

Survey Report

Job name	1907-7-nere_ep
Creation date	13 Jun 2025
Version	Trimble General Survey 3.21
Distance Units	Meters
Angle units	Gons
Pressure Units	mbar
Temperature Units	Celsius

Coordinate system (Job)

System	
Zone	
Datum	

Projection

Projection	Transverse Mercator
Origin lat	0°00'00.00000"N
Origin long	21°00'00.00000"E
False northing	0.000
False easting	7500000.000
Scale	0.99990000
South azimuth (grid)	No
Grid coords	Increase North-East
Ellipsoid	Semi-major axis: 6378137.000 Flattening: 298.25722154

Local site

Type	Grid
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Datum transformation

Type	None
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Collected Field Data

Projection

Projection	Transverse Mercator
Origin lat	0°00'00.00000"N
Origin long	21°00'00.00000"E
False northing	0.000
False easting	7500000.000
Scale	0.99990000
Ellipsoid	Semi-major axis: 6378137.000 Flattening: 298.25722154

Local site

Type	Grid
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Datum transformation

Type	None
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Feature library

Library name	LIRIDON
Library File Name	LIRIDON.fxl
Attribute Support	No

Corrections

South azimuth (grid)	No
Grid coords	Increase North-East
Magnetic declination	0.0000
Distances	Grid
Neighborhood adjustment	Off

Rover options

Elevation mask	13	PDOP mask	6						
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Rover options

Elevation mask	13	PDOP mask	6						
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Survey event

Survey event	Rover started
Note	VRS base: 42°22'04.81740", 21°05'27.21720", 671.137m

Initialization event: RTK initialized

GPS week	2370	Seconds	456825	Initialization type	On the fly	Survey type	Real-time		
Point	fe12	Latitude	42°22'04.81733"N	Longitude	21°05'27.05974"E	Height	669.854	Code	

GNSS receiver

Receiver type	R10
Serial number	5452489155
Firmware version	4.9
Antenna type	R10 Internal
Measurement method	Bottom of quick release
Tape adjustment	0.000
Horizontal offset	0.000
Vertical offset	0.199

Point	fe12mm	X	4403855.105	Y	1698498.304	Z	4276346.073	Code	
		Method	Network RTK	Type	Observed control point	Search class	Normal		
Antenna height	2.000	Type	Uncorrected	H _z Prec	0.009	V _t Prec	0.012		
QC 1		PDOP	1.4	GDOP	1.8	HDOP	0.8	VDOP	1.2
		Base data age	1	Satellites	13	Positions used	13		
QC 2		VCV xx (m²)	0.000082	VCV xy (m²)	0.000021	VCV xz (m²)	0.000039		
				VCV yy (m²)	0.000038	VCV yz (m²)	0.000019		
						VCV zz (m²)	0.000092		

Initialization event: RTK not initialized

GPS week	2370	Seconds	457108	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK initialized

GPS week	2370	Seconds	457113	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK not initialized

GPS week	2370	Seconds	457139	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK initialized

GPS week	2370	Seconds	457145	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK not initialized

GPS week	2370	Seconds	457303	Initialization type	On the fly	Survey type	Real-time		
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Survey event

Survey event	End survey
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Rover options

Elevation mask	13	PDOP mask	6						
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Rover options

Elevation mask	13	PDOP mask	6						
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Rover options

Elevation mask	13	PDOP mask	6						
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Survey event

Survey event	Rover started

Note	VRS base: 42°22'33.98340", 21°05'08.33520", 714.667m
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Initialization event: RTK initialized

GPS week	2370	Seconds	457746	Initialization type	On the fly	Survey type	Real-time		
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GNSS receiver

Receiver type	R10
Serial number	5452489155
Firmware version	4.9
Antenna type	R10 Internal
Measurement method	Bottom of quick release
Tape adjustment	0.000
Horizontal offset	0.000
Vertical offset	0.199

Point	Auto0000	X	4403479.763	Y	1697892.599	Z	4277033.525	Code	PDFndarj 10994
		Method	Network RTK	Type	Rapid point	Search class	As-staked		
Antenna height	2.000	Type	Uncorrected	Hz Prec	0.010	Vt Prec	0.015		
QC 1		PDOP	1.5	GDOP	1.9	HDOP	0.8	VDOP	1.2
		Base data age	2	Satellites	13	Positions used	1		

Stake out point (Auto0000)		Design point: PDFndarj 10994Code:							
Method		To the point							
Stakeout	Deltas: Grid	Δ North	-0.012	Δ East	0.013	ΔElev	-713.432		

Point	Auto0001	X	4403466.555	Y	1697894.849	Z	4277044.084	Code	PDFndarj 11022
		Method	Network RTK	Type	Rapid point	Search class	As-staked		
Antenna height	2.000	Type	Uncorrected	Hz Prec	0.008	Vt Prec	0.012		
QC 1		PDOP	1.3	GDOP	1.7	HDOP	0.7	VDOP	1.1
		Base data age	2	Satellites	14	Positions used	1		

Stake out point (Auto0001)		Design point: PDFndarj 11022Code:							
Method		To the point							
Stakeout	Deltas: Grid	Δ North	0.003	Δ East	-0.017	ΔElev	-712.042		

Point	Auto0002	X	4403462.478	Y	1697910.788	Z	4277040.256	Code	PDFndarj 11021
		Method	Network RTK	Type	Rapid point	Search class	As-staked		
Antenna height	2.000	Type	Uncorrected	Hz Prec	0.008	Vt Prec	0.011		
QC 1		PDOP	1.4	GDOP	1.7	HDOP	0.7	VDOP	1.1
		Base data age	1	Satellites	14	Positions used	1		

Stake out line (Auto0002)		Line name: PDFndarj 11021 Code:							
Method		To the line							
Station		17.674							
Elevation		0.000							
Stakeout	Deltas: Grid	Δ North	-0.012	Δ East	-0.003	ΔElev	-710.888		
Stakeout	Deltas: Linear	Δ Station	?	ΔOffset	-0.012	ΔElev	-710.888	Grade to line	-5782309.16%

Point	Auto0003	X	4403457.822	Y	1697927.360	Z	4277035.840	Code	PDFndarj 10995
		Method	Network RTK	Type	Rapid point	Search class	As-staked		
Antenna height	2.000	Type	Uncorrected	Hz Prec	0.009	Vt Prec	0.012		
QC 1		PDOP	1.4	GDOP	1.7	HDOP	0.7	VDOP	1.1
		Base data age	1	Satellites	14	Positions used	1		

Stake out point (Auto0003)		Design point: PDFndarj 10995Code:							
Method		To the point							
Stakeout	Deltas: Grid	Δ North	-0.002	Δ East	-0.005	ΔElev	-709.107		

Point	Auto0004	X	4403437.106	Y	1697928.539	Z	4277052.316	Code	PDFndarj 11023
		Method	Network RTK	Type	Rapid point	Search class	As-staked		
Antenna height	2.000	Type	Uncorrected	Hz Prec	0.012	Vt Prec	0.018		
QC 1		PDOP	2.0	GDOP	2.6	HDOP	1.0	VDOP	1.7
		Base data age	2	Satellites	11	Positions used	1		

Stake out point (Auto0004)		Design point: PDFndarj 11023Code:							
Method		To the point							
Stakeout	Deltas: Grid	Δ North	0.004	Δ East	-0.027	ΔElev	-706.246		

Point	Auto0005	X	4403437.776	Y	1697931.383	Z	4277050.067	Code	ParcelaB 10496
		Method	Network RTK	Type	Rapid point	Search class	As-staked		
Antenna height	2.000	Type	Uncorrected	Hz Prec	0.011	Vt Prec	0.016		
QC 1		PDOP	1.5	GDOP	2.0	HDOP	0.8	VDOP	1.3
		Base data age	1	Satellites	12	Positions	1		

Survey event		Rover started							
Note		VRS base: 42°22'35.60460", 21°05'09.30300", 706.865m							
Initialization event: RTK initialized									
GPS week	2370	Seconds	458774	Initialization type	On the fly	Survey type	Real-time		
GNSS receiver									
Receiver type	R10								
Serial number	5452489155								
Firmware version	4.9								
Antenna type	R10 Internal								
Measurement method	Bottom of quick release								
Tape adjustment	0.000								
Horizontal offset	0.000								
Vertical offset	0.199								

Point	Auto0010	X	4403429.015	Y	1697900.555	Z	4277072.148	Code	PDFndarj 10967
Antenna height	2.000	Method	Network RTK	Type	Rapid point	Search class	As-staked		
QC 1		Type	Uncorrected	Hz Prec	0.013	Vt Prec	0.022		
		PDOP	1.8	GDOP	2.3	HDOP	0.9	VDOP	1.5
		Base data age	2	Satellites	11	Positions used	1		
Stake out point (Auto0010)	Design point: PDFndarj 10967Code:								
Method	To the point								
Stakeout	Deltas: Grid	Δ North	0.013	Δ East	-0.025	ΔElev	-706.599		

Initialization event: RTK not initialized

GPS week	2370	Seconds	458868	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK initialized

GPS week	2370	Seconds	458909	Initialization type	On the fly	Survey type	Real-time		
Point	Auto0011	X	4403442.236	Y	1697910.033	Z	4277056.960	Code	PDFndarj 11049
Antenna height	2.000	Method	Network RTK	Type	Rapid point	Search class	As-staked		
QC 1		Type	Uncorrected	Hz Prec	0.011	Vt Prec	0.018		
		PDOP	1.7	GDOP	2.2	HDOP	0.8	VDOP	1.5
		Base data age	1	Satellites	12	Positions used	1		
Stake out line (Auto0011)	Line name: PDFndarj 11049 Code:								
Method	To the line								
Station	12.718								
Elevation	0.000								
Stakeout	Deltas: Grid	Δ North	-0.005	Δ East	-0.001	ΔElev	-707.994		
Stakeout	Deltas: Linear	Δ Station	?	ΔOffset	0.005	ΔElev	-707.994	Grade to line	-13217592.96%

Initialization event: RTK not initialized

GPS week	2370	Seconds	459021	Initialization type	On the fly	Survey type	Real-time		
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Note	New base station detected								
Note	VRS base: 42°22'33.96240", 21°05'10.01760", 710.938m								

Initialization event: RTK initialized

GPS week	2370	Seconds	459092	Initialization type	On the fly	Survey type	Real-time		
Point	Auto0012	X	4403457.831	Y	1697927.344	Z	4277035.849	Code	PDFndarj 10995
Antenna height	2.000	Method	Network RTK	Type	Rapid point	Search class	As-staked		
QC 1		Type	Uncorrected	Hz Prec	0.006	Vt Prec	0.010		
		PDOP	1.7	GDOP	2.3	HDOP	0.8	VDOP	1.5
		Base data age	1	Satellites	12	Positions used	1		
Stake out point (Auto0012)	Design point: PDFndarj 10995Code:								
Method	To the point								
Stakeout	Deltas: Grid	Δ North	-0.006	Δ East	0.014	ΔElev	-709.115		
Point	Auto0013	X	4403466.550	Y	1697894.857	Z	4277044.091	Code	PDFndarj 11022
Antenna height	2.000	Method	Network RTK	Type	Rapid point	Search class	As-staked		
		Type	Uncorrected	Hz Prec	0.008	Vt Prec	0.014		

QC 1		PDOP	1.9	GDOP	2.4	HDOP	0.9	VDOP	1.6
		Base data age	2	Satellites	11	Positions used	1		
Stake out point (Auto0013)		Design point: PDFndarj 11022Code: To the point							
Stakeout	Deltas: Grid	Δ North	-0.004	Δ East	-0.025	ΔElev	-712.045		

Initialization event: RTK not initialized

GPS week	2370	Seconds	459187	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK initialized

GPS week	2370	Seconds	459209	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK not initialized

GPS week	2370	Seconds	459348	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK initialized

GPS week	2370	Seconds	459351	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK not initialized

GPS week	2370	Seconds	459387	Initialization type	On the fly	Survey type	Real-time		
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Note	New base station detected								
Note	VRS base: 42°22'33.15540", 21°05'11.80920", 706.768m								

Initialization event: RTK initialized

GPS week	2370	Seconds	459432	Initialization type	On the fly	Survey type	Real-time		
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Point	Auto0014	X	4403464.625	Y	1697969.250	Z	4277008.704	Code	ParcKojs 10078
Antenna height	2.000	Method	Network RTK	Type	Rapid point	Search class	As-staked		
QC 1		Type	Uncorrected	H _z Prec	0.011	V _t Prec	0.020		
		PDOP	1.8	GDOP	2.4	HDOP	0.9	VDOP	1.6
		Base data age	2	Satellites	12	Positions used	1		

Stake out point (Auto0014)		Design point: ParcKojs 10078Code: To the point							
Stakeout	Deltas: Grid	Δ North	0.011	Δ East	-0.035	ΔElev	-706.640		

Point	Auto0015	X	4403432.840	Y	1697954.322	Z	4277044.166	Code	ParcKojs 9950
Antenna height	2.000	Method	Network RTK	Type	Rapid point	Search class	As-staked		
QC 1		Type	Uncorrected	H _z Prec	0.014	V _t Prec	0.027		
		PDOP	2.0	GDOP	2.6	HDOP	0.9	VDOP	1.8
		Base data age	1	Satellites	11	Positions used	1		

Stake out point (Auto0015)		Design point: ParcKojs 9950Code: To the point							
Stakeout	Deltas: Grid	Δ North	0.007	Δ East	0.030	ΔElev	-704.665		

Initialization event: RTK not initialized

GPS week	2370	Seconds	459850	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK initialized

GPS week	2370	Seconds	459852	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK not initialized

GPS week	2370	Seconds	459853	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK initialized

GPS week	2370	Seconds	459858	Initialization type	On the fly	Survey type	Real-time		
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Survey event

Survey event

Survey event	End survey
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Rover options

Elevation mask	13	PDOP mask	6					
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Rover options

Elevation mask	13	PDOP mask	6					
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Survey event

Survey event	Rover started
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Note	VRS base: 42°21'16.06860", 20°59'17.07000", 1191.292m
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Initialization event: RTK initialized

GPS week	2370	Seconds	461470	Initialization type	On the fly	Survey type	Real-time	
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Initialization event: RTK not initialized

GPS week	2370	Seconds	461537	Initialization type	On the fly	Survey type	Real-time	
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Initialization event: RTK initialized

GPS week	2370	Seconds	461538	Initialization type	On the fly	Survey type	Real-time	
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GNSS receiver

Receiver type	R10
Serial number	5452489155
Firmware version	4.9
Antenna type	R10 Internal
Measurement method	Bottom of quick release
Tape adjustment	0.000
Horizontal offset	0.000
Vertical offset	0.199

Point	Auto0016	X	4408209.890	Y	1691084.573	Z	4275579.869	Code	Ndarjet 10448
Antenna height	2.000	Method	Network RTK	Type	Rapid point	Search class	As-staked		
QC 1		Type	Uncorrected	H _z Prec	0.007	V _t Prec	0.016		
		PDOP	2.1	GDOP	2.8	HDOP	1.0	VDOP	1.8
		Base data age	1	Satellites	11	Positions used	1		
Stake out point (Auto0016)		Design point: Ndarjet 10448Code: To the point							
Method									
Stakeout	Deltas: Grid	Δ North	-0.029	Δ East	0.025	ΔElev	-1190.189		

Point	Auto0017	X	4408197.352	Y	1691063.083	Z	4275603.672	Code	Ndarjet 10423
Antenna height	2.000	Method	Network RTK	Type	Rapid point	Search class	As-staked		
QC 1		Type	Uncorrected	H _z Prec	0.007	V _t Prec	0.018		
		PDOP	2.1	GDOP	2.8	HDOP	1.0	VDOP	1.8
		Base data age	1	Satellites	11	Positions used	1		
Stake out point (Auto0017)		Design point: Ndarjet 10423Code: To the point							
Method									
Stakeout	Deltas: Grid	Δ North	0.021	Δ East	-0.010	ΔElev	-1191.887		

Reduced points

Point	fe12	North	4692048.444	East	7507482.713	Elevation	669.854	Code	
Point	fe12mm	North	4692048.437	East	7507482.715	Elevation	669.863	Code	
Point	Auto0000	North	4692938.577	East	7507051.791	Elevation	713.432	Code	PDFndarj 10994
Point	Auto0001	North	4692954.140	East	7507058.625	Elevation	712.042	Code	PDFndarj 11022
Point	Auto0002	North	4692950.029	East	7507074.964	Elevation	710.888	Code	PDFndarj 11021
Point	Auto0003	North	4692945.695	East	7507092.102	Elevation	709.107	Code	PDFndarj 10995
Point	Auto0004	North	4692970.611	East	7507100.628	Elevation	706.246	Code	PDFndarj 11023
Point	Auto0005	North	4692967.842	East	7507103.043	Elevation	705.947	Code	ParcelaB 10496
Point	Auto0006	North	4692958.526	East	7507106.067	Elevation	706.476	Code	ParcelaB 10500

Point	Auto0007	North	4692978.298	East	7507069.154	Elevation	709.028	Code	PDFndarj 11050
Point	101	North	4692979.257	East	7507065.224	Elevation	1.000	Code	PDFndarj 11050
Point	Auto0008	North	4692979.247	East	7507065.216	Elevation	709.220	Code	101
Point	Auto0009	North	4693000.432	East	7507074.453	Elevation	706.636	Code	ParcelaB 10492
Point	Auto0010	North	4692997.107	East	7507077.407	Elevation	706.599	Code	PDFndarj 10967
Point	Auto0011	North	4692975.283	East	7507081.515	Elevation	707.994	Code	PDFndarj 11049
Point	Auto0012	North	4692945.699	East	7507092.083	Elevation	709.115	Code	PDFndarj 10995
Point	Auto0013	North	4692954.147	East	7507058.634	Elevation	712.045	Code	PDFndarj 11022
Point	Auto0014	North	4692911.257	East	7507128.767	Elevation	706.640	Code	ParcKojis 10078
Point	Auto0015	North	4692961.049	East	7507126.224	Elevation	704.665	Code	ParcKojis 9950
Point	Auto0016	North	4690533.468	East	7499002.604	Elevation	1190.189	Code	Ndarjet 10448
Point	Auto0017	North	4690564.124	East	7498987.038	Elevation	1191.887	Code	Ndarjet 10423