

Survey Planning Timing Guide Lines for Pls V5

1. Air Sources Only –

- a. First Source Deployment – 4 hours
- b. Subsequence Source Deployments – 1.5 hours
- c. Source Retrieval – 1.5 hours
- d. Turning – 7 Deg a min or ~1000km Radius or 3k between lines
- e. Maximum Speed 5.5 KTS
- f. Minimum Water Depth – 6m under source depth or 15m which ever comes first.
- g. Preventive Maintenance – 2 hours every 48 hours
- h. 20% Technical Downtime for Instruments, Source Air Leaks, and MMO Issues
- i. 5.5 KTS max speed through the water
- j. Average Speed ~4.5 KTS Speed Over Ground

2. 2D Single Streamer 8Km or Less & Air Sources –

- a. First Deployment Streamer – 24 hours
- b. Subsequent Streamer Deployments – 12 hours
- c. Streamer Retrieval – 4 hours
- d. First Source Deployment – 4 hours
- e. Subsequent Source Deployments – 1.5 hours
- f. Source Retrieval – 1.5 hours
- g. Turning – 5 deg a min or ~2.5 km radius or 5 k between lines
- h. Maximum Speed 5.2 KTS with 6 km streamer – 4.5 KTS with 8 km streamer
- i. Minimum Water Depth – 6m under equipment depth or 25m which ever comes first.
- j. Preventative Maintenance Source – 2 hours every 12 hours
- k. Preventative Maintenance Streamer – 18 hours every 14 days
- l. 20% Technical Downtime for Instruments, Source Air Leaks, and MMO Issues
- m. With 6km cable, max speed is 5.2 KTS through the water or ~4000 lbs
- n. With 8km cable, max speed is 4.8 KTS through the water or ~5000 lbs
- o. Average Speed ~4.5 KTS Speed Over Ground

3. 2D Single Streamer 12.6Km & Air Sources –

- a. First Deployment Streamer – 36 hours
- b. Subsequent Streamer Deployments – 14 hours
- c. Streamer Retrieval – 6 hours
- d. First Source Deployment – 4 hours
- e. Subsequent Source Deployments – 1.5 hours
- f. Source Retrieval – 1.5 hours
- g. Turning – 5 deg a min or ~2.5 km radius or 5 k between lines
- h. Minimum Water Depth – 8m under equipment depth or 25m which ever comes first.
- i. Preventative Maintenance Source – 2 hours every 12 hours
- j. Preventative Maintenance Streamer – 24 hours every 14 days
- k. 20% Technical Downtime for Instruments, Source Air Leaks, and MMO Issues
- l. With 12.6km cable, max speed is ~4.5 KTS through the water or ~7000 lbs
- m. Average Speed ~4.3 KTS Speed Over Ground

4. 2D Single Streamer 15Km & Air Sources –

- a. First Deployment Streamer – 48 hours
- b. Subsequent Streamer Deployments – 16 hours
- c. Streamer Retrieval – 8 hours
- d. First Source Deployment – 4 hours
- e. Subsequent Source Deployments – 1.5 hours
- f. Source Retrieval – 1.5 hours
- g. Turning – 3 deg a min or ~2.5 km radius or 5 k between lines
- h. Minimum Water Depth – 10m under equipment depth or 25m which ever comes first.
- i. Preventative Maintenance Source – 2 hours every 12 hours
- j. Preventative Maintenance Streamer – 26 hours every 14 days
- k. 20% Technical Downtime for Instruments, Source Air Leaks, and MMO Issues
- l. With 15km cable, max speed is ~4.1 KTS through the water or ~7000 lbs
- m. Average Speed ~4.1 KTS Speed Over Ground

***Note: All waypoint are to be submitted in the following format for 2D and Source only Lines.

*** Example of the TXT File:

SurvOPT Example Text File

WGS84 UTM ZONE????

Shot Point Interval????

#line name	easting1	northing1	easting2	northing2	SP(SOL)
1001	719440	3599496	306573	3825484	1001
1002	306573	3825484	719440	3599496	1001

These waypoints can then be imported in Quick Plot Pro, which will enable us to provide all the available formats for SurvOPT, Spectra/Orca, ArcGIS, and the Ships Bridge System.

5. 3D Multi - Streamer & Air Sources –

- a. First Deployment Streamer – 72 hours
- b. Subsequence Streamer Deployments – 24 hours
- c. Streamer Retrieval – 18 hours
- d. First Source Deployment – 4 hours
- e. Subsequence Source Deployments – 1.5 hours
- f. Source Retrieval – 1.5 hours
- g. Turning – 3 Deg a min or ~2.5 km Radius or 5k between lines
- h. Maximum Speed 4.8 KTS with 6 km Streamer
- i. Minimum Water Depth – 50m
- j. Preventive Maintenance Source – 2 hours every 24 hours
- k. Preventive Maintenance Streamer – 24 hours every 14 days
- l. 20% Technical D/T for Instruments, Source Air Leaks, and MMO Issues
- m. Max speed is 4.5KTS (through the water)
- n. Average Speed ~4.3 KTS Speed Over Ground

*** Note: It is each PI own responsibility to investigate the weather and current patterns for their specific area and to factor in the appropriate amount of other contingency time for Weather, Fishing Activities, Ship traffic, and Currents.

Maximum Allowable Tow Depth of the Source is 12m.

Maximum Allowable Separation for Streamers is 150m

*** Note: Waypoints for 3D Survey the area should be present to us in Easting and Northings for WGS84 UTM Zone of the survey. Each corner must have its own Easting and Northing location and a minimum of 4 corners are required to define the survey area. These waypoints can then be imported in Quick Plot Pro, which will enable us to provide all the available formats for SurvOPT, Spectra/Orca, ArcGIS, and the Ships Bridge Systems.