM (USAP)	✓				5d	02/06/23	02/10/23	
1967	1.2	1.2.10.3	USAP Field Season 1 (FY24)	✓				289d	02/06/23	02/20/24	
1968	1.2	1.2.10.3.1	Installation Team FS1 Arrives (Placeholder)	✓			✓	0	02/06/23	02/06/23	
1969	1.2	1.2.10.3.2	PQ, ECW, Deployment Travel Costs Installation Team FS1 (Placeholder)	✓			✓	0	02/06/23	02/06/23	
1970	1.2	1.2.10.3.3	Cargo Movements (USAP)	✓				67d	11/15/23	02/20/24	
1971	1.2	1.2.10.3.3.1	Pole (USAP)	✓				67d	11/15/23	02/20/24	
1972	1.2	1.2.10.3.3.1.1	SPoT 1	✓			✓	0	12/01/23	12/01/23	
1973	1.2	1.2.10.3.3.1.1.1	Sensor Handling Facility Arrives - Pole (USAP)	✓			✓	0	12/01/23	12/01/23	
1974	1.2	1.2.10.3.3.1.1.2	SJBs Arrive - Pole (USAP)	✓			✓	0	12/01/23	12/01/23	
1975	1.2	1.2.10.3.3.1.2	SPoT 2	✓			✓	0	01/01/24	01/01/24	
1976	1.2	1.2.10.3.3.1.2.1	Placeholder	✓			✓	0	01/01/24	01/01/24	
1977	1.2	1.2.10.3.3.1.3	SPoT 3	✓			✓	0	02/01/24	02/01/24	
1978	1.2	1.2.10.3.3.1.3.1	Placeholder	✓			✓	0	02/01/24	02/01/24	
1979	1.2	1.2.10.3.3.1.4	LC-130	✓				67d	11/15/23	02/20/24	
1980	1.2	1.2.10.3.3.1.4.1	Placeholder	✓				67d	11/15/23	02/20/24	
1981	1.2	1.2.10.3.3.2	MCM (USAP)	✓				3d	02/06/24	02/06/24	
1982	1.2	1.2.10.3.3.2.1	MCM SAAM - ComSur (USAP)	✓				1d	02/06/24	02/06/24	
1983	1.2	1.2.10.3.3.2.1.1	Placeholder	✓				1d	02/06/24	02/06/24	
1984	1.2	1.2.10.3.3.2.2	Vessel (USAP)	✓			✓	0	02/06/24	02/06/24	
1985	1.2	1.2.10.3.3.2.2.1	Installation Weights Arrive - MCM (USAP)	✓			✓	0	02/06/24	02/06/24	
1986	1.2	1.2.10.3.3.2.2.2	Installation Kits Arrive - MCM (USAP)	✓			✓	0	02/06/24	02/06/24	
1987	1.2	1.2.10.3.3.3	Retrograde (USAP)	✓				1d	02/06/24	02/06/24	
1988	1.2	1.2.10.3.3.3.1	Placeholder	✓				1d	02/09/24	02/09/24	
1989	1.2	1.2.10.3.3.4	Cargo Storage Support Pole & MCM (USAP)	✓				4d	12/01/23	12/06/23	
1990	1.2	1.2.10.4	USAP Field Season 2 (FY25)	✓				198d	06/01/24	02/19/25	
1991	1.2	1.2.10.4.1	Installation Team FS2 Arrives (Headcount 1)	✓			✓	0	12/10/24	12/10/24	
1992	1.2	1.2.10.4.2	PQ, ECW, Deployment Travel Costs Installation Team FS2 (Headcount 1)	✓				186d	06/01/24	02/19/25	
1993	1.2	1.2.10.4.3	Cargo Movements (USAP)	✓				75d	11/01/24	02/18/25	
1994	1.2	1.2.10.4.3.1	Pole (USAP)	✓				54d	12/01/24	02/15/25	
1995	1.2	1.2.10.4.3.1.1	LC-130 (USAP)	✓				54d	12/01/24	02/15/25	
1996	1.2	1.2.10.4.3.1.1.1	ICL Power and Timing Electronics Arrive - Pole (USAP)	✓			✓	0	12/01/24	12/01/24	
1997	1.2	1.2.10.4.3.1.1.2	ICL Patch Cables and Patch Panels Arrive - Pole (USAP)	✓			✓	0	12/01/24	12/01/24	
1998	1.2	1.2.10.4.3.1.1.3	Field Hub Electronics - Pole (USAP)	✓			✓	0	12/01/24	12/01/24	
1999	1.2	1.2.10.4.3.1.1.4	Science Crate SF2 (SPAT, IME, Pressure Sensors, Laser Ranglers) Equipment Arrives - Pole (USAP)	✓			✓	0	12/01/24	12/01/24	
2000	1.2	1.2.10.4.3.1.1.5	String 87 & 88 Sensors Arrive (D-Eggs from Japan, mDOMs from Germany) - Pole (USAP)	✓			✓	0	12/15/24	12/15/24	
2001	1.2	1.2.10.4.3.1.1.6	String 87 & 88 Calibration Devices Arrive (Europe, USA) - Pole (USAP)	✓			✓	0	12/15/24	12/15/24	
2002	1.2	1.2.10.4.3.1.1.7	String 87 & 88 Special Devices Arrive (Europe, USA) - Pole (USAP)	✓			✓	0	12/15/24	12/15/24	
2003	1.2	1.2.10.4.3.1.1.8	String 87 & 88 BCAs Arrive - Pole (USAP)	✓			✓	0	02/15/25	02/15/25	
2004	1.2	1.2.10.4.3.1.2	SPoT 1 (USAP)	✓			✓	0	12/01/24	12/01/24	
2005	1.2	1.2.10.4.3.1.2.1	SCA x7 Arrive - Pole (USAP)	✓			✓	0	12/01/24	12/01/24	
2006	1.2	1.2.10.4.3.1.3	SPoT 2 (USAP)	✓			✓	0	01/01/25	01/01/25	
2007	1.2	1.2.10.4.3.1.3.1	Installation Kits Arrive - Pole (USAP)	✓			✓	0	01/01/25	01/01/25	
2008	1.2	1.2.10.4.3.1.3.2	Installation Weights Arrive - Pole (USAP)	✓			✓	0	01/01/25	01/01/25	
2009	1.2	1.2.10.4.3.1.4	SPoT 3 (USAP)	✓			✓	0	02/01/25	02/01/25	
2010	1.2	1.2.10.4.3.1.4.1	Placeholder	✓			✓	0	02/01/25	02/01/25	
2011	1.2	1.2.10.4.3.2	MCM (USAP)	✓				66d	11/01/24	02/06/25	
2012	1.2	1.2.10.4.3.2.1	MCM SAAM - ComSur (USAP)	✓			✓	0	11/01/24	11/01/24	
2013	1.2	1.2.10.4.3.1.1.1	ICL Power and Timing Electronics Arrive (USAP)	✓			✓	0	11/01/24	11/01/24	
2014	1.2	1.2.10.4.3.1.1.2	ICL Patch Cables and Patch Panels Arrive (USAP)	✓			✓	0	11/01/24	11/01/24	
2015	1.2	1.2.10.4.3.1.1.3	Field Hub Electronics (USAP)	✓			✓	0	11/01/24	11/01/24	
2016	1.2	1.2.10.4.3.1.1.4	Science Crate SF2 (SPAT, IME, Pressure Sensors, Laser Ranglers) Equipment (USAP)	✓			✓	0	11/01/24	11/01/24	
2017	1.2	1.2.10.4.3.1.1.5	String 87 & 88 Sensors Arrive (D-Eggs from Japan, mDOMs from Germany) (USAP)	✓			✓	0	11/01/24	11/01/24	
2018	1.2	1.2.10.4.3.1.1.6	String 87 & 88 Calibration Devices Arrive (Europe, USA) (USAP)	✓			✓	0	11/01/24	11/01/24	
2019	1.2	1.2.10.4.3.1.1.7	String 87 & 88 Special Devices Arrive (Europe, USA) (USAP)	✓			✓	0	11/01/24	11/01/24	
2020	1.2	1.2.10.4.3.2.2	Vessel (USAP)	✓			✓	0	02/06/25	02/06/25	
2021	1.2	1.2.10.4.3.2.2.1	Downhole MCAs - (USAP)	✓			✓	0	02/06/25	02/06/25	
2022	1.2	1.2.10.4.3.2.2.2	Downhole Load Members ? - (USAP)	✓			✓	0	02/06/25	02/06/25	
2023	1.2	1.2.10.4.3.2.2.3	String 87 & 88 BCAs - (USAP)	✓			✓	0	02/06/25	02/06/25	
2024	1.2	1.2.10.4.3.2.2.4	String 89-93 BCAs (USAP)	✓			✓	0	02/06/25	02/06/25	
2025	1.2	1.2.10.4.3.3	Retrograde (USAP)	✓			✓	0	02/06/25	02/06/25	
2026	1.2	1.2.10.4.3.4	Cargo Storage Support Pole & MCM (USAP)	✓				56d	12/01/24	02/18/25	
2027	1.2	1.2.10.4.4	Sensor Sleds & Tent	✓				17d	12/01/24	12/24/24	
2028	1.2	1.2.10.4.4.1	Sensor Sleds Construction/Prep Oversight	✓				5d	12/01/24	12/05/24	
2029	1.2	1.2.10.4.4.2	Sensor Sleds Construction/Prep Support (USAP)	✓				5d	12/02/24	12/06/24	2028SS, 2028FF
2030	1.2	1.2.10.4.4.3	Sensor Sleds Ready	✓			✓	0	12/06/24	12/06/24	2029
2031	1.2	1.2.10.4.4.4	Sensor Testing Tent Prep Oversight	✓				5d	12/01/24	12/05/24	
2032	1.2	1.2.10.4.4.5	Sensor Testing Tent Prep Support (USAP)	✓				5d	12/02/24	12/06/24	2031SS, 2031FF
2033	1.2	1.2.10.4.4.6	Sensor Testing Tent Ready	✓			✓	0	12/06/24	12/06/24	2032
2034	1.2	1.2.10.4.4.7	Setup SPAT in tent	✓				67d	12/17/24	12/24/24	1999FS +1d, 3416FS

L2	WBS	Task Name	NSF	L1 Milestone	L2 Milestone	Internal Milestone	Duration	Start Date	End Date	Predecessor WBS
2035	1.2	1.2.10.4.4.8	SPAT ready	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	12/24/24	12/24/24	2034
2036	1.2	1.2.10.4.5	[-] Sensor Handling Facility Assembly	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17d	12/04/24	12/27/24	
2037	1.2	1.2.10.4.5.1	Sensor Handling Facility Assembly Oversight	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14d	12/04/24	12/23/24	
2038	1.2	1.2.10.4.5.2	Sensor Handling Facility Assembly - Assemble Skis and Deck, Erect Walls, Construct Walls, Construct Roof (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14d	12/04/24	12/23/24	2037SS
2039	1.2	1.2.10.4.5.3	Sensor Handling Facility Assembly Crane Support (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14d	12/04/24	12/23/24	2037SS
2040	1.2	1.2.10.4.5.4	Sensor Handling Facility Construction Complete	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	12/23/24	12/23/24	2039, 2038
2041	1.2	1.2.10.4.5.5	Position Sensor Handling Facility near Tower	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1d	12/24/24	12/24/24	2040
2042	1.2	1.2.10.4.5.6	Sensor Handling Dry Run	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2d	12/26/24	12/27/24	2041
2043	1.2	1.2.10.4.6	[-] String Component Activities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	24d	12/15/24	01/20/25	
2044	1.2	1.2.10.4.6.1	Receive and inspect Installation Kits & Weights Shipments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3d	01/02/25	01/06/25	2008
2045	1.2	1.2.10.4.6.2	Receive and inspect String 87 & 88 Sensors, Calibration & Special Devices Shipments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	e1d	12/15/24	12/16/24	2001
2046	1.2	1.2.10.4.6.3	Load String 87 Sensors on Sleds 1,2 for testing prior to storage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	e6h	12/26/24	12/26/24	2001FS +1d, 2035FS
2047	1.2	1.2.10.4.6.4	Load String 87 Sensors on Sleds 3,4 for testing prior to storage (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	e6h	12/26/24	12/26/24	2046SS
2048	1.2	1.2.10.4.6.5	Load String 88 Sensors on Sleds 3,4 for testing prior to storage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	e6h	12/27/24	12/27/24	2035FS +1d, 2030FS
2049	1.2	1.2.10.4.6.6	Load String 88 Sensors on Sleds 3,4 for testing prior to storage (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	e6h	12/27/24	12/27/24	2048SS
2050	1.2	1.2.10.4.6.7	Conduct South Pole Acceptance Testing (SPAT) String 87	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	e7d	12/26/24	01/02/25	2001FS +1d, 2035FS
2051	1.2	1.2.10.4.6.8	Conduct South Pole Acceptance Testing (SPAT) String 88	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	e7d	01/03/25	01/10/25	2049FS +1d, 2050FS
2052	1.2	1.2.10.4.6.9	Conduct South Pole Acceptance Testing (SPAT) Special Devices String 87-88	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	e7d	01/13/25	01/20/25	2051FS +1d
2053	1.2	1.2.10.4.6.10	IME deployment and integration	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20d	12/18/24	01/16/25	
2054	1.2	1.2.10.4.7	[-] Surface Cable Activities (SJB to ICL)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	64d	11/10/24	01/27/25	
2055	1.2	1.2.10.4.7.1	Survey Trenches, Surface Junction Boxes and Holes (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3d	11/10/24	11/12/24	
2056	1.2	1.2.10.4.7.2	Prep & Compact Surface Near ICL for Cable Install (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3d	12/01/24	12/03/24	
2057	1.2	1.2.10.4.7.3	Open and Modify Tower, Bridge & ICL for Cable Routing (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4d	12/04/24	12/09/24	2056
2058	1.2	1.2.10.4.7.4	Excavate ICL Tower for Cable Entry & Routing (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1d	12/10/24	12/10/24	2057
2059	1.2	1.2.10.4.7.5	Prep/Uncrate Cable Spools; Load on 953 Loader	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7d	12/17/24	12/26/24	2058, 3047FS +1d
2060	1.2	1.2.10.4.7.6	Prep/Uncrate Cable Spools; Load on 953 Loader (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7d	12/11/24	12/19/24	2058
2061	1.2	1.2.10.4.7.7	Install 7 Surface Cables into ICL Tower, Across Bridge, into ICL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7d	12/17/24	12/26/24	2059SS
2062	1.2	1.2.10.4.7.8	Install 7 Surface Cables into ICL Tower, Across Bridge, into ICL (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7d	12/17/24	12/26/24	2059SS
2063	1.2	1.2.10.4.7.9	Close ICL Tower Bridge (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1d	12/30/24	12/30/24	2062FS +1d
2064	1.2	1.2.10.4.7.10	Prep Cables & Attach to Grounding System in ICL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2d	12/27/24	12/30/24	2062
2065	1.2	1.2.10.4.7.11	Prep Cables & Attach to Grounding System in ICL (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2d	12/27/24	12/30/24	2062
2066	1.2	1.2.10.4.7.12	Excavate Surface Junction Box Pits (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1d	12/10/24	12/10/24	2068SS
2067	1.2	1.2.10.4.7.13	Trench (mechanical) from SJB to ICL Tower (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2d	12/27/24	12/30/24	2061
2068	1.2	1.2.10.4.7.14	Unspool & Lay Surface Cables from Tower to SJB Pits	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2d	12/30/24	12/31/24	2067FS -1d
2069	1.2	1.2.10.4.7.15	Unspool & Lay Surface Cables from Tower to SJB Pits (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2d	12/30/24	12/31/24	2067FS -1d
2070	1.2	1.2.10.4.7.16	Install SJB's in Pits (2); Connect Cables	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2d	01/02/25	01/03/25	2069
2071	1.2	1.2.10.4.7.17	Build & Install Temp-Vault w/Lid (6x10x4h) (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3d	01/02/25	01/06/25	2070SS
2072	1.2	1.2.10.4.7.18	Survey (as built), Backfill, and Flag Pits & Trenches (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3d	01/03/25	01/07/25	2070FS -1d
2073	1.2	1.2.10.4.7.19	Surface Cable Continuity Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2d	01/07/25	01/08/25	2070FS +1d
2074	1.2	1.2.10.4.7.20	Maintain access to SJBs (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15d	01/07/25	01/27/25	2070FS +1d
2075	1.2	1.2.10.4.8	[-] ICL Upgrade Activities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	24d	12/31/24	02/03/25	
2076	1.2	1.2.10.4.8.1	ICL Upgrade Activities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	19d	01/08/25	02/03/25	3082SS, 3042FF
2077	1.2	1.2.10.4.8.1	Field Hubs, timing system, patch panels and patch cables installation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	19d	12/31/24	01/27/25	
2078	1.2	1.2.10.4.9	[-] End of NPX Season Installation Close-Out Work	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	19d	12/31/24	01/27/25	
2079	1.2	1.2.10.4.9.1	Store Sensor Handling Facility for Winter (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3d	12/31/24	01/03/25	2042FS +1d
2080	1.2	1.2.10.4.9.2	Sensor Sleds Winter Storage (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5d	01/21/25	01/27/25	2081
2081	1.2	1.2.10.4.9.3	Store 87 & 88 Sensors in Cryo Helium Bay for Winter	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3d	01/16/25	01/20/25	2053FS -1d
2082	1.2	1.2.10.4.9.4	Support Storage 87 & 88 Sensors in Cryo Helium Bay for Winter (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3d	01/16/25	01/20/25	2081SS
2083	1.2	1.2.10.4.9.5	Store 87 & 88 Special Devices and BCAs in ICL for Winter	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3d	01/16/25	01/20/25	2053FS -1d
2084	1.2	1.2.10.4.9.6	Clean up Testing Tent & Store SPAT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3d	01/21/25	01/23/25	2052FS +1d
2085	1.2	1.2.10.4.9.7	Clean up Testing Tent & Store SPAT (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3d	01/21/25	01/23/25	2084SS
2086	1.2	1.2.10.4.10	Installation: On-Ice Labor (FS2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	40d	12/10/24	02/05/25	1991SS, 2087FF
2087	1.2	1.2.10.4.11	END NPX Installation FS2 Season	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	02/05/25	02/05/25	
2088	1.2	1.2.10.5	[-] USAP Field Season 3 (FY28)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	287d	02/06/25	02/18/28	
2089	1.2	1.2.10.5.1	[-] Installation Team Arrives	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11d	11/20/25	12/08/25	
2090	1.2	1.2.10.5.1.1	Installation Team I arrives (1 + 1 In-kind)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/20/25	11/20/25	
2091	1.2	1.2.10.5.1.2	Installation Team II arrives (8 all in kind)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	12/08/25	12/08/25	
2092	1.2	1.2.10.5.2	PQ, ECW, Deployment Travel Costs Install FS2 Installation Team	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	186d	06/01/25	02/18/26	
2093	1.2	1.2.10.5.3	[-] Cargo Movements (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	283d	02/06/25	02/12/28	
2094	1.2	1.2.10.5.3.1	[-] Pole (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3d	11/25/25	12/01/25	
2095	1.2	1.2.10.5.3.1.1	[-] LC-130 (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/25/25	11/25/25	
2096	1.2	1.2.10.5.3.1.1.1	89-93 BCAs Arrive - Pole (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/25/25	11/25/25	
2097	1.2	1.2.10.5.3.1.1.2	Science Crate FS3 Arrive - Pole (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/25/25	11/25/25	
2098	1.2	1.2.10.5.3.1.1.3	String 89-93 BCAs Arrive (McMurdo) - Pole (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/25/25	11/25/25	
2099	1.2	1.2.10.5.3.1.1.4	String 89-93 Sensors Arrive (Japan, USA, Europe) - Pole (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/25/25	11/25/25	
2100	1.2	1.2.10.5.3.1.1.5	String 89-93 Special Devices (Germany, USA) Arrive Pole (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/25/25	11/25/25	
2101	1.2	1.2.10.5.3.1.1.6	String 89-93 Calibration Devices (Europe, USA) Arrive Pole (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/25/25	11/25/25	
2102	1.2	1.2.10.5.3.1.1.7	Dust Logger and Dust Logger Winch Arrives Pole (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/25/25	11/25/25	
2103	1.2	1.2.10.5.3.1.1.8	DM-Ice (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/25/25	11/25/25	
2104	1.2	1.2.10.5.3.1.2	[-] SPOT 1 (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	12/01/25	12/01/25	
2105	1.2	1.2.10.5.3.1.2.1	MCAs Arrive - Pole (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	12/01/25	12/01/25	
2106	1.2	1.2.10.5.3.1.2.2	Load Members Arrive - Pole (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	12/01/25	12/01/25	
2107	1.2	1.2.10.5.3.1.3	[-] SPOT 2 (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/25/25	11/25/25	
2108	1.2	1.2.10.5.3.1.3.1	Placeholder	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/25/25	11/25/25	
2109	1.2	1.2.10.5.3.1.4	[-] SPOT 3 (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/25/25	11/25/25	
2110	1.2	1.2.10.5.3.1.4.1	Placeholder	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/25/25	11/25/25	
2111	1.2	1.2.10.5.3.2	[-] MCM (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/01/25	11/01/25	
2112	1.2	1.2.10.5.3.2.1	[-] MCM SAAM - ComSur (USAP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/01/25	11/01/25	

L2	WBS	Task Name	NSF	L1 Milestone	L2 Milestone	Internal Milestone	Duration	Start Date	End Date	Predecessor WBS	
2113	1.2	1.2.10.5.3.2.1.1	Science Crate FS3 Arrive - (USAP)	☑	☐	☐	☑	0	11/01/25	11/01/25	
2114	1.2	1.2.10.5.3.2.1.2	String 89-93 BCAs Arrive (McMurdo) - (USAP)	☑	☐	☐	☑	0	11/01/25	11/01/25	
2115	1.2	1.2.10.5.3.2.1.3	String 89-93 Sensors Arrive (Japan, USA, Europe) - (USAP)	☑	☐	☐	☑	0	11/01/25	11/01/25	
2116	1.2	1.2.10.5.3.2.1.4	String 89-93 Special Devices (Germany, USA) Arrive Pole - (USAP)	☑	☐	☐	☑	0	11/01/25	11/01/25	
2117	1.2	1.2.10.5.3.2.1.5	String 89-93 Calibration Devices (Europe, USA) - (USAP)	☑	☐	☐	☑	0	11/01/25	11/01/25	
2118	1.2	1.2.10.5.3.2.1.6	Dust Logger and Dust Logger Winch - (USAP)	☑	☐	☐	☑	0	11/01/25	11/01/25	
2119	1.2	1.2.10.5.3.2.1.7	DM-Ice (USAP)	☑	☐	☐	☑	0	11/01/25	11/01/25	
2120	1.2	1.2.10.5.3.2.2	☐ Vessel (USAP)	☑	☐	☐	☑	0	11/01/25	11/01/25	
2121	1.2	1.2.10.5.3.2.2.1	Placeholder	☑	☐	☐	☑	0	11/01/25	11/01/25	
2122	1.2	1.2.10.5.3.3	Retrograde (USAP)	☑	☐	☐	☑	0	02/06/25	02/06/25	
2123	1.2	1.2.10.5.3.4	Cargo Storage Support Pole & MCM (USAP)	☑	☐	☐	☐	52d	12/01/25	02/12/26	
2124	1.2	1.2.10.5.4	☐ Pre-Installation Activities	☑	☐	☐	☐	16d	11/21/25	12/16/25	
2125	1.2	1.2.10.5.4.1	Prep Sensor Testing Tent for SPAT & De-Berm Sleds	☑	☐	☐	☐	3d	11/21/25	11/25/25	2090FS +1d, 2131SF -
2126	1.2	1.2.10.5.4.2	Prep Sensor Testing Tent for SPAT & De-Berm Sleds (USAP)	☑	☐	☐	☐	3d	11/21/25	11/25/25	2125SS
2127	1.2	1.2.10.5.4.3	Prep Sensor Handling Facility	☑	☐	☐	☐	3d	11/21/25	11/25/25	2090FS +1d
2128	1.2	1.2.10.5.4.4	On-ice Sensor Handling Training	☑	☐	☐	☐	1d	12/10/25	12/10/25	2127, 2091FS +2d,
2129	1.2	1.2.10.5.4.5	Receive and Inspect MCAs & load members	☑	☐	☐	☐	3d	12/01/25	12/03/25	2105, 3123
2130	1.2	1.2.10.5.4.6	Receive and Inspect BCAs & String 89-93 Sensors	☑	☐	☐	☐	2d	11/25/25	11/26/25	2098, 2099
2131	1.2	1.2.10.5.4.7	Take out String 87 Sensors from Storage; Load sensor String 87 on sleds 1 & 2	☑	☐	☐	☐	e12h	11/21/25	11/21/25	3418FS +1d
2132	1.2	1.2.10.5.4.8	Take out String 87 Sensors from Storage; Load sensor String 87 on sleds 1 & 2 (USAP)	☑	☐	☐	☐	e12h	11/21/25	11/21/25	2131SS
2133	1.2	1.2.10.5.4.9	SPAT String 87	☑	☐	☐	☐	e7d	11/26/25	12/03/25	2131, 2136SF -1d
2134	1.2	1.2.10.5.4.10	Take out String 88 Sensors from Storage; Load sensor String 88 on sleds 3 & 4	☑	☐	☐	☐	e12h	11/21/25	11/22/25	2131
2135	1.2	1.2.10.5.4.11	Take out String 88 Sensors from Storage; Load sensor String 88 on sleds 3 & 4 (USAP)	☑	☐	☐	☐	e12h	11/21/25	11/22/25	2134SS
2136	1.2	1.2.10.5.4.12	SPAT String 88	☑	☐	☐	☐	e7d	12/05/25	12/12/25	2135, 1762SF -2d
2137	1.2	1.2.10.5.4.13	Excavation Pit #1	☑	☐	☐	☐	3d	12/11/25	12/15/25	1762FF -2d
2138	1.2	1.2.10.5.4.14	Excavation Pit #1 (USAP)	☑	☐	☐	☐	3d	12/11/25	12/15/25	2137SS
2139	1.2	1.2.10.5.4.15	Dust Logger / Dust Logger Winch On-ice Test	☑	☐	☐	☐	5d	11/21/25	12/01/25	2102SF +1d, 2090FS
2140	1.2	1.2.10.5.4.16	Installation Team On Ice Training and Installation Preparation	☑	☐	☐	☐	5d	12/08/25	12/12/25	2091
2141	1.2	1.2.10.5.4.17	On-ice Readiness Review for 1st Hole Drill/Deployment	☑	☐	☐	☐	1d	12/15/25	12/15/25	1758FF
2142	1.2	1.2.10.5.4.18	Installation Team Ready for Deployment	☑	☐	☐	☑	0	12/12/25	12/12/25	2140
2143	1.2	1.2.10.5.5	☐ String Installation Field Activities	☑	☐	☐	☐	27.501d	12/03/25	01/13/26	
2144	1.2	1.2.10.5.5.1	☐ Installation - String 87 - Hole 1	☑	☐	☐	☐	13d	12/03/25	12/21/25	
2145	1.2	1.2.10.5.5.1.1	Load String 87 Sensors in Sensor Handling Facility	☑	☐	☐	☐	e12h	12/03/25	12/03/25	1734, 2133
2146	1.2	1.2.10.5.5.1.2	Load String 87 Special/Calibration Devices, Rigging Hardware and BCAs in Sensor Handling Facility	☑	☐	☐	☐	e12h	12/03/25	12/04/25	2145
2147	1.2	1.2.10.5.5.1.3	Install String 87 / Hole 1	☑	☐	☐	☐	e48h	12/17/25	12/19/25	1783
2148	1.2	1.2.10.5.5.1.4	Install String 87 / Hole 1 Complete	☑	☐	☑	☑	e5e	12/19/25	12/19/25	2147
2149	1.2	1.2.10.5.5.1.5	Anchor String 87 / Hole 1	☑	☐	☐	☐	e1h	12/19/25	12/19/25	2148
2150	1.2	1.2.10.5.5.1.6	TOS Clean Up - Wait 12 hours for Anchor to Set	☑	☐	☐	☐	e12h	12/19/25	12/20/25	2149
2151	1.2	1.2.10.5.5.1.7	String 87 / Hole 1 Cable drag	☑	☐	☐	☐	e4h	12/20/25	12/20/25	2150
2152	1.2	1.2.10.5.5.1.8	Trench Hole 1 / String 87 to Pit #1	☑	☐	☐	☐	e4h	12/20/25	12/20/25	1769
2153	1.2	1.2.10.5.5.1.9	Trench Hole 1 / String 87 to Pit #1 (USAP)	☑	☐	☐	☐	e4h	12/20/25	12/20/25	2152SS
2154	1.2	1.2.10.5.5.1.10	Connect in-ice Cable to SJB 87 in Pit #1	☑	☐	☐	☐	e4h	12/20/25	12/21/25	2153
2155	1.2	1.2.10.5.5.1.11	Backfill Hole 1 / String 87 to Pit #1	☑	☐	☐	☐	e4h	12/21/25	12/21/25	2154
2156	1.2	1.2.10.5.5.1.12	Backfill Hole 1 / String 87 to Pit #1 (USAP)	☑	☐	☐	☐	e4h	12/21/25	12/21/25	2155SS
2157	1.2	1.2.10.5.5.1.13	Load Sensor String 89 (Hole 3) on Sleds 1 & 2	☑	☐	☐	☐	e4h	12/17/25	12/18/25	2147SS
2158	1.2	1.2.10.5.5.1.14	Load Sensor String 89 (Hole 3) on Sleds 1 & 2 (USAP)	☑	☐	☐	☐	e4h	12/17/25	12/18/25	2157SS
2159	1.2	1.2.10.5.5.1.15	SPAT String 89	☑	☐	☐	☐	e72h	12/18/25	12/21/25	2158
2160	1.2	1.2.10.5.5.2	☐ Installation - String 88 - Hole 2	☑	☐	☐	☐	4d	12/19/25	12/27/25	
2161	1.2	1.2.10.5.5.2.1	Load String 88 Sensors in Sensor Handling Facility	☑	☐	☐	☐	e12h	12/19/25	12/20/25	1767, 2136
2162	1.2	1.2.10.5.5.2.2	Load String 88 Calibration/Special Devices & BCAs in Sensor Handling Facility	☑	☐	☐	☐	e12h	12/20/25	12/20/25	2161
2163	1.2	1.2.10.5.5.2.3	Install String 88 / Hole 2	☑	☐	☐	☐	e24h	12/23/25	12/24/25	1778
2164	1.2	1.2.10.5.5.2.4	Install String 88 / Hole 2 Complete	☑	☐	☑	☑	e5e	12/24/25	12/24/25	2163
2165	1.2	1.2.10.5.5.2.5	Anchor String 88 / Hole 2	☑	☐	☐	☐	e1h	12/24/25	12/24/25	2164
2166	1.2	1.2.10.5.5.2.6	TOS Clean Up - Wait 12 hours for Anchor to Set	☑	☐	☐	☐	e12h	12/24/25	12/25/25	2165
2167	1.2	1.2.10.5.5.2.7	Christmas Break	☑	☐	☐	☐	e24h	12/24/25	12/25/25	2166SS
2168	1.2	1.2.10.5.5.2.8	String 88 / Hole 2 Cable drag	☑	☐	☐	☐	e2h	12/25/25	12/26/25	2167
2169	1.2	1.2.10.5.5.2.9	Trench Hole 2 / String 88 to Pit #1	☑	☐	☐	☐	e4h	12/26/25	12/26/25	1786
2170	1.2	1.2.10.5.5.2.10	Trench Hole 2 / String 88 to Pit #1 (USAP)	☑	☐	☐	☐	e4h	12/26/25	12/26/25	2169SS
2171	1.2	1.2.10.5.5.2.11	Connect in-ice Cable to SJB 88 in Pit #1	☑	☐	☐	☐	e4h	12/26/25	12/26/25	2170
2172	1.2	1.2.10.5.5.2.12	Backfill Hole 2 / String 88 to Pit #1	☑	☐	☐	☐	e4h	12/26/25	12/26/25	2171
2173	1.2	1.2.10.5.5.2.13	Backfill Hole 2 / String 88 to Pit #1 (USAP)	☑	☐	☐	☐	e4h	12/26/25	12/26/25	2172SS
2174	1.2	1.2.10.5.5.2.14	Load sensor String 90 (Hole 4) on sleds 3,4	☑	☐	☐	☐	e4h	12/23/25	12/24/25	2163SS
2175	1.2	1.2.10.5.5.2.15	Load sensor String 90 (Hole 4) on sleds 3,4 (USAP)	☑	☐	☐	☐	e4h	12/23/25	12/24/25	2174SS
2176	1.2	1.2.10.5.5.2.16	SPAT String 90	☑	☐	☐	☐	e72h	12/24/25	12/27/25	2175
2177	1.2	1.2.10.5.5.3	☐ Installation - String 89 - Hole 3	☑	☐	☐	☐	2d	12/24/25	12/26/25	
2178	1.2	1.2.10.5.5.3.1	Load String 89 (Hole 3) Sensors in Sensor Handling Facility	☑	☐	☐	☐	e12h	12/24/25	12/25/25	1782, 2159
2179	1.2	1.2.10.5.5.3.2	Load String 89 (Hole 3) Calibration/Special Devices & BCAs in Sensor Handling Facility	☑	☐	☐	☐	e12h	12/25/25	12/25/25	2178
2180	1.2	1.2.10.5.5.3.3	Install String 89 / Hole 3	☑	☐	☐	☐	e24h	12/26/25	12/27/25	1792
2181	1.2	1.2.10.5.5.3.4	Install String 89 / Hole 3 Complete	☑	☐	☑	☑	e5e	12/27/25	12/27/25	2180
2182	1.2	1.2.10.5.5.3.5	Anchor String 89 / Hole 3	☑	☐	☐	☐	e1h	12/27/25	12/27/25	2181
2183	1.2	1.2.10.5.5.3.6	TOS Clean Up - Wait 12 hours for Anchor to Set	☑	☐	☐	☐	e12h	12/27/25	12/28/25	2182
2184	1.2	1.2.10.5.5.3.7	String 89 / Hole 3 Cable drag	☑	☐	☐	☐	e4h	12/28/25	12/28/25	2183
2185	1.2	1.2.10.5.5.3.8	Trench Hole 3 / String 89 to Pit #1	☑	☐	☐	☐	e4h	12/28/25	12/28/25	1800
2186	1.2	1.2.10.5.5.3.9	Trench Hole 3 / String 89 to Pit #1 (USAP)	☑	☐	☐	☐	e4h	12/28/25	12/28/25	2185SS
2187	1.2	1.2.10.5.5.3.10	Connect in-ice cable to SJB 89 in Pit #1	☑	☐	☐	☐	e4h	12/28/25	12/28/25	2186
2188	1.2	1.2.10.5.5.3.11	Backfill Hole 3 / String 89 to Pit #1	☑	☐	☐	☐	e4h	12/28/25	12/28/25	2187
2189	1.2	1.2.10.5.5.3.12	Backfill Hole 3 / String 89 to Pit #1 (USAP)	☑	☐	☐	☐	e4h	12/28/25	12/28/25	2188SS
2190	1.2	1.2.10.5.5.3.13	Load sensor String 91 (Hole 5) on sleds 1 & 2	☑	☐	☐	☐	e4h	12/26/25	12/26/25	2180SS

	L2	WBS	Task Name	NSF	L1 Milestone	L2 Milestone	Internal Milestone	Duration	Start Date	End Date	Predecessor WBS
2191	1.2	1.2.10.5.5.3.14	Load sensor String 91 (Hole 5) on sleds 1 & 2 (USAP)	✓				e4h	12/26/25	12/26/25	2190SS
2192	1.2	1.2.10.5.5.3.15	SPAT String 91	✓				e72h	12/26/25	12/29/25	2190
2193	1.2	1.2.10.5.5.4	Installation - String 90 - Hole 4	✓				4.25d	12/27/25	01/03/26	
2194	1.2	1.2.10.5.5.4.1	Load String 90 (Hole 4) Sensors in Sensor Handling Facility	✓				e12h	12/27/25	12/28/25	1796, 2176
2195	1.2	1.2.10.5.5.4.2	Load String 90 (Hole 4) Calibration/Special Devices & BCAs in Sensor Handling Facility	✓				e12h	12/28/25	12/28/25	2194
2196	1.2	1.2.10.5.5.4.3	Install String 90	✓				e24h	12/31/25	01/01/26	1807
2197	1.2	1.2.10.5.5.4.4	Install String 90 / Hole 4 Complete	✓		✓	✓	e5s	01/01/26	01/01/26	2196
2198	1.2	1.2.10.5.5.4.5	Anchor String 90 / Hole 4	✓				e1h	01/01/26	01/01/26	2197
2199	1.2	1.2.10.5.5.4.6	TOS Clean Up - Wait 12 hours for Anchor to Set	✓				e12h	01/01/26	01/02/26	2198
2200	1.2	1.2.10.5.5.4.7	String 90 / Hole 4 Cable drag	✓				e4h	01/02/26	01/02/26	2199
2201	1.2	1.2.10.5.5.4.8	Trench Hole 4 / String 90 to Pit #1	✓				e4h	01/02/26	01/02/26	1815
2202	1.2	1.2.10.5.5.4.9	Trench Hole 4 / String 90 to Pit #1 (USAP)	✓				e4h	01/02/26	01/02/26	2201SS
2203	1.2	1.2.10.5.5.4.10	Connect in-ice cable to SJB 90 in Pit #1	✓				e4h	01/02/26	01/02/26	2201
2204	1.2	1.2.10.5.5.4.11	Backfill Hole 4 / String 90 to Pit #1	✓				e4h	01/02/26	01/03/26	2203
2205	1.2	1.2.10.5.5.4.12	Backfill Hole 4 / String 90 to Pit #1 (USAP)	✓				e4h	01/02/26	01/03/26	2204SS
2206	1.2	1.2.10.5.5.4.13	Backfill, Remove Temp Vault, Flag and Survey Pit #1	✓				e4h	01/02/26	01/03/26	2204SS
2207	1.2	1.2.10.5.5.4.14	Backfill, Remove Temp Vault, Flag and Survey Pit #1 (USAP)	✓				e4h	01/02/26	01/03/26	2206SS
2208	1.2	1.2.10.5.5.4.15	Load Sensor String 92 (Hole 6) on Sleds 3 & 4	✓				e4h	12/31/25	12/31/25	2196SS
2209	1.2	1.2.10.5.5.4.16	Load Sensor String 92 (Hole 6) on sleds 3 & 4 (USAP)	✓				e4h	12/31/25	12/31/25	2208SS
2210	1.2	1.2.10.5.5.4.17	SPAT String 92	✓				e72h	12/31/25	01/03/26	2209
2211	1.2	1.2.10.5.5.5	Installation - String 91 - Hole 5	✓				2.5d	01/01/26	01/06/26	
2212	1.2	1.2.10.5.5.5.1	Excavation Pit #2 (Assist)	✓				e8h	01/03/26	01/03/26	2207
2213	1.2	1.2.10.5.5.5.2	Excavation Pit #2 (USAP)	✓				e8h	01/03/26	01/03/26	2212SS
2214	1.2	1.2.10.5.5.5.3	Load String 91 (Hole 5) Sensors in Sensor Handling Facility	✓				e12h	01/01/26	01/02/26	1811, 2192
2215	1.2	1.2.10.5.5.5.4	Load String 91 (Hole 5) Calibration/Special Devices & BCAs in Sensor Handling Facility	✓				e12h	01/02/26	01/02/26	2214
2216	1.2	1.2.10.5.5.5.5	Install String 91 / Hole 5	✓				e24h	01/03/26	01/04/26	1821
2217	1.2	1.2.10.5.5.5.6	Install String 91 / Hole 5 Complete	✓		✓	✓	e5s	01/04/26	01/04/26	2216
2218	1.2	1.2.10.5.5.5.7	Anchor String 91 / Hole 5	✓				e1h	01/04/26	01/04/26	2217
2219	1.2	1.2.10.5.5.5.8	TOS Clean Up - Wait 12 hours for Anchor to Set	✓				e12h	01/04/26	01/04/26	2218
2220	1.2	1.2.10.5.5.5.9	String 91 / Hole 5 Cable drag	✓				e4h	01/04/26	01/05/26	2219
2221	1.2	1.2.10.5.5.5.10	Trench Hole 5 / String 91 to Pit #2	✓				e4h	01/05/26	01/05/26	1830
2222	1.2	1.2.10.5.5.5.11	Trench Hole 5 / String 91 to Pit #2 (USAP)	✓				e4h	01/05/26	01/05/26	2221SS
2223	1.2	1.2.10.5.5.5.12	Connect in-ice Cable to SJB 91 in Pit #2	✓				e4h	01/05/26	01/05/26	2221
2224	1.2	1.2.10.5.5.5.13	Backfill Hole 5 / String 91 to Pit #2	✓				e4h	01/05/26	01/05/26	2223
2225	1.2	1.2.10.5.5.5.14	Backfill Hole 5 / String 91 to Pit #2 (USAP)	✓				e4h	01/05/26	01/05/26	2224SS
2226	1.2	1.2.10.5.5.5.15	Load Sensor String 93 (Hole 7) on Sleds 3 & 4	✓				e4h	01/03/26	01/03/26	2216SS
2227	1.2	1.2.10.5.5.5.16	Load Sensor String 93 (Hole 7) on Sleds 3 & 4 (USAP)	✓				e4h	01/03/26	01/03/26	2226SS
2228	1.2	1.2.10.5.5.5.17	SPAT String 93	✓				e72h	01/03/26	01/06/26	2226
2229	1.2	1.2.10.5.5.6	Installation - String 92 - Hole 6	✓				5.509d	01/04/26	01/11/26	
2230	1.2	1.2.10.5.5.6.1	Load String 92 (Hole 6) Sensors in Sensor Handling Facility	✓				e12h	01/04/26	01/04/26	1825, 2210
2231	1.2	1.2.10.5.5.6.2	Load String 92 (Hole 6) Calibration/Special Devices & BCAs in Sensor Handling Facility	✓				e12h	01/04/26	01/05/26	2230
2232	1.2	1.2.10.5.5.6.3	Set-up Logging Winch	✓				e4h	01/08/26	01/08/26	1836FF
2233	1.2	1.2.10.5.5.6.4	Dust Logging	✓				e12h	01/08/26	01/08/26	1836
2234	1.2	1.2.10.5.5.6.5	Dust Logging Complete	✓		✓	✓	e5s	01/08/26	01/08/26	2233
2235	1.2	1.2.10.5.5.6.6	Install String 92 / Hole 6	✓				e24h	01/08/26	01/09/26	2234
2236	1.2	1.2.10.5.5.6.7	Install String 92 / Hole 6 Complete	✓		✓	✓	e5s	01/09/26	01/09/26	2235
2237	1.2	1.2.10.5.5.6.8	Anchor String 92 / Hole 6	✓				e1h	01/09/26	01/09/26	2236
2238	1.2	1.2.10.5.5.6.9	TOS Clean Up - Wait 12 hours for Anchor to Set	✓				e12h	01/09/26	01/10/26	2237
2239	1.2	1.2.10.5.5.6.10	String 92 / Hole 6 Cable drag	✓				e4h	01/10/26	01/10/26	2238
2240	1.2	1.2.10.5.5.6.11	Trench Hole 6 / String 92 to Pit #2	✓				e4h	01/10/26	01/10/26	1842
2241	1.2	1.2.10.5.5.6.12	Trench Hole 6 / String 92 to Pit #2 (USAP)	✓				e4h	01/10/26	01/10/26	2240SS
2242	1.2	1.2.10.5.5.6.13	Connect in-ice Cable to SJB 92 in Pit #2	✓				e4h	01/10/26	01/11/26	2240
2243	1.2	1.2.10.5.5.6.14	Backfill Hole 6 / String 92 to Pit #2	✓				e4h	01/11/26	01/11/26	2242
2244	1.2	1.2.10.5.5.6.15	Backfill Hole 6 / String 92 to Pit #2 (USAP)	✓				e4h	01/11/26	01/11/26	2243SS
2245	1.2	1.2.10.5.5.7	Installation - String 93 - Hole 7	✓				1.501d	01/09/26	01/13/26	
2246	1.2	1.2.10.5.5.7.1	Load String 93 (Hole 7) Sensors into Sensor Handling Facility	✓				e12h	01/09/26	01/10/26	1841, 2228
2247	1.2	1.2.10.5.5.7.2	Load String 93 (Hole 7) Calibration/Special Devices & BCAs in Sensor Handling Facility	✓				e12h	01/10/26	01/10/26	2246
2248	1.2	1.2.10.5.5.7.3	Install String 93 / Hole 7	✓				e24h	01/11/26	01/12/26	1846
2249	1.2	1.2.10.5.5.7.4	Install String 93 / Hole 7 Complete	✓		✓	✓	e5s	01/12/26	01/12/26	2248
2250	1.2	1.2.10.5.5.7.5	Anchor String 93 / Hole 7	✓				e1h	01/12/26	01/12/26	2249
2251	1.2	1.2.10.5.5.7.6	TOS Clean Up - Wait 12 hours for Anchor to Set	✓				e12h	01/12/26	01/12/26	2250
2252	1.2	1.2.10.5.5.7.7	String 93 / Hole 7 Cable drag	✓				e4h	01/12/26	01/12/26	2251
2253	1.2	1.2.10.5.5.7.8	Trench Hole 7 / String 93 to Pit #2	✓				e4h	01/13/26	01/13/26	1848
2254	1.2	1.2.10.5.5.7.9	Trench Hole 7 / String 93 to Pit #2 (USAP)	✓				e4h	01/13/26	01/13/26	2253SS
2255	1.2	1.2.10.5.5.7.10	Connect in-ice Cable to SJB 93 in Pit #2	✓				e4h	01/13/26	01/13/26	2253
2256	1.2	1.2.10.5.5.7.11	Backfill Hole 7 / String 93 to Pit #2	✓				e4h	01/13/26	01/13/26	2255
2257	1.2	1.2.10.5.5.7.12	Backfill Hole 7 / String 93 to Pit #2 (USAP)	✓				e4h	01/13/26	01/13/26	2256SS
2258	1.2	1.2.10.5.5.7.13	Backfill, Remove Temp Vault, Flag and Survey Pit #2	✓				e4h	01/13/26	01/13/26	2256SS
2259	1.2	1.2.10.5.5.7.14	Backfill, Remove Temp Vault, Flag and Survey Pit #2 (USAP)	✓				e4h	01/13/26	01/13/26	2258SS
2260	1.2	1.2.10.5.6	String Installation ICL Activities	✓				31d	12/05/25	01/20/26	
2261	1.2	1.2.10.5.6.1	M&O/Upgrade liaison [ongoing]	✓				31d	12/07/25	01/20/26	
2262	1.2	1.2.10.5.6.2	Update CPT installation firmware, software (pre-deployment) [1.5 days]	✓				1.5d	12/17/25	12/18/25	2263SF
2263	1.2	1.2.10.5.6.3	Final DOM power system configuration (pre-deployment) [0.5 day]	✓				0.5d	12/18/25	12/18/25	2264SF
2264	1.2	1.2.10.5.6.4	CPT final pre-deployment checkout [1 day]	✓				1d	12/19/25	12/19/25	2148SF
2265	1.2	1.2.10.5.6.5	Low-level Communications and Timing Commissioning: String 87	✓				3d	12/22/25	12/24/25	2148
2266	1.2	1.2.10.5.6.6	Low-level Communications and Timing Commissioning: String 88	✓				1d	12/26/25	12/26/25	2164
2267	1.2	1.2.10.5.6.7	Low-level Communications and Timing Commissioning: String 89	✓				1d	12/29/25	12/29/25	2181
2268	1.2	1.2.10.5.6.8	Low-level Communications and Timing Commissioning: String 90	✓				1d	01/02/26	01/02/26	2197

L2	WBS	Task Name	NSF	L1 Milestone	L2 Milestone	Internal Milestone	Duration	Start Date	End Date	Predecessor WBS
2269	1.2	1.2.10.5.6.9		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1d	01/05/26	01/05/26	2217
2270	1.2	1.2.10.5.6.10		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1d	01/12/26	01/12/26	2236
2271	1.2	1.2.10.5.6.11		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1d	01/12/26	01/12/26	2249
2272	1.2	1.2.10.5.6.12		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	31d	12/05/25	01/20/26	
2273	1.2	1.2.10.5.6.13		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	31d	12/05/25	01/20/26	
2274	1.2	1.2.10.5.6.14		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1d	01/13/26	01/13/26	2271
2275	1.2	1.2.10.5.7		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5d	01/13/26	01/20/26	
2276	1.2	1.2.10.5.7.1		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1d	01/13/26	01/14/26	2255
2277	1.2	1.2.10.5.7.2		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	01/14/26	01/14/26	2276FF
2278	1.2	1.2.10.5.7.3		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2d	01/14/26	01/16/26	2277
2279	1.2	1.2.10.5.7.4		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2d	01/14/26	01/16/26	2277
2280	1.2	1.2.10.5.7.5		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2d	01/16/26	01/20/26	2279
2281	1.2	1.2.10.5.7.6		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2d	01/14/26	01/16/26	2277
2282	1.2	1.2.10.5.8		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	54d	11/20/25	02/06/26	2090SS
2283	1.2	1.2.10.5.9		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1d	01/20/26	01/21/26	2280
2284	1.3	1.3		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1980d	10/01/18	05/14/28	
2285	1.3	1.3.1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1818d	10/01/18	08/25/25	
2286	1.3	1.3.1.1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1140d	10/01/18	02/10/23	
2299	1.3	1.3.1.1.2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	879d	10/01/19	02/10/23	
2318	1.3	1.3.1.1.2.3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	470d	04/28/21	02/10/23	
2323	1.3	1.3.1.1.2.3.5		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	285d	01/10/22	01/13/23	
2326	1.3	1.3.1.1.2.3.5.3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	100d	07/11/22	11/25/22	2325
2327	1.3	1.3.1.1.2.3.5.4		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	11/25/22	11/25/22	2326
2328	1.3	1.3.1.1.2.3.5.5		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20d	11/28/22	12/23/22	2327
2329	1.3	1.3.1.1.2.3.5.6		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5d	12/26/22	12/30/22	2328
2330	1.3	1.3.1.1.2.3.5.7		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10d	01/02/23	01/13/23	2329
2331	1.3	1.3.1.1.2.3.6		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20d	01/16/23	02/10/23	2330
2337	1.3	1.3.1.1.6		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	180d	01/31/22	10/07/22	
2342	1.3	1.3.1.1.6.5		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	80d	06/20/22	10/07/22	2341
2343	1.3	1.3.1.2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1047d	10/01/18	10/04/22	
2383	1.3	1.3.1.2.8		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	312d	07/28/21	10/04/22	
2384	1.3	1.3.1.2.8.1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	312d	07/28/21	10/04/22	
2402	1.3	1.3.1.2.8.1.18		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2d	10/03/22	10/04/22	2401
2403	1.3	1.3.1.2.8.1.19		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	10/04/22	10/04/22	2402
2449	1.3	1.3.1.5		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1195d	10/01/18	04/28/23	
2462	1.3	1.3.1.5.13		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	270d	03/21/22	03/31/23	
2471	1.3	1.3.1.5.13.9		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15d	10/03/22	10/21/22	2470
2472	1.3	1.3.1.5.13.10		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15d	10/24/22	11/11/22	2471
2473	1.3	1.3.1.5.13.11		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15d	11/14/22	12/02/22	2472
2474	1.3	1.3.1.5.13.12		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15d	12/05/22	12/23/22	2473
2475	1.3	1.3.1.5.13.13		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15d	12/26/22	01/13/23	2474
2476	1.3	1.3.1.5.13.14		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15d	01/16/23	02/03/23	2475
2477	1.3	1.3.1.5.13.15		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15d	02/06/23	02/24/23	2476
2478	1.3	1.3.1.5.13.16		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15d	02/27/23	03/17/23	2477
2479	1.3	1.3.1.5.13.17		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10d	03/20/23	03/31/23	2478
2480	1.3	1.3.1.5.13.18		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	03/31/23	03/31/23	2479
2483	1.3	1.3.1.5.16		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	280d	04/04/22	04/28/23	
2490	1.3	1.3.1.5.16.7		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15d	09/19/22	10/07/22	2469SS +10d, 2489
2491	1.3	1.3.1.5.16.8		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15d	10/10/22	10/28/22	2470SS +10d, 2490
2492	1.3	1.3.1.5.16.9		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15d	10/31/22	11/18/22	2471SS +10d, 2491
2493	1.3	1.3.1.5.16.10		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15d	11/21/22	12/09/22	2472SS +10d, 2492
2494	1.3	1.3.1.5.16.11		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15d	12/12/22	12/30/22	2473SS +10d, 2493
2495	1.3	1.3.1.5.16.12		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15d	01/02/23	01/20/23	2474SS +10d, 2494
2496	1.3	1.3.1.5.16.13		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	30d	01/23/23	03/03/23	2489, 2490, 2491,
2497	1.3	1.3.1.5.16.14		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15d	01/23/23	02/10/23	2475SS +10d, 2495
2498	1.3	1.3.1.5.16.15		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15d	02/13/23	03/03/23	2476SS +10d, 2497
2499	1.3	1.3.1.5.16.16		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15d	03/06/23	03/24/23	2477SS +10d, 2498
2500	1.3	1.3.1.5.16.17		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15d	03/27/23	04/14/23	2478SS +10d, 2499
2501	1.3	1.3.1.5.16.18		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10d	04/17/23	04/28/23	2479SS +10d, 2500
2502	1.3	1.3.1.5.16.19		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	04/28/23	04/28/23	2501
2509	1.3	1.3.1.7		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1050d	10/01/18	10/07/22	
2514	1.3	1.3.1.7.5		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	288d	10/01/21	10/07/22	
2523	1.3	1.3.1.7.5.9		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	30d	08/29/22	10/07/22	2522
2524	1.3	1.3.1.7.5.10		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	10/07/22	10/07/22	2523
2549	1.3	1.3.1.9		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	985d	02/18/19	10/28/22	
2572	1.3	1.3.1.9.2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	847d	08/01/19	10/28/22	
2573	1.3	1.3.1.9.2.1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	842d	08/01/19	10/21/22	
2580	1.3	1.3.1.9.2.1.4		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0	10/21/22	10/21/22	2582
2582	1.3	1.3.1.9.2.3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	30d	09/12/22	10/21/22	2581
2583	1.3	1.3.1.9.2.4		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5d	10/24/22	10/28/22	2582
2585	1.3	1.3.1.10		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	843d	08/24/22	08/25/25	
2586	1.3	1.3.1.10.1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	320d	08/24/22	08/15/23	
2587	1.3	1.3.1.10.1.1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	295d	08/24/22	08/11/23	
2592	1.3	1.3.1.10.1.1.5		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15d	10/03/22	10/21/22	2488, 2591
2593	1.3	1.3.1.10.1.1.6		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5d	12/19/22	12/23/22	2328SS +15d
2594	1.3	1.3.1.10.1.1.7		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5d	12/26/22	12/30/22	2593
2595	1.3	1.3.1.10.1.1.8		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10d	01/02/23	01/13/23	2594
2596	1.3	1.3.1.10.1.1.9		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	30d	01/16/23	02/24/23	2595

L2	WBS	Task Name	NSF	L1 Milestone	L2 Milestone	Internal Milestone	Duration	Start Date	End Date	Predecessor WBS
2597	1.3	1.3.1.10.1.1.10	Mounting of harness wires and packing (Batch #1)				5d	02/27/23	03/03/23	2596
2598	1.3	1.3.1.10.1.1.11	Mainboard integration and sealing Batch #2				10d	01/16/23	01/27/23	2590, 2595
2599	1.3	1.3.1.10.1.1.12	FAT Batch #2				20d	02/27/23	03/24/23	2596, 2598
2600	1.3	1.3.1.10.1.1.13	Mounting of harness wires and packing (Batch #2)				5d	03/27/23	03/31/23	2599
2601	1.3	1.3.1.10.1.1.14	Mainboard integration and sealing Batch #3				10d	01/30/23	02/10/23	2591, 2598
2602	1.3	1.3.1.10.1.1.15	FAT Batch #3				20d	03/27/23	04/21/23	2599, 2601
2603	1.3	1.3.1.10.1.1.16	Mounting of harness wires and packing (Batch #3)				5d	04/24/23	04/28/23	2602
2604	1.3	1.3.1.10.1.1.17	Mainboard integration and sealing Batch #4				10d	02/13/23	02/24/23	2592, 2601
2605	1.3	1.3.1.10.1.1.18	FAT Batch #4				15d	04/24/23	05/12/23	2602, 2604
2606	1.3	1.3.1.10.1.1.19	Mounting of harness wires and packing (Batch #4)				5d	05/15/23	05/19/23	2605
2607	1.3	1.3.1.10.1.1.20	128 mDOMs for Strings 87-88 ready to ship to CHC		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	05/19/23	05/19/23	2606
2608	1.3	1.3.1.10.1.1.21	Production Batch #5 (Qty. 27)				15d	03/06/23	03/24/23	2497FS +15d, 2604
2609	1.3	1.3.1.10.1.1.22	FAT Batch #5				15d	05/15/23	06/02/23	2605, 2608
2610	1.3	1.3.1.10.1.1.23	Mounting of harness wires and packing (Batch #5)				5d	06/05/23	06/09/23	2609
2611	1.3	1.3.1.10.1.1.24	Production Batch #6 (Qty. 27)				15d	03/27/23	04/14/23	2498, 2608
2612	1.3	1.3.1.10.1.1.25	FAT Batch #6				15d	06/05/23	06/23/23	2609, 2611
2613	1.3	1.3.1.10.1.1.26	Mounting of harness wires and packing (Batch #6)				5d	06/26/23	06/30/23	2612
2614	1.3	1.3.1.10.1.1.27	Production Batch #7 (Qty. 27)				15d	04/17/23	05/05/23	2499, 2611
2615	1.3	1.3.1.10.1.1.28	FAT Batch #7				15d	06/26/23	07/14/23	2612, 2614
2616	1.3	1.3.1.10.1.1.29	Mounting of harness wires and packing (Batch #7)				5d	07/17/23	07/21/23	2615
2617	1.3	1.3.1.10.1.1.30	Production Batch #8 (Qty. 16)				15d	04/17/23	05/05/23	2500, 2611
2618	1.3	1.3.1.10.1.1.31	FAT Batch #8				15d	07/17/23	08/04/23	2615, 2617
2619	1.3	1.3.1.10.1.1.32	Mounting of harness wires and packing (Batch #8)				5d	08/07/23	08/11/23	2618
2620	1.3	1.3.1.10.1.1.33	96 mDOMs for Strings 89-93 ready to ship to CHC		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	08/11/23	08/11/23	2619
2621	1.3	1.3.1.10.1.2	MSU Production Facility				140d	03/03/23	09/15/23	
2622	1.3	1.3.1.10.1.2.1	Start of mDOM series production at MSU			<input checked="" type="checkbox"/>	0	03/03/23	03/03/23	2496
2623	1.3	1.3.1.10.1.2.2	Production Batch #1 (Qty. 27)				20d	03/06/23	03/31/23	2622
2624	1.3	1.3.1.10.1.2.3	FAT Batch #1				20d	04/03/23	04/28/23	2623
2625	1.3	1.3.1.10.1.2.4	Mounting of harness wires and packing (Batch #1)				5d	05/01/23	05/05/23	2624
2626	1.3	1.3.1.10.1.2.5	Production Batch #2 (Qty. 27)				20d	04/03/23	04/28/23	2623
2627	1.3	1.3.1.10.1.2.6	FAT Batch #2				20d	05/01/23	05/26/23	2624, 2626
2628	1.3	1.3.1.10.1.2.7	Mounting of harness wires and packing (Batch #2)				5d	05/29/23	06/02/23	2627
2629	1.3	1.3.1.10.1.2.8	Production Batch #3 (Qty. 27)				15d	05/01/23	05/19/23	2626
2630	1.3	1.3.1.10.1.2.9	FAT Batch #3				15d	05/29/23	06/16/23	2627, 2629
2631	1.3	1.3.1.10.1.2.10	Mounting of harness wires and packing (Batch #3)				5d	06/19/23	06/23/23	2630
2632	1.3	1.3.1.10.1.2.11	Production Batch #4 (Qty. 27)				15d	05/22/23	06/09/23	2629
2633	1.3	1.3.1.10.1.2.12	FAT Batch #4				15d	06/19/23	07/07/23	2630, 2632
2634	1.3	1.3.1.10.1.2.13	Mounting of harness wires and packing (Batch #4)				5d	07/10/23	07/14/23	2633
2635	1.3	1.3.1.10.1.2.14	Production Batch #5 (Qty. 27)				15d	06/12/23	06/30/23	2632
2636	1.3	1.3.1.10.1.2.15	FAT Batch #5				15d	07/10/23	07/28/23	2633, 2635
2637	1.3	1.3.1.10.1.2.16	Mounting of harness wires and packing (Batch #5)				5d	07/31/23	08/04/23	2636
2638	1.3	1.3.1.10.1.2.17	Production Batch #6 (Qty. 27)				15d	07/03/23	07/21/23	2635
2639	1.3	1.3.1.10.1.2.18	FAT Batch #6				15d	07/31/23	08/18/23	2636, 2638
2640	1.3	1.3.1.10.1.2.19	Mounting of harness wires and packing (Batch #6)				5d	08/21/23	08/25/23	2639
2641	1.3	1.3.1.10.1.2.20	Production Batch #7 (Qty. 23)				15d	07/24/23	08/11/23	2638
2642	1.3	1.3.1.10.1.2.21	FAT Batch #7				15d	08/21/23	09/08/23	2639, 2641
2643	1.3	1.3.1.10.1.2.22	Mounting of harness wires and packing (Batch #7)				5d	09/11/23	09/15/23	2642
2644	1.3	1.3.1.10.1.2.23	200 mDOMs for Strings 89-93 ready to ship to Pt. Hueneme		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	09/15/23	09/15/23	2643
2645	1.3	1.3.1.10.2	Ship 116 + 12 spare mDOMs for Strings 87-88 from DESY to CHC				40d	08/01/24	09/25/24	2607FS +310d
2646	1.3	1.3.1.10.3	Ship 96 mDOMs for Strings 89-93 from DESY to CHC				40d	08/01/25	09/25/25	2620FS +508d
2647	1.3	1.3.1.10.4	Ship 190 + 10 spare mDOMs for Strings 89-93 from MSU to Pt. Hueneme				20d	08/01/25	08/28/25	2644FS +483d
2648	1.3	1.3.2	D-Egg				1838d	10/01/18	10/23/25	
2710	1.3	1.3.2.9	D-Egg Series Production				1487d	02/04/20	10/23/25	
2711	1.3	1.3.2.9.1	Series production				854d	02/04/20	05/12/23	
2721	1.3	1.3.2.9.1.3	D-Egg Batch #2 (Qty. 110)				480d	12/14/20	10/14/22	
2723	1.3	1.3.2.9.1.3.2	FAT				105d	05/23/22	10/14/22	2720
2724	1.3	1.3.2.9.1.4	D-Egg Batch #3 (Qty. 150)				527d	05/08/21	05/12/23	
2726	1.3	1.3.2.9.1.4.2	FAT				150d	10/17/22	05/12/23	2723
2728	1.3	1.3.2.9.1.6	197 + 11 spare D-Eggs for Strings 89-93 ready to ship to CHC		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	05/12/23	05/12/23	2726
2729	1.3	1.3.2.9.1.7	Production of 310 D-Eggs completed			<input checked="" type="checkbox"/>	0	05/12/23	05/12/23	2728
2730	1.3	1.3.2.9.2	Ship 78 + 18 spare D-Eggs for Strings 87-88 to CHC				60d	08/01/24	10/23/24	2727FS +525d
2731	1.3	1.3.2.9.3	Ship 197 + 11 spare D-Eggs for Strings 89-93 to CHC				60d	08/01/25	10/23/25	2728FS +573d
2732	1.3	1.3.3	PDOM				1683d	03/11/19	08/28/25	
2733	1.3	1.3.3.1	PDOM DAQ Electronics		<input checked="" type="checkbox"/>		940d	03/11/19	10/14/22	
2740	1.3	1.3.3.1.2	PDOM Rev3 Mainboard		<input checked="" type="checkbox"/>		841d	05/01/20	10/14/22	
2746	1.3	1.3.3.1.2.5	PDOM Rev3 Mainboard production (Qty. 27)		<input checked="" type="checkbox"/>		30d	09/05/22	10/14/22	2755
2747	1.3	1.3.3.2	PDOM High Voltage Subsystem		<input checked="" type="checkbox"/>		903d	05/01/19	10/14/22	
2749	1.3	1.3.3.2.2	PDOM HV System Final Design		<input checked="" type="checkbox"/>		359d	06/01/21	10/14/22	
2754	1.3	1.3.3.2.2.5	PDOM HV system production (Qty. 27)		<input checked="" type="checkbox"/>		30d	09/05/22	10/14/22	2755
2756	1.3	1.3.3.4	IceCube DOM Refurbishment		<input checked="" type="checkbox"/>		923d	02/07/22	08/28/25	
2763	1.3	1.3.3.4.5	Refurbish 20 IceCube DOMs with Rev3 Mainboards		<input checked="" type="checkbox"/>		65d	10/17/22	01/13/23	
2764	1.3	1.3.3.4.5.1	Refurbishment Batch #1 (Qty. 20)		<input checked="" type="checkbox"/>		30d	10/17/22	11/25/22	2746, 2754, 2762
2765	1.3	1.3.3.4.5.2	FAT Batch #1		<input checked="" type="checkbox"/>		30d	11/28/22	01/06/23	2764
2766	1.3	1.3.3.4.5.3	Packing Batch #1		<input checked="" type="checkbox"/>		5d	01/09/23	01/13/23	2765
2767	1.3	1.3.3.4.5.4	2 + 2 spare PDOMs for Strings 87-88 ready to ship to Pt. Hueneme			<input checked="" type="checkbox"/>	0	01/13/23	01/13/23	2766
2768	1.3	1.3.3.4.5.5	12 + 4 spare PDOMs for Strings 89-93 ready to ship to Pt. Hueneme			<input checked="" type="checkbox"/>	0	01/13/23	01/13/23	2766
2769	1.3	1.3.3.4.5.6	Refurbishment of 20 PDOMs completed			<input checked="" type="checkbox"/>	0	01/13/23	01/13/23	2768
2770	1.3	1.3.3.4.6	Ship 2 + 1 spare PDOMs for Strings 87-88 to Pt. Hueneme		<input checked="" type="checkbox"/>		20d	08/01/24	08/28/24	2767FS +400d

	L2	WBS	Task Name	NSF	L1 Milestone	L2 Milestone	Internal Milestone	Duration	Start Date	End Date	Predecessor WBS
2771	1.3	1.3.3.4.7	Ship 12 + 1 spare PDOMs for Strings 89-93 to Pt. Hueneme	✓				20d	08/01/25	08/28/25	2768FS +658d
2788	1.3	1.3.4	Ice Comms Module					1891d	02/01/19	05/14/26	
2808	1.3	1.3.4.2	ICM Firmware					1415d	11/30/20	05/14/26	
2810	1.3	1.3.4.2.3	RAPCAL Firmware					1405d	12/14/20	05/14/26	
2815	1.3	1.3.4.2.3.3	Firmware support during D-Egg FAT	✓				315d	02/28/22	05/12/23	2720SS
2817	1.3	1.3.4.2.3.5	Firmware support during mDOM FAT	✓				175d	01/16/23	09/15/23	
2818	1.3	1.3.4.2.3.6	Firmware support during development of Calibration Devices, Special Devices, system integration, and commissioning	✓				1217d	09/02/21	05/14/26	2843SS
2820	1.3	1.3.5	Special Devices					1739d	01/01/19	08/28/25	
2825	1.3	1.3.5.5	DM-Ice					911d	02/24/22	08/28/25	
2827	1.3	1.3.5.5.2	DM-Ice Final Design Review				✓	0	05/01/24	05/01/24	2828SF -195d
2828	1.3	1.3.5.5.3	DM-Ice Deployment Readiness Review				✓	0	02/03/25	02/03/25	2829SF -130d
2829	1.3	1.3.5.5.4	Ship 2 DM-Ice modules from Yale to Pt. Hueneme					20d	08/04/25	08/29/25	
2830	1.3	1.3.5.6	Fiber-Optic Module (FOM)					883d	04/04/22	08/28/25	
2832	1.3	1.3.5.6.2	FOM Final Design Review				✓	0	05/01/23	05/01/23	2833SF -195d
2833	1.3	1.3.5.6.3	FOM Deployment Readiness Review				✓	0	02/01/24	02/01/24	2834SF -130d
2834	1.3	1.3.5.6.4	Ship 4 FOMs from UW to Pt. Hueneme					20d	08/01/24	08/28/24	2770SS
2835	1.3	1.3.5.6.5	Ship 5 FOMs from UW to Pt. Hueneme					20d	08/01/25	08/28/25	2771SS
2836	1.3	1.3.5.7	elongated Optical Module (LOM)					962d	12/14/21	08/28/25	
2838	1.3	1.3.5.7.2	LOM Final Design Review				✓	0	05/01/23	05/01/23	2839SF -195d
2839	1.3	1.3.5.7.3	LOM Deployment Readiness Review				✓	0	02/01/24	02/01/24	2840SF -130d
2840	1.3	1.3.5.7.4	Ship 2 LOMs from UW to Pt. Hueneme					20d	08/01/24	08/28/24	2770SS
2841	1.3	1.3.5.7.5	Ship 12 LOMs from UW to Pt. Hueneme					20d	08/01/25	08/28/25	2771SS
2842	1.3	1.3.5.8	Radio Puleer (RP)					777d	09/02/21	08/28/24	
2844	1.3	1.3.5.8.2	RP Final Design Review				✓	0	05/01/23	05/01/23	2845SF -195d
2845	1.3	1.3.5.8.3	RP Deployment Readiness Review				✓	0	02/01/24	02/01/24	2846SF -130d
2846	1.3	1.3.5.8.4	Ship 5 RPs from UW to Pt. Hueneme					20d	08/01/24	08/28/24	2770SS
2847	1.3	1.3.5.9	Radio Receiver (RR)					883d	05/02/22	08/28/25	
2849	1.3	1.3.5.9.2	RR Final Design Review				✓	0	05/01/23	05/01/23	2850FS -195d
2850	1.3	1.3.5.9.3	RR Deployment Readiness Review				✓	0	02/01/24	02/01/24	2851SF -130d
2851	1.3	1.3.5.9.4	Ship 2 RRs from UW to Pt. Hueneme					20d	08/01/24	08/28/24	2770SS
2852	1.3	1.3.5.9.5	Ship 3 RRs from UW to Pt. Hueneme					20d	08/01/25	08/28/25	2771SS
2853	1.3	1.3.5.10	Very Broadband Selmograph (SMG)					818d	07/04/22	08/28/25	
2855	1.3	1.3.5.10.2	SMG Final Design Review				✓	0	05/28/24	05/28/24	2856FS -195d
2856	1.3	1.3.5.10.3	SMG Deployment Readiness Review				✓	0	02/28/25	02/28/25	2857FS -130d
2857	1.3	1.3.5.10.4	Ship SMG from UW to Pt. Hueneme					20d	08/01/25	08/28/25	2771SS
2858	1.3	1.3.5.11	Wavelength-shifting Optical Module (WOM)					728d	12/10/21	08/27/24	
2860	1.3	1.3.5.11.2	WOM Final Design Review				✓	0	05/03/23	05/03/23	2861SF -195d
2861	1.3	1.3.5.11.3	WOM Deployment Readiness Review				✓	0	02/05/24	02/05/24	2862SF -130d
2862	1.3	1.3.5.11.4	Ship 16 WOMs from DESY to CHC					40d	08/05/24	09/27/24	
2863	1.4	1.4	CPT	✓				1920d	11/14/18	04/08/26	
2864	1.4	1.4.1	Downhole Cables	✓				1886d	11/14/18	02/10/26	
2865	1.4	1.4.1.1	Main Cable Assembly	✓				1303d	11/14/18	11/10/23	
2866	1.4	1.4.1.1.1	Main Cables	✓				1201d	11/14/18	08/21/23	
2869	1.4	1.4.1.1.1.3	Main Cable Production	✓				568d	05/03/21	08/21/23	
2898	1.4	1.4.1.1.1.3.2	Production of first article	✓				120d	08/30/22	02/13/23	
2899	1.4	1.4.1.1.1.3.2.1	Fabrication	✓				16w	08/30/22	12/19/22	2897
2900	1.4	1.4.1.1.1.3.2.2	Acceptance testing	✓				3w	12/20/22	01/09/23	2899
2901	1.4	1.4.1.1.1.3.2.4	First article shipping to breakout installation facility	✓				5w	01/10/23	02/13/23	2900
2902	1.4	1.4.1.1.1.3.3	Production readiness review	✓				17d	01/10/23	02/01/23	2900
2903	1.4	1.4.1.1.1.3.3.1	Production readiness review complete	✓		✓	✓	0	02/01/23	02/01/23	2902
2904	1.4	1.4.1.1.1.3.4	Production of final six main cables	✓				12w	02/02/23	04/26/23	2902
2905	1.4	1.4.1.1.1.3.5	Main Cable Production Complete	✓		✓	✓	0	04/26/23	04/26/23	2904
2906	1.4	1.4.1.1.1.3.6	Production main cable shipping to breakout installation facility	✓				8w	04/27/23	06/21/23	2904
2907	1.4	1.4.1.1.2	Breakout connections	✓				482d	03/25/21	12/30/22	
2912	1.4	1.4.1.1.2.2	Breakout final design phase	✓				104d	08/08/22	12/30/22	
2913	1.4	1.4.1.1.2.2.1	Breakout final design	✓				10w	08/09/22	10/17/22	2910
2914	1.4	1.4.1.1.2.2.2	Breakout prototype production	✓				14w	08/09/22	11/14/22	2887, 2913SS
2915	1.4	1.4.1.1.2.2.3	Breakout prototype testing	✓				12d	11/15/22	11/30/22	2914
2916	1.4	1.4.1.1.2.2.4	Breakout final design review	✓				22d	12/01/22	12/30/22	2915
2917	1.4	1.4.1.1.2.2.5	Breakout final design review complete	✓		✓	✓	0	12/30/22	12/30/22	2916
2918	1.4	1.4.1.1.3	Main Cable Assembly production	✓				102d	08/22/23	11/10/23	
2919	1.4	1.4.1.1.3.2	MCA production	✓				12w	06/22/23	09/13/23	2906, 2917, 2979
2920	1.4	1.4.1.1.3.3	Pre-ship review	✓				2d	09/14/23	09/15/23	2919
2921	1.4	1.4.1.1.3.4	Main Cable Assembly shipping to PTH (RDD 12/1/23 for FY24 vessel, ROS 12/1/2025)	✓				8w	09/18/23	11/10/23	2920
2922	1.4	1.4.1.1.3.5	MCAs shipped to PTH	✓	✓	✓	✓	0	09/18/23	09/18/23	2921SS
2923	1.4	1.4.1.1.4	Main Cable Assembly support	✓				551d	10/01/21	11/10/23	
2924	1.4	1.4.1.2	Breakout Cable Assemblies	✓				537d	10/01/21	10/23/23	
2925	1.4	1.4.1.2.1	BCA preliminary design phase	✓				249d	11/01/21	10/13/22	
2930	1.4	1.4.1.2.1.5	BCA prototype testing	✓				12d	09/28/22	10/13/22	2929
2931	1.4	1.4.1.2.1.6	BCA prototype testing complete	✓			✓	0	10/13/22	10/13/22	2930
2932	1.4	1.4.1.2.2	BCA final design phase	✓				82d	10/14/22	02/06/23	
2933	1.4	1.4.1.2.2.1	BCA final design	✓				4w	10/14/22	11/10/22	2930
2934	1.4	1.4.1.2.2.2	BCA final design review	✓				22d	11/11/22	12/12/22	2933
2935	1.4	1.4.1.2.2.3	BCA final design complete	✓			✓	0	12/12/22	12/12/22	2934
2936	1.4	1.4.1.2.2.4	BCA procurement	✓				8w	12/13/22	02/06/23	2935
2937	1.4	1.4.1.2.3	BCA production for first two strings	✓				116d	02/07/23	07/18/23	
2938	1.4	1.4.1.2.3.1	BCA manufacturing	✓				20w	02/07/23	06/26/23	2936
2939	1.4	1.4.1.2.3.2	BCA pre-ship review	✓				1d	06/27/23	06/27/23	2938

L2	WBS	Task Name	NSF	L1 Milestone	L2 Milestone	Internal Milestone	Duration	Start Date	End Date	Predecessor WBS
2940	1.4	1.4.1.2.3.3					3w	06/28/23	07/18/23	2939
2941	1.4	1.4.1.2.3.4					0	07/18/23	07/18/23	2940
2942	1.4	1.4.1.2.4					85d	08/27/23	10/23/23	
2943	1.4	1.4.1.2.4.1					14w	06/27/23	10/02/23	2938
2944	1.4	1.4.1.2.4.2					3w	10/03/23	10/23/23	2943
2945	1.4	1.4.1.2.4.3					0	10/02/23	10/02/23	2943
2946	1.4	1.4.1.2.5					523d	10/01/21	10/03/23	
2947	1.4	1.4.1.3					491d	01/01/21	11/18/22	
2963	1.4	1.4.1.3.4					308d	08/15/21	11/18/22	
2965	1.4	1.4.1.3.4.2					14w	07/04/22	10/07/22	2964
2966	1.4	1.4.1.3.4.3					3w	10/10/22	10/28/22	2965
2967	1.4	1.4.1.3.4.4					3w	10/31/22	11/18/22	2966
2968	1.4	1.4.1.3.4.5					0	11/18/22	11/18/22	2967
2969	1.4	1.4.1.3.5					296d	10/01/21	11/18/22	
2970	1.4	1.4.1.4					587d	01/01/21	03/06/23	
2971	1.4	1.4.1.4.1					587d	01/01/21	03/06/23	
2976	1.4	1.4.1.4.1.5					1d	10/17/22	10/17/22	2883, 2975, 2886,
2977	1.4	1.4.1.4.1.6					12w	10/18/22	01/09/23	2976
2978	1.4	1.4.1.4.1.7					8w	01/10/23	03/06/23	2977
2979	1.4	1.4.1.4.1.8					2w	01/10/23	01/23/23	2977
2980	1.4	1.4.1.4.1.9					0	01/23/23	01/23/23	2979
2981	1.4	1.4.1.4.2					307d	10/01/21	12/05/22	
2996	1.4	1.4.1.6					187d	06/01/25	02/19/26	
2997	1.4	1.4.1.6.1					3d	08/15/25	08/19/25	997FF
2998	1.4	1.4.1.6.2					0	11/20/25	11/20/25	
2999	1.4	1.4.1.6.3					187d	06/01/25	02/19/26	
3000	1.4	1.4.1.6.4					34d	11/20/25	01/09/26	
3001	1.4	1.4.1.6.5					11d	01/06/26	01/20/26	
3002	1.4	1.4.2					1359d	12/01/20	02/28/26	
3014	1.4	1.4.2.2					298d	10/01/21	11/18/22	
3018	1.4	1.4.2.2.4					6w	09/02/22	10/13/22	3017
3019	1.4	1.4.2.2.5					0	10/13/22	10/13/22	3018
3020	1.4	1.4.2.2.6					11d	10/14/22	10/28/22	3018
3021	1.4	1.4.2.2.7					3w	10/31/22	11/18/22	3020
3022	1.4	1.4.2.2.8					296d	10/01/21	11/18/22	
3023	1.4	1.4.2.3					1336d	01/01/21	02/28/26	
3024	1.4	1.4.2.3.1					1336d	01/01/21	02/28/26	
3025	1.4	1.4.2.3.2					445d	04/01/22	12/15/23	
3028	1.4	1.4.2.3.2.3					6w	09/22/22	11/02/22	3027
3029	1.4	1.4.2.3.2.4					2w	11/03/22	11/16/22	3028
3030	1.4	1.4.2.3.2.5					4w	11/17/22	12/14/22	3029
3031	1.4	1.4.2.3.2.6					0	11/17/22	11/17/22	3030SS
3032	1.4	1.4.2.3.2.7					1d	12/15/23	12/15/23	
3033	1.4	1.4.2.3.3					728d	04/12/22	02/03/25	
3034	1.4	1.4.2.3.3.1					35w	06/30/22	03/01/23	3046FF +3w
3035	1.4	1.4.2.3.3.2					29w	04/12/22	10/31/22	
3036	1.4	1.4.2.3.3.3					11d	03/02/23	03/16/23	3034, 3035
3037	1.4	1.4.2.3.3.4					18w	03/17/23	07/06/23	3036
3038	1.4	1.4.2.3.3.5					15w	07/07/23	10/19/23	3037
3039	1.4	1.4.2.3.3.6					7d	10/20/23	10/30/23	3038
3040	1.4	1.4.2.3.3.7					4w	10/31/23	11/28/23	3039
3041	1.4	1.4.2.3.3.8					0	10/31/23	10/31/23	3040SS
3042	1.4	1.4.2.3.3.9					5d	01/28/25	02/03/25	3082, 3090, 3115,
3043	1.4	1.4.2.3.3.10					0	02/03/25	02/03/25	3032, 3042
3044	1.4	1.4.2.3.4					1141d	10/01/21	02/28/26	
3045	1.4	1.4.2.4					584d	12/15/22	02/19/25	
3046	1.4	1.4.2.4.1					40d	12/15/22	02/08/23	
3047	1.4	1.4.2.4.3					0	12/15/24	12/15/24	
3048	1.4	1.4.2.4.4					186d	06/01/24	02/19/25	
3049	1.4	1.4.2.4.5					18d	12/15/24	01/09/25	
3050	1.4	1.4.2.4.6					24d	12/15/24	01/17/25	
3051	1.4	1.4.3					1061d	01/01/21	01/20/25	
3052	1.4	1.4.3.1					1061d	01/01/21	01/20/25	
3053	1.4	1.4.3.1.1					632d	01/01/21	06/05/23	
3057	1.4	1.4.3.1.1.4					11w	09/19/22	12/02/22	3056
3058	1.4	1.4.3.1.1.5					13w	12/05/22	03/03/23	3057
3059	1.4	1.4.3.1.1.6					9w	03/06/23	05/05/23	3058, 3110
3060	1.4	1.4.3.1.1.8					2d	05/04/23	05/05/23	3059FF
3061	1.4	1.4.3.1.1.9					4w	05/08/23	06/02/23	3060
3062	1.4	1.4.3.1.1.10					1d	06/05/23	06/05/23	3061
3063	1.4	1.4.3.1.1.11					0	06/05/23	06/05/23	3062
3064	1.4	1.4.3.1.2					419d	06/06/23	01/20/25	
3065	1.4	1.4.3.1.2.1					6w	06/06/23	07/17/23	3062
3066	1.4	1.4.3.1.2.2					6w	06/06/23	07/17/23	3065SS
3067	1.4	1.4.3.1.2.3					9w	07/18/23	09/18/23	3065, 3066
3068	1.4	1.4.3.1.2.4					4w	09/19/23	10/16/23	3067
3069	1.4	1.4.3.1.2.5					0	10/16/23	10/16/23	3068
3070	1.4	1.4.3.1.2.6					11d	10/17/23	10/31/23	3068

L2	WBS	Task Name	NSF	L1 Milestone	L2 Milestone	Internal Milestone	Duration	Start Date	End Date	Predecessor WBS
3071	1.4	1.4.3.1.2.7					6w	11/01/23	12/13/23	3070
3072	1.4	1.4.3.1.2.8					5d	01/14/25	01/20/25	3082, 3115, 3455
3073	1.4	1.4.3.1.2.9					0	01/20/25	01/20/25	3072
3074	1.4	1.4.4					1310d	02/01/21	02/18/28	
3075	1.4	1.4.4.1					1041d	02/01/21	02/04/25	
3076	1.4	1.4.4.1.1					1025d	02/01/21	01/13/25	
3077	1.4	1.4.4.1.1.1					533d	02/01/21	02/15/23	
3078	1.4	1.4.4.1.1.2					8w	02/16/23	04/12/23	3077
3079	1.4	1.4.4.1.1.3					11d	04/13/23	04/27/23	3078
3080	1.4	1.4.4.1.1.4					0	04/27/23	04/27/23	3079
3081	1.4	1.4.4.1.1.5					7w	04/28/23	06/15/23	3079
3082	1.4	1.4.4.1.1.7					5d	01/07/25	01/13/25	
3083	1.4	1.4.4.1.2					545d	12/19/22	01/27/25	
3084	1.4	1.4.4.1.2.1					372d	12/19/22	05/24/24	3086FF
3085	1.4	1.4.4.1.2.2					4w	04/01/24	04/26/24	
3086	1.4	1.4.4.1.2.3					4w	04/29/24	05/24/24	3085
3087	1.4	1.4.4.1.2.4					6w	05/27/24	07/05/24	3084
3088	1.4	1.4.4.1.2.5					0	07/05/24	07/05/24	3087
3089	1.4	1.4.4.1.2.6					3w	07/08/24	07/26/24	3087
3090	1.4	1.4.4.1.2.8					5d	01/21/25	01/27/25	3073
3091	1.4	1.4.4.1.3					867d	10/01/21	02/04/25	
3092	1.4	1.4.4.2					1287d	03/04/21	02/19/28	
3093	1.4	1.4.4.2.1					572d	03/04/21	05/12/23	
3097	1.4	1.4.4.2.1.5					25w	11/21/22	05/12/23	3111
3098	1.4	1.4.4.2.1.6					0	05/12/23	05/12/23	3097
3099	1.4	1.4.4.2.2					418d	08/03/21	04/07/23	
3100	1.4	1.4.4.2.2.1					296d	09/03/21	10/21/22	3095FF +3w
3102	1.4	1.4.4.2.2.4					20w	11/21/22	04/07/23	3111
3103	1.4	1.4.4.2.2.5					0	04/07/23	04/07/23	3102
3104	1.4	1.4.4.2.3					498d	05/15/21	04/07/23	
3107	1.4	1.4.4.2.3.4					20w	11/21/22	04/07/23	3111
3108	1.4	1.4.4.2.3.5					0	04/07/23	04/07/23	3107
3109	1.4	1.4.4.2.4					590d	10/03/22	01/13/25	
3110	1.4	1.4.4.2.4.1					4w	10/03/22	10/28/22	3095, 3101, 3106
3111	1.4	1.4.4.2.4.2					3w	10/31/22	11/18/22	3110
3112	1.4	1.4.4.2.4.3					1d	05/15/23	05/15/23	3098, 3103, 3108
3113	1.4	1.4.4.2.4.4					4w	05/16/23	06/12/23	3112
3114	1.4	1.4.4.2.4.5					0	05/16/23	05/16/23	3113SS
3115	1.4	1.4.4.2.4.6					5d	01/07/25	01/13/25	
3116	1.4	1.4.4.2.5					1121d	10/01/21	01/29/26	
3117	1.4	1.4.4.3					548d	01/07/24	02/18/28	
3118	1.4	1.4.4.3.1					0	01/07/24	01/07/24	
3119	1.4	1.4.4.3.2					186d	06/01/24	02/19/25	
3120	1.4	1.4.4.3.3					19d	01/07/25	01/31/25	
3121	1.4	1.4.4.3.4					14d	01/15/25	02/03/25	
3122	1.4	1.4.4.3.5					21d	08/01/25	08/29/25	
3123	1.4	1.4.4.3.6					0	11/15/25	11/15/25	
3124	1.4	1.4.4.3.7					187d	06/01/25	02/19/26	
3125	1.4	1.4.4.3.8					21d	11/15/25	12/15/25	
3126	1.4	1.4.4.3.9					20d	12/18/25	01/16/26	
3127	1.4	1.4.5					1383d	01/01/21	04/08/28	
3139	1.4	1.4.5.4					1383d	01/01/21	04/08/28	
3142	1.4	1.4.5.4.3					1255d	06/02/21	04/06/26	3141
3143	1.4	1.4.6					1168d	10/01/21	04/06/26	
3144	1.5	1.5					1957d	10/01/18	04/13/28	
3145	1.5	1.5.1					1360d	12/19/18	02/23/24	
3146	1.5	1.5.1.1					1248d	12/19/18	08/28/23	
3147	1.5	1.5.1.1.1					1248d	12/19/18	09/29/23	
3148	1.5	1.5.1.1.2					0	12/31/22	12/31/22	
3149	1.5	1.5.1.2					29d	01/16/24	02/23/24	
3150	1.5	1.5.2					1778d	10/01/18	08/01/25	
3151	1.5	1.5.2.1					1155d	10/01/18	03/03/23	
3158	1.5	1.5.2.1.2					284d	02/01/22	03/03/23	
3167	1.5	1.5.2.1.2.8					15d	09/19/22	10/07/22	3166
3168	1.5	1.5.2.1.2.9					15d	10/10/22	10/28/22	3167
3169	1.5	1.5.2.1.2.10					15d	10/31/22	11/18/22	3168
3170	1.5	1.5.2.1.2.11					15d	11/21/22	12/09/22	3169
3171	1.5	1.5.2.1.2.12					15d	12/12/22	12/30/22	3170
3172	1.5	1.5.2.1.2.13					15d	01/02/23	01/20/23	3171
3173	1.5	1.5.2.1.2.14					15d	01/23/23	02/10/23	3172
3174	1.5	1.5.2.1.2.15					15d	02/13/23	03/03/23	3173
3176	1.5	1.5.2.2					923d	01/10/22	08/01/25	
3177	1.5	1.5.2.2.1					844d	05/01/22	08/01/25	
3182	1.5	1.5.2.2.1.5					67d	03/01/23	06/01/23	
3183	1.5	1.5.2.2.1.6					66d	04/01/23	06/30/23	
3184	1.5	1.5.2.2.1.7					23d	07/01/23	08/01/23	
3185	1.5	1.5.2.2.1.8					0	08/01/23	08/01/23	3184
3186	1.5	1.5.2.2.1.9					0	12/15/23	12/15/23	

L2	WBS	Task Name	NSF	L1 Milestone	L2 Milestone	Internal Milestone	Duration	Start Date	End Date	Predecessor WBS
3187	1.5	1.5.2.2.1.10	Deliver Str. 87-88 POCAM Modules to CHC (4)				0	08/01/24	08/01/24	
3188	1.5	1.5.2.2.1.11	Deliver Str. 89-93 POCAM Modules to CHC (17)				0	08/01/25	08/01/25	
3189	1.5	1.5.2.2.2	Pencil Beam (at UW, Chris Wendt)				923d	01/10/22	08/01/25	
3190	1.5	1.5.2.2.2.0	Pencil Beam Engineering				666d	01/10/22	08/01/24	
3191	1.5	1.5.2.2.2.1	Pencil Beam DVT Module(s) built				255d	01/10/22	12/30/22	
3192	1.5	1.5.2.2.2.2	Pencil Beam Design verification testing				252d	03/15/22	03/01/23	
3193	1.5	1.5.2.2.2.3	Update Pencil Beam design				209d	03/15/22	12/30/22	
3194	1.5	1.5.2.2.2.4	Pencil Beam Final Design Review				0	03/01/23	03/01/23	
3195	1.5	1.5.2.2.2.5	Pencil Beam Batch 1 production				43d	03/02/23	05/01/23	
3196	1.5	1.5.2.2.2.6	Pencil Beam Batch 1 calibration				67d	05/01/23	08/01/23	
3197	1.5	1.5.2.2.2.7	Pencil Beam Batch 1 FAT testing				67d	05/01/23	08/01/23	
3198	1.5	1.5.2.2.2.8	Pencil Beam Batch 2 production				108d	08/02/23	01/03/24	
3199	1.5	1.5.2.2.2.9	Pencil Beam Batch 2 calibration				154d	01/01/24	08/01/24	
3200	1.5	1.5.2.2.2.10	Pencil Beam Batch 2 FAT testing				154d	01/01/24	08/01/24	
3201	1.5	1.5.2.2.2.11	PencilBeam Batch 1 Ready to Ship				0	08/01/23	08/01/23	3197
3202	1.5	1.5.2.2.2.12	PencilBeam Batch 2 Ready to Ship				0	08/01/24	08/01/24	3200
3203	1.5	1.5.2.2.2.13	Deliver 1 Pencil Beam module to NTS				0	12/15/23	12/15/23	
3204	1.5	1.5.2.2.2.14	Deliver Str. 87-88 Pencil Beam Modules to PTH (4)				0	08/01/24	08/01/24	
3205	1.5	1.5.2.2.2.15	Deliver Str. 89-93 Pencil Beam Modules to PTH (8)				0	08/01/25	08/01/25	
3206	1.5	1.5.2.3	Camera and Light Detection				1386d	04/01/20	08/01/25	
3207	1.5	1.5.2.3.1	Cameras in Photosensors				696d	04/01/20	11/30/22	
3216	1.5	1.5.2.3.1.2	mDOM Cameras				696d	04/01/20	11/30/22	
3247	1.5	1.5.2.3.1.2.31	Delivery of Camera mDOM batch 6 to MSU				22d	09/30/22	10/31/22	
3248	1.5	1.5.2.3.1.2.32	Camera mDOM MSU batch 7 Calibration (CAT)				22d	10/01/22	10/31/22	
3249	1.5	1.5.2.3.1.2.33	Delivery of Camera mDOM batch 7 to MSU				23d	10/31/22	11/30/22	
3250	1.5	1.5.2.3.1.2.34	Delivery of Camera mDOM to MSU Completed				0	11/30/22	11/30/22	
3251	1.5	1.5.2.3.2	Sweden Camera 2.0				1100d	05/08/21	08/01/25	
3254	1.5	1.5.2.3.2.3	Sweden Camera Final Design Review				0	10/03/22	10/03/22	
3255	1.5	1.5.2.3.2.4	Sweden Camera Production				240d	10/03/22	09/01/23	
3256	1.5	1.5.2.3.2.5	Sweden Camera Ready to Ship				0	09/01/23	09/01/23	3255
3257	1.5	1.5.2.3.2.6	Delivery of 1 Sweden Camera Module to NTS				0	10/02/23	10/02/23	
3258	1.5	1.5.2.3.2.7	Delivery of Str. 87-88 Sweden Camera Modules to CHC (2)				0	08/01/24	08/01/24	
3259	1.5	1.5.2.3.2.8	Delivery of Str. 89-93 Sweden Camera Modules to CHC (3)				0	08/01/25	08/01/25	
3260	1.5	1.5.2.4	Acoustic Sensors				1039d	08/01/21	08/01/25	
3265	1.5	1.5.2.4.5	Acoustic Electronic Update and test				45d	10/01/22	12/01/22	
3266	1.5	1.5.2.4.6	Acoustic Design complete, Final Design Review				0	11/01/22	11/01/22	
3267	1.5	1.5.2.4.7	Acoustic Batch 1 production				66d	01/01/23	03/31/23	
3268	1.5	1.5.2.4.8	Acoustic Batch 1 calibration				88d	03/01/23	06/30/23	
3269	1.5	1.5.2.4.9	Acoustic Batch 1 FAT testing				67d	06/01/23	09/01/23	
3270	1.5	1.5.2.4.10	Acoustic Modules Ready to Ship				0	09/01/23	09/01/23	3269
3271	1.5	1.5.2.4.11	Acoustic deliver one module to Northern Test System				0	10/02/23	10/02/23	3270FS +21d
3272	1.5	1.5.2.4.12	Delivery of Str. 87-88 Acoustic modules to CHC (4)				0	08/01/24	08/01/24	
3273	1.5	1.5.2.4.13	Delivery of Str. 89-93 Acoustic modules to CHC (6)				0	08/01/25	08/01/25	
3288	1.5	1.5.3	Array Calibration				1948d	10/01/18	03/31/26	
3289	1.5	1.5.3.1	Calibration Benchmarks				1901d	10/01/18	01/23/26	
3290	1.5	1.5.3.1.1	Simulation Studies				1819d	10/01/18	09/26/25	
3291	1.5	1.5.3.1.2	Plan				1564d	01/01/20	01/09/26	
3292	1.5	1.5.3.1.3	Software Development				782d	12/30/22	01/09/26	
3293	1.5	1.5.3.1.4	Execution				524d	01/15/24	01/23/26	
3294	1.5	1.5.3.2	Timing Calibration				1901d	12/05/18	03/31/26	
3295	1.5	1.5.3.2.1	Develop Flasher Plan w New Timing System				1050d	12/05/18	12/13/22	
3296	1.5	1.5.3.2.2	TEST Flasher in IceCube w New Timing System				263d	12/14/22	12/18/23	
3297	1.5	1.5.3.2.3	Development of Timing Calibration Plan				1346d	11/01/19	01/06/25	
3298	1.5	1.5.3.2.4	Create Database Structure for Timing Calibration Data				458d	04/01/24	01/08/26	
3299	1.5	1.5.3.2.5	Analyze Timing Calibration Data from Deployed Modules				64d	01/01/26	03/31/26	
3300	1.5	1.5.3.3	Geometry Calibration				1984d	11/01/19	03/31/26	
3301	1.5	1.5.3.3.1	Develop Geometry Plan				1282d	11/01/19	10/03/24	
3302	1.5	1.5.3.3.2	Create Database Structure for Geometry Calibration Data				458d	04/01/24	01/08/26	
3303	1.5	1.5.3.3.3	Analyze Geometry Calibration Data from Deployed Modules				64d	01/01/26	03/31/26	
3304	1.5	1.5.3.3.4	Delivery of Preliminary Timing and Geometry Calibration				0	03/31/26	03/31/26	3303
3305	1.5	1.5.3.4	Ice Properties Calibration				1054d	03/04/22	03/31/26	
3306	1.5	1.5.3.4.1	Plan				667d	03/04/22	09/26/24	
3307	1.5	1.5.3.4.2	Software Development				458d	04/01/24	01/08/26	
3308	1.5	1.5.3.4.3	Execution of Array Calibration				64d	01/01/26	03/31/26	
3309	1.5	1.5.3.4.4	Preliminary Array Calibration Complete				0	03/31/26	03/31/26	3308
3310	1.5	1.5.3.5	Pre-deployment Hole Measurement				428d	08/01/24	03/31/26	
3311	1.5	1.5.3.5.1	Testing of dust logger and IDP winch				22d	08/01/24	08/30/24	
3312	1.5	1.5.3.5.2	Dust Logger and IDP Winch - Ready to Ship				0	08/30/24	08/30/24	3311
3313	1.5	1.5.3.5.3	Delivery of logger and winch to PTH				0	09/01/25	09/01/25	
3314	1.5	1.5.3.5.4	Analyze Hole Log Data				54d	01/15/26	03/31/26	
3315	1.5	1.5.3.5.5	Preliminary Delivery of Dust Logger Data				0	03/31/26	03/31/26	3314
3316	1.5	1.5.4	Calibration Management and Organization				1883d	01/11/19	04/13/26	
3317	1.5	1.5.4.1	Calibration management				1883d	01/11/19	04/13/26	
3318	1.5	1.5.4.2	Travel				1883d	01/11/19	04/13/26	
3319	1.6	1.6	IceCube Data Systems Integration				2043d	08/01/18	04/13/26	
3320	1.6	1.6.0	L2 Task Management				1434d	10/01/20	04/13/26	
3321	1.6	1.6.1	Online Systems Software				2043d	08/01/18	04/13/26	
3322	1.6	1.6.1.0	L3 Task Management				1434d	10/01/20	04/13/26	

L2	WBS	Task Name	NSF	L1 Milestone	L2 Milestone	Internal Milestone	Duration	Start Date	End Date	Predecessor WBS
3323	1.6	1.6.1.1					1920d	11/01/16	03/24/26	
	1.6	1.6.1.1.1					1672d	11/01/16	01/15/23	
3324	1.6	1.6.1.1.1.8					783d	09/30/20	09/29/23	3323SS +106d
3335	1.6	1.6.1.1.1.9.1					227d	07/04/22	05/16/23	3334
3336	1.6	1.6.1.1.1.10					0	05/16/23	05/16/23	3335
3337	1.6	1.6.1.1.1.1.1					160d	05/17/23	12/28/23	3336
3338	1.6	1.6.1.1.1.1.1.1					160d	12/29/23	08/09/24	3337
3339	1.6	1.6.1.1.1.1.1.2					160d	08/12/24	03/26/25	3338
3340	1.6	1.6.1.1.1.1.1.3					188d	03/27/25	12/16/25	3339
3341	1.6	1.6.1.1.1.1.2					0	12/16/25	12/16/25	3340
3342	1.6	1.6.1.1.1.1.3					20d	12/17/25	01/15/26	3341
3343	1.6	1.6.1.1.2					1399d	11/01/20	03/24/26	
3348	1.6	1.6.1.1.2.5					643d	09/15/22	03/11/25	3347
3349	1.6	1.6.1.1.2.5.0					97d	04/12/23	08/24/23	3254, 3194FS +30d,
3350	1.6	1.6.1.1.2.5.1					190d	08/25/23	05/21/24	3349
3351	1.6	1.6.1.1.2.5.2					0	05/21/24	05/21/24	3350
3352	1.6	1.6.1.1.2.6					150d	05/22/24	12/18/24	3351
3353	1.6	1.6.1.1.2.6.1					150d	12/19/24	07/18/25	3352
3354	1.6	1.6.1.1.2.6.2					154d	07/21/25	02/24/26	3353
3355	1.6	1.6.1.1.2.7					0	02/24/26	02/24/26	3354
3356	1.6	1.6.1.1.2.8					20d	02/25/26	03/24/26	3355
3357	1.6	1.6.1.2					2041d	06/01/16	04/09/26	
3358	1.6	1.6.1.2.1					1981d	06/01/16	01/15/26	
3366	1.6	1.6.1.2.1.8					782d	10/01/20	09/29/23	
3368	1.6	1.6.1.2.1.9.1					227d	07/04/22	05/16/23	3367
3369	1.6	1.6.1.2.1.10					0	05/16/23	05/16/23	3368
3370	1.6	1.6.1.2.1.1.1					160d	05/17/23	12/28/23	3369
3371	1.6	1.6.1.2.1.1.1.1					160d	12/29/23	08/09/24	3370
3372	1.6	1.6.1.2.1.1.1.2					160d	08/12/24	03/26/25	3371
3373	1.6	1.6.1.2.1.1.1.3					188d	03/27/25	12/16/25	3372
3374	1.6	1.6.1.2.1.1.2					0	12/16/25	12/16/25	3373
3375	1.6	1.6.1.2.1.1.3					20d	12/17/25	01/15/26	3374
3376	1.6	1.6.1.2.2					1046d	03/27/22	04/08/26	
3378	1.6	1.6.1.2.2.2					97d	04/12/23	08/24/23	3254, 3194FS +30d,
3379	1.6	1.6.1.2.2.3					190d	08/25/23	05/21/24	3378
3380	1.6	1.6.1.2.2.4					0	05/21/24	05/21/24	3379
3381	1.6	1.6.1.2.2.5					140d	05/22/24	12/04/24	3380
3382	1.6	1.6.1.2.2.5.1					140d	12/05/24	06/20/25	3381
3383	1.6	1.6.1.2.2.5.2					175d	06/23/25	02/25/26	3382
3384	1.6	1.6.1.2.2.6					0	02/25/26	02/25/26	3383, 3355
3385	1.6	1.6.1.2.2.7					20d	02/26/26	03/25/26	3384
3386	1.6	1.6.1.2.2.8					11d	03/26/26	04/09/26	3385
3387	1.6	1.6.1.2.3					391d	10/01/24	04/08/26	
3388	1.6	1.6.1.3					784d	01/01/23	12/12/25	
3389	1.6	1.6.1.3.1					34d	01/01/23	02/15/23	
3390	1.6	1.6.1.3.2					65d	02/16/23	05/17/23	3389
3391	1.6	1.6.1.3.3					1d	05/18/23	05/18/23	3390
3392	1.6	1.6.1.3.4					196d	02/13/25	11/13/25	
3393	1.6	1.6.1.3.5					0	11/13/25	11/13/25	3392
3394	1.6	1.6.1.3.6					20d	11/14/25	12/12/25	3393
3395	1.6	1.6.1.4					1880d	12/06/16	03/03/26	
3398	1.6	1.6.1.4.3					1821d	01/16/19	01/20/26	
3409	1.6	1.6.1.4.3.8					740d	11/30/20	09/29/23	3408
3411	1.6	1.6.1.4.3.9.1					160d	10/01/22	05/11/23	
3412	1.6	1.6.1.4.3.9.2					267d	05/12/23	05/23/24	3411
3413	1.6	1.6.1.4.3.10					77d	01/15/24	04/30/24	
3414	1.6	1.6.1.4.3.10.1					1d	06/12/24	06/12/24	3413FS +30d
3415	1.6	1.6.1.4.3.11					44d	05/01/24	07/01/24	
3416	1.6	1.6.1.4.3.12					0	12/15/24	12/15/24	
3417	1.6	1.6.1.4.3.13					46d	12/24/24	02/27/25	2035
3418	1.6	1.6.1.4.3.14					0	11/20/25	11/20/25	
3419	1.6	1.6.1.4.3.15					41d	11/20/25	01/20/26	3418
3425	1.6	1.6.1.4.5					1362d	12/01/20	03/03/26	
3430	1.6	1.6.1.4.5.4.1					150d	10/03/22	04/28/23	3429
3431	1.6	1.6.1.4.5.4.2					332d	05/01/23	08/09/24	3430
3432	1.6	1.6.1.4.5.4.3					190d	08/25/23	05/21/24	3350SS
3433	1.6	1.6.1.4.5.4.4					77d	01/15/24	04/30/24	3413SS
3434	1.6	1.6.1.4.5.4.5					1d	06/12/24	06/12/24	3433FS +30d
3435	1.6	1.6.1.4.5.4.6					188d	03/27/25	12/16/25	3373SS
3436	1.6	1.6.1.4.5.5					0	04/28/23	04/28/23	3430
3437	1.6	1.6.1.4.5.6					154d	07/21/25	02/24/26	3354SS
3438	1.6	1.6.1.4.5.7					0	12/16/25	12/16/25	3435
3439	1.6	1.6.1.4.5.8					316d	12/10/24	03/03/26	3417SS -10d
3440	1.6	1.6.1.4.6					1157d	06/01/21	11/13/25	
3445	1.6	1.6.1.4.6.5					360d	06/25/24	11/13/25	3350FS +24d
3446	1.6	1.6.1.5					1382d	01/01/21	04/03/26	
3447	1.6	1.6.1.5.1					716d	01/01/21	09/29/23	
3450	1.6	1.6.1.5.2.2					70d	11/01/22	02/06/23	3057FS -24d

	L2	WBS	Task Name	NSF	L1 Milestone	L2 Milestone	Internal Milestone	Duration	Start Date	End Date	Predecessor WBS
3451	1.6	1.6.1.5.3	Modification of FieldHub server software to support full FieldHub functionality	✓				164d	09/19/22	05/04/23	3449
3452	1.6	1.6.1.5.3.1	Field Hub Software ready for use on FH hardware at NTS	✓			✓	0	05/05/23	05/05/23	3451, 3059
3453	1.6	1.6.1.5.4	Review Field Hub software in Upgrade detector operations	✓				0	05/18/23	05/18/23	
3454	1.6	1.6.1.5.5	Development of FieldHub monitoring software (IceCube Live interface)	✓				211d	01/28/24	11/15/24	
3455	1.6	1.6.1.5.5.1	Software available to support FieldHub installation and testing at Pole	✓			✓	0	11/15/24	11/15/24	3454
3456	1.6	1.6.1.5.6	support of FieldHub / pDAQ Data Collector interface layer with pDAQ development	✓				290d	03/26/24	05/08/25	
3457	1.6	1.6.1.5.7	support FieldHub and SBC software system thru DAQ deployment and String commissioning	✓				152d	09/01/25	04/03/26	
3458	1.6	1.6.1.6	OM Firmware support (PSU)	✓				1902d	12/17/18	04/13/28	
3482	1.6	1.6.1.6.6	Firmware device maintenance and support for all OM devices during DAQ Development	✓				913d	10/01/22	04/13/26	
3483	1.6	1.6.2	Offline Systems	✓				1891d	01/01/19	04/13/26	
3484	1.6	1.6.2.0	L3 Task Management	✓				1434d	10/01/20	04/13/26	
3485	1.6	1.6.2.1	Core Software	✓				1271d	12/24/19	11/08/24	
3490	1.6	1.6.2.1.5	Extend Core Software to include support for new hardware readouts	✓				107d	06/13/24	11/08/24	3434
3491	1.6	1.6.2.1.6	Core Software Release for hardware readout support ready	✓			✓	0	11/08/24	11/08/24	3490
3492	1.6	1.6.2.2	Reconstruction	✓				1530d	05/12/20	04/03/26	
3497	1.6	1.6.2.2.5	Offline software support and testing for Upgrade low energy event reconstruction tools	✓				323d	01/05/25	04/03/26	
3498	1.6	1.6.2.3	Tools and Infrastructure	✓				1891d	01/01/19	04/13/26	
3501	1.6	1.6.2.3.3	Support Upgrade SW Development environment and infrastructure	✓				1740d	07/31/19	04/13/26	3500
3502	1.6	1.6.3	Simulation Software	✓				1934d	11/01/18	04/13/26	
3503	1.6	1.6.3.0	L3 Task Management	✓				1434d	10/01/20	04/13/26	
3504	1.6	1.6.3.1	Electronic readout and optical module simulation	✓				1514d	05/28/20	03/30/26	
3510	1.6	1.6.3.1.4	Version 2 - as built	✓				85d	12/29/25	03/30/26	
3511	1.6	1.6.3.1.4.1	Capture Improvements of OM device Simulation Tools (w/testing, deployment&initial data collection)	✓				30d	12/29/25	02/09/26	3565FS -65d
3512	1.6	1.6.3.1.4.2	Prepare and handoff needed details for as-built simulation final Implementation and testing	✓				53d	01/15/26	03/30/26	
3513	1.6	1.6.3.1.4.3	As built device details delivered to IceCube simulation team for simulation implementation and testing	✓			✓	0	03/30/26	03/30/26	3512
3514	1.6	1.6.3.2	Calibration Device simulation	✓				800d	03/01/23	04/06/26	
3515	1.6	1.6.3.2.1	Capture requirements for Calibration device Simulation Tools based on Final Designs	✓				25d	03/01/23	04/04/23	
3516	1.6	1.6.3.2.2	Design Calibration Device Simulation Tools based on Final Designs	✓				80d	04/05/23	07/25/23	3515
3517	1.6	1.6.3.2.3	Version 1 - as designed	✓				74d	07/28/23	11/08/23	
3518	1.6	1.6.3.2.3.1	Implementation and testing	✓				74d	07/28/23	11/08/23	3516
3519	1.6	1.6.3.2.3.2	Release v1 calibration devicesimulation tools	✓			✓	0	11/06/23	11/06/23	3518
3520	1.6	1.6.3.2.4	Version 2 - as built	✓				45d	02/03/26	04/06/26	
3521	1.6	1.6.3.2.4.1	Capture Improvements of Calibration device Simulation Tools (w/testing, deployment&initial data collection)	✓				23d	02/03/26	03/05/26	3571FS -45d
3522	1.6	1.6.3.2.4.2	Prepare and handoff needed details for as-built simulation final Implementation and testing	✓				22d	03/06/26	04/06/26	3521
3523	1.6	1.6.3.2.4.3	As built device details delivered to IceCube simulation team for simulation implementation and testing	✓			✓	0	04/06/26	04/06/26	3522
3524	1.6	1.6.3.3	Simulation production	✓				1925d	11/01/18	03/31/26	
3529	1.6	1.6.3.3.5	Develop tools for "As-Built"Simulation Samples for Data Quality Verification Studies	✓				43d	01/31/26	03/31/26	
3530	1.6	1.6.3.3.6	Tools to provide "As Built" simulation sample ready	✓			✓	0	03/31/26	03/31/26	3529
3531	1.6	1.6.4	Computing Infrastructure	✓				1888d	02/01/19	04/13/26	
3532	1.6	1.6.4.0	L3 Task Management	✓				1434d	10/01/20	04/13/26	
3533	1.6	1.6.4.1	SPTS/NTS computing needs	✓				1888d	02/01/19	04/13/26	
3534	1.6	1.6.4.1.1	NTS	✓				1888d	02/01/19	04/13/26	
3539	1.6	1.6.4.1.1.5	Refresh NTS HW to match SPS	✓				21d	04/01/25	04/29/25	
3540	1.6	1.6.4.1.1.6	Support NTS System	✓				1708d	09/15/19	04/13/26	
3546	1.6	1.6.4.2	SPS computing needs	✓				1745d	05/01/19	01/19/28	
3548	1.6	1.6.4.2.9	Design/Specify SPS Computing Sys Extensions for Upgrade	✓				44d	02/01/25	04/02/25	
3549	1.6	1.6.4.2.10	Procure Computing Sys for SPSExt	✓				21d	04/03/25	05/01/25	3548
3550	1.6	1.6.4.2.11	Buildout and test SPS systems in North	✓				45d	05/02/25	07/03/25	3549
3551	1.6	1.6.4.2.12	Ship Computing Sys for SPS Ext to Pole	✓				22d	07/04/25	08/04/25	3550
3552	1.6	1.6.4.2.13	Computing HW for SPS Ext Arrival at NPX	✓			✓	0	12/13/25	12/13/25	
3553	1.6	1.6.4.2.14	Installation at Pole	✓				24d	12/15/25	01/19/26	3552
3554	1.6	1.6.4.2.15	SPS computing system for Upgrade complete at pole	✓		✓	✓	0	01/19/26	01/19/26	3553
3555	1.6	1.6.4.3	Distributed computing needs	✓				1141d	11/03/21	03/31/28	
3557	1.6	1.6.4.3.2	Prepare Distributed Mass Production for "As Built" Detector Verification	✓				43d	02/01/26	03/31/26	
3558	1.6	1.6.5	Upgrade String Commissioning	✓				326d	01/01/25	04/06/26	
3559	1.6	1.6.5.0	L3 Task Management	✓				325d	01/01/25	04/03/26	
3560	1.6	1.6.5.1	Upgrade OM module commissioning	✓				257d	04/01/25	03/30/28	
3561	1.6	1.6.5.1.1	Develop and review OM module commissioning plan	✓				87d	04/01/25	07/30/25	
3562	1.6	1.6.5.1.2	Review OM module commissioning plan	✓			✓	0	07/30/25	07/30/25	3561
3563	1.6	1.6.5.1.3	Develop software needed for OM commissioning	✓				108d	07/31/25	12/31/25	3562
3564	1.6	1.6.5.1.4	Commission newly deployed OMs following deployment	✓				83d	12/02/25	03/30/26	2148SS -14d
3565	1.6	1.6.5.1.5	Deliver commissioned OMs to detector operations team for integration	✓		✓	✓	0	03/30/26	03/30/26	3564
3566	1.6	1.6.5.2	Upgrade calibration device commissioning	✓				197d	07/01/25	04/06/26	
3567	1.6	1.6.5.2.1	Develop and review calibration device commissioning plan	✓				46d	07/01/25	09/02/25	
3568	1.6	1.6.5.2.2	Review calibration device commissioning plan	✓			✓	0	09/02/25	09/02/25	3567
3569	1.6	1.6.5.2.3	Develop software needed for calibration device commissioning	✓				85d	09/03/25	01/02/26	3568
3570	1.6	1.6.5.2.4	Commission newly deployed calibration devices following deployment	✓				77d	12/17/25	04/06/26	2148SS -3d
3571	1.6	1.6.5.2.5	Deliver commissioned calibration devices to detector operations team for integration	✓		✓	✓	0	04/06/26	04/06/26	3570