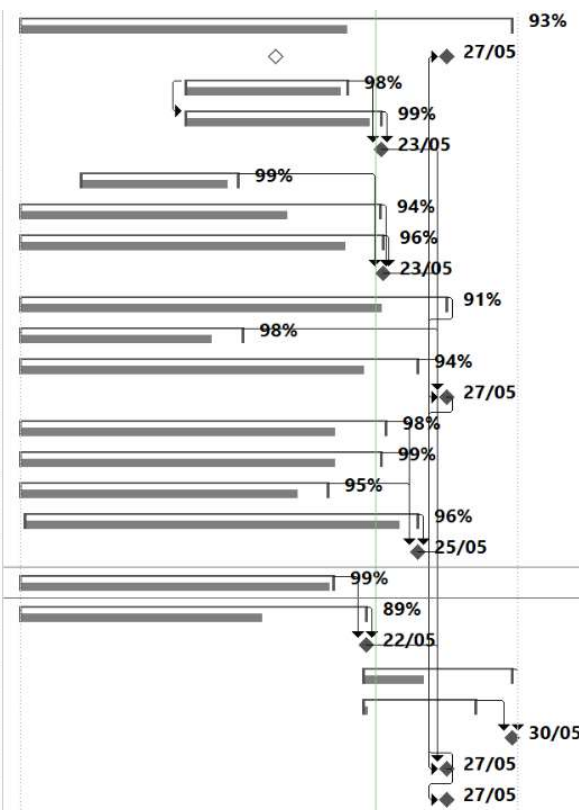




SODA ASH PLANT DASHBOARD

SHUTDOWN PLAN 2023 - SODA ASH PLANT	293.25 hrs	93%	03/05/2023	30/05/2023
PROJECT FINISH	0 hrs	0%	27/05/2023	27/05/2023
POTABLE & BRACKISH WATER SUPPLY	97 hrs	98%	12/05/2023	21/05/2023
FIRE HYDRANT SYSTEM	115.5 hrs	99%	12/05/2023	23/05/2023
Water Plant Maintenance Complete	0 hrs	0%	23/05/2023	23/05/2023
HOT WASH WATER SYSTEM	91 hrs	99%	06/05/2023	15/05/2023
CARBONATION	210.25 hrs	94%	03/05/2023	23/05/2023
CRYSTALLISATION	214.25 hrs	96%	03/05/2023	23/05/2023
Carbonation Maintenance Complete	0 hrs	0%	23/05/2023	23/05/2023
BICARBONATE THICKENING	252 hrs	91%	03/05/2023	27/05/2023
BICARBONATE FILTRATION - A LINE	294.75 hrs	98%	03/05/2023	15/05/2023
BICARBONATE FILTRATION - B LINE	233.5 hrs	94%	03/05/2023	25/05/2023
Thickening and Filtration Maintenance Complete	0 hrs	0%	27/05/2023	27/05/2023
CALCINER - A LINE	217.5 hrs	98%	03/05/2023	23/05/2023
CALCINER - B LINE	211.5 hrs	99%	03/05/2023	23/05/2023
CALCINER GAS TREATMENT - A LINE	180 hrs	95%	03/05/2023	20/05/2023
CALCINER GAS TREATMENT - B LINE	233 hrs	96%	03/05/2023	25/05/2023
Calcining Maintenance Complete	0 hrs	0%	25/05/2023	25/05/2023
COMPACTION - A LINE	187.25 hrs	99%	03/05/2023	20/05/2023
COMPACTION - B LINE	204.25 hrs	89%	03/05/2023	22/05/2023
Compaction Maintenance Complete	0 hrs	0%	22/05/2023	22/05/2023
DENSE SODA ASH STORAGE	92.25 hrs	52%	22/05/2023	30/05/2023
DENSE SODA ASH BAGGING	69.5 hrs	5%	22/05/2023	28/05/2023
Ash Bagging and Storage Maintenance Complete	0 hrs	0%	30/05/2023	30/05/2023
SHUTDOWN MAINTENANCE COMPLETE	0 hrs	0%	27/05/2023	27/05/2023
PLANT START-UP PLAN	0 hrs	0%	27/05/2023	27/05/2023



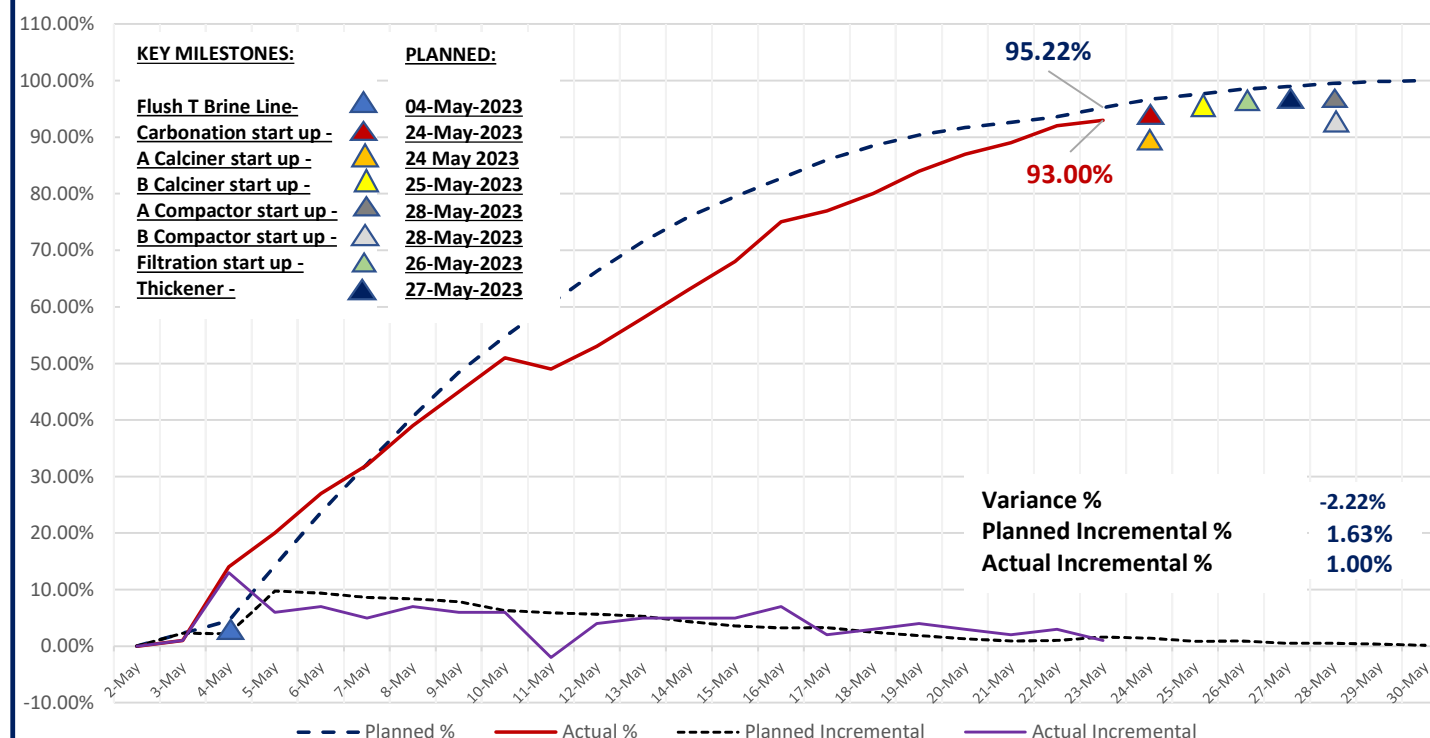
SODA ASH PLANT KEY MILESTONES	PLANNED	FORECAST	Variance	DAYS TO COMPLETION	TOP 5 RISKS
HOT WASH WATER SYSTEM	15-May-23	24-May-23	-8.77	4	1) B Compactor gearbox repairs
BICARBONATE THICKENING	27-May-23	27-May-23	-0.09		2) Thickener concrete repairs
BICARBONATE FILTRATION - A LINE	15-May-23	28-May-23	-12.45		3) A Calciner paddle repairs
CALCINER - A LINE	23-May-23	24-May-23	-0.94		4) Sand Filter repairs
COMPACTION - A LINE	20-May-23	25-May-23	-4.53		5) Possible rework
Soda Ash Plant operational	30-May-23	30-May-23	-0.18		

PLANT SUB-AREA:	Planned	Actual	Variance	Planned % Increment	Actual % Increment	Risk
SHUTDOWN 2023 - SODA ASH	95.22%	93.00%	-2.22%	1.63%	1.00%	
POTABLE & BRACKISH WATER	100.00%	98.00%	-2.00%	0.00%	0.00%	
FIRE HYDRANT SYSTEM	100.00%	99.00%	-1.00%	0.33%	0.00%	
HOT WASH WATER SYSTEM	100.00%	99.00%	-1.00%	0.00%	0.00%	
CARBONATION	100.00%	94.00%	-6.00%	0.01%	0.00%	
CRYSTALLISATION	100.00%	96.00%	-4.00%	1.35%	0.00%	
BICARBONATE THICKENING	95.44%	91.00%	-4.44%	4.99%	6.00%	
BICARBONATE FILTRATION - A LINE	100.00%	98.00%	-2.00%	0.00%	1.00%	
BICARBONATE FILTRATION - B LINE	98.85%	94.00%	-4.85%	2.51%	3.00%	
CALCINER - A LINE	100.00%	98.00%	-2.00%	0.32%	0.00%	
CALCINER - B LINE	100.00%	99.00%	-1.00%	0.11%	0.00%	
CALCINER GAS TREATMENT - A LINE	100.00%	95.00%	-5.00%	0.00%	0.00%	
CALCINER GAS TREATMENT - B LINE	91.17%	96.00%	4.83%	3.76%	0.00%	
COMPACTION - A LINE	100.00%	99.00%	-1.00%	0.00%	0.00%	
COMPACTION - B LINE	100.00%	89.00%	-11.00%	0.00%	1.00%	
DENSE SODA ASH STORAGE	0.00%	51.00%	51.00%	0.00%	7.00%	
DENSE SODA ASH BAGGING	0.00%	5.00%	5.00%	0.00%	5.00%	



BOTSWANA BOTASH REFURBISHMENT PROJECT 2023 - SODA ASH

PLANT :- 23-May-2023

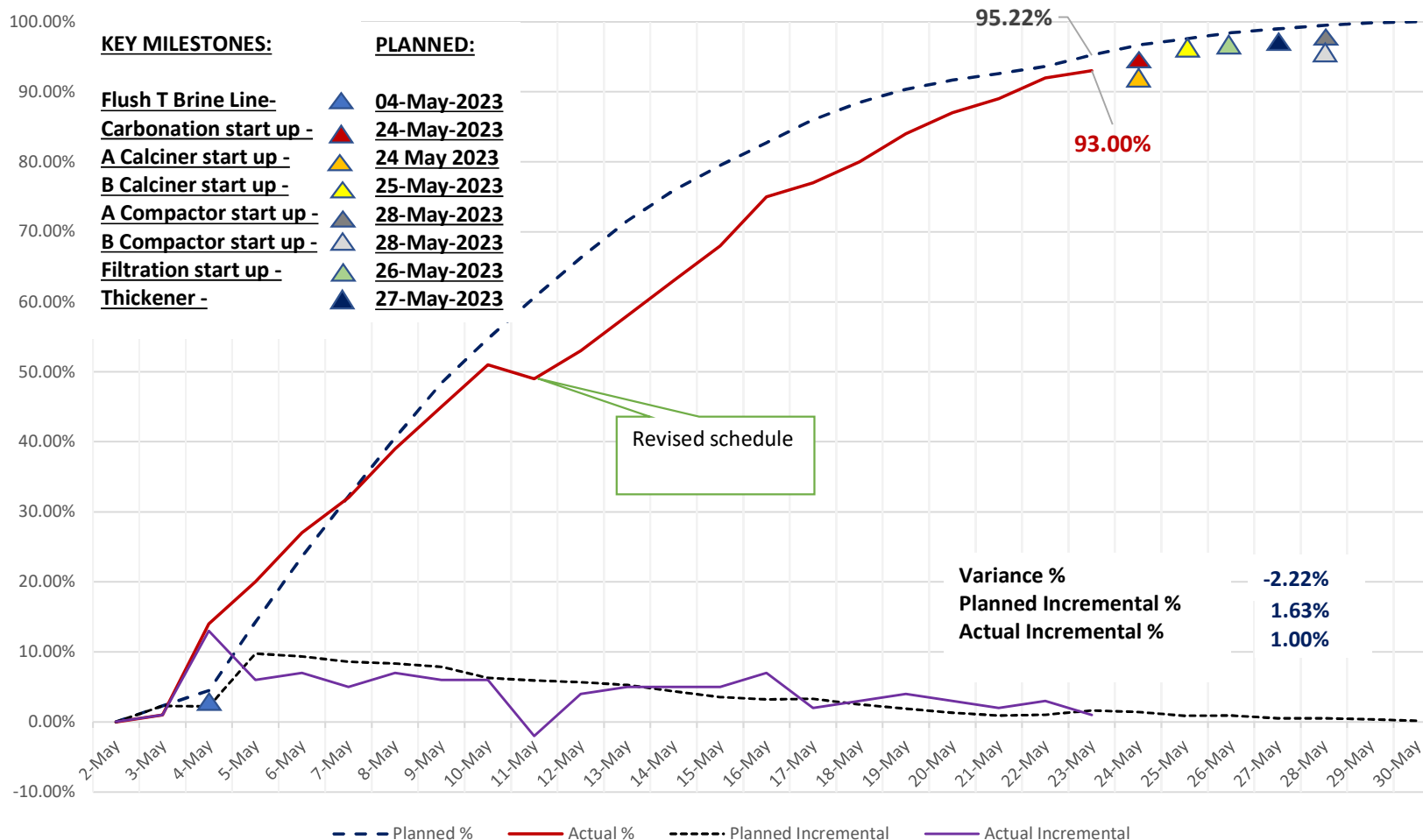


LOOK AHEAD SCOPE OF WORKS (L/L)	POSSIBLE RISKS	MITIGATIONS ON RISKS
DENSE SODA ASH BAGGING - maintenance		
SAND FILTER - Remove rubberlining then glasscoat tank		
SECONDARY CARBONATOR - Agitator shaft and steady rest replacement		
# 3 CRYSTALLISER FEEDPUMP B - Overhaul Pump		
THICKENING MAIN GEAR - Clean Out And Inspect The Main Gear		
THICKENER WALLS AND LAUNDER REPAIRS	Overshooting	Working extended hours
THICKENER LAUNDER - Install wash water pipes	Tier works	Consolidated Plan & HIRA
THICKENER RAKE - Inspect And Repair Rubber Lining	Tier works	Consolidated Plan & HIRA
THICKENER RAKE - Service Hydraulic Unit	Tier works	Consolidated Plan & HIRA
BITTERNS PUMP B - Replace pump		
BITTERNS PUMP A - Replace suction pipes and install suction bellow		
B BELT FILTER - Replace belt structure with stainless steel		
# B BELT FILTER - Inspect and replace bearings		
# B BELT FILTER - Remove the whole ripple skirting		
# A DOUBLE SHAFT MIXER - Carry Out Inspection on screws		
# A DOUBLE SHAFT MIXER - Replace couplings		
# A CALCINER - Repair Trunnion Roller guards		
# B SCREW FEEDER - Overhaul Screw Feeder		
# B COMPACTOR GEARBOX - Send for bearing landings corrections		
CRUSHER - Modify all crusher frames covers & guards		
# B FEED HOPPER WITH STIRRERS - Overhaul And Repair Base Plates		



BOTSWANA BOTASH REFURBISHMENT PROJECT 2023 - SODA ASH PLANT :-

23-May-2023



Discipline Completion dates:

- Electrical** (Red line)
- Civil** (Blue line)
- Mechanical works** (Purple line)

PLANNED:

- 20-May-2023** (Red triangle)
- 22-May-2023** (Blue triangle)
- 23-May-2023** (Blue triangle)

Variance %

- Planned Incremental %** (Blue line)
- Actual Incremental %** (Purple line)

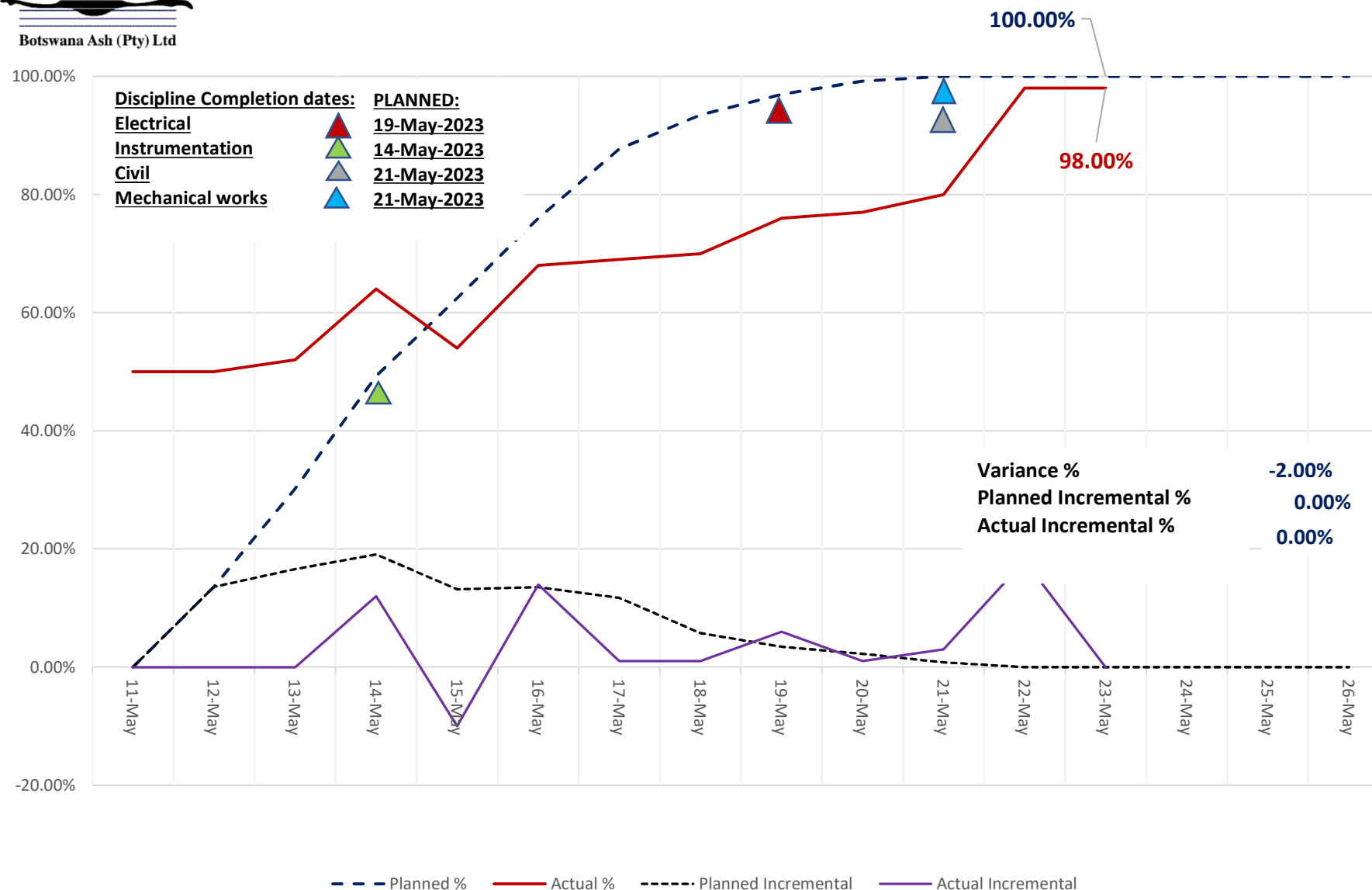
Completion Percentages:

- 100.00%** (Blue line)
- 99.00%** (Red line)
- 1.00%** (Blue line)
- 0.33%** (Blue line)
- 0.00%** (Blue line)

Date	Planned %	Actual %	Planned Incremental %	Actual Incremental %
11-May	0.00%	0.00%	0.00%	0.00%
12-May	20.00%	15.00%	15.00%	15.00%
13-May	40.00%	20.00%	10.00%	5.00%
14-May	55.00%	55.00%	10.00%	30.00%
15-May	70.00%	60.00%	10.00%	5.00%
16-May	80.00%	85.00%	10.00%	35.00%
17-May	85.00%	85.00%	5.00%	0.00%
18-May	88.00%	85.00%	0.00%	-1.00%
19-May	90.00%	85.00%	0.00%	-1.00%
20-May	92.00%	95.00%	0.00%	0.00%
21-May	94.00%	95.00%	-1.00%	0.00%
22-May	95.00%	95.00%	0.00%	0.00%
23-May	95.00%	99.00%	0.00%	0.00%
24-May	95.00%	99.00%	0.00%	0.00%
25-May	95.00%	99.00%	0.00%	0.00%
26-May	95.00%	99.00%	0.00%	0.00%



POTABLE & BRACKISH WATER:- 23-May-2023



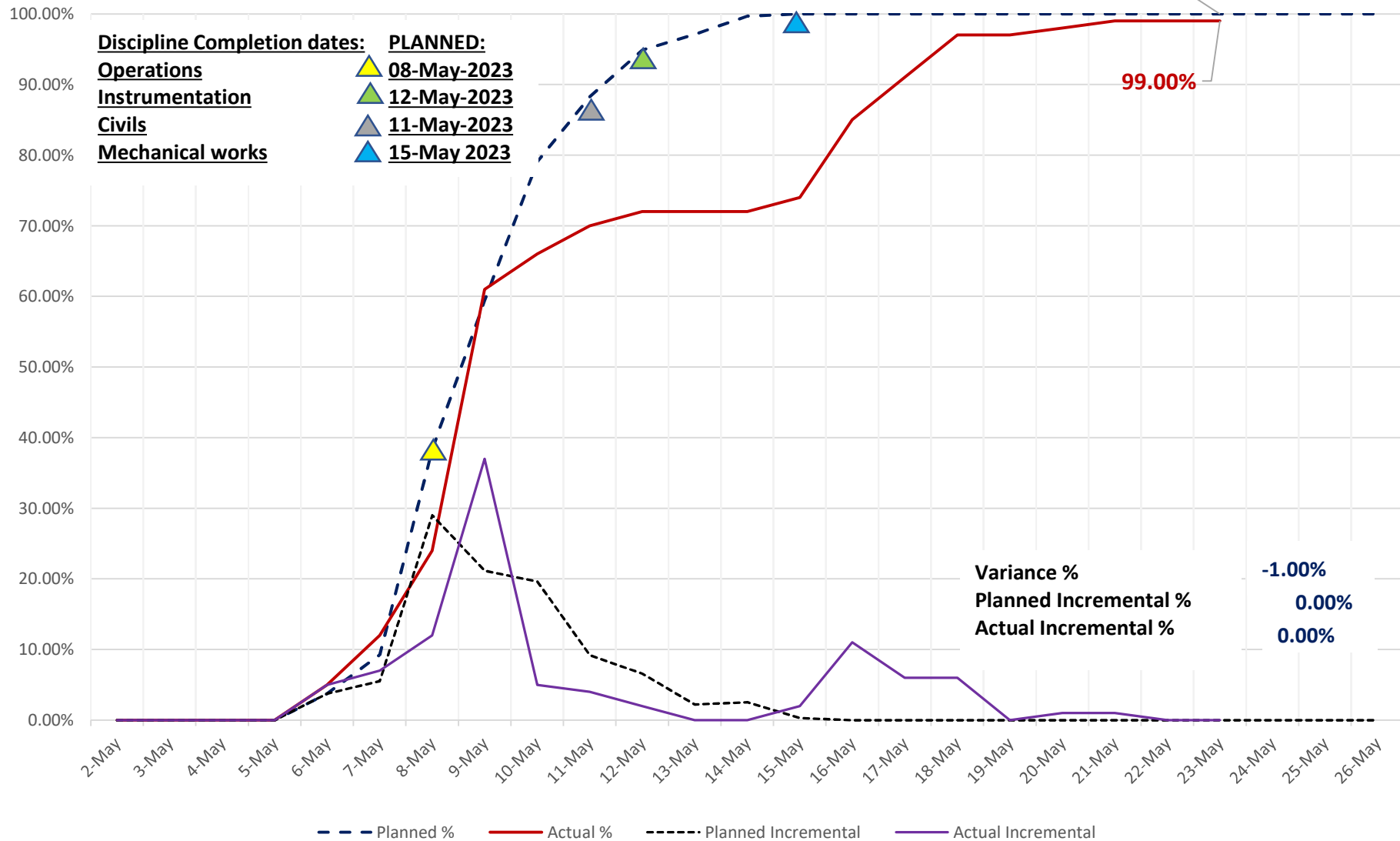


Botswana Ash (Pty) Ltd

HOT WASH WATER SYSTEM:- 23-May-2023

Discipline Completion dates:

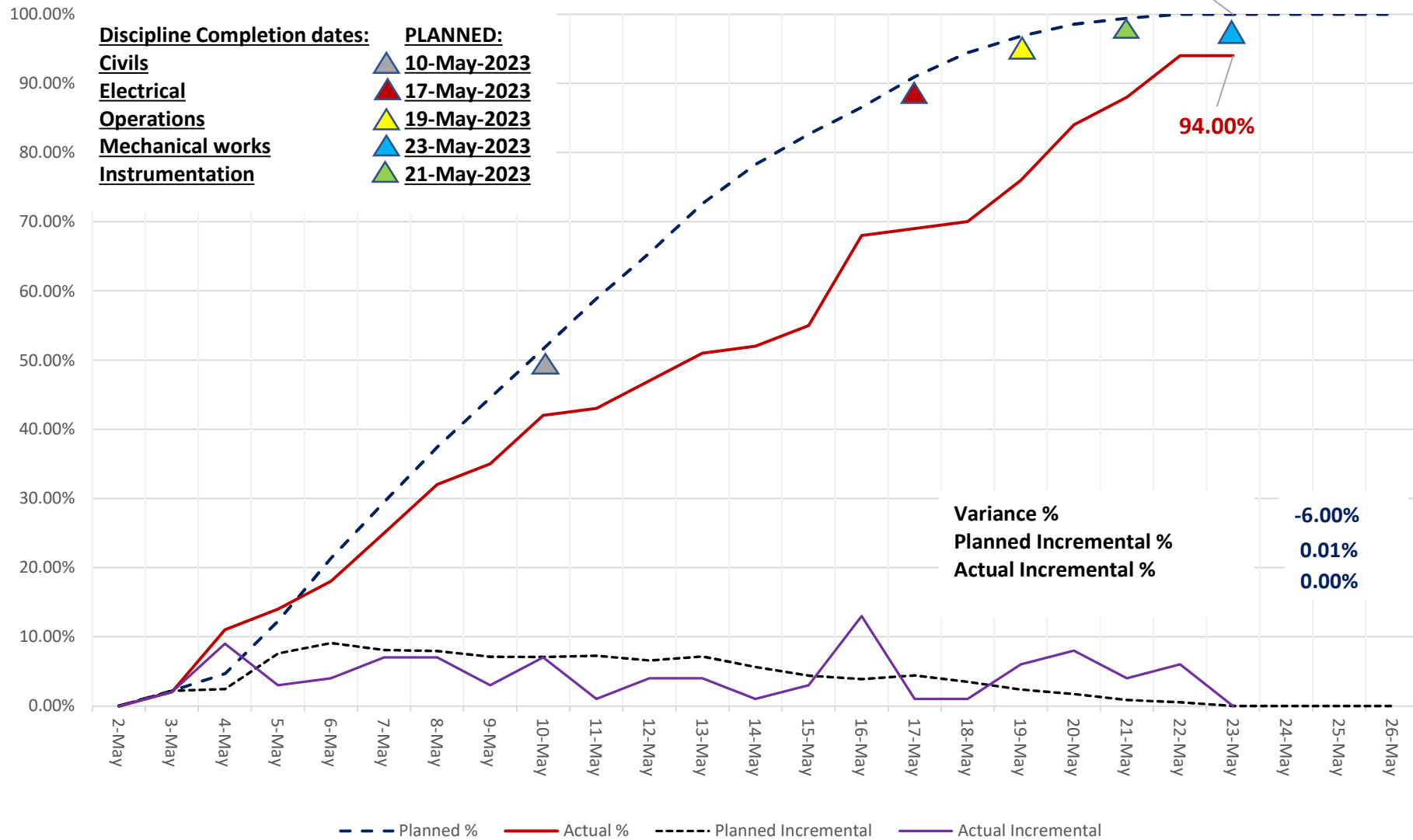
Operations	PLANNED:
Instrumentation	08-May-2023
Civils	12-May-2023
Mechanical works	11-May-2023
	15-May-2023





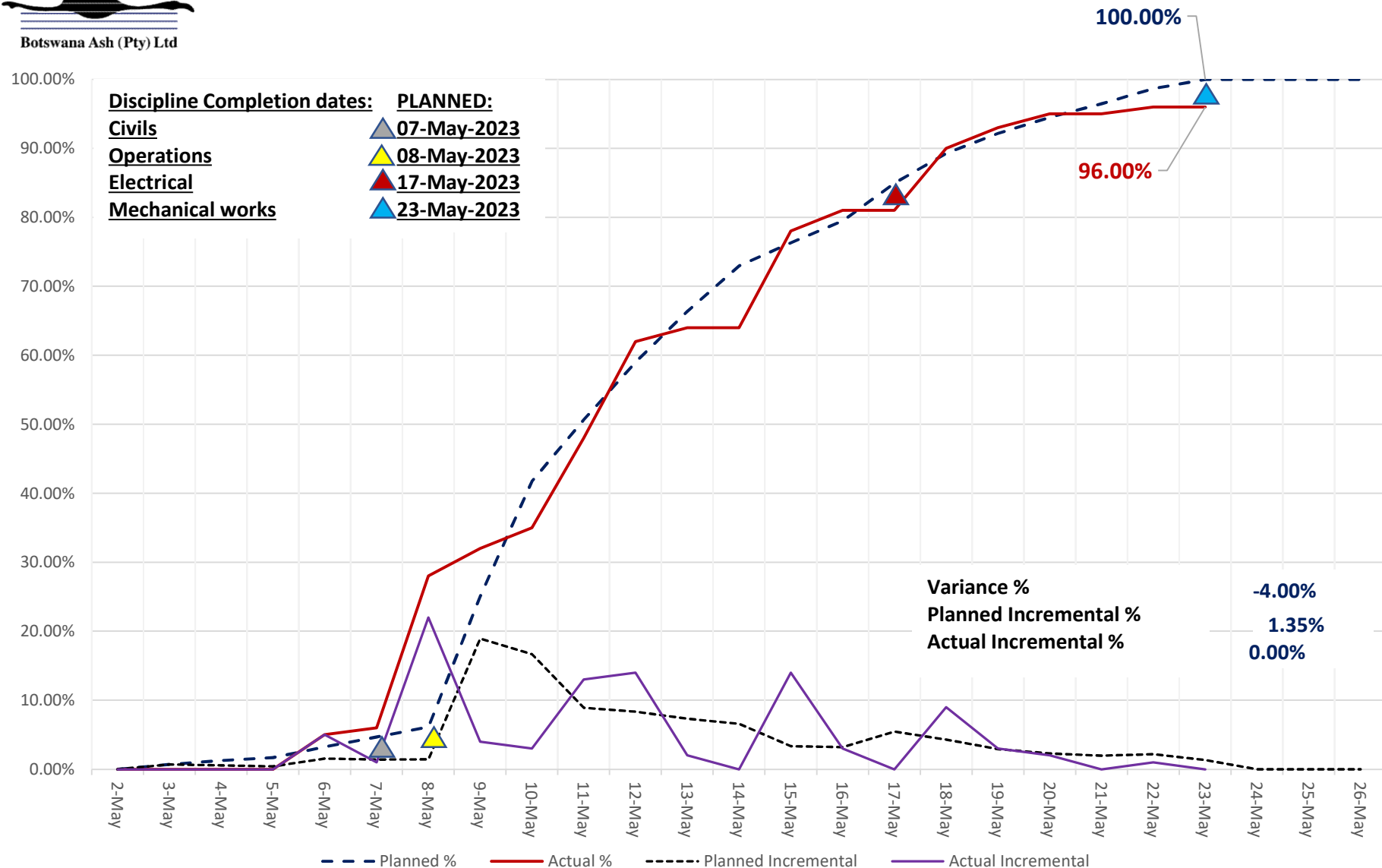
Botswana Ash (Pty) Ltd

CARBONATION:- 23-May-2023



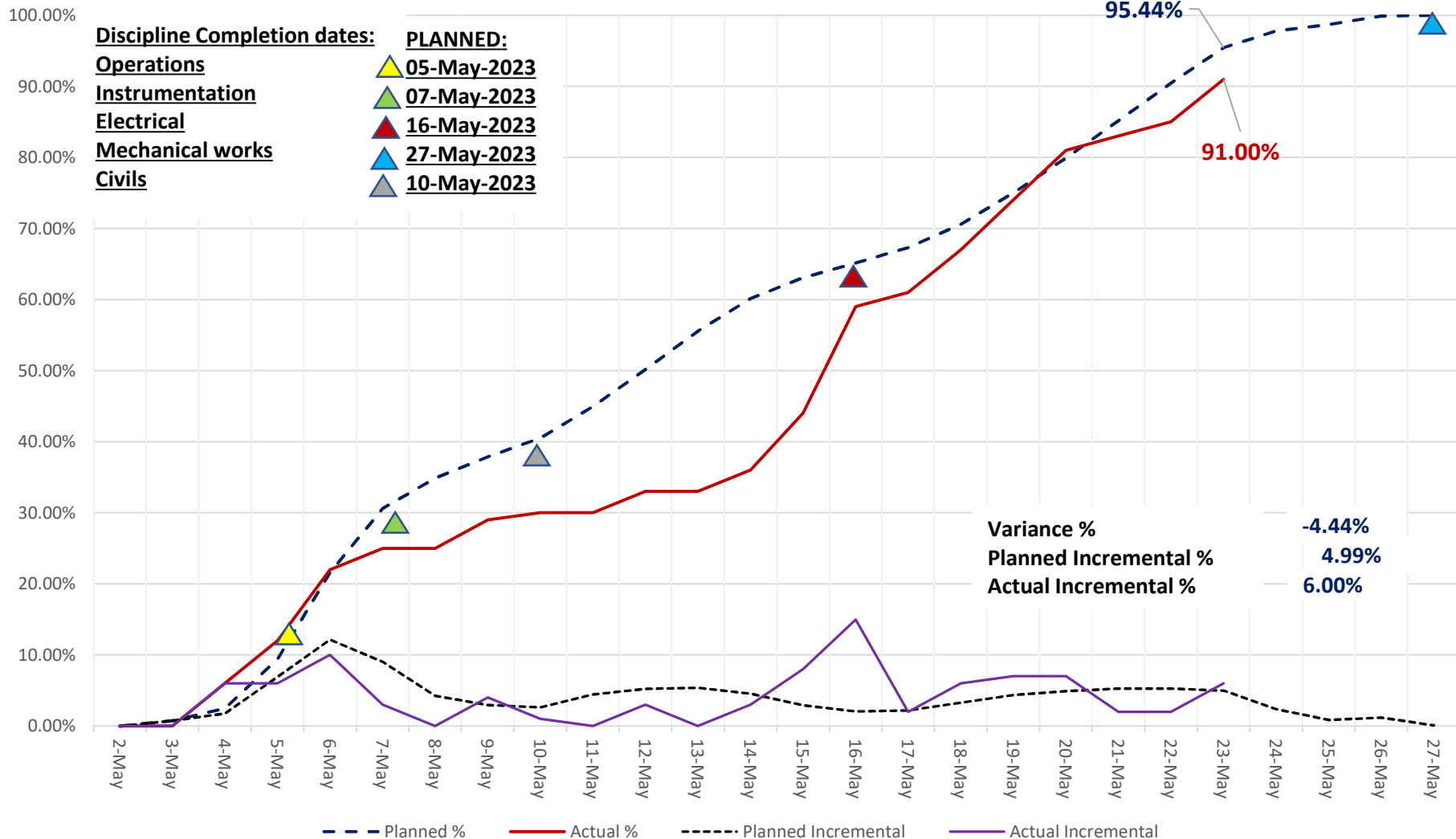


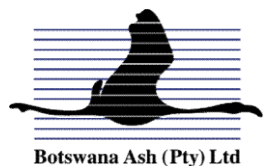
CRYSTALLISATION:- 23-May-2023



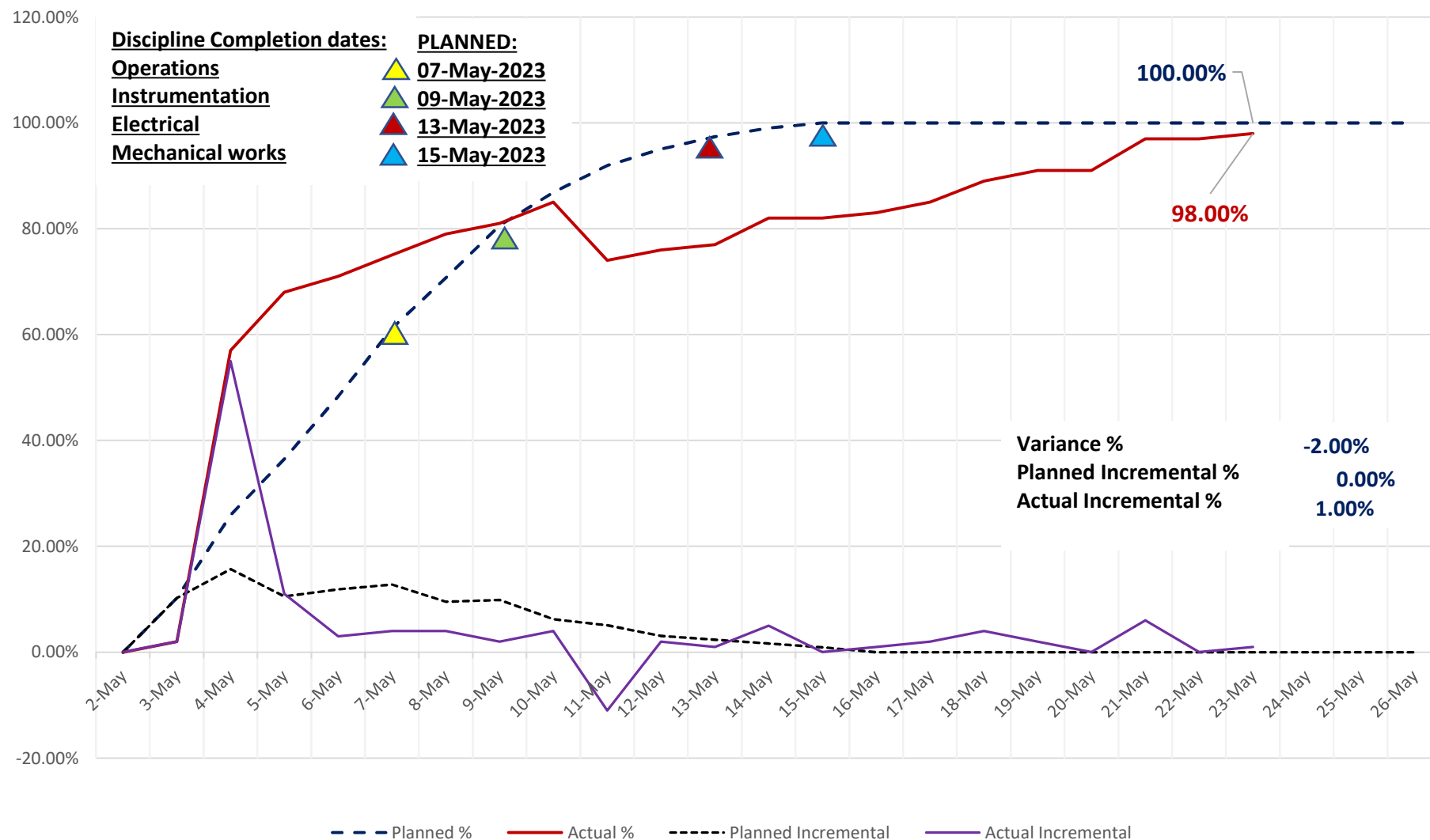


BICARBONATE THICKENING:- 23-May-2023



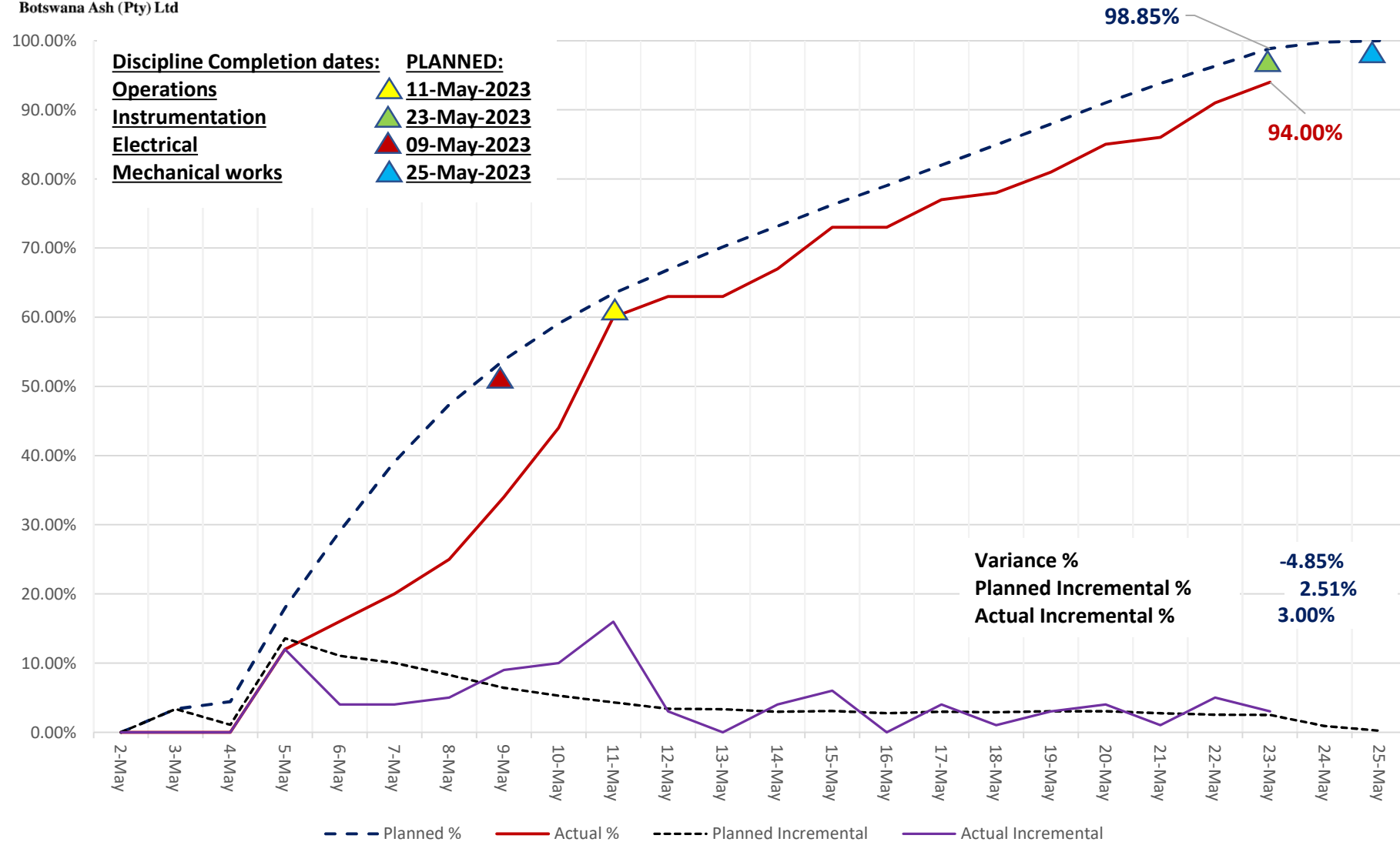


BICARBONATE FILTRATION A LINE:- 23-May-2023



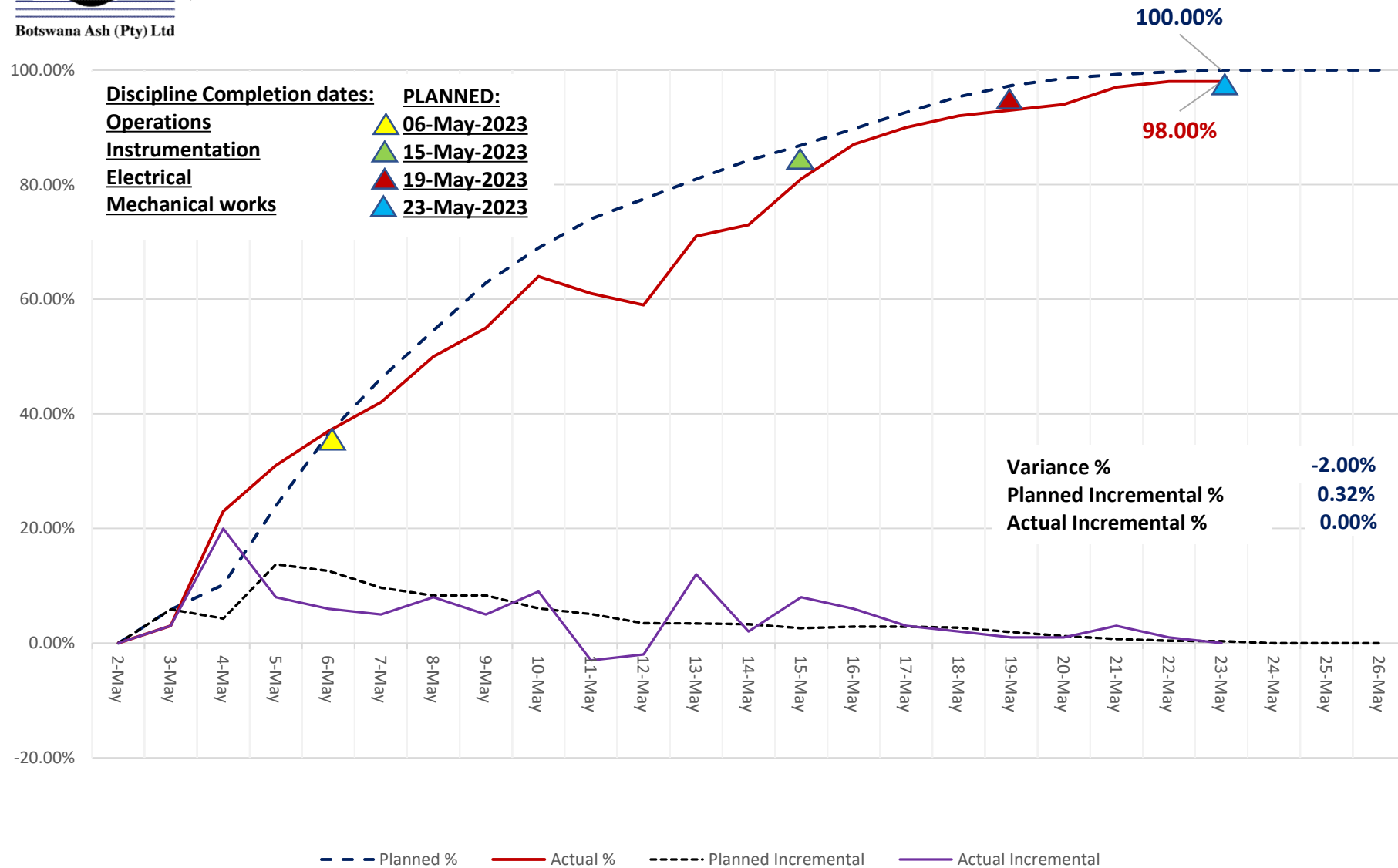


BICARBONATE FILTRATION B LINE:- 23-May-2023



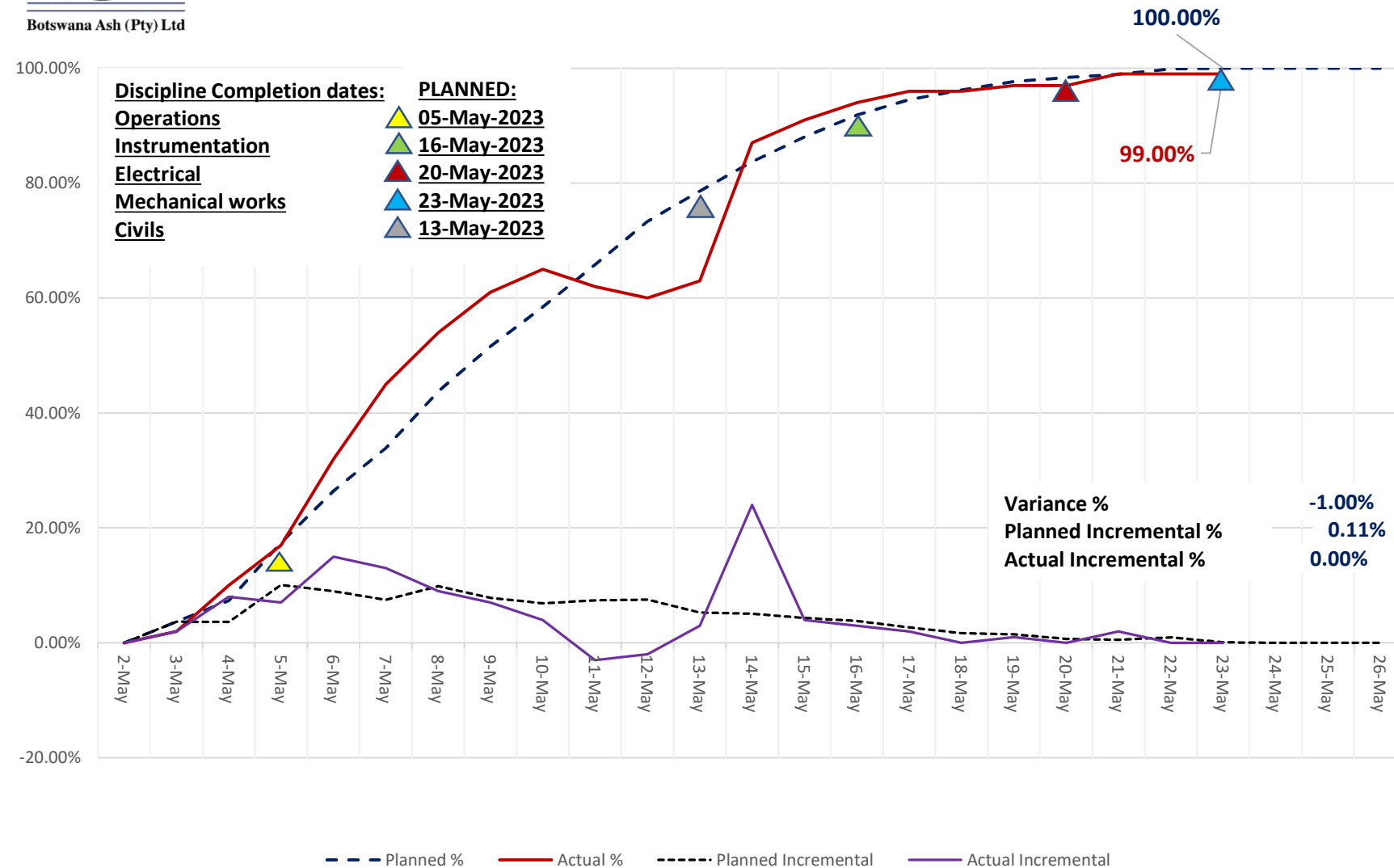


CALCINER - A LINE:- 23-May-2023



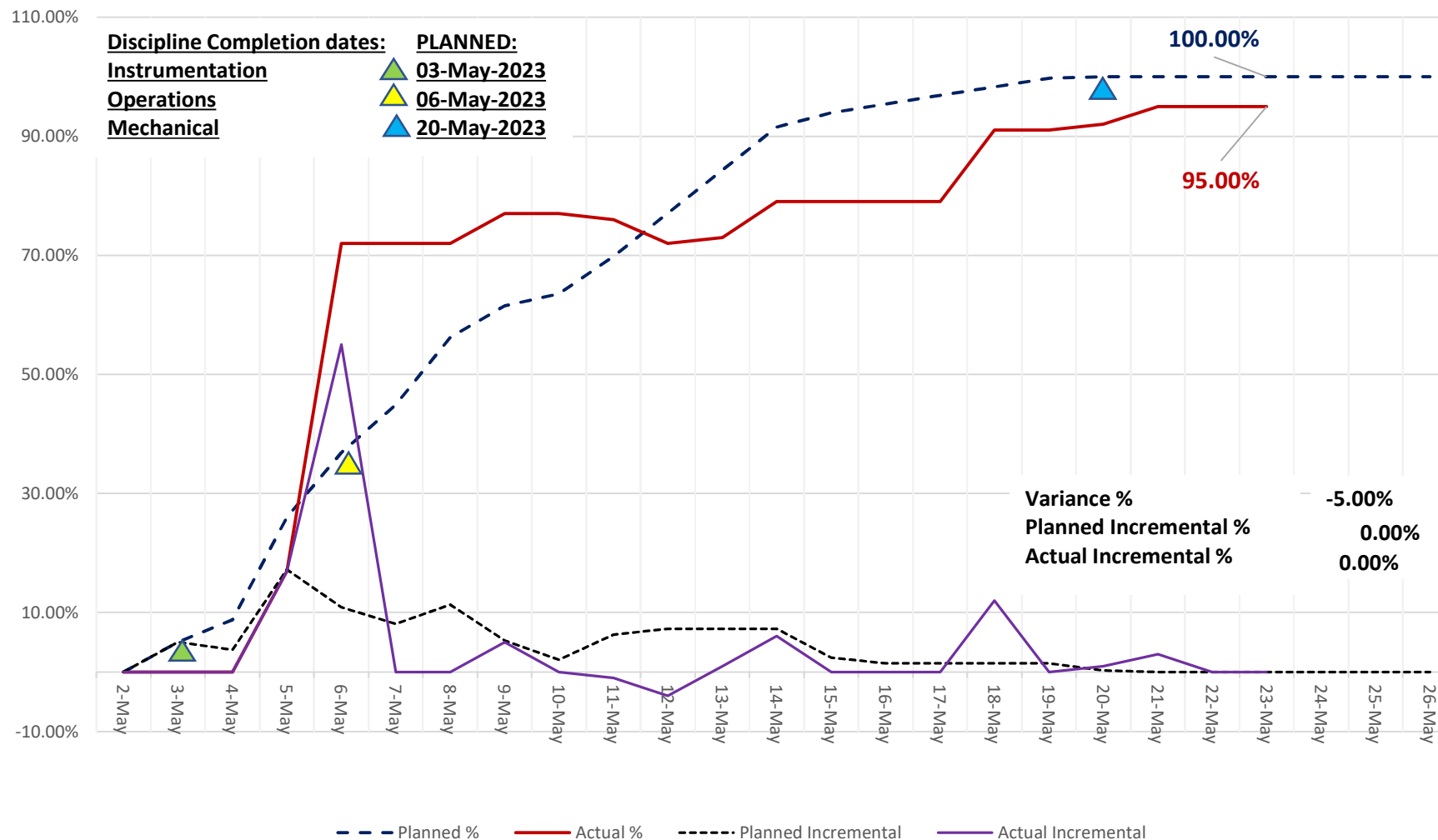


CALCINER - B LINE:- 23-May-2023



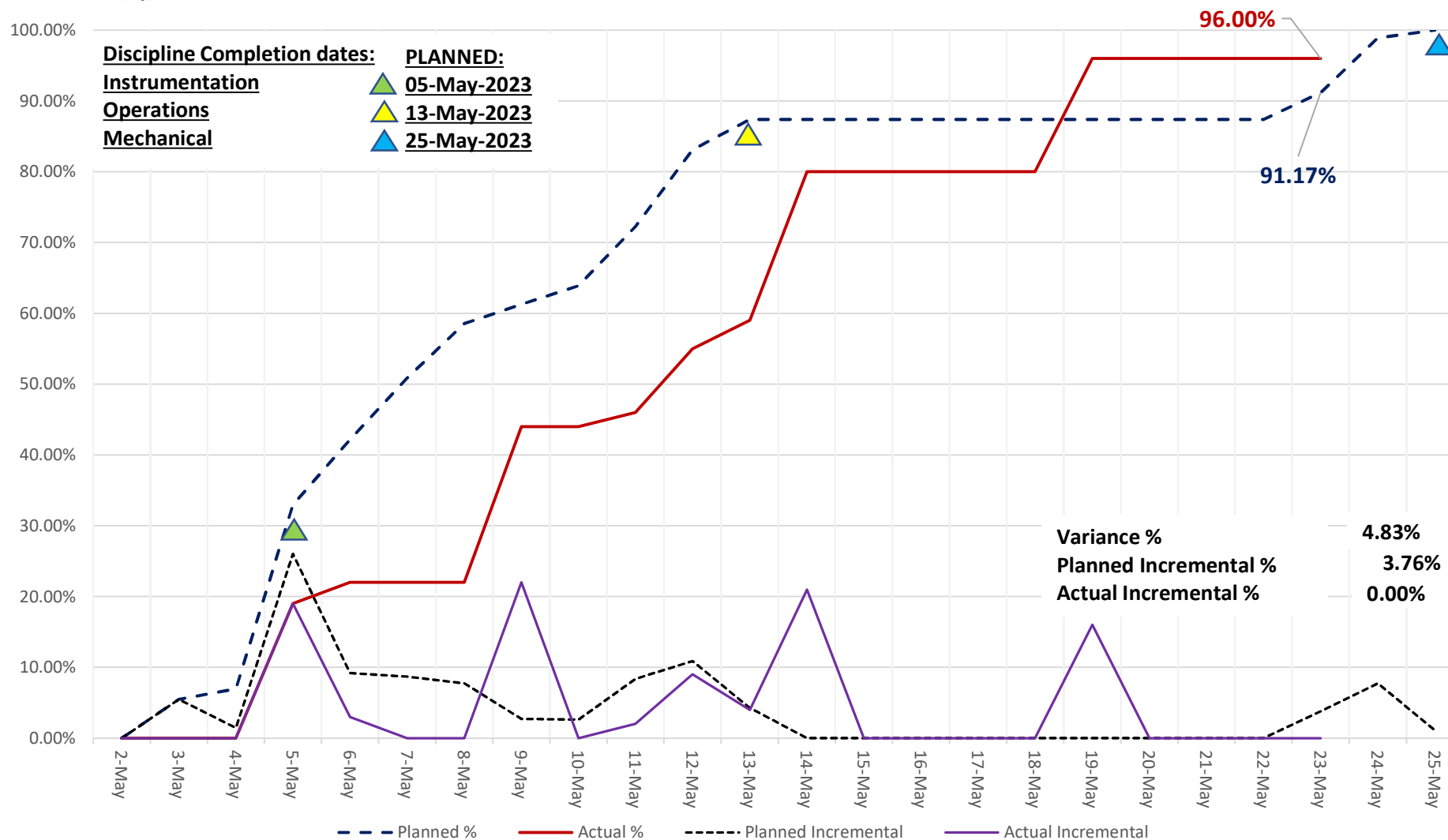


CALCINER GAS TREATMENT - A LINE:- 23-May-2023



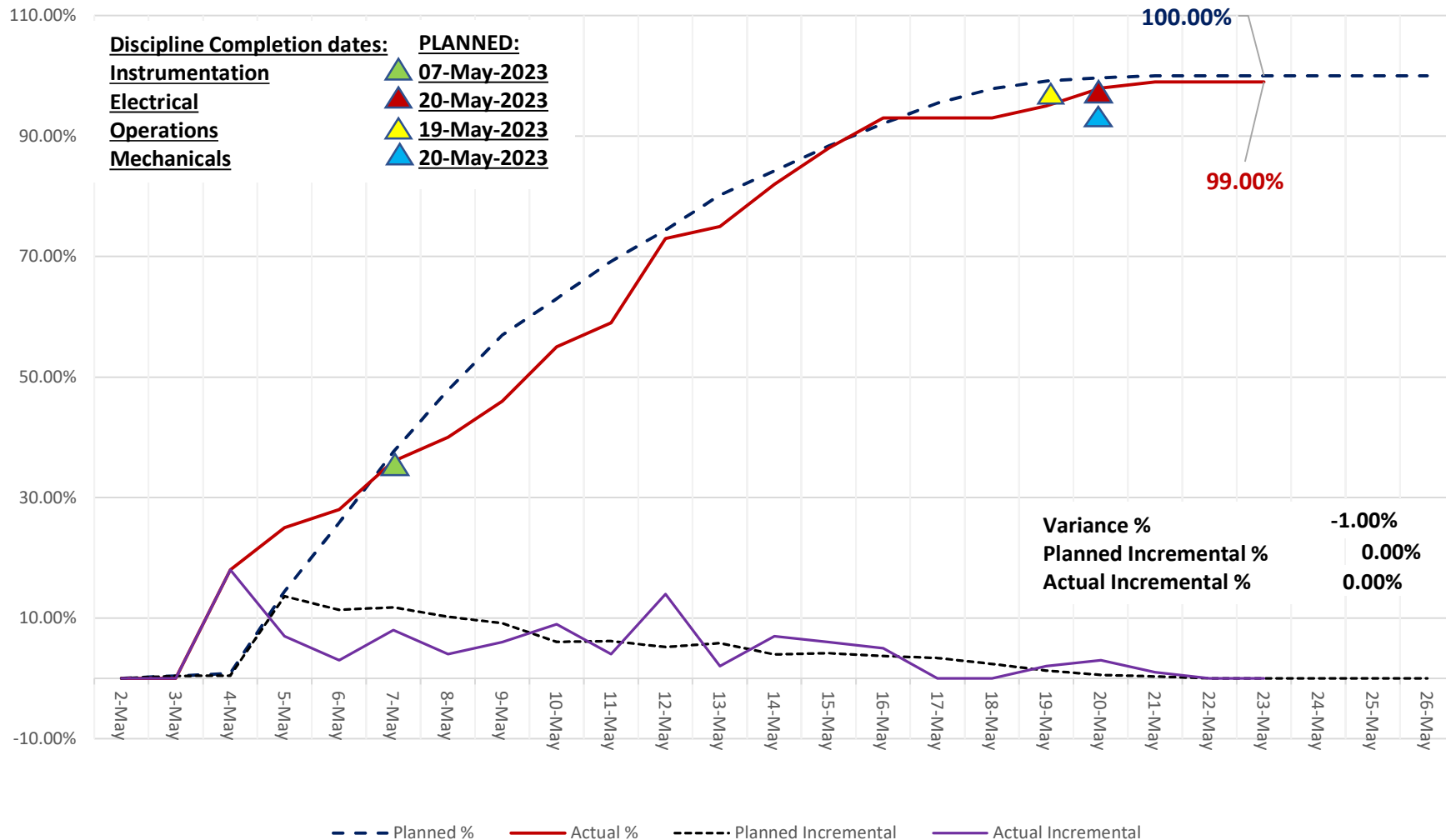


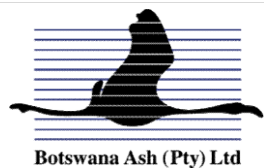
CALCINER GAS TREATMENT - B LINE:- 23-May-2023



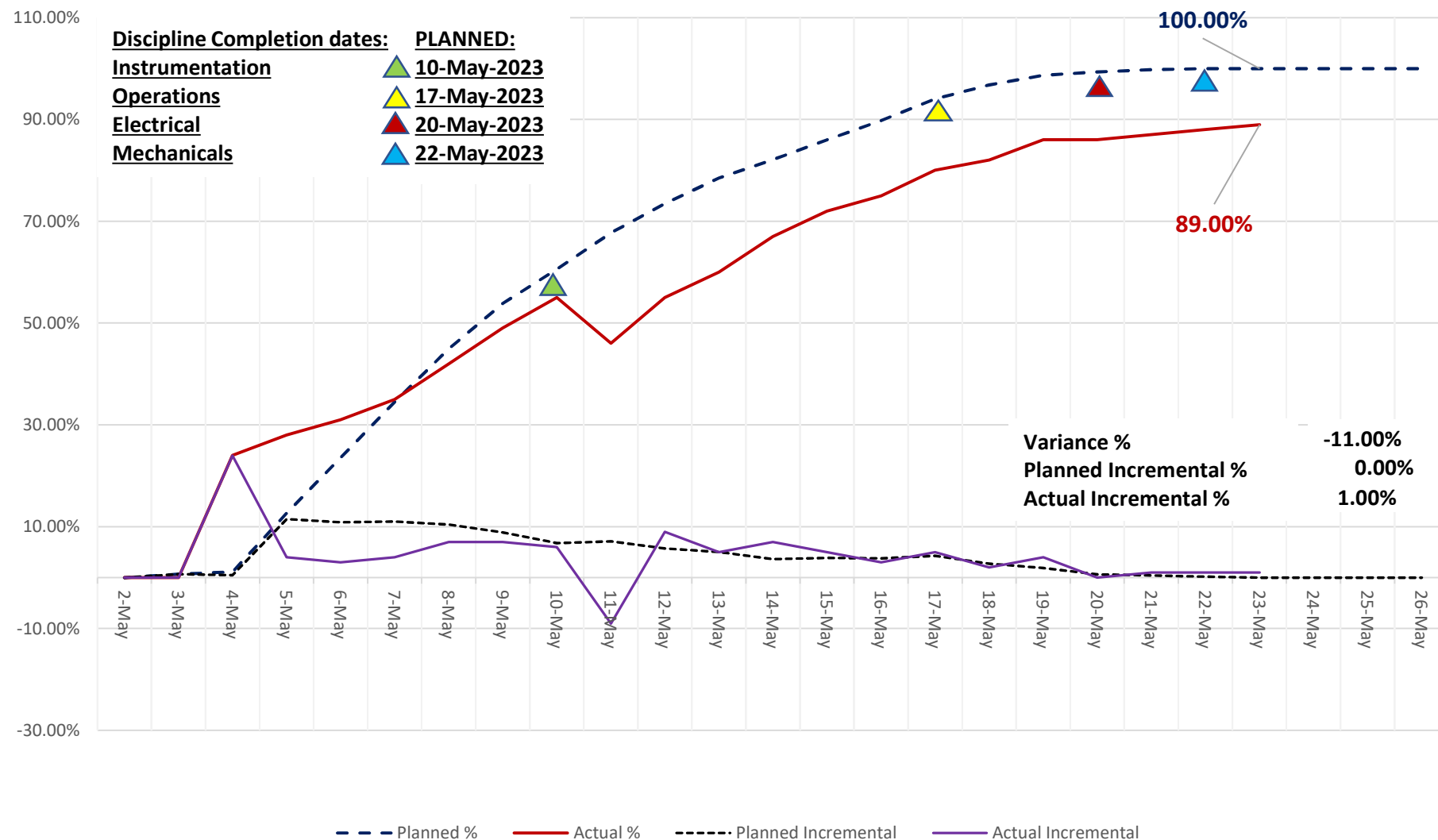


COMPACTION - A LINE:- 23-May-2023



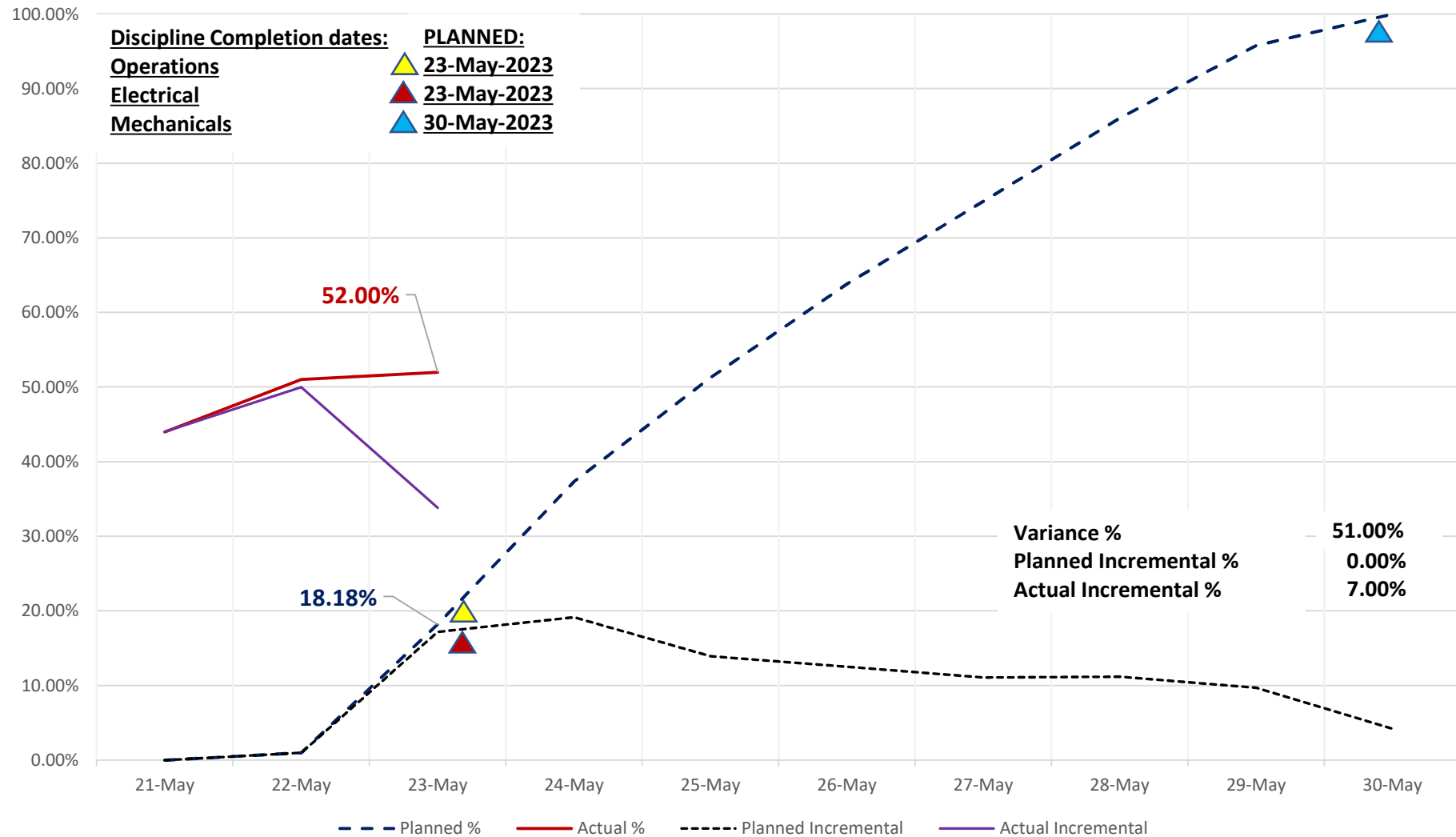


COMPACTION - B LINE:- 23-May-2023





DENSE SODA ASH STORAGE:- 23-May-2023





DENSE SODA ASH BAGGING:- 23-May-2023

