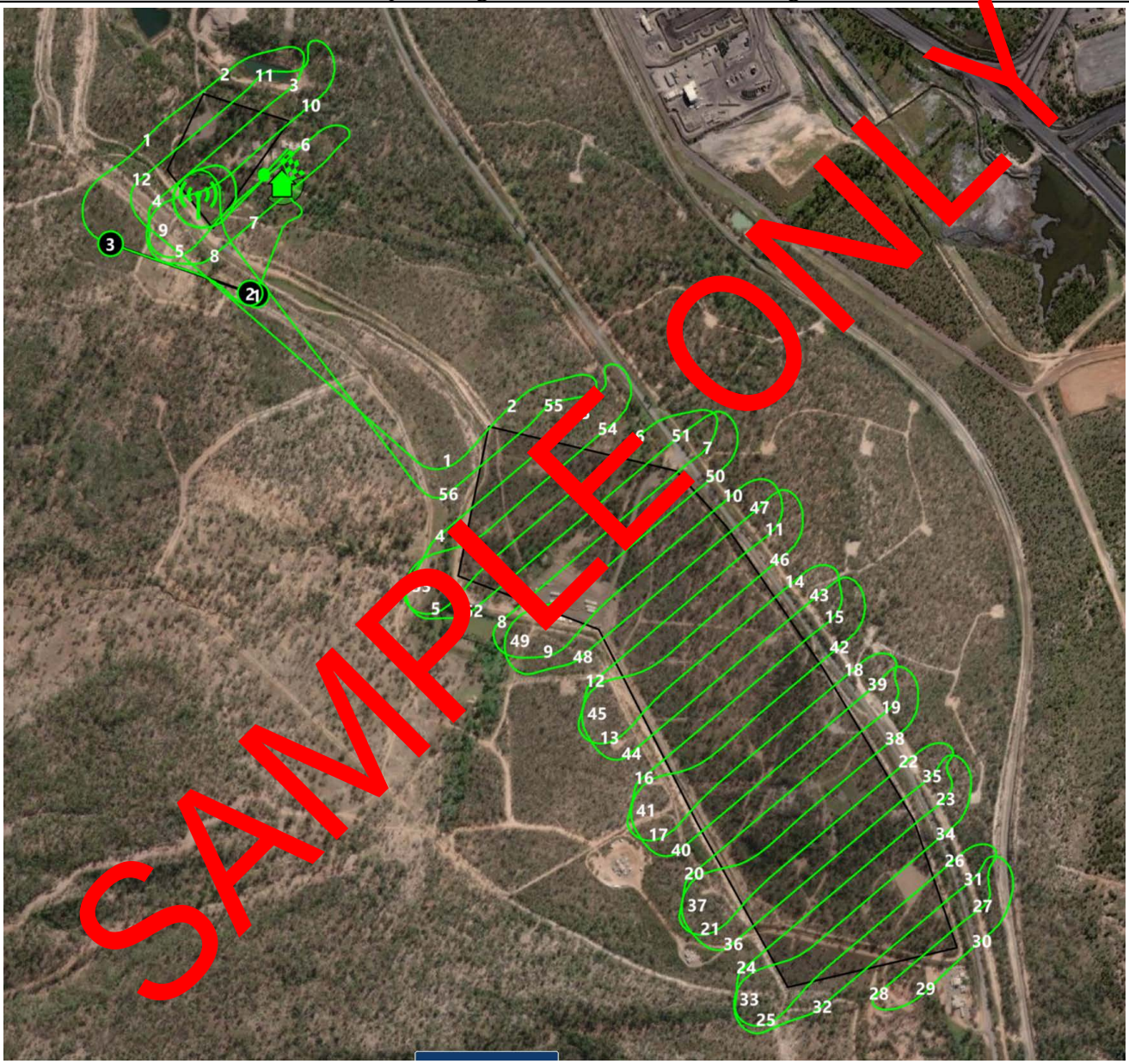
VUL-FRM-20-01-Aerial Survey Operations Checklist

Flight Checklist	
Date/Time	21/07/2021
Site	Vulcan Mine
Job ID	210721-pit-flight_examples

Flight Plan Screen Shot

Screen Shot of Qbase Flight Plan, Take-Off and Landing Location



Flight Plan Screen Shot
Screen Shot Wind (Willy Weather) and Weather (BOM and site weather station) Information Below

MORANBAH 7-DAY WEATHER FORECAST

Hover Your Mouse Over Any Forecast Item To Identify Its Source — zone/BoM | Opticast | BoM

	Wed Jul 21	Thu Jul 22	Fri Jul 23	Sat Jul 24	Sun Jul 25	Mon Jul 26	Tue Jul 27
Summary	Sunny	Sunny	Sunny	S	Sunny	Sunny	Sunny
Maximum	23°C	21°C	28°C	29°C	26°C	23°C	24°C
Minimum	7°C			14°C	12°C	7°C	7°C
Chance of Rain	5%	5%	5%	5%	5%	5%	5%
Rain Amount	< 1mm	< 1mm	< 1mm	< 1mm	< 1mm	< 1mm	< 1mm
UV Index	Mod		Moderate	High	High		
Frost Risk	Nil	Mod	Nil	Nil	Nil	Nil	Nil
	9am 3pm		9am 3pm	9am 3pm	9am 3pm	9am 3pm	9am 3pm
Wind Speed	18 km/h	19 km/h	7 km/h	18 km/h	23 km/h	18 km/h	24 km/h	16 km/h	18 km/h	19 km/h	13 km/h	17 km/h	14 km/h
Wind Direction	SSW SW	ESE	ESE	NNE	NNW	WNW	W	SW	SW	SSE	SSE	ESE	SE
Relative Humidity	24%	42%	18%	62%	33%	72%	29%	38%	20%	37%	22%	55%	26%

	Pre-Take Off
☑	Start flight records.
☑	Weather conditions; ground wind speed below 7m/s (25km/h), no visible signs of rain.
☑	Batteries charged (must be above 65%).
☑	Qbase and AP firmware up-to-date (ensure that you update Trinity F90+ firmware and RC controller at the same time).
☑	Check that the Vitrinite base station is logging (green flashing light on SD card indicator light).
☑	Assemble Trinity F90+ and check for any signs of damage or damaged parts (check that the wing and tail wing ailerons are correctly coupled and move together).
☑	Ensure all parts are locked and secured.
☑	Clear SD card of photos from previous flight (ensure copy on server).
☑	Place Trinity F90+ on take-off mat or its carry-case **FACING INTO THE WIND.**

Pre-Take Off	
☑	Power up the UAV by installing battery. Listen for audio and look for green LED.
☑	Turn on RC unit.
☑	Check connection between Qbase (PC Toughbook) and the UAV.
☑	Check camera via Qbase or use the right-hand stick and toggle down to activate camera (take a couple of test shots).
☑	Load flight plan into Qbase.
☑	Are take-off position and transition, correct?
☑	Is the aircraft orientation in Qbase correct (and into the wind)?
☑	Is the transition cone and plane orientation, correct?
☑	Check the landing transition for obstacles.
☑	Take-off and landing transitions are into the wind?
☑	Check everything is green across the board in the monitor box in Qbase (alo[illegible] with [illegible] top of the screen.
☑	Upload flight plan.
☑	Select preflight on RC (make sure Trinity F90+ does not [illegible]ove duri[illegible] pre[illegible]ight check).
☑	Check air speed sensor for movement.
☑	Check ailerons and rear elevator for full move[illegible]nt via RC.
☑	Arm Trinity F90+ via remote controller.
☑	Listen for any odd sounding noises from moto[illegible]
☑	Takeoff.
☑	Monitor flight.
☑	After landing, wait until [illegible]K buttor[illegible] disappe[illegible]rs on RC to collect sufficient GPS data.

Post Flight	
☑	Disconnect battery.
☑	Disconnect wi[illegible]s, li[illegible]hts, [illegible]levator and tail section and place in the case.
☑	Remo[illegible]D card to [illegible]ollect raw photos for Trinity F90+.
☑	Connect [illegible]nag[illegible]t [illegible]SB connector to aircraft body and laptop.
☑	Open Qba[illegible] → Tools (selection items along top of screen) → Access aircraft SD card → this will acc[illegible]n b[illegible]ard storage and remove fly logs from aircraft with USB or laptop (look for the current [illegible]ate).
☐	Place a[illegible]craft body back in carry case.

Worker Sign-off			
I confirm that I have read and understood the Safe Work Procedure for **VUL-SWP-002-Aerial Survey Operations** and will follow the outlined procedure when undertaking this task. I confirm that I have placed a scanned or completed copy into the relevant job pack.			
Name:	Joe Bloggs		
Company:	Vitrinite	**Job Title:**	Engineer
Date:	21/07/2021	**Signature:**	