1.1 LiDAR Acquisition Parameters

Sanborn specifically defined the collection parameters to accomplish the desired Client specifications. These parameters are dependent on the LiDAR sensor and aircraft type used in the LiDAR campaign.

Table 1 and 2 shows the planned acquisition parameters for Sanborn's Leica ALS70 utilized for this specific LiDAR aerial survey operation that was installed in Sanborn's aircraft.

Table 1: LiDAR Acquisition Parameters East Block

LiDAR Sensor	ALS70-HP
Aircraft	Fixed Wing Single Engine
Average Altitude	1600 Meters AGL
Airspeed	~130 Knots
Scan Frequency	53.4 Hz
Scan Angle	20°
Pulse Rate	339200 Hz
Laser Power	100%
Pulse mode	Multi Pulse
NPS	0.5
PPM	4
Aircraft GNSS Rate	0.5 sec

Table 2: LiDAR Acquisition Parameters West Block

LiDAR Sensor	ALS70-HP
Aircraft	Fixed Wing Single Engine
Average Altitude	1120 Meters AGL
Airspeed	~130 Knots
Scan Frequency	53.4 Hz
Scan Angle	20°
Pulse Rate	478600 Hz
Laser Power	100%
Pulse mode	Multi Pulse
NPS	0.35
PPM	8
Aircraft GNSS Rate	0.5 sec

1.2 Planned Collection

With the parameters defined above, the LiDAR flight plan was developed and encompasses a total of 142 flight lines for a total of 2932 linear miles. Note: the planned number of flight lines may not reflect actual number of lines delivered.

1.3 PDOP

A few missions had short periods or spikes in PDOP over 4. They all however, continually had more than 6 satellites and a combined separation within tolerance.