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# 2019 VLF SURVEY REPORT <br> FLAT LAKE AREA <br> WEST, MIDDLE \& FLAT LAKE GRIDS <br> SUGAR ZONE PROPERTY <br> DAYOHESSARAH LAKE AREA <br> WHITE RIVER, ONTARIO 

## NTS 42C/ 10, 11, 14 and 15

Latitude $48^{\circ} 36^{\prime} \mathrm{N}$, Longitude $85^{\circ} 06^{\prime} \mathrm{W}$

Work Completed
March 12-September 17, 2019
for
Harte Gold Corporation
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Appendix C - Superior Exploration, Adventure \& Climbing Co. Ltd. - Invoice
Appendix D - Superior Exploration, Adventure \& Climbing Co. Ltd. - Harte Gold - Flat Lakes Area - Raw VLF Data, West Grid / Middle Grid / Flat Lake Grid

## Executive Summary

Between March 12 and April 3, 2019 ground VLF surveys were conducted on the West, Middle and Flat Lake Grids in an area locally know as the Flat Lake area. This area is located on the Dayohessarah Lake property which is located in the Dayohessarah Lake area, north of White River, Ontario.

The work was performed by Shaun Parent of Superior Exploration, Adventure \& Climbing Co. Ltd. on behalf of Harte Gold Corporation. The objective of the survey was to delineate geophysical anomalies potentially containing precious or base metal mineralization and/or identify significant geological structures in the area.

The total cost of the Flat Lake Area VLF surveys amounted to $\$ 42,990$ and spanned across nine grouped mining claims. The survey consisted of 17.3 kilometers along 12 reconnaissance grid lines, 4 lines per grid, spaced 200m apart. A total of 876 station readings were taken spaced at 20 m intervals.

A VLF EM-16 unit and a Garmin GPS 60CSX was utilized during the survey to collect the VLF readings and note the GPS location of each reading. Two transmitters were read at each station: NAA 24.0 KHz - Cutler, Maine and NML 25.2 KHz- La Moure, North Dakota.

Plan view Fraser-Filter, and Resistivity contour maps as well as cross sections were produced of the area (modelled up to 144 meters in depth). The survey outlined several strong VLF bedrock conductors, as well as several highly resistive bedrock units. Superior Exploration, Adventure \& Climbing Ltd recommends adding additional infill lines to the grid to obtain a higher resolution of VLF trends as well as some ground follow up. Several potential drill targets are also recommended.

The Property is in the Dayohessarah Greenstone Belt ("DGB"). This greenstone belt is part of the larger, east trending Schreiber-White River Belt of the Wawa Subprovince of the Superior Craton. The DGB is situated between two larger greenstone belts; the Hemlo Greenstone Belt to the west and the Kabinakagami Greenstone Belt to the east. The DGB has an active history of exploration dating back to 1969 when Canex Aerial Exploration Ltd. drilled three holes on the Property. Exploration ramped up after the discovery of Hemlo, when Pezamerica Resources commenced geophysics and drilling.

In 1998, Harte Gold Corp. entered into an option agreement on most of the unpatented mining claims comprising the Dayohessarah Lake Property, including the Sugar Zone. Harte subsequently entered into a Joint Venture agreement with Corona Gold Corporation.

### 1.0 Introduction

Between March 12 and April 3, 2019 three ground VLF surveys was conducted by Superior Exploration, Adventure \& Climbing Co. Ltd. on behalf of Harte Gold Corporation in the Flat Lake area. A total of 17.3 line-kilometers were completed. The surveys were conducted on the West, Middle and Flat Lake Grids (Figures 5, 6 and 7). Each grid consisted of 4 lines for a total of 12 lines. The Flat Lake area is located 16.5 km north-northeast of the Sugar Zone mine site (Figure 2) on the Dayohessarah Lake Property and is accessed via Highway 631 from White River, ON (NTS 042C11).

This report is being written to introduce the VLF interpretive report written by Shaun Parent of Superior Exploration, Adventure \& Climbing Co. Ltd. and is attached to this report as Appendix B. Please refer to this report for a detailed discussion of the results. This introductory report was written from September 14-17, 2019.

All UTM coordinates are in NAD 83, Zone 16N projection.
Although a work permit is not required for a VLF survey, the Flat Lake VLF surveys occurs within Exploration Permit PR-18-000299 and PR-18000300 which were issued May 10, 2019.

### 2.0 Property Location and Description

### 2.1 Location and Access

The Dayohessarah Lake Property is situated approximately 25 km northeast of the Town of White River (Trans-Canada Highway No. 17) and 60 km east of the Hemlo gold camp. The Property is approximately equidistant from Sault Ste. Marie to the south-east and Thunder Bay to the west (Figure 1). The overall Property encompasses NTS zones 42C/ 10, 11, 14 and 15 and the gold mineralized occurrences are exposed at Latitude $48^{\circ} 48^{\prime}$ north, Longitude $85^{\circ} 10^{\prime}$ west. The property covers parts of the Odlum, Strickland, Gourlay, Tedder, Hambleton, Cooper, Nameigos, Abraham and Bayfield Townships, and falls within the Sault Ste. Marie Mining Division.

The Property can be accessed via a series of logging roads and drill trails extending north from the community of White River. Access is also available by way of float plane, based in White River via Dayohessarah Lake or Hambleton Lake, and by helicopter based in Wawa or Marathon.

The western and southern portions of the Property are accessible via a series of logging roads controlled by White River Forest Products Limited. Road No. 100 extends north from the western end of White River. Road No. 200 intersects Road No. 100 approximately 20 km from Highway 17 and provides access to the western and southern portions of the property. Road No. 300 intersects Road No. 100 approximately 36 km from Highway 17 and provides access to the very northern portion of the Property. Road No. 305 intersects Road No. 300 approximately 6 km from Road No. 100 and provides access to northern and eastern parts of the Property. Road access to within 400 m of the Sugar Zone is available via a small road heading south and southwest from Road No. 305 for 8.8 km . From there, access to the Sugar Zone is available via all-terrain or tracked vehicles in the summer, and snowmobiles, tracked vehicles and trucks in the winter. The distance from White River to the Sugar Zone is approximately 60 km by road.

Areas surrounding Dayohessarah, Hambleton, Strickland and Pike Lakes are designated by the Ontario Ministry of Natural Resources as 'Restricted Access'. Locked gates on Road No. 200 and Road No. 305 control vehicular access in order to prevent access to remote lodge operations on two lakes. Permits are required for road access to most of the Sugar Zone property for mineral exploration purposes.

### 2.2 Description of Mining Claims

The Dayohessarah Lake Property consists of four mining leases comprising 1467.26 hectares, including 69 boundary cell claims, 43 single cell claims, 197 multi-cell claims. Harte Gold also


Figure 1 - Property Location
has an option to earn a 100\% interest in the Halverson Property subject to certain terms and conditions. The Halverson Property consist of 12 boundary cell claims and 4 single cell claims. (Appendix A). All claims of the Dayohessarah Lake Property are held in the name of Harte Gold Corp., except for those of the Halverson Property which are held in the name of Lloyd Joseph Halverson and are subject to an option agreement. The Property boundaries are marked by claim lines but have not been surveyed (Figure 2).

There are two mining alienations which border parts of Harte's current claim block. The largest (W-LL-C1521) lies to the east of the current claim area, and shortly borders claim 4260617 on the east, and Hwy 631 on the west. The second alienation (No. 2847) lies entirely within Harte's current claim block, west of Dayohessarah Lake. Surface rights are held by the Crown and timber cutting rights are held by White River Forest Products Ltd.

In 1998, Harte Gold Corp. (Harte) entered into an option agreement on most of the unpatented mining claims comprising the Dayohessarah Lake Property, including the Sugar Zone. Harte Subsequently entered into a Joint Venture agreement with Corona Gold Corp.

The original claims are subject to a $3.5 \%$ net smelter royalty ("NSR"). The Joint Venture participants, namely Corona (51\%) and Harte (49\%), have the option of acquiring $1.5 \%$ of the $3.5 \%$ NSR for $\$ 1.5$ million, in proportion to their respective interest and have, in addition, the right of first refusal on the remaining $2.0 \%$ NSR.


Figure 2-Claim Position and Showings
Harte and Corona entered into an Option Agreement (the "Corona Option") dated May 28, 2010, entitling Harte to acquire Corona's $51 \%$ interest in the Sugar Zone Joint Venture upon completion of certain conditions. Effective March 10, 2010, Harte became the Operator of the Sugar Zone Joint Venture for as long as the Corona Option remained in good standing. Harte completed all required conditions and as of May 23, 2012 acquired Corona's 51\% interest to become the 100\% owner and operator of all the claims which were previously part of the Sugar Zone Joint Venture.

### 2.3 Physiography and Vegetation

The climate is northern boreal, with short hot summers and cold, snowy winters. Some field operations, such as drilling, can be carried out year-round while other operations, such as prospecting and mapping, can only be carried out during the late spring, summer and early autumn months.

The temperatures can range from $-35^{\circ} \mathrm{C}$ in the winter to $+30^{\circ} \mathrm{C}$ in the summer; though the mean temperatures are around $-20^{\circ} \mathrm{C}$ to $+20^{\circ} \mathrm{C}$. Rainfall is about 727 mm annual average, with the wettest month being September ( 120 mm average). Snow is abundant, often reaching several metres with December and January having the heaviest snowfall (about 80 cm ). Snow is on the ground by late October and the ice begins to thaw on the lakes by April.

The topography on the Property varies from moderate to rugged, with lake levels generally at 390 m above sea level, and occasional hills up to 480 m elevation. The overburden is generally between 0 to 20 m deep on the Property, with occasional boulderer terrain, and normally approximately 2 to 3 m overlying the Sugar Zone. Vegetation is boreal, with jack pine, fir, poplar and birch occupying dry uplands and cedar, tamarack and spruce growth on more poorly drained terrain.

### 3.0 Historical Work

Exploration for gold and base metals has been conducted on the Dayohessarah property since 1969. After over 10 years of very little work, exploration started to pick up on the property again in 1983, after the discovery of the Hemlo Gold camp. A complete timeline of mineral exploration on the DGB is presented below.

1969 Canex Aerial Exploration Ltd. drilled three diamond drill holes in the vicinity of the mafic/ultramafic intrusives and flows near the north end of Dayohessarah Lake. Results include an intersection of $0.326 \% \mathrm{Ni}$ and $0.08 \%$ Cu over 5 ft . in metagabbroic rocks.

1983-1986 Pezamerica Resources Limited conducted an exploration program which included an airborne Mag and EM survey that outlined thirty-one (31) geophysical anomalies in the area. Twenty-four (24) of these anomalies were investigated by Teck Exploration on behalf of Pezamerica. Teck Exploration drilled nine airborne geophysical targets based on coincidental soil gold anomaly trends. In all cases, the airborne anomalies were explained by pyrite/pyrrhotite rich horizons within felsic volcanics. Hole PZ-6 returned appreciable amounts of sphalerite mineralization $(0.47 \% \mathrm{Zn}$ over 2.8 feet). None of the assayed core returned significant gold values.

1990 Most of the DGB is staked by a prospecting syndicate.
1991 The Property is optioned from the prospectors by Hemlo Gold Mines Inc. Initial prospecting uncovered the gold-bearing Sugar Zone deposit. Based on bedrock exposure and trenching, the Sugar Zone was traced for 750 m , and a ground IP survey outlined the Sugar Zone structure extending for $1,500 \mathrm{~m}$.

1993 Hemlo Gold conducted a preliminary diamond drill program to test the Sugar Zone for economic gold mineralization. A grid was cut with a $6-\mathrm{km}$ baseline and tie-lines ranging in spacing between 100 m and $1,000 \mathrm{~m}$. Six diamond drill holes were completed totaling 800 m . All drill holes intersected significant gold mineralization in the Sugar Zone. A small trenching program is initiated on the Sugar Zone.

1994 Hemlo Gold proceeds with initial geological mapping, prospecting and a follow-up drill program. Fifteen diamond drill holes are completed on the Property, totaling $2,416 \mathrm{~m}$. Eight of the drill holes intersected the Sugar Zone. An I.P. survey is completed over the southern portion of the Property, and a Mag survey is completed over the entire grid. After the exploration program, the Property was returned to the prospecting syndicate who initially staked the ground, due to legal reasons.

1998-1999 Most of the Property is optioned from the prospector's syndicate. The mining claims were subject to a Joint Venture agreement between Corona Gold Corporation (51\%) and Harte Gold Corp. (49\%). Corona was the operator. The initial 313 claims are subject to a $3.5 \%$
net smelter royalty ("NSR"), and the Joint Venture participants have the option to acquire $1.5 \%$ of the 3.5\% NSR for $\$ 1.5$ million and have the right of first refusal on the remaining 2.0\% NSR.

Corona carries out an extensive exploration program. The existing grid was rehabilitated, and new grid lines established east of Dayohessarah Lake. In total, 96.1 km of grid lines with 100 m spacing oriented at $320^{\circ}$ azimuth are cut over the Sugar Zone area. An oriented soil sampling program is carried out on the grid, as well as mapping and sampling. Prospecting was limited to the Sugar Zone and extensions of the Sugar Zone to the south and to the north. A surface power trenching program is conducted on parts of the Sugar Zone and six trenches were excavated, washed, channel sampled and mapped in detail. A detailed Mag-VLF and reconnaissance gradient I.P. survey is performed on the Property.

A diamond drilling program totaling $9,937 \mathrm{~m}$ of NQ core in 53 holes is completed, mostly into and around the Sugar Zone. The drill holes cover 3 km of strike length and intersect the zone at approximately 50 m spacing at shallow depths. A secondary purpose of the program was to follow-up low grade mineralization encountered in previous drilling by Hemlo Gold and to test previously untested/poorly tested I.P. anomalies west of the Sugar Zone and east of Dayohessarah Lake.

Preliminary Mineral Resource estimates of the Sugar Zone mineralization in the 12000 N to 13100 N area were prepared, based on the drilling program noted above. Another estimate was made, using revised and refined criteria and polygonal methods, in the spring 1999, following additional data evaluation (Drost et AI, 1998).

2003-2004 Corona conducts a diamond drilling program totaling $7,100 \mathrm{~m}$ in 26 holes. The drill program mostly intersects the Sugar Zone and is successful in its purpose of expanding the strike and dip extent of the zone, as well as increasing the level of confidence in the continuity of mineralization by in-fill drilling.

2004 Corona conducts another diamond drilling program totaling $3,588 \mathrm{~m}$ in 11 holes. The program is successful in increasing the mineralization extent of the Sugar Zone, as well as increasing the defined Sugar Zone depth to a vertical depth of 300 m . A new Mineral Resource estimate was completed.

2008 A helicopter airborne geophysical survey was flown over the Property by Fugro Airborne Surveys Corp., under contract from Corona. The survey used a DIGHEM multi-coil, multifrequency electromagnetic system along with a high sensitivity cesium magnetometer. A total of 1,917 line-km was flown. It was recommended by Dave Hunt P.Geo. that compilation of historic exploration data on the remainder of the property be followed by a program of reconnaissance mapping and prospecting to evaluate the Fugro airborne conductor axes on the ground, as well as to identify additional target areas extending both north and south of existing Sugar Zone mineralization and elsewhere on the property.

2009 During March, Corona undertook a drilling program totaling $2,020 \mathrm{~m}$ in 10 holes. The purpose of the program was to test airborne electromagnetic conductors, magnetic anomalies, induced polarization chargeability anomalies and geologically defined possible extensions to the north and the south of the known Sugar Zone mineralization.

During July to September, a prospecting, reconnaissance geological mapping and channel sampling program was undertaken on geophysical targets outlined by the Fugro airborne
geophysical anomalies. Highlights included sampling of a float rock (Peacock Boulders) returning a value of $87.80 \mathrm{~g} / \mathrm{t} \mathrm{Au}$, as well as grab samples from quartz veining east of the Sugar Zone returning values of 30.40 and $9.04 \mathrm{~g} / \mathrm{t} \mathrm{Au}$.

2010 Harte Gold Corp. initiated it first drilling program. During March, a diamond drill program totaling $2,097.31 \mathrm{~m}$ in 12 holes, two of which were aborted before reaching the Sugar Zone. The program was successful in locating a high-grade area of the Sugar Zone located near surface and directly under a series of surface trenches. The drill program was also successful in determining that the Sugar Zone has significant mineralization below 300 m depth.
Ground IP is completed over a grid totaling 20,475 meters. Chargeability from the survey outlines a potential zone north of the Peacock Boulder discovery of 2009. 5 Trenches totaling 1,850 square meters were completed over and around the newly discovered Wolf Zone.

A total of $5,387.94 \mathrm{~m}$ of diamond drilling totaling 33 drill holes was completed on the newly discovered Wolf Zone. Results outlined a small, high grade zone with a strike length up to 600 m and a depth up to 250 meters.

2011 Between May and June 2011 two more grids totaling 60,800 meters were completed over the fold nose near the north end of the of the Dayohessarah Lake Property, on the west side of Hambleton Lake. Follow up ground IP was completed on the grids by JVX Geophysical Surveys. A small 5,200-meter grid was also cut, and ground IP completed on the west side of Dayohessarah Lake, to outline a Gossan Zone.

A Bore Hole survey was completed In August 2011 on eleven deep drill holes in the Sugar Zone. The Bore Hole survey outlined several conductors in the area. An airborne VTEM survey was completed at the end of August by Geotech Ltd. The survey covered the entire property and outlined 5 large moderate to strong conductive areas of interest. The most exciting result of the survey was a potential copper-nickel ore body below the surface, under the komatiite volcanics at the northern end of Dayohessarah Lake.

There were two main drill programs in 2011. The first was on the Sugar Zone, between February 11 to April 13, and again between July 17 and November 24, 2011, and totaled $7,885.74$ meters of diamond drilling in 27 drill holes. The drilling was designed to expand the resource estimate both at depth, and to upgrade inferred resource to indicated resource. The second drill program targeted IP anomalies on the Fold Nose grid. A total of 3,430.93 meters were drilled in 15 diamond drill holes. Most IP anomalies were explained by sedimentary layers, and no significant intercepts were observed.

2012 In April 2012, Geotech Ltd. carried out a helicopter borne geophysical survey over the Dayohessarah Lake Property. The program was completed as an extension of the airborne VTEM survey conducted in 2011 which totaled 302 line-km of data over the northern parts of Dayohessarah Lake and western parts of Hambleton Lake and the shore line. The 2012 program totaled 1,153 line-km of data essentially covering the rest of the Dayohessarah Greenstone Belt.

To understand the source of the Peacock boulders, thin sections of three Peacock boulder samples were sent to Pleason Geoscience for analysis. The boulders returned assay values of $87.30 \mathrm{~g} / \mathrm{t} \mathrm{Au}, 52.80 \mathrm{~g} / \mathrm{t} \mathrm{Au}$ and $37.20 \mathrm{~g} / \mathrm{t} \mathrm{Au}$. It was noted that the mineralogy and micro-textures of the samples were similar to gold-bearing zones at the Hemlo and Musselwhite gold camps.

Between October 30, 2012 and November 2, 2012 four mechanical trenches were made along the surface exposure of the Sugar Zone. The purpose of the trenches was to expose enough high-grade material from the Lower Zone of the Sugar Zone for a reasonably representative blasting program. The total area of the trenches is 1,799 square meters.

During the period January 21, 2012 to July 29, 2012 a total of $6,283.92$ meters were drilled in 12 diamond drill holes targeting the Sugar Zone. The drilling was carried out by Major Drilling Group International Inc. The purpose of the diamond drilling program was to expand the current Mineral Resource Estimate of the Sugar Zone at vertical depths below 400 m , and to test the continuity, grade and width of the zone at $1,000 \mathrm{~m}$ vertical depth. The program was successful in defining Au mineralization in both the Upper and Lower Zones with significant assay results ranging from 0.56g/t Au to 162g/t Au.

An additional 2 drill holes targeted an IP north-east of Dayohessarah Lake. These exploration holes totaled 375 meters and did not return any significant gold values.

Two holes totaling 333 meters were drilled targeting an extension of the Wolf Zone. No significant assays were returned.

2013 Exploration in the 2013 season included a short prospecting program, where 46 samples were taken and analyzed for Au using fire assay. Two samples returned Au values of $10.2 \mathrm{~g} / \mathrm{t}$ and $0.73 \mathrm{~g} / \mathrm{t}$.

Four holes were drilled on the Halverson Zone, totaling 1103.28m These holes targeted $\mathrm{Cu}-\mathrm{Ni}$ mineralization discovered in 2011 by a VTEM survey.

An additional 17 diamond drill holes totaling 1356m were drilled to decrease the spacing between holes in a high-grade portion of the Sugar Zone Lower Zone (called Jewelry Box). Significant intervals from this program ran from $2.77 \mathrm{~g} / \mathrm{t}$ Au to $28.5 \mathrm{~g} / \mathrm{t}$ Au over widths from 0.35 m to 8.27 m .

Harte Gold continued moving forward with the permitting and optimization of the advance exploration 70,000 tonne bulk sample at the Sugar Zone. Confirmation drilling at the Jewelry Box Zone (JBZ) returned significant high-grade gold assays and enabled Harte Gold to re-design the bulk sample target areas in order to test this high-grade portion of the Sugar Zone deposit. The JBZ lies close to surface and can be developed quicker and more cost effectively.

Harte Gold also completed road construction to provide highway access to the property and survey work associated with taking certain of the Sugar Zone property mining claims to lease. Harte Gold is also in the process of negotiating contract mining and off-site milling agreements.

Harte Gold completed a regional exploration program and Induced Polarization (IP) survey with the objective of finding the source of the high-grade Peacock Boulders which returned gold values up to $87 \mathrm{~g} / \mathrm{t}$. Drill targets have been identified and are scheduled to be drilled during the summer of 2014.

2014 Harte Gold continued to advance the Sugar Zone "Advanced Exploration and Bulk Sample Project" during 2014. Efforts focused on completing the permitting associated with the amended closure plan, completing the road to the portal site and overall optimization of the mining plan developed in the 2012 Preliminary Economic Assessment.

Additional confirmation drilling at the Jewelry Box Zone (JBZ), the target area for the bulk sample, returned significant high-grade gold assays providing additional confirmation to mining contractors developing bids for the project.

2014 was a busy year of exploration, Induced Polarization and magnetometer surveys were conducted over a majority of the core mining claims and generated numerous drill targets. Follow up ground proofing and drill programs identified the Wolf Zone as the source of the high-grade Peacock Boulders and lead to the discovery of the Contact Zone, where a sericite schist was found to have Hemlo-style geochemistry and anomalous gold as well as a third mineralized zone known as the Footwall Zone and located 50 meters east of the Sugar Zone deposit.

During 2015 Harte Gold completed additional exploration drilling that extended the Sugar Zone deposit 300 meters south of its previously defined boundary.

Harte Gold completed additional construction work on the site access road linking the Sugar Zone deposit to Highway 631 and completed the lease application process for certain mining claims that comprise the Sugar Zone property. The leases cover the Sugar Zone deposit and immediately surrounding area and are a requirement for commercial production.

2015 This was a pivotal year for Harte Gold as efforts to move the project ahead during a challenging mining market finally culminated in October with the first portal blast at the Sugar Zone. Since October the ramp was advanced to over 850 meters in length and begun shipping ore to Barrick Gold for custom milling from ore developed on the 375 level.

With production under our bulk sampling program well underway, the commercial permitting process has begun. This process is expected to take 12-18 months which may coincide well with completion of the bulk sample program. During the intervening period, the plan is to continue with underground development which would include the ramp, underground infrastructure including ventilation and setting up stopes to be ready for mining.

The commercial production target is 600 tonnes/day. Milling options are currently being studied and a tailings facility will form part of our permit application so that an on-site milling facility can eventually be built.

Harte gold initiated a significant geophysical program between the Sugar Zone and the Wolf Zone. The Contact Zone where Hemlo-style mineralization has been found in sericite schists up to 45-meter-wide and the Gossan Zone located on the west side of Dayohessarah Lake will be a focus for future exploration.

2016 This was a very busy year for Harte Gold as mining was in full swing with ore being delivered to Barrick Gold Corporation's Hemlo mill throughout the year.

Exploration efforts both near-mine and regionally are progressing at an aggressive pace with 6 drill rigs now working at the Sugar Zone and the newly discovered Middle Zone and the Wolf Zone. It is expected that the next resource update will include resources at the Middle Zone which could be incorporated into an updated mine plan and Technical Report.

2017 During the year the Company raised an aggregate of $\$ 50$ million under bought deal private placements and received $\$ 5,063,163$ from the exercise of investor and finders warrants and stock options. Funds were used to complete the Company's 70,000 tonne Advanced

Exploration Bulk Sample, underground development work associated with the Company's 30,000 Phase I Commercial Permit, mill construction and general corporate purposes.

Harte Gold completed the 70,000 tonne Advanced Exploration Bulk Sample in March 2017 under which it shipped a total of 67,425 dry tonnes at an average grade of 8.28 grams / tonne to Barrick Inc.'s nearby Hemlo Mill for processing. Harte Gold realized approximately $\$ 27$ million from the advanced exploration bulk sample, which funds were re-invested in the Sugar Zone project.

Harte Gold received a Phase I-30,000 tonne commercial permit in January 2017. The Phase I program is situated towards the south end of the Sugar Zone Deposit and required the development of a ramp from the Advanced Exploration Bulk Sample at the north end of the Deposit to provide access. Harte Gold established five mining levels and excavated 30,000 tonnes of development ore. The development ore is stockpiled on surface and will serve as the initial feed for the on-site Mill under Phase II Commercial Permits anticipated in June 2018.

In February 2017 Harte Gold submitted a Notice of Material Change ("NOMC") and subsequently received approval to build the Mill Building and install the crusher, ball mill, gravity concentrator, float concentrate circuit, paste back-fill plant, effluent treatment plant and other ancillary items associated with on-site milling process. As of the date hereof construction is well advanced and on schedule for completion in June 2018.

Harte Gold received location approval for its tailing's management facility ("TMF") and commenced preconstruction clearing completed the installation of the west dam. Harte Gold sought and received confirmation from the Canadian Environmental Assessment Agency that no federal environmental assessment is applicable to the project.

Harte Gold submitted a Draft Closure Plan Amendment ("CPA") to the MNDM which CPA provides for full commercial production, on-site milling and the operation of the TMF. Harte Gold is working with the MNDM and MOECC to finalize all outstanding permits in order to begin commissioning the mill in June and production in July.

Harte Gold was also very active with its exploration programs; Harte Gold completed approximately 80,000 meters of drilling during the year. Drill programs focused on:

Moving that portion of the Sugar Zone Deposit between surface and 500 m from the inferred resource category to the indicated category. Increasing the number of contained ounces within the newly discovered Middle Zone. Testing for Wolf Zone extensions at depth and other targets along strike.

A regional airborne geophysical survey was also undertaken which resulted in the definition of new exploration targets within and outside the Sugar Zone Property. As a result of this survey Harte Gold staked an additional ground to cover a greenstone belt and other targets, to bring the total property package to 79,335 hectares.

2018 A Mineral Resource Estimate dated February 15, 2018 contains an Indicated Mineral Resource Estimate of $2,607,000$ tonnes grading $8.52 \mathrm{~g} / \mathrm{t}$ for 714,200 ounces of contained gold and an Inferred Mineral Resource Estimate of 3,590,000 tonnes, grading $6.59 \mathrm{~g} / \mathrm{t}$ for 760,800 ounces of contained gold, using a $3.0 \mathrm{~g} / \mathrm{t}$ Au cut-off. The Company also completed a Preliminary Economic Assessment with an effective date of March 31, 2018, outlining 80,700 ounces of annual average gold production at an All-In Sustaining Cash Cost ("AISC") of US\$708/oz Au over an 11 year mine life.

All commercial production permits were issued in September. Process plant construction and transition to grid power were completed in September. First gold production was announced in mid-October. Gold doré bars are being produced through the gravity circuit and a high-grade concentrate is being produced through the flotation recovery circuit for offsite processing.

Official Mine Opening which was attended by the Premier of Ontario and Minister of Energy, Northern Development and Mines occurred October $24^{\text {th }}$, 2018. The Company bought down the royalty on the Sugar Zone property from 3.5\% to 2.0\% effective October 31, 2018.

Process plant commissioning was completed in early November. Since that time the Company has increased throughput to achieve the initial targeted rate of 575 tpd .

Sill development is on-going and long-hole stoping between the 140 and 155 levels off the Sugar Zone South ramp has begun. Results of the first production stope blast achieved expectations.

Underground development continues at the Sugar Zone North and South ramps. During September, the average advance rate of 8 meters per day was ahead of plan. The installation of critical underground infrastructure to support ventilation, power and pumping has been completed. In addition, the mine return air ventilation fan was successful installed and the transition to grid power for the majority of site power requirements substantially completed. Redpath is ramping up its underground mine personnel to achieve targeted ore sill development rates. Harte Gold's current permits allow for underground mining and mill processing rates of 550 tpd and 575 tpd respectively. Harte Gold will submit an application to increase both categories to 800 tpd in Q1 2019.

The Company expects to declare commercial production at the end of December 2018.
Near Mine Exploration infill drilling at the Sugar and Middle Zones for 2018 has concluded. Approximately 62,000 meters was drilled with a focus on the upgrade of Inferred Mineral Resources to the Indicated category. The drill program was successful and is expected to improve overall modelled grade of the Resources. Results will be factored into an updated NI 43101 Mineral Resource Estimate targeted for early 2019. Step-out drilling underway will continue to mid-December. Approximately 30,000 meters has been drilled to-date, targeting extension of known mineralization at the Sugar, Middle and Wolf Zones, as well as discovery of new potential zones of mineralization like the Fox Zone. Information provided from the Company's downhole IP program completed in August has been successful identifying a number of drill targets, including a chargeability anomaly currently being drilled to test the convergence of the Middle and Wolf Zones. Downhole geophysics has been a highly successful tool used in the past, earlier work led to the deep Sugar Zone discovery at a depth of 1,000 meters. The Company has also started deep drilling at the Sugar Zone, approximately 1,500 meters below surface and 500 meters below the current extent of Inferred Mineral Resources, illustrated below. The intent of deep drilling is to test continuity of mineralization down dip and to potentially follow up with further downhole IP to develop deep drilling targets.

### 4.0 Geological Setting

### 4.1 Regional Geology

The DGB is situated between two larger greenstone belts; the Hemlo Greenstone Belt to the west and the Kabinakagami Greenstone Belt to the east. These greenstone belts are part of the larger, east trending Schreiber-White River Belt of the Wawa Subprovince of the Superior Craton (Figure 3). The Late Archean DGB trends northwest and forms a narrow, eastward concave crescent. The belt is approximately 36 km in length and varies in width from 1.5 to 5.5 km . Principal lithologies in the belt are moderately to highly deformed metamorphosed volcanics, volcaniclastics and sediments that have been enclosed and intruded by tonalitic to granodioritic quartz-porphyry plutons.

The greenstone belt is bordered to the east by the Strickland Pluton and to the west by the Black Pic Batholith. The Danny Lake Stock borders the south-western edge of the DGB. The Strickland Pluton is characterized by a granodioritic composition, quartz phenocrysts, fine grained titanite, and hematitic fractures. The Black Pic Batholith is like the Strickland Pluton, but locally more potassic. The Black Pic Batholith also contains interlayers of monzogranite. The Danny Lake Stock is characterized by hornblende porphyritic quartz monzonite to quartz monzodiorite (G. M. Stott, 1999).


Figure 3-Regional Geology

The DGB has been metamorphosed to upper greenschist to amphibolite facies. The Strickland Pluton seems to have squeezed the greenstone belt and imposed upon it a thermal metamorphism. Most of the mafic volcanics are composed primarily of plagioclase and hornblende. Almandine garnets are widely observed in the clastic metasediments and locally, along with pyrope garnets, in the mafic volcanics (G.M. Stott, 1996a,b,c).

Alteration throughout the belt consists of diopsidation, albitization, weak magnesium biotitization, weak carbonatization and moderate to strong silicification which accompanied the emplacement of the porphyry dykes/sills and quartz veining.

The belt has been strongly foliated, flattened and strained. Deformation seen in the supracrustal rocks has been interpreted to be related to the emplacement of the Strickland Pluton. Strongly developed metamorphic mineral lineations in the supracrustal rocks closely compare with the orientations of the quartz phenocryst lineations seen in the Strickland Pluton. This probably reflects a constant strain aureole imposed by the pluton upon the belt (G.M. Stott, 1996a,b,c). The strain fabric is best observed a few hundred meters from the Strickland Pluton in the Sugar Zone, which has been characterized as the most severely strained part of the belt. The Sugar Zone is defined by sets of parallel mineralized quartz veining, quartz flooding of strongly altered wall-rock, thin intermediate porphyry lenses and dykes/sills parallel to stratigraphy and foliation, and gold mineralization.

Foliations and numerous top indicators define a synclinal fold in the central portion of the belt. The synclinal fold has been strongly flattened and stands upright with the fold hinge open to the south and centered along Dayohessarah Lake.

### 4.2 Property Geology

Near Dayohessarah Lake, the belt is dominated by a basal sequence of massive to pillowed mafic volcanics, commonly with ellipsoidal, bleached alteration pods, overlain by intermediate tuff and lapilli tuff. The tuffaceous units rapidly grade upwards to a sedimentary sequence consisting of greywacke and conglomerates derived from volcanics, sediments and felsic intrusive sources (G. M. Stott, 1996a,b,c). Several thin, continuous cherty sulphide facies iron formations are found in the mafic volcanic sequence. Spinifex textured komatiitic flows stratigraphically underlie the main sedimentary sequence and can be traced around the north end of Dayohessarah Lake. Also, at the north end of Dayohessarah Lake, mafic and ultramafic sills and stocks underlie the komatiites (Figure 4).

Several fine to medium grained, intermediate feldspar porphyry dykes/sills have intruded and swarmed the belt. Swarming of the intermediate porphyry dykes is more intense east of Dayohessarah Lake. Stott has interpreted the porphyry sills and associated porphyry bodies to be related to the Strickland Pluton. A smaller granitic quartz porphyry body containing some sulphide mineralization is located northwest of Dayohessarah Lake. The porphyritic texture of the dykes/sills is often nearly, or completely, obliterated by the degree of foliation in the greenstone belt, or by the degree of shear in the Sugar Zone. These intermediate dykes/sills vary in abundance across the Property, but increase in regularity within, and around, the Sugar Zone. There is also a consistent, weak pervasive silicic alteration in the intermediate intrusives, as well as consistently trace amounts of very fine-grained disseminated pyrite.

The major linear structure recognized on the Property is the Sugar Deformation Zone ("SDZ"), which trends northwest-southeast for approximately 3.5 km and dips southwest between $65^{\circ}$ and
$75^{\circ}$. The SDZ appears to be spatially related to the Strickland Pluton and is a complex system with strain intensities varying from strongly deformed-pillow mafic volcanics to undeformed massive mafic flows to anastomosing linear areas. Stratigraphically-conformable porphyritic intermediate intrusions swarm through the SDZ. Both the mafic volcanics and the intermediate intrusives exhibit moderate linear fabrics along with hydrothermal alteration (i.e., silicification).

In general, the north-westerly striking, south-westerly dipping stratigraphy hosting the gold mineralized portions of the Sugar Zone can be subdivided into the following units:

- Hanging Wall Volcanics;
- Upper Zone (Sugar Zone mineralization);
- Interzone Volcanics;
- Lower Zone (Sugar Zone mineralization);
- Footwall Volcanics

The Hanging Wall, Interzone and Footwall volcanic horizons consist predominantly of massive and pillowed basalt flows generally striking northwest and dipping at an average angle of $64^{\circ}$ to the southwest. Coarse to very coarse grained, locally gabbroic-textured phases form a significant component of the Hanging Wall mafic volcanic package. It is believed that these phases represent thick, slowly-cooled portions of the massive mafic flows, as they commonly grade into finer grained, more recognizable basaltic flows, and eventually even pillow flows. In much of the area which drilling on the Sugar Zone was carried out, a distinctive, very coarse grained mafic volcanic flow was observed consistently about 15 m stratigraphically above the Upper Zone. Other than this unit, specific mafic flows, as well as intermediate porphyry units, are nearly impossible to interpret/distinguish between holes.

The Upper and Lower zones range in thickness from 1.5 to 10 m , strike at $140^{\circ}$ and dip between $65^{\circ}$ and $75^{\circ}$ with minor undulations.

The auriferous Wolf Zone lies in the northern extent of the SDZ but drilling between the two zones indicates that the zones are complexly separate from each other. Like the Sugar Zone, the Wolf Zone is north-north-westerly striking and south-westerly dipping. Unlike the Sugar Zone, there is only one gold mineralized zone, and not two or more parallel zones.

A northerly-striking, sub-vertically dipping, dark grey-black, diabase dyke intrudes the older rock types in the greenstone belt and crosscuts the SDZ. The diabase obliterates the SDZ when it is encountered. The diabase dyke is aphanitic around the edges and, where thick enough to do so, grades to a coarse-grained euhedral rock in the middle of the dyke. The dyke exhibits very coarse-grained greenish quartz-epidote phenocrysts up to 3 cm across throughout. The dyke is weakly pervasively magnetic. A very small amount of lateral movement of the zones has been interpreted locally on either side of the dyke, suggesting that very minor dyke-related faulting has occurred. There are at least two more diabase dykes on the property. They strike at 35 degrees across the northern portion of the belt. These dykes are up to 40 m across and are similar in appearance and mineralogy to the dyke that cuts through the Sugar Zone.


Figure 4 - Property Geology
Other than the diabase, the youngest intrusive rocks observed on the Property are white to pale grey, fine grained to medium grained and occasionally pegmatitic felsite dykes. The dykes generally consist of varying amounts of plagioclase, quartz and muscovite. These generally thin dykes strike northeast and where they intersect the SDZ, they completely wipe out the zone. These dykes are undeformed and clearly postdate the mineralization and deformation events.

### 5.0 Mineralization

### 5.1 Sugar Zone

The auriferous Upper and Lower zones of the Sugar Zone lie within the SDZ. They are defined as highly strained packages consisting of variously altered mafic volcanic flows, intermediate porphyritic intrusions and boudinaged auriferous quartz veins. The two zones range in true thickness from about 1.5 to 10 m and are separated by 20 to 30 m of barren mafic volcanics. A high-grade section of the Lower zone between lines $13+000 \mathrm{~N}$ and $12+900 \mathrm{~N}$ has been the focus of a bulk sample study and is referred to as the Jewelry Box.

Each zone is made up of one or more porphyritic intrusions, flanked by altered basalt and hosting stratigraphically conformable quartz veins. Alteration within the mafic volcanic potions of the zones consists primarily of silicification (both pervasive and as quartz veining), diopsidation and biotitization. The porphyry units of the zones exhibit biotite and silica alteration as well, but no diopside alteration.

The Upper and Lower zones appear geologically consistent both down dip and along strike. The Lower Zone has consistently larger widths, as well as mostly consistently higher grades of gold mineralization, however both the width and the gold grade within each zone seem to follow the same trends across the zone. That is to say, that where the Upper Zone exhibits larger widths and higher gold grades, the Lower Zone also exhibits larger widths and higher gold grades. The zones are observed on surface to pinch and swell over distances of 50 m or more.

Gold mineralization mostly occurs in quartz veins, stringers and quartz flooded zones predominantly associated with porphyry zones, porphyry contact zones, hydrothermally altered basalts and, rarely, weakly altered or unaltered basalt within the Upper and Lower zones.

Fine to coarse grained specks and blebs of visible gold are common in the Sugar Zone quartz veins, usually occurring within marginal, laminated or refractured portions of the veins. The visible gold itself is often observed to be concentrated within thin fractures, indicating some degree of remobilization. Quartz veins and floods also contain varying amounts of pyrrhotite, pyrite, chalcopyrite, galena, sphalerite, molybdenite and arsenopyrite. The presence of galena, sphalerite and/or arsenopyrite is a strong indicator of the presence of visible gold. Pyrite, chalcopyrite and, rarely, molybdenite form a minor component of total sulphides and do not appear to be directly related to the presence of gold mineralization.

Other mineralized zones have been observed between, above and below the Sugar Zone Upper and Lower zones, in diamond drilling. Most of these intercepts are believed to be quartz veining originating in either the Upper or Lower zone, that have been diverted from the sheared part of the zone, up to 30 m from the main bodies of mineralization. One of these zones is the historically discovered Zoe Zone, which has been recently renamed the Lynx Zone, which lies east of the southern end of the Sugar Zone.

### 5.2 Wolf Zone

The auriferous Wolf Zone lies along strike of the Sugar Zone and may represent the northern extension of the SDZ. It is defined as highly strained packages consisting of variously altered mafic volcanic flows and gabbro. The zone ranges in true thickness from 0.5 to 8 m .

The zone is made up of highly sheared mafic volcanics, and a network of intrusive, intermediate quartz-feldspar porphyry dykes/sills. Alteration in the mafic volcanic and gabbro units consists mainly of silicification (both pervasive and quartz veining), diopside alteration and magnesiumrich brown biotite alteration. Alteration within the intermediate porphyry units consist of mostly silicification, with small amounts of magnesium-rich brown biotite, and no diopside. The zone is observed in trenches to pinch and swell over 30 m .

Gold mineralization mostly occurs in quartz veins, stringers and quartz flooded zones predominantly associated with porphyry zones, and hydrothermally altered basalts and gabbro.

Fine grained specks of visible gold are occasionally observed in the Wolf Zone quartz veins. The visible gold itself is often observed to be concentrated within thin fractures, indicating some degree of remobilization. Quartz veins and floods also contain varying amounts of pyrrhotite, pyrite and occasional galena. The presence of galena is a strong indicator of the presence of visible gold. Pyrite and pyrrhotite form most of the total sulphides, but do not appear to be directly related to the presence of gold mineralization.

### 6.0 Summary of Work

Between March 12 and April 3, 2019 Superior Exploration, Adventure \& Climbing Ltd. completed VLF EM-16 surveys on three grids (West, Middle and Flat Lake) in the Flat Lake area which occur on Harte Gold's Dayohessarah Lake property (Figures 5, 6 and 7). These grids are located 16.5 km north-northeast of the Sugar Zone mine site. These grids are accessed via Highway 631 and then a series of logging roads from White River, Ontario. A total of 17.3 km was surveyed along 12 lines which included a total of 876 station readings. Readings were taken every 20 m on lines spaced 200 m apart. Four lines were surveyed per grid. Field work on the grids were completed from March 12, 15, 20-28, 30-31 and April 1-3. The main objective of the survey was to delineate geophysical anomalies and/or identify significant geological structures in the area. This introductory report was written September 14-17, 2019.

Please refer to the interpretive report submitted by Superior Exploration, Adventure \& Climbing Ltd. for further details on all technical and logistical aspects of the completed survey. (Appendix $B)$.

Invoices from Superior Exploration, Adventure \& Climbing Ltd. for the survey is included in Appendix C.

### 7.0 Results

Plan view Fraser-Filter, and resistivity contour maps as well as cross sections were produced of the area (modelled up to 144 meters in depth). The survey outlined several strong VLF bedrock conductors, as well as several highly resistive bedrock units.

For a more detailed discussion of the results and maps please see the Superior Exploration, Adventure \& Climbing Ltd. interpretation report attached in Appendix B.


Figure 5 - West Grid and Claim Locations


Figure 6 - Middle Grid and Claim Locations


Figure 7 - Flat Lake (East) Grid and Claim Locations

### 8.0 Conclusions and Recommendations

The VLF EM-16 surveys were successful in identifying several strong bedrock conductors as well as several highly resistive rock units. Superior Exploration, Adventure \& Climbing Ltd recommends adding additional 100m infill lines to the grid to obtain a higher resolution of VLF trends and adding additional filters as well as some follow-up ground work.

Please refer to the Superior Exploration, Adventure \& Climbing Ltd. interpretation report attached in Appendix B for a detailed list of conclusions and recommendations.

### 9.0 Costs

The total cost of the three VLF surveys conducted on the West, Middle and Flat Lake grids amounted to $\$ 42,990$. A total of 17.3 km of VLF survey was completed with a total of 876 station readings along 12 lines ( 4 lines per grid). The survey area intersected a total of nine grouped mining claims; 531240, 531241, 531232, 531233, 531239, 531238, 531234, 531235 and 531237 (Figures 5, 6 and 7).

Program costs and cost per claim are summarized in Tables 1 and 2.

Table 1 - Summary of Costs

| Activity | Units |  |  | Cost per Unit |  | Total | \% |
| :--- | :---: | ---: | ---: | ---: | :--- | :--- | :---: |
| Fieldwork, Interpretation and Modelling | 17.30 | km | $@$ | $\$ 1,500.00$ | per km | $\$ 25,950$ | $60.4 \%$ |
| Geophysical Report | 17.30 | km | $@$ | $\$ 300.00$ | per km | $\$ 5,190$ | $12.1 \%$ |
| Mobilization \& Demobilization | 1 | trip | $@$ | $\$ 800.00$ | per day | $\$ \mathbf{8 0 0}$ | $1.9 \%$ |
| Truck Rental | 13 | days | $@$ | $\$ 125.00$ | per day | $\$ 1,625$ | $3.8 \%$ |
| Snow Machine Rental | 11 | days | $@$ | $\$ 75.00$ | per day | $\$ 8825$ | $1.9 \%$ |
| Per Diem | 16 | samples | $@$ | $\$ 75.00$ | per sample | $\$ 1,200$ | $2.8 \%$ |
| Room \& Board - Shaun Parent | 16 | days | $@$ | $\$ 300.00$ | per day | $\$ 4,800$ | $11.2 \%$ |
| Report Writing | 4 | days | $@$ | $\$ 650.00$ | per day | $\$ 2,600$ | $6.0 \%$ |
| Total Cost |  |  |  |  |  | $\mathbf{\$ 4 2 , 9 9 0}$ | $100.0 \%$ |

Table 2 - Cost Per Claim

| Claim \# | West Grid |  | Middle Grid |  | Flat Lake (East) Grid |  | Total M/Claim | \% of Total Meters | \$/Claim |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Line \# | Meters | Line \# | Meters | Line \# | Meters |  |  |  |
| 531240 | L0, 1080N-1980N | 900 |  |  |  |  | 900 |  |  |
|  | L2E, 950N-1980N | 1030 |  |  |  |  | 1030 |  |  |
|  | L4E, 840N-1980N | 1140 |  |  |  |  | 1140 |  |  |
|  | L6E, 1220N-1980N | 760 |  |  |  |  | 760 |  |  |
|  |  |  |  |  |  |  | 3830 | 22.11\% | \$9,506 |
|  |  |  |  |  |  |  |  |  |  |
| 531241 | LO, 260N-1080N | 820 |  |  |  |  | 820 |  |  |
|  | L2E, 490N-950N | 460 |  |  |  |  | 460 |  |  |
|  |  |  |  |  |  |  | 1280 | 7.39\% | \$3,177 |
|  |  |  |  |  |  |  |  |  |  |
| 531232 | L2E, 260N-400N | 140 |  |  |  |  | 140 |  |  |
|  | L4E, 260-300N | 40 |  |  |  |  | 40 |  |  |
|  |  |  |  |  |  |  | 180 | 1.04\% | \$447 |
|  |  |  |  |  |  |  |  |  |  |
| 531233 | L2E, 400N-490N | 90 | L0, 300N-1560N | 1260 |  |  | 1350 |  |  |
|  | L4E, 300N-840N | 540 | L2E, 280N-1430N | 1150 |  |  | 1690 |  |  |
|  | L6E, 260N-1220N | 960 | L4E, 300N-1340N | 1040 |  |  | 2000 |  |  |
|  |  |  | L6E, 300N-1240N | 940 |  |  | 940 |  |  |
|  |  |  |  |  |  |  | 5980 | 34.53\% | \$14,843 |
|  |  |  |  |  |  |  |  |  |  |
| 531239 |  |  | LO, 1560N-1800N | 240 |  |  | 240 |  |  |
|  |  |  | L2E, 1430N-1800N | 370 |  |  | 370 |  |  |
|  |  |  | L4E, 1340N-1800N | 460 |  |  | 460 |  |  |
|  |  |  | L6E, 1240N-1780N | 540 |  |  | 540 |  |  |
|  |  |  |  |  |  |  | 1610 | 9.30\% | \$3,996 |
|  |  |  |  |  |  |  |  |  |  |
| 531238 |  |  | L6E, 1780N-1800N | 20 |  |  | 20 |  |  |
|  |  |  |  |  |  |  |  | 0.12\% | \$50 |
|  |  |  |  |  |  |  |  |  |  |
| 531234 |  |  |  |  | LO, 300N-580N | 280 | 280 |  |  |
|  |  |  |  |  | L2E, 300N-460N | 160 | 160 |  |  |
|  |  |  |  |  | L4E, 240N-360N | 120 | 120 |  |  |
|  |  |  |  |  |  |  | 560 | 3.23\% | \$1,390 |
|  |  |  |  |  |  |  |  |  |  |
| 531235 |  |  |  |  | L0, 580N-1300N | 720 | 720 |  |  |
|  |  |  |  |  | L2E, 460N-1380N | 920 | 920 |  |  |
|  |  |  |  |  | L4E, 360N-1400N | 1040 | 1040 |  |  |
|  |  |  |  |  | L6E, 240N-1310N | 1070 | 1070 |  |  |
|  |  |  |  |  |  |  | 3750 | 21.65\% | \$9,308 |
|  |  |  |  |  |  |  |  |  |  |
| 531237 |  |  |  |  | L6E, 1310N-1420N | 110 | 110 |  |  |
|  |  |  |  |  |  |  | 110 | 0.64\% | \$273 |
|  |  |  |  |  |  |  |  |  |  |
| Totals |  | 6880 |  | 6020 |  | 4420 | 17320 | 100.00\% | \$42,990 |

### 10.0 References

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Stott, G.M., 1996c. Precambrian Geology of Dayohessarah Lake Area (South half), Ontario Geological Survey, Preliminary map no. 3311.

### 11.0 Statement of Qualifications

I, David B. Stevenson, of 2217 Lacewood Drive, Thunder Bay, Ontario, P7K 1C4 hereby certify that:

I am presently employed by Harte Gold Corporation as their Chief Exploration Geologist.
I am a graduate of the University of New Brunswick, B.Sc. (Hons. Geology), 1981 and a graduate of Queen's University, M.Sc. (Minex), 1998.

I have practiced my profession as a geologist for over 35 years in various provinces and territories across Canada as well as Norway.

I am a member in good standing of the Association Professional Geoscientists of Ontario.
I have personal knowledge of the work carried out on the property as described in this report, I have no personal interest in the property.

Dated this $17^{\text {th }}$ day of September, 2019 at Thunder Bay, Ontario.


[^0]Appendix A - Claims List

Schedule "A"
Sugar Zone Mining Leases


## Schedule "B"

 Sugar Zone - Claims

| ABRAHAM, TEDDER | 531048 | Multi-cell Mining Claim | 2020-02-22 | \$9,000 | \$0 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ABRAHAM, TEDDER | 531080 | Multi-cell Mining Claim | 2020-02-22 | \$9,600 | \$0 |
| BAYFIELD | 531235 | Multi-cell Mining Claim | 2019-12-22 | \$8,000 | \$74 |
| BAYFIELD | '531236 | Multi-cell Mining Claim | 2019-12-22 | \$8,000 | \$0 |
| BAYFIELD | 531237 | Multi-cell Mining Claim | 2019-12-22 | \$8,000 | \$0 |
| BAYFIELD | 531238 | Multi-cell Mining Claim | 2019-12-22 | \$9,200 | \$0 |
| BAYFIELD | 531239 | Multi-cell Mining Claim | 2019-12-22 | \$1,600 | \$0 |
| BAYFIELD,GOURLAY | 531233 | Multi-cell Mining Claim | 2019-12-22 | \$10,000 | \$0 |
| BAYFIELD,GOURLAY | '531234 | Multi-cell Mining Claim | 2019-12-22 | \$8,000 | \$0 |
| BAYFIELD,GOURLAY,HAMBLET' | '531240 | Multi-cell Mining Claim | 2019-12-22 | \$9,600 | \$0 |
| BAYFIELD,HAMBLETON,MATTY' | +531242 | Multi-cell Mining Claim | 2019-12-17 | \$8,000 | \$0 |
| COOPER | 531139 | Multi-cell Mining Claim | 2020-01-09 | \$9,200 | \$0 |
| COOPER | 531112 | Multi-cell Mining Claim | 2020-01-09 | \$10,000 | \$0 |
| COOPER | '531163 | Multi-cell Mining Claim | 2020-01-09 | \$6,000 | \$0 |
| COOPER | 531115 | Multi-cell Mining Claim | 2020-01-10 | \$9,200 | \$0 |
| COOPER | 531116 | Multi-cell Mining Claim | 2020-01-10 | \$9,600 | \$0 |
| COOPER | 531117 | Multi-cell Mining Claim | 2020-01-10 | \$10,000 | \$2,829 |
| COOPER | 531118 | Multi-cell Mining Claim | 2020-01-10 | \$10,000 | \$0 |
| COOPER | '531085 | Multi-cell Mining Claim | 2020-03-10 | \$9,600 | \$0 |
| COOPER | 531088 | Multi-cell Mining Claim | 2020-03-10 | \$9,600 | \$0 |
| COOPER | 531089 | Multi-cell Mining Claim | 2020-03-10 | \$8,000 | \$0 |
| COOPER | 531090 | Multi-cell Mining Claim | 2020-03-10 | \$9,600 | \$2,410 |
| COOPER | 531091 | Multi-cell Mining Claim | 2020-03-10 | \$9,600 | \$0 |
| COOPER | 531092 | Multi-cell Mining Claim | 2020-03-10 | \$9,600 | \$8 |
| COOPER | 531093 | Multi-cell Mining Claim | 2020-03-10 | \$10,000 | \$0 |
| COOPER | 531113 | Multi-cell Mining Claim | 2020-03-10 | \$10,000 | \$0 |
| COOPER | 531114 | Multi-cell Mining Claim | 2020-03-10 | \$10,000 | \$2,309 |
| COOPER,STRICKLAND | 531166 | Multi-cell Mining Claim | 2020-01-09 | \$800 | \$0 |
| COOPER,STRICKLAND | 531119 | Multi-cell Mining Claim | 2020-01-10 | \$8,000 | \$0 |
| COOPER,STRICKLAND | 531120 | Multi-cell Mining Claim | 2020-01-10 | \$6,000 | \$0 |
| COOPER,STRICKLAND | 531121 | Multi-cell Mining Claim | 2020-01-10 | \$6,400 | \$0 |
| COOPER,STRICKLAND | 531164 | Multi-cell Mining Claim | 2020-01-10 | \$7,200 | \$0 |
| COOPER,STRICKLAND | 531165 | Multi-cell Mining Claim | 2020-04-21 | \$5,200 | \$0 |
| COOPER,STRICKLAND,TEDDER | 531152 | Multi-cell Mining Claim | 2020-01-09 | \$6,800 | \$0 |
| COOPER,TEDDER | 531151 | Multi-cell Mining Claim | 2020-01-09 | \$10,000 | \$0 |
| COOPER,TEDDER | 531111 | Multi-cell Mining Claim | 2020-01-09 | \$10,000 | \$0 |
| COOPER,TEDDER | 531097 | Multi-cell Mining Claim | 2020-01-09 | \$10,000 | \$0 |
| COOPER,TEDDER | 531100 | Multi-cell Mining Claim | 2020-01-09 | \$9,600 | \$0 |
| GOURLAY | 531220 | Multi-cell Mining Claim | 2019-12-03 | \$9,600 | \$2,964 |
| gourlay | 531225 | Multi-cell Mining Claim | 2019-12-03 | \$9,600 | \$891 |
| GOURLAY | 531229 | Multi-cell Mining Claim | 2019-12-03 | \$10,000 | \$4,154 |
| GOURLAY | 531231 | Multi-cell Mining Claim | 2019-12-03 | \$10,000 | \$7,260 |
| GOURLAY | 531232 | Multi-cell Mining Claim | 2019-12-22 | \$9,600 | \$0 |
| GOURLAY,HAMBLETON | 531219 | Multi-cell Mining Claim | 2019-11-20 | \$9,200 | \$2,615 |
| GOURLAY,HAMBLETON | 531224 | Multi-cell Mining Claim | 2019-12-03 | \$9,600 | \$1,774 |
| GOURLAY,HAMBLETON | 531226 | Multi-cell Mining Claim | 2019-12-03 | \$10,000 | \$2,337 |
| GOURLAY,HAMBLETON | 531230 | Multi-cell Mining Claim | 2019-12-03 | \$8,800 | \$4,898 |
| GOURLAY,HAMBLETON | 531243 | Multi-cell Mining Claim | 2019-12-03 | \$10,000 | \$2,913 |
| GOURLAY,HAMBLETON | 531241 | Multi-cell Mining Claim | 2019-12-17 | \$9,600 | \$6,343 |
| GOURLAY,HAMBLETON,STRICY | + 531222 | Multi-cell Mining Claim | 2019-12-03 | \$6,200 | \$0 |
| GOURLAY,STRICKLAND | 531221 | Multi-cell Mining Claim | 2019-12-03 | \$10,000 | \$0 |
| HAMBLETON | 531254 | Multi-cell Mining Claim | 2019-06-13 | \$9,600 | \$6,152 |
| HAMBLETON | 531255 | Multi-cell Mining Claim | 2019-06-13 | \$10,000 | \$6,288 |
| HAMBLETON | 531256 | Multi-cell Mining Claim | 2019-06-13 | \$10,000 | \$8,118 |
| HAMBLETON | 531258 | Multi-cell Mining Claim | 2019-06-13 | \$4,800 | \$3,900 |
| HAMBLETON | 531269 | Multi-cell Mining Claim | 2019-06-13 | \$1,200 | \$0 |
| HAMBLETON | 531214 | Multi-cell Mining Claim | 2019-07-20 | \$2,400 | \$243,686 |
| HAMBLETON | 531228 | Multi-cell Mining Claim | 2019-12-03 | \$6,000 | \$1,879 |
| HAMBLETON | 531264 | Multi-cell Mining Claim | 2019-12-17 | \$9,600 | \$850 |
| HAMBLETON | 531244 | Multi-cell Mining Claim | 2019-12-17 | \$10,000 | \$0 |
| HAMBLETON | 531245 | Multi-cell Mining Claim | 2019-12-17 | \$9,600 | \$0 |
| HAMBLETON | 531246 | Multi-cell Mining Claim | 2019-12-17 | \$9,600 | \$0 |
| HAMBLETON | 531247 | Multi-cell Mining Claim | 2019-12-17 | \$9,600 | \$0 |
| HAMBLETON | 531210 | Multi-cell Mining Claim | 2019-12-23 | \$6,800 | \$4,399 |
| HAMBLETON | 531249 | Multi-cell Mining Claim | 2019-12-23 | \$1,200 | \$0 |
| HAMBLETON | 531257 | Multi-cell Mining Claim | 2019-12-23 | \$10,000 | \$0 |
| HAMBLETON | 531268 | Multi-cell Mining Claim | 2019-12-23 | \$4,000 | \$0 |
| HAMBLETON | 531212 | Multi-cell Mining Claim | 2019-12-31 | \$7,200 | \$58,751 |
| HAMBLETON | 531215 | Multi-cell Mining Claim | 2019-12-31 | \$3,600 | \$213,133 |
| HAMBLETON | 531216 | Multi-cell Mining Claim | 2019-12-31 | \$1,000 | \$546,949 |
| HAMBLETON | 531217 | Multi-cell Mining Claim | 2019-12-31 | \$2,200 | \$471,385 |
| HAMBLETON | 531218 | Multi-cell Mining Claim | 2019-12-31 | \$1,800 | \$110,673 |
| HAMBLETON | 531227 | Multi-cell Mining Claim | 2020-04-21 | \$5,600 | \$1,553 |
| HAMBLETON | 531248 | Multi-cell Mining Claim | 2020-04-21 | \$10,000 | \$0 |
| HAMBLETON | 531265 | Multi-cell Mining Claim | 2020-04-21 | \$10,000 | \$0 |
| HAMBLETON | 531266 | Multi-cell Mining Claim | 2020-04-21 | \$5,600 | \$0 |
| HAMBLETON | 531267 | Multi-cell Mining Claim | 2020-04-21 | \$5,600 | \$0 |
| HAMBLETON | 531211 | Multi-cell Mining Claim | 2021-12-23 | \$3,200 | \$2,381 |
| HAMBLETON | 531259 | Multi-cell Mining Claim | 2022-12-23 | \$1,200 | \$851 |


| HAMBLETON,ODLUM | 531209 | Multi-cell Mining Claim | 2019-12-23 | \$2,400 | \$3,007 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| HAMBLETON,ODLUM | 531208 | Multi-cell Mining Claim | 2019-12-31 | \$5,200 | \$578 |
| HAMBLETON,ODLUM | 531206 | Multi-cell Mining Claim | 2020-04-26 | \$8,200 | \$419,784 |
| JOHNS | 530313 | Multi-cell Mining Claim | 2019-06-20 | \$6,400 | \$4,084 |
| JOHNS | 530314 | Multi-cell Mining Claim | 2019-06-20 | \$6,400 | \$3,989 |
| JOHNS | 530315 | Multi-cell Mining Claim | 2019-06-20 | \$7,200 | \$8,147 |
| JOHNS | 530316 | Multi-cell Mining Claim | 2019-06-20 | \$10,000 | \$7,432 |
| JOHNS | 530317 | Multi-cell Mining Claim | 2019-06-20 | \$7,200 | \$1,858 |
| JOHNS | 531017 | Multi-cell Mining Claim | 2019-06-20 | \$9,600 | \$10,643 |
| JOHNS | 531018 | Multi-cell Mining Claim | 2019-06-20 | \$10,000 | \$1,750 |
| JOHNS,ODLUM | 530318 | Multi-cell Mining Claim | 2019-06-20 | \$7,200 | \$3,955 |
| JOHNS,ODLUM | 531019 | Multi-cell Mining Claim | 2019-06-20 | \$9,600 | \$3,654 |
| JOHNS,ODLUM | 531020 | Multi-cell Mining Claim | 2019-06-20 | \$10,000 | \$1,750 |
| MOSAMBIK | 531287 | Multi-cell Mining Claim | 2020-01-09 | \$10,000 | \$0 |
| MOSAMBIK | 531348 | Multi-cell Mining Claim | 2020-01-09 | \$8,800 | \$0 |
| MOSAMBIK | 532869 | Multi-cell Mining Claim | 2020-04-10 | \$8,000 | \$0 |
| MOSAMBIK,NAMEIGOS | 531286 | Multi-cell Mining Claim | 2020-01-09 | \$10,000 | \$0 |
| MOSAMBIK,NAMEIGOS | 531288 | Multi-cell Mining Claim | 2020-01-09 | \$8,400 | \$0 |
| MOSAMBIK,NAMEIGOS | 531347 | Multi-cell Mining Claim | 2020-01-09 | \$10,000 | \$0 |
| MOSAMBIK,NAMEIGOS | 531349 | Multi-cell Mining Claim | 2020-01-09 | \$6,400 | \$0 |
| MOSAMBIK,NAMEIGOS | 531350 | Multi-cell Mining Claim | 2020-01-09 | \$10,000 | \$0 |
| NAMEIGOS | 531340 | Multi-cell Mining Claim | 2019-06-13 | \$6,800 | \$6,473 |
| NAMEIGOS | 531335 | Multi-cell Mining Claim | 2019-06-13 | \$10,000 | \$2,377 |
| NAMEIGOS | 531342 | Multi-cell Mining Claim | 2019-06-13 | \$8,000 | \$4,097 |
| NAMEIGOS | 531343 | Multi-cell Mining Claim | 2019-06-13 | \$8,000 | \$5,623 |
| NAMEIGOS | 531344 | Multi-cell Mining Claim | 2019-06-13 | \$7,200 | \$8,195 |
| NAMEIGOS | 531283 | Multi-cell Mining Claim | 2020-01-09 | \$10,000 | \$0 |
| NAMEIGOS | 531284 | Multi-cell Mining Claim | 2020-01-09 | \$9,200 | \$0 |
| NAMEIGOS | 531285 | Multi-cell Mining Claim | 2020-01-09 | \$10,000 | \$0 |
| NAMEIGOS | 531351 | Multi-cell Mining Claim | 2020-01-09 | \$9,600 | \$0 |
| NAMEIGOS | 531352 | Multi-cell Mining Claim | 2020-01-09 | \$10,000 | \$0 |
| NAMEIGOS | 531332 | Multi-cell Mining Claim | 2020-02-16 | \$9,600 | \$0 |
| NAMEIGOS | 531333 | Multi-cell Mining Claim | 2020-02-16 | \$4,800 | \$0 |
| NAMEIGOS | 531334 | Multi-cell Mining Claim | 2020-02-16 | \$10,000 | \$0 |
| NAMEIGOS | 531336 | Multi-cell Mining Claim | 2020-02-16 | \$9,200 | \$0 |
| NAMEIGOS | 531337 | Multi-cell Mining Claim | 2020-02-16 | \$9,200 | \$0 |
| NAMEIGOS | 531338 | Multi-cell Mining Claim | 2020-02-16 | \$9,600 | \$0 |
| NAMEIGOS | 531341 | Multi-cell Mining Claim | 2020-02-16 | \$800 | \$0 |
| NAMEIGOS | 531345 | Multi-cell Mining Claim | 2020-02-16 | \$800 | \$0 |
| NAMEIGOS | 531346 | Multi-cell Mining Claim | 2020-02-16 | \$1,600 | \$2,096 |
| NAMEIGOS | 531331 | Multi-cell Mining Claim | 2020-04-11 | \$7,600 | \$0 |
| NAMEIGOS | 531281 | Multi-cell Mining Claim | 2020-04-11 | \$10,000 | \$0 |
| NAMEIGOS | 531282 | Multi-cell Mining Claim | 2020-04-11 | \$9,600 | \$0 |
| NAMEIGOS | 531289 | Multi-cell Mining Claim | 2020-04-11 | \$5,600 | \$0 |
| NAMEIGOS,STRICKLAND | 531276 | Multi-cell Mining Claim | 2020-02-22 | \$10,000 | \$0 |
| NAMEIGOS,STRICKLAND | 531279 | Multi-cell Mining Claim | 2020-02-22 | \$4,000 | \$0 |
| NAMEIGOS,STRICKLAND | 531280 | Multi-cell Mining Claim | 2020-04-11 | \$9,600 | \$0 |
| ODLUM | 531016 | Multi-cell Mining Claim | 2019-06-20 | \$10,000 | \$2,167 |
| ODLUM | 531021 | Multi-cell Mining Claim | 2019-06-20 | \$10,000 | \$7,963 |
| ODLUM | 531024 | Multi-cell Mining Claim | 2019-06-20 | \$10,000 | \$6,270 |
| ODLUM | 531025 | Multi-cell Mining Claim | 2019-06-20 | \$9,600 | \$4,018 |
| ODLUM | 531207 | Multi-cell Mining Claim | 2019-07-02 | \$1,600 | \$38,911 |
| ODLUM | 531201 | Multi-cell Mining Claim | 2019-10-29 | \$2,000 | \$1,713 |
| ODLUM | 531026 | Multi-cell Mining Claim | 2019-12-23 | \$10,000 | \$151 |
| ODLUM | 531182 | Multi-cell Mining Claim | 2019-12-23 | \$10,000 | \$0 |
| ODLUM | 531199 | Multi-cell Mining Claim | 2019-12-23 | \$800 | \$0 |
| ODLUM | 531200 | Multi-cell Mining Claim | 2019-12-23 | \$10,000 | \$0 |
| ODLUM | 531202 | Multi-cell Mining Claim | 2019-12-23 | \$9,200 | \$416 |
| ODLUM | 531203 | Multi-cell Mining Claim | 2019-12-31 | \$7,000 | \$1,479 |
| ODLUM | 531204 | Multi-cell Mining Claim | 2019-12-31 | \$3,800 | \$0 |
| ODLUM | 531205 | Multi-cell Mining Claim | 2020-03-27 | \$4,800 | \$66,972 |
| ODLUM | 531183 | Multi-cell Mining Claim | 2020-04-21 | \$9,600 | \$0 |
| ODLUM | 531198 | Multi-cell Mining Claim | 2020-04-21 | \$7,600 | \$0 |
| ODLUM,STRICKLAND | 531270 | Multi-cell Mining Claim | 2019-12-03 | \$5,000 | \$4,323 |
| ODLUM,STRICKLAND | 531184 | Multi-cell Mining Claim | 2020-04-21 | \$9,600 | \$0 |
| ODLUM,STRICKLAND | 531197 | Multi-cell Mining Claim | 2020-04-21 | \$9,600 | \$0 |
| ODLUM,STRICKLAND,TEDDER | 531175 | Multi-cell Mining Claim | 2020-04-21 | \$10,000 | \$0 |
| ODLUM, TEDDER | 531022 | Multi-cell Mining Claim | 2019-06-20 | \$8,800 | \$8,157 |
| ODLUM, TEDDER | 531023 | Multi-cell Mining Claim | 2019-06-20 | \$9,600 | \$5,911 |
| ODLUM, TEDDER | 531027 | Multi-cell Mining Claim | 2019-12-23 | \$9,600 | \$0 |
| ODLUM,TEDDER | 531154 | Multi-cell Mining Claim | 2019-12-23 | \$10,000 | \$0 |
| ODLUM, TEDDER | 531173 | Multi-cell Mining Claim | 2019-12-23 | \$10,000 | \$0 |
| ODLUM, TEDDER | 531174 | Multi-cell Mining Claim | 2019-12-23 | \$9,600 | \$0 |
| STRICKLAND | 531162 | Multi-cell Mining Claim | 2019-11-16 | \$9,600 | \$0 |
| STRICKLAND | 531168 | Multi-cell Mining Claim | 2019-11-16 | \$10,000 | \$0 |
| STRICKLAND | 531177 | Multi-cell Mining Claim | 2019-11-16 | \$9,600 | \$0 |
| STRICKLAND | 531178 | Multi-cell Mining Claim | 2019-11-16 | \$10,000 | \$0 |
| STRICKLAND | 531180 | Multi-cell Mining Claim | 2019-11-16 | \$9,200 | \$0 |
| STRICKLAND | 531271 | Multi-cell Mining Claim | 2019-11-16 | \$8,000 | \$0 |


| STRICKLAND | 531273 | Multi-cell Mining Claim | 2019-11-16 | \$10,000 | \$0 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| STRICKLAND | "531274 | Multi-cell Mining Claim | 2019-11-16 | \$10,000 | \$0 |
| STRICKLAND | 531275 | Multi-cell Mining Claim | 2019-11-16 | \$8,400 | \$0 |
| STRICKLAND | 531278 | Multi-cell Mining Claim | 2019-11-16 | \$800 | \$0 |
| STRICKLAND | 531195 | Multi-cell Mining Claim | 2019-12-03 | \$8,800 | \$3,651 |
| STRICKLAND | 531167 | Multi-cell Mining Claim | 2019-12-03 | \$8,400 | \$6,945 |
| STRICKLAND | 531170 | Multi-cell Mining Claim | 2019-12-03 | \$9,200 | \$1,763 |
| STRICKLAND | 531176 | Multi-cell Mining Claim | 2019-12-03 | \$10,000 | \$4,122 |
| STRICKLAND | 531179 | Multi-cell Mining Claim | 2019-12-03 | \$8,400 | \$0 |
| STRICKLAND | 531181 | Multi-cell Mining Claim | 2019-12-03 | \$9,600 | \$0 |
| STRICKLAND | 531185 | Multi-cell Mining Claim | 2019-12-03 | \$9,600 | \$5,886 |
| STRICKLAND | 531196 | Multi-cell Mining Claim | 2019-12-03 | \$8,800 | \$0 |
| STRICKLAND | 531223 | Multi-cell Mining Claim | 2019-12-03 | \$7,400 | \$3,197 |
| STRICKLAND | 531272 | Multi-cell Mining Claim | 2019-12-03 | \$1,200 | \$0 |
| STRICKLAND | 531160 | Multi-cell Mining Claim | 2020-02-22 | \$8,400 | \$0 |
| STRICKLAND | 531161 | Multi-cell Mining Claim | 2020-02-22 | \$8,400 | \$0 |
| STRICKLAND | 531277 | Multi-cell Mining Claim | 2020-02-22 | \$7,200 | \$0 |
| STRICKLAND | "531157 | Multi-cell Mining Claim | 2020-04-21 | \$10,000 | \$0 |
| STRICKLAND,TEDDER | 531156 | Multi-cell Mining Claim | 2019-12-23 | \$10,000 | \$0 |
| STRICKLAND,TEDDER | 531169 | Multi-cell Mining Claim | 2020-04-21 | \$8,800 | \$200 |
| STRICKLAND,TEDDER | 531171 | Multi-cell Mining Claim | 2020-04-21 | \$8,800 | \$0 |
| TEDDER | 531031 | Multi-cell Mining Claim | 2019-12-23 | \$9,600 | \$0 |
| tedder | 531153 | Multi-cell Mining Claim | 2019-12-23 | \$8,800 | \$0 |
| TEDDER | 531155 | Multi-cell Mining Claim | 2019-12-23 | \$10,000 | \$0 |
| TEDDER | 531172 | Multi-cell Mining Claim | 2019-12-23 | \$10,000 | \$0 |
| TEDDER | 531079 | Multi-cell Mining Claim | 2020-01-09 | \$9,200 | \$0 |
| TEDDER | 531046 | Multi-cell Mining Claim | 2020-01-09 | \$8,800 | \$346 |
| TEDDER | 531047 | Multi-cell Mining Claim | 2020-01-09 | \$9,600 | \$0 |
| TEDDER | 531098 | Multi-cell Mining Claim | 2020-01-09 | \$9,600 | \$0 |
| TEDDER | 531099 | Multi-cell Mining Claim | 2020-01-09 | \$9,600 | \$0 |
| COOPER | 531126 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| MOSAMBIK | 273604 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| MOSAMBIK | 188477 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| MOSAMBIK,NAMEIGOS | 265657 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| MOSAMBIK,NAMEIGOS | 344618 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 335993 | Single Cell Mining Claim | 2020-01-08 | \$400 | \$0 |
| NAMEIGOS | 208958 | Single Cell Mining Claim | 2020-01-08 | \$400 | \$0 |
| NAMEIGOS | 220373 | Single Cell Mining Claim | 2020-01-08 | \$400 | \$0 |
| NAMEIGOS | 102261 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 127131 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 229063 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 154316 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 103256 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 118285 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 219164 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 276303 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 125852 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 170953 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 286410 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 189211 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 531316 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 531309 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 118287 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 531304 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 170954 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 531290 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 531291 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 531292 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 531293 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 531294 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 531295 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 531296 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 531297 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 531298 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 531299 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 531300 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 531301 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 531302 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 531305 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 531306 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 531317 | Single Cell Mining Claim | 2020-01-09 | \$400 | \$0 |
| NAMEIGOS | 514033 | Single Cell Mining Claim | 2020-04-11 | \$400 | \$0 |
| NAMEIGOS | 514035 | Single Cell Mining Claim | 2020-04-11 | \$400 | \$0 |
| STRICKLAND | 110507 | Single Cell Mining Claim | 2019-12-03 | \$200 | \$0 |

## Schedule "C"

 Halverson Property| Legacy Claim Id | Township / Area | Tenure ID | Tenure Type | Anniversary Date | Work Required | Total Reserve |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4281896 | ODLUM | 136581 | Boundary Cell Mining Claim | 2021-02-06 | \$200 | \$0 |
| 4281896 | ODLUM | 334503 | Boundary Cell Mining Claim | 2021-02-06 | \$200 | \$0 |
| 4281896 | ODLUM | 255919 | Boundary Cell Mining Claim | 2021-02-06 | \$200 | \$0 |
| 4281896 | ODLUM | 237877 | Boundary Cell Mining Claim | 2021-02-06 | \$200 | \$0 |
| 4281896 | ODLUM | 220822 | Boundary Cell Mining Claim | 2021-02-06 | \$200 | \$0 |
| 4281896 | ODLUM | 220821 | Boundary Cell Mining Claim | 2021-02-06 | \$200 | \$0 |
| 4281896 | ODLUM | 209284 | Boundary Cell Mining Claim | 2021-02-06 | \$200 | \$0 |
| 4281896 | ODLUM | 209282 | Boundary Cell Mining Claim | 2021-02-06 | \$200 | \$0 |
| 4281896 | ODLUM | 201257 | Boundary Cell Mining Claim | 2021-02-06 | \$200 | \$0 |
| 4281896 | ODLUM | 171296 | Boundary Cell Mining Claim | 2021-02-06 | \$200 | \$0 |
| 4281896 | ODLUM | 142560 | Boundary Cell Mining Claim | 2021-02-06 | \$200 | \$0 |
| 4281896 | ODLUM | 136582 | Boundary Cell Mining Claim | 2021-02-06 | \$200 | \$0 |
| 4281896 | ODLUM | 324599 | Single Cell Mining Claim | 2021-02-06 | \$400 | \$0 |
| 4281896 | ODLUM | 255918 | Single Cell Mining Claim | 2021-02-06 | \$400 | \$0 |
| 4281896 | ODLUM | 255917 | Single Cell Mining Claim | 2021-02-06 | \$400 | \$223 |
| 4281896 | ODLUM | 209283 | Single Cell Mining Claim | 2021-02-06 | \$400 | \$0 |

Appendix B - Superior Exploration, Adventure \& Climbing Co. Ltd.
Report titled "VLF EM-16 Survey / Interpretation Report Over the Flat Lake Area, West Grid / Middle Grid / Flat Lake Grid, White River, Ontario, Canada.

Shaun Parent P.Geo. dated April 24, 2019"


# VLF EM-16 Survey / Interpretation Report 

Over the

Flat Lake Area

# West Grid / Middle Grid / Flat Lake Grid White River, Ontario <br> Prepared For 

Harte Gold Corporation
By

Shaun Parent

Superior Exploration, Adventure \& Climbing Co. Ltd.
April 24, 2019

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## Preamble

Superior Exploration, Adventure \& Climbing Co. Ltd. is an Incorporated Company specializing in Mining Exploration and Geophysics as well as Professional climbing.

Our VLF surveys (YVLF) are a non-invasive way to complete first pass ground geophysics. No cut lines are needed and an exploration permit is not generally required.

We have worked in many countries and have experience working in a wide variety of environments such as VMS, Breccia Pipes, Epithermal Veins and Shear Hosted Gold Deposits.

Shaun Parent, BSc. P. Geo is a member of the Association of Professional Geoscientists of Ontario as well as the Prospectors \& Developers Association of Canada. He has over 30 years' experience working in the Geological and Geophysical Field. Although he specializes in Ground VLF, he is also experienced working with I.P., Max Min, Surface \& Borehole Pulse EM, Airborne Magnetics and Ground Magnetometer.

Sandra Slater is a member of the Prospectors \& Developers Association of Canada. She has been working in the Geological/Geophysical field for over 10 years and specializes in data analysis and VLF2DMF software, as well as assisting in the field.

Shaun began working with the developer of the VLF2DMF software since its inception in 2008 and he and Sandra continue to do so. Superior Exploration has completed many successful "blind" case history test VLF surveys over various ore bodies and mineralized zones.

## Executive Summary:

3 separate Ground VLF surveys were completed over the Flat Lakes area. The property is located approximately 50 kilometers Northeast of White River, Ontario. The survey was carried out in March \& April 2019 using a VLF EM-16 unit and a handheld Garmin GPS-60CSX. Two transmitters were read at each station: NAA 24.0 KHz - Cutler, Maine and NML 25.2 KHz- La Moure, North Dakota. A total of 17.3 km of VLF was carried out on 3 separate grids (West Grid) (Middle Grid) (Flat Grid) consisting of 4 VLF lines on each grid.

The main objective of the survey was to determine if the VLF Survey could delineate zones carrying mineralization and or structures. No geological information was known at the time of the VLF survey.

## Property Access

Access is by the following:

- Follow Logging Road \#100 just west of White River across from the White River Forest Products for 35 kilometers to the junction of logging road \#300
- Follow logging road \#300 to Km. Marker 57 and park vehicle.
- Using an off road vehicle, follow southern logging road for 18 kilometers
- From the end of this logging road, follow a blazed and cut snow machine trail to Flat Lake where the Flat Lake Grid, Line 00, station $14+00 \mathrm{~N}$ begins
- Cross Flat Lake to the west and follow the blazed and cut snow machine trail to the Middle Lake Grid. The grid crosses Middle Lake.
- Go to the far west end of Middle Lake and walk 40 minutes through the woods to the West Lake Grid. The grid crosses West Lake.


## Introduction

A VLF-EM16 survey is a relatively simple and economic geophysical survey that is used to better understand shallow, vertical and sub vertical bedrock conductors.

This report describes the findings and results of the VLF EM-16 survey utilizing the VLF2DMF processing software of which the author of this report has assisted in its development since 2007. It enables the processing and inversion of electromagnetic (EM) induction data acquired along a survey area using a Very Low Frequency (VLF) (Santos 2013. The software generates profiles of Raw Data, Fraser Filtered Data, Fraser Filter Pseudo Sections, KH Filtered Data, Resistivity, JY Inversions, and (2-D) Modelled Inversions.

VLF data collected in the surveyed area was also compiled onto separate plan maps of contoured Fraser Filter In Phase, Fraser Filter Quadrature as well as Resistivity data.

## Personnel

The VLF EM-16 operator and GPS field navigator responsible for the collection of all raw data was Shaun Parent.
Processing, Profiling, Modelling and Interpretation of the VLF data using the VLF2DMF Software was completed by Sandra Slater and Shaun Parent.

Map 1 General Location Map of the Flat Lake Area Grids showing TX NAA and TX NML


Map 2 General Location Map of Flat Lake Area Grids with White River, ON


Map 3 Flat Lake Area Grids with Line Starts \& Ends


## Work Performed

## Fieldwork

The VLF EM-16 survey consisted of running a total of 12 VLF reconnaissance lines over 3 separate Grid Areas, 200 meters apart. An extreme amount of snow this year did not allow for any basic prospecting to be completed during the survey to discover any pertinent findings such as outcrops.

- Flat Lake grid area: 4 lines
- Middle lake grid area: 4 lines
- West Lake grid area: 4 lines

The following parameters were used throughout the survey

Equipment Used: VLF EM-16 unit and a handheld Garmin 60-CSX PS

VLF Transmitters Used: NAA - 24.0 KHz . Cutler, Maine (East) @ Azimuth 110 degrees 1420 Km
NML - 25.2 KHz. La Moure, North Dakota (West) @ Azimuth 254 degrees 1048 Km

VLF survey direction: The VLF Em-16 receiver faced a direction of 00 degrees true azimuth for each reading taken.

VLF survey stations: VLF readings began at the south end of each VLF line and were taken approximately 20 meters apart along each survey line.

Parameters of Measurement: In-phase and Quad-phase components of a vertical magnetic field is measured as a percentage of horizontal primary fields. (Tangent of tilt angle and ellipticity). VLF transmitter NAA was to the east while transmitter NML was to the west. The transmitters are chosen so that the direction to the transmitting station is as close to the orientation of the bedrock strike.

## VLF Data Collection Process

Field data was collected as follows on each surveyed line.

- Each station was saved onto the Handheld Garmin 60CSX GPS Unit (including any local features such as power lines, fences and geological structures)
- VLF readings for each station were recorded on the GPS as In-Phase and Quadrature corresponding to the line number and station number. (See example in Table 1)
- Garmin and VLF data were compiled and processed. All UTM Values are NAD 83.

Table 1 Example of VLF Data Collection

| Line 2E | NAA In phase | NAA Quadrature | NML In phase | NML Quadrature | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $3+00 \mathrm{~N}$ | 10 | 6 | 4 | 5 | swamp |
| $3+20 \mathrm{~N}$ | 8 | 4 | 2 | 4 | oc |

## Interpretation \& Modelling

## VLF2DMF Data Processing

All VLF data collected was processed and interpreted separately for TX NAA and TX NML. The following filters, inversions, profiling and modelling were completed and used in the interpretation process, however, only the Raw Data and 2D Modelled Inversions are included in the appendix at the end of this report.

## Raw Data Profiles

The raw data for each frequency was plotted for each line surveyed. No filtering or smoothing of the raw data was done. Raw Data Profiles for all lines can be found in the Appendices at the end of this report.

- West Grid: Appendix A
- Middle Grid: Appendix B
- Flat Lake Grid: Appendix C


## Fraser Filter Profile with Fraser Peaks

Raw data was run through the Fraser filter. This filter transforms In-Phase cross overs and inflections into positive peak anomalies. (Fraser 1969) In-Phase inflections and cross overs are usually plus to minus, while Quadrature responses are negative to positive giving a negative peak anomaly when the Fraser Filter is applied. Fraser filter data was compiled separately for each grid to produce Plan Maps.

- West Grid: NAA Maps 6, 7 NML Maps 11, 12
- Middle Grid: NAA Maps 17, 18 NML Maps 22,23
- Flat Lake Grid: NAA Maps 28, 29 NML Maps 33, 34


## Fraser Pseudo Section

Fraser Filter pseudo section is built by applying the Fraser Filter of various lengths along the survey line.

## K-H Profiles

Raw Data was run through the Karous-Hjelt (K-H) filter. The filter is applied to obtain a section of current density. The higher values are generally associated with conductive structures. (Karous, Hjelt 1983)

## Resistivity Profiles: 2000 \& $\mathbf{4 0 0 0}$ Ohm's

The apparent resistivity was calculated. The resistivity can be calculated if the mean environmental resistivity is known at the beginning of the VLF profile. A mean resistivity of 2000 ohm's and 4000 ohm's was used for all lines. Resistivity data from each profile was combined to produce plans maps. This report contains Plan Maps for Resistivity results at 4000 Ohm's.

- West Grid:
- Middle Grid:
- Flat Lake Grid:

NAA Map 8
NAA Map 19
NAA Map 30

NML Maps 13
NML Maps 24
NML Maps 35

## JY Section Model:

A 2D inversion that looks for the best distribution of the density of current (JY). The output is the apparent current density with positive values associated with conductors and negative values associated to resistors.

## 2D Inversion Resistivity Models 2000 Ohm's \& 4000 Ohm's

A resistivity of 2000 Ohm's and 4000 Ohm's was used to build initial models used in the inversion to obtain a realistic cross section of the line surveyed.
Conductive zones are red/yellow while resistive zones are blue. A depth scale is found on the left side of model profiles. Surface conductive zones show little depth extent, have a horizontal display and are limited in depth.

The maximum depth slice with a bedrock resistivity of 2000 Ohms is 144.3 meters for transmitter NAA ( 24.0 KHz .) and 140.9 meters for TX NML ( 25.2 KHz .).

The maximum depth slice with a bedrock resistivity of 4000 Ohms is 204.1 meters for transmitter NAA (24.0 KHz.) and 192.2 meters for TX NML (25.2 KHz.).

All Inversion models have the same color scaling using a minimum resistivity of 10 and a maximum of 10000. The vertical exaggeration of all models is 1.0. Fraser Filter anomaly picks are found across the top of all models. Models with a resistivity of 4000 Ohm's were selected due to a more detailed response and are included in this report. Models for all lines can be found in the Appendices at the end of this report.

- West Grid: Appendix A
- Middle Grid Appendix B
- Flat Lake Grid: Appendix C


## Discussion of Results - West Grid

Lines W00, W2E, W4E, W6E
Map-4 shows the layout of the VLF lines on an elevation contour map.

The stronger anomalies were interpreted into main trends. There are more, weaker anomalies that could not be followed due to the 200 meter spacing between lines as well as a lack of knowledge of the geological strike prior to interpretation. A more detailed interpretation could be achieved with additional fill in lines being completed in order to verify the 200 meter responses.

## Map 4 West Grid Elevation Map




## West Grid VLF Anomalies

VLF Trends were identified for TX NAA ( 8 trends) and TX NML ( 6 trends). Trends are signified as the following example: 4E-D, 6E-D (Line 4 East-VLF Pick D to Line 6E-VLF Pick D)

## TX NAA (8 Trends)

Map- 5 Elevation Contours with NAA Picks and Trends Trend 4 follows a topographic high which may signify outcropping ( $00-\mathrm{K}$, 2E-J, 4E-I, 6E-J)
Trend 3 follows the floodplain of a winding river ( $00-\mathrm{F}, 2 \mathrm{E}-\mathrm{G}, 4 \mathrm{E}-\mathrm{G}, 6 \mathrm{E}-\mathrm{H}$ )
Maps 6 \& 7 Fraser Filter Contours of In Phase \& Quadrature Values
Map 8 Resistivity Contours:

- Trend 4 occurs in a resistivity high ( $00-\mathrm{K}, 2 \mathrm{E}-\mathrm{J}, 4 \mathrm{E}-\mathrm{I}, 6 \mathrm{E}-\mathrm{J}$ )
- Trends 6 \& 5 follow a resistivity low ( $2 \mathrm{E}-\mathrm{N}, 4 \mathrm{E}-\mathrm{L}, 6 \mathrm{E}-\mathrm{N}$ ) \& ( $00-\mathrm{O}$, 2E-N, 4E-K, 6E-M)
- Trend 3 follows the edge of the resistivity high ( $00-\mathrm{F}, 2 \mathrm{E}-\mathrm{G}, 4 \mathrm{E}-\mathrm{G}$, 6E-H)
Map $9 \quad$ NAA Picks and Trends on a Google Image

TX NAA Trends with those suggested for ground follow up in Red

1. $00-\mathrm{B}, 2 \mathrm{E}-\mathrm{C}$
2. $4 \mathrm{E}-\mathrm{D}, 6 \mathrm{E}-\mathrm{D}$
3. $00-F, 2 E-G, 4 E-G, 6 E-H$
4. $00-\mathrm{K}, 2 \mathrm{E}-\mathrm{J}, 4 \mathrm{E}-\mathrm{I}, 6 \mathrm{E}-\mathrm{J}$
5. $00-0,2 E-N, 4 E-K, 6 E-M$
6. $2 \mathrm{E}-\mathrm{N}, 4 \mathrm{E}-\mathrm{L}, 6 \mathrm{E}-\mathrm{N}$
7. $00-\mathrm{P}, 2 \mathrm{E}-\mathrm{O}$
8. $2 \mathrm{E}-\mathrm{P}, 4 \mathrm{E}-\mathrm{N}$






Values \%




Map 9 West Grid Google Image of TX NAA Picks \& Trends


Map- 10 Elevation Contours with NML Picks and Trends
Trend 2 follows a topographic high with outcropping (00-I, 2E-J, $4 \mathrm{E}-\mathrm{I}, 6 \mathrm{E}-\mathrm{I})$
Trend 1 follows the flood plain of a river (00-D, 2E-G, 4E-G, 6E-F)
Maps 11 \& $12 \quad$ Fraser Filter Contours of In Phase \& Quadrature Values
Map 13
Resistivity Contours:

- Trends 3 \& 4 occur in a resistivity low ( $00-\mathrm{M}, 2 \mathrm{E}-\mathrm{M}, 4 \mathrm{E}-\mathrm{K}$, $6 \mathrm{E}-\mathrm{K})$ \& ( $00-\mathrm{M}, 2 \mathrm{E}-\mathrm{N}, 4 \mathrm{E}-\mathrm{L}, 6 \mathrm{E}-\mathrm{K}$ )
- Trend 5 follows the edge of the resistivity low ( $00-\mathrm{O}, 2 \mathrm{E}-\mathrm{O}$ )
- Trends $1 \& 2$ follow the edge of the resistivity high (00-D, $2 \mathrm{E}-\mathrm{G}, 4 \mathrm{E}-\mathrm{G}, 6 \mathrm{E}-\mathrm{F}) \&(00-\mathrm{I}, 2 \mathrm{E}-\mathrm{J}, 4 \mathrm{E}-\mathrm{I}, 6 \mathrm{E}-\mathrm{I})$
Map 14
NML Picks and Trends on a Google Image.

TX NML Trends with those suggested for ground follow up highlighted in Blue

1. $00-\mathrm{D}, 2 \mathrm{E}-\mathrm{G}, 4 \mathrm{E}-\mathrm{G}, 6 \mathrm{E}-\mathrm{F}$
2. $00-\mathrm{I}, 2 \mathrm{E}-\mathrm{J}, 4 \mathrm{E}-\mathrm{I}, 6 \mathrm{E}-\mathrm{I}$
3. $00-\mathrm{M}, 2 \mathrm{E}-\mathrm{M}, 4 \mathrm{E}-\mathrm{K}, 6 \mathrm{E}-\mathrm{K}$
4. $00-\mathrm{M}, 2 \mathrm{E}-\mathrm{N}, 4 \mathrm{E}-\mathrm{L}, 6 \mathrm{E}-\mathrm{K}$
5. $00-\mathrm{O}, 2 \mathrm{E}-\mathrm{O}$
6. $2 \mathrm{E}-\mathrm{P}, 4 \mathrm{E}-\mathrm{N}$

$\qquad$



Fraser Filter Quadrature
Values \%


Map 13 West Grid TX NML Resistivity 4000 Ohm Contours with Picks \& Trends



Map 14 West Grid Google Image of TX NML Picks \& Trends


## Discussion of Results - Middle Grid

Lines M00, M2E, M4E, M6E

Map-15 shows the layout of the VLF lines on an elevation contour map.

The stronger anomalies were interpreted into main trends. There are more, weaker anomalies that could not be followed due to the 200 meter spacing between lines as well as a lack of knowledge of the geological strike prior to interpretation. A more detailed interpretation could be achieved with additional fill in lines being completed in order to verify the 200 meter responses.

Map 15 Middle Grid Elevation Map



## Middle Grid VLF Anomalies

VLF Trends were identified for TX NAA ( 6 trends) and TX NML ( 6 trends). Trends are signified as the following example: 2E-D, 4E-B, 6E-A (Line 2 East-VLF Pick D to Line 4E-VLF Pick B to Line 6 East-VLF Pick A)

TX NAA (6 Trends)
Map- $16 \quad$ Elevation Contours with NAA Picks and Trends
Trends 3 \& 2 follow a topographic high with outcropping ( $00-\mathrm{G}$, $2 \mathrm{E}-\mathrm{H}, 4 \mathrm{E}-\mathrm{F}, 6 \mathrm{E}-\mathrm{F})$ \& (00-D, 2E-F, 4E-D, 6E-C)
Maps 17 \& $18 \quad$ Fraser Filter Contours of In Phase and Quadrature Values
Map 19
Resistivity Contours:

- Trend 5 occurs in a resistivity low (00-I, 2E-K, 4E-H)
- Trend 6 follows the edge of the resistivity low ( $00-\mathrm{J}, 2 \mathrm{E}-\mathrm{L}$, $4 \mathrm{E}-\mathrm{K}, 6 \mathrm{E}-\mathrm{J})$
Map 20
NAA Picks and Trends on a Google Image.

TX NAA Trends with those suggested for ground follow up in Red

1. $2 E-D, 4 E-B, 6 E-A$
2. $00-D, 2 E-F, 4 E-D, 6 E-C$
3. $00-\mathrm{G}, 2 \mathrm{E}-\mathrm{H}, 4 \mathrm{E}-\mathrm{F}, 6 \mathrm{E}-\mathrm{F}$
4. 2E-J, 4E-G, 6E-F
5. $00-\mathrm{I}, 2 \mathrm{E}-\mathrm{K}, 4 \mathrm{E}-\mathrm{H}$
6. $00-\mathrm{J}, 2 \mathrm{E}-\mathrm{L}, 4 \mathrm{E}-\mathrm{K}, 6 \mathrm{E}-\mathrm{J}$









Map 20 Middle Grid Google Image of TX NAA Picks \& Trends


Map- 21 Elevation Contours with NML Picks and Trends
Trend 2 follows a topographic high with outcropping ( $00-\mathrm{E}, 2 \mathrm{E}-\mathrm{E}$, 4E-E, 6E-E)
Maps 22 \& $23 \quad$ Fraser Filters Contours of In Phase and Quadrature Values
Map 24
Resistivity Contours:

- Trend 4 occurs in a resistivity low (00-K, $2 \mathrm{~N}-\mathrm{I}$ )
- Trends $6 \& 3$ follow the edge of the resistivity low ( $00-\mathrm{M}$, $2 \mathrm{E}-\mathrm{J}, 4 \mathrm{E}-\mathrm{L}, 6 \mathrm{E}-\mathrm{M}) \&(2 \mathrm{E}-\mathrm{H}, 4 \mathrm{E}-\mathrm{H}, 6 \mathrm{E}-\mathrm{H})$
Map 25
NML Picks and Trends on a Google Image

TX NML Trends with those suggested for ground follow up highlighted in Blue
1 4E-C, 6E-B
2 00-E, 2E-E, 4E-E, 6E-E
3 2E-H, 4E-H, 6E-H
4 00-K, 2N-I
5 4E-J, 6E-J
6 00-M, 2E-J, 4E-L, 6E-M




Map 23 Middle Grid TX NML Fraser Quadrature Contours with Picks \& Trends



Map 24 Middle Grid TX NML Resistivity 4000 Ohm Contours with Picks \& Trends



## Discussion of Results - Flat Lake Grid

Lines F00, F2E, F4E, F6E
Map-26 shows the layout of the VLF lines on an elevation contour map.

The stronger anomalies were interpreted into main trends. There are more, weaker anomalies that could not be followed due to the 200 meter spacing between lines as well as a lack of knowledge of the geological strike prior to interpretation. A more detailed result could be achieved with additional fill in lines being completed in order to verify the 200 meter responses.

Map 26 Flat Lake Grid Elevation Map



## Flat Lake Grid VLF Anomalies

VLF Trends were identified for TX NAA ( 2 trends) and TX NML ( 2 trends). Trends are signified as the following example: $00-\mathrm{E}, 2 \mathrm{E}-\mathrm{E}-4 \mathrm{E}-\mathrm{E}, 6 \mathrm{E}-\mathrm{C}$ (Line $00-\mathrm{VLF}$ Pick E to Line $2 \mathrm{E}-\mathrm{VLF}$ Pick E to Line 4 East-VLF Pick E to Line 6 East-VLF Pick C)

TX NAA (2 Trends)
Map- $27 \quad$ Elevation Contours with NAA Picks and
Maps 28 \& 29
Fraser Filter Contours of In Phase and Quadrature Values
Map 30
Resistivity Contours:

- Trends $1 \& 2$ follow the edge of the resistivity low (00-E, $2 \mathrm{E}-\mathrm{E}, 4 \mathrm{E}-\mathrm{E}, 6 \mathrm{E}-\mathrm{C}$ ) \& (00-H, 2E-J, 4E-H, 6E-G)
Map 31
NAA Picks and Trends on a Google Image

TX NAA Trends with those suggested for ground follow up in Red

1 00-E, 2E-E, 4E-E, 6E-C
2 00-H, 2E-J, 4E-H, 6E-G






Map 30 Flat Lake Grid TX NAA Resistivity 4000 Ohm Contours with Picks \& Trends



Map 31 Flat Lake Grid Google Image of TX NAA Picks \& Trends


TX NML (2 Trends)

Map- 32 Elevation Contours with NML Picks and Trends
Trends $1 \& 2$ follow the edge of a topographic high that has outcropping ( $00-\mathrm{A}, 2 \mathrm{E}-\mathrm{C}, 4 \mathrm{E}-\mathrm{E}, 6 \mathrm{E}-\mathrm{B}$ ) \& ( $00-\mathrm{E}, 2 \mathrm{E}-\mathrm{H}, 4 \mathrm{E}-\mathrm{I}, 6 \mathrm{E}-\mathrm{F}$ )
Maps 33 \& 34
Map 35
Fraser Filter Contours of In Phase and Quadrature Values
Resistivity Contours:

- Trends $1 \& 2$ follow the edge of the resistivity low (00-A, $2 \mathrm{E}-\mathrm{C}, 4 \mathrm{E}-\mathrm{E}, 6 \mathrm{E}-\mathrm{B})$ \& ( $00-\mathrm{E}, 2 \mathrm{E}-\mathrm{H}, 4 \mathrm{E}-\mathrm{I}, 6 \mathrm{E}-\mathrm{F}$ )
Map 36 NML Picks and Trends on a Google Image

TX NML Trends with those suggested for ground follow up highlighted in Blue $100-\mathrm{A}, 2 \mathrm{E}-\mathrm{C}, 4 \mathrm{E}-\mathrm{E}, 6 \mathrm{E}-\mathrm{B}$
$200-\mathrm{E}, 2 \mathrm{E}-\mathrm{H}, 4 \mathrm{E}-\mathrm{I}, 6 \mathrm{E}-\mathrm{F}$

Map 32 Flat Lake Grid Elevation Map with TX NML Picks \& Trends


Map 33 Flat Lake Grid TX NML Fraser In Phase Contours with Picks \& Trends




Map 35 Flat Lake Grid TX NML Resistivity 4000 Ohm with Picks \& Trends



Map 36 Flat Lake Grid Google Image of TX NML Picks \& Trends


## Conclusions - West Grid

This Ground VLF EM-16 survey over the West Grid area was successful in:

- Defining Several VLF bedrock conductors.
- Using a bedrock background resistivity of 4000 ohms gave us modelled sections to 204 meters in depth and outlined several highly resistive and minimally resistive rock units.
- Without geological information or geological strike information, it is difficult to match many of the VLF Picks and Trends.


## Recommendations - West Grid

- Run additional 100 meter fill in lines at $1 E, 3 E \& 5 E$ in order to identify additional VLF Picks and Trends. This would enable a more detailed interpretation of trends across the surveyed area.
- Overlay the TX NAA and NML Picks and Trends on Google earth images as well as geology maps and airborne magnetic maps in order to identify surface lineaments and geological contacts.
- Run depth slice plan maps of both the KH data and the Inversion models at increasing depths. This will eliminate shallow conductors and isolate deeper bedrock conductors to a depth of 204 meters. This will also determine if the bedrock conductor has a dip or plunge.
- Overlay TX NAA and TX NML VLF Picks and Trends with airborne magnetic survey data in order to find a matching VLF Magnetic anomaly.
- Ground follow-up of the VLF Picks and Trends outlined in this report in order to ground proof the targets with the geology, as outcrops exist on this grid.
NAA Strongest VLF Anomaly Picks:
$00-0,00-F \quad 2 E-F, 2 E-M, 2 E-N \quad 4 E-F, 4 E-K \quad 6 E-H, 6 E-M$
NML Strongest VLF Anomaly Picks:
$00-\mathrm{D}, 00-\mathrm{L}, 00-\mathrm{M}, 00-\mathrm{O} \quad 2 \mathrm{E}-\mathrm{F}, 2 \mathrm{E}-\mathrm{J}, 2 \mathrm{E}-\mathrm{M}, 2 \mathrm{E}-\mathrm{N} \quad 4 \mathrm{E}-\mathrm{F}, 4 \mathrm{E}-\mathrm{G}, 4 \mathrm{E}-\mathrm{K}, 4 \mathrm{E}-\mathrm{L} \quad 6 \mathrm{E}-\mathrm{F}, 6 \mathrm{E}-\mathrm{J}, 6 \mathrm{E}-\mathrm{K}$
- Perhaps a lake bottom soil survey below the VLF conductors found under West Lake, and under the flood plain of the southern river will assist in determining the cause of these anomalies.
- Proposed drill holes should be projected on both the inversion models and the JY models using a vertical exaggeration of 1.0 to determine if the proposed hole will intersect the VLF Bedrock conductor.


## Conclusions - Middle Grid

This Ground VLF EM-16 survey over the Middle Grid area was successful in:

- Defining Several VLF bedrock conductors.
- Using a bedrock background resistivity of 4000 ohms gave us modelled sections to 204 meters in depth and outlined several highly resistive and minimally resistive rock units
- Without geological information or geological strike information, it is difficult to match the VLF Picks and Trends with geology.


## Recommendations - Middle Grid

- Run additional 100 meter fill in lines at $1 E, 3 E \& 5 E$ in order to obtain additional VLF Picks and Trends. This would enable a more detailed interpretation of trends across the surveyed area.
- Overlay the TX NAA and NML Picks and Trends on Google earth images as well as geology maps and airborne magnetic maps in order to identify surface lineaments and geological contacts.
- Run depth slice plan maps of both the KH data and the Inversion models at various depths. This will eliminate shallow conductors and isolate deeper bedrock conductors to a depth of 204 meters. This will also determine if the bedrock conductor has a dip or plunge.
- Overlay TX NAA and TX NML VLF Picks and Trends with airborne magnetic survey data in order to find a matching VLF Magnetic anomaly.
- Ground follow-up of the VLF Picks and Trends outlined in this report in order to ground proof the targets with geology, as outcrops exist on this grid.
NAA Strongest Anomaly Picks:
00-D, 00-I, 00-J 2E-E, 2E-H 2E-J, 2E-K, 2E-L 4E-D, 4E-F, 4E-G, 4E-H, 4E-K 6E-A, 6E-C, $6 \mathrm{E}-\mathrm{E}, 6 \mathrm{E}-\mathrm{H}, 6 \mathrm{E}-\mathrm{I}, 6 \mathrm{E}-\mathrm{J}$
NML Strongest Anomaly Picks:
$00-\mathrm{E}, 00-\mathrm{K}, 00-\mathrm{M} \quad 2 \mathrm{E}-\mathrm{D}, 2 \mathrm{E}-\mathrm{E}, 2 \mathrm{E}-\mathrm{G}, 2 \mathrm{E}-\mathrm{H}, 2 \mathrm{E}-\mathrm{I}, 2 \mathrm{E}-\mathrm{J} \quad 4 \mathrm{E}-\mathrm{C}, 4 \mathrm{E}-\mathrm{E}, 4 \mathrm{E}-\mathrm{G}, 4 \mathrm{E}-\mathrm{H}, 4 \mathrm{E}-\mathrm{I}, 4 \mathrm{E}-\mathrm{J}$, 4E-L 6E-B, 6E-E, 6E-H, 6E-I, 6E-K, 6E-L, 6E-M
- Perhaps a lake bottom soil survey below the VLF conductors found in Middle Lake, will assist in determining the cause of these anomalies.
- Proposed drill holes should be projected on both the inversion models and the JY models using a vertical exaggeration of 1.0 to determine if the proposed hole will intersect the VLF Bedrock conductor.


## Conclusions - Flat Lake Grid

This Ground VLF EM-16 survey over the Flat Lake area was successful in:

- Defining 2 VLF bedrock conductors.
- Using a bedrock background resistivity of 4000 ohms gave us modelled sections to 204 meters in depth and outlined one highly resistive rock unit, flanked by 2 VLF trends.
- Without geological information or geological strike information, it is difficult to match the VLF Picks and Trends with geology.


## Recommendations - Flat Lake Grid

- Run additional 100 meter fill in lines at $1 E, 3 E \& 5 E$ in order to obtain additional VLF Picks and Trends. This would enable a more detailed interpretation of trends across the surveyed area.
- Overlay the TX NAA and NML Picks and Trends on Google earth images as well as geology maps and airborne magnetic maps in order to identify surface lineaments and geological contacts.
- Run depth slice plan maps of both the KH data and the Inversion models at various depths. This will eliminate shallow conductors and isolate deeper bedrock conductors to a depth of 204 meters. This will also determine if the bedrock conductor has a dip or plunge.
- Overlay TX NAA and TX NML VLF Picks and Trends with airborne magnetic survey data in order to find a matching VLF Magnetic anomaly.
- Ground follow-up of the VLF Picks and Trends outlined in this report in order to ground proof the targets with geology, as outcrops exist on this grid in the area of high resistive response.
NAA Strongest Anomaly Picks:
$00-\mathrm{E}, 00-\mathrm{G}, 00-\mathrm{H} \quad 2 \mathrm{E}-\mathrm{E}, 2 \mathrm{E}-\mathrm{F}, 2 \mathrm{E}-\mathrm{I}, 2 \mathrm{E}-\mathrm{J} \quad 4 \mathrm{E}-\mathrm{D}, 4 \mathrm{E}-\mathrm{E}, 4 \mathrm{E}-\mathrm{G}, 4 \mathrm{E}-\mathrm{H} \quad 6 \mathrm{E}-\mathrm{C}, 6 \mathrm{E}-\mathrm{G}, 6 \mathrm{E}-\mathrm{H}$ NML Strongest Anomaly Picks:
$00-\mathrm{A}, 00-\mathrm{B}, 00-\mathrm{D}, 00-\mathrm{E} \quad 2 \mathrm{E}-\mathrm{C}, 2 \mathrm{E}-\mathrm{D}, 2 \mathrm{E}-\mathrm{G}, 2 \mathrm{E}-\mathrm{H} \quad 4 \mathrm{E}-\mathrm{E}, 4 \mathrm{E}-\mathrm{F}, 4 \mathrm{E}-\mathrm{H}, 4 \mathrm{E}-\mathrm{I}, \quad 6 \mathrm{E}-\mathrm{B} 6 \mathrm{E}-\mathrm{C}, 6 \mathrm{E}-\mathrm{F}$
- Proposed drill holes should be projected on both the inversion models and the JY models using a vertical exaggeration of 1.0 to determine if the proposed hole will intersect the VLF Bedrock conductor.


## List of References

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## Certificate of Qualifications

I, Shaun Parent, P. Geo . Residing at 282 B Whispering Pines Road, Batchawana Bay, Ontario do certify that:

1. I am a consulting Geoscientist with Superior Exploration, Adventure \& Climbing Co. Ltd.
2. I graduated with a Geological Technician Diploma from Sir Sandford Fleming College in 1986.
3. I graduated with a BSc. from the University of Toronto in 1986
4. I am a member in good standing with the Association of Professional Geoscientists of Ontario \#1955 and a member of the Prospectors and Developers Association of Canada.
5. I have been employed continuously as a Geoscientist for the past 27 years since my graduation from University.
6. The nature of my involvement with this project was to carry out the interpretation of the VLF data using the EMTOMO VLF2D Software of which I have been developing with Dr. Fernando Santos of Lisbon, Portugal.

Dated this $24^{\text {th }}$ day of April 2019


Shaun Parent, Diploma-Geo, BSc. P. Geo

# APPENDIX A 

West Grid

## NAA Figures

West Grid NAA Figure 1 Line W00 Raw Data Profile

VLF-EM raw data
Line: Harte Gold Flat Lakes Area West Grid Line WOO Azimuth: -30.2



West Grid NAA Figure 2 Line W00 Model 4000 Ohm with Fraser Picks


## West Grid NAA Figure 3 Line W2E Raw Data Profile

VLF-EM raw data
Line: Harte Gold Flat Lakes Area West Grid Line W2E Azimuth: $\quad-30.0$


West Grid NAA Figure 4 Line W2E Model 4000 Ohm with Fraser Picks


Transmitter: NAA
Vertical Exaggeration: 1.0

## West Grid NAA Figure 5 Line W4E Raw Data Profile



West Grid NAA Figure 6 Line W4E Model 4000 Ohm with Fraser Picks


Transmitter: NAA
Vertical Exaggeration: 1.0

## West Grid NAA Figure 7 Line W6E Raw Data Profile



West Grid NAA Figure 8 Line W6E Model 4000 Ohm with Fraser Picks


Transmitter: NAA

## NML Figures

West Grid NML Figure 1 Line W00 Raw Data Profile

VLF-EM raw data
Line: Harte Gold Flat Lakes Area West Grid Line W00 Azimuth: -30.2


West Grid NML Figure 2 Line W00 Model 4000 Ohm with Fraser Picks


Transmitter: NML
Vertical Exaggeration: 1.0

## West Grid NML Figure 3 Line W2E Raw Data Profile



West Grid NML Figure 4 Model 4000 Ohm with Fraser Picks


[^1]Vertical Exaggeration: 1.0

## West Grid NML Figure 5 Line W4E Raw Data Profile



West Grid NML Figure 6 Line W4E Model 4000 Ohm with Fraser Picks

LIne: Harte Gold Flat Lakes Area West Grid Line W4E


Transmitter: NML

## West Grid NML Figure 7 Line W6E Raw Data Profile



West Grid NML Figure 8 Line W6E Model 4000 Ohm with Fraser Picks


# APPENDIX B 

 Middle Grid
## NAA Figures

Middle Grid NAA Figure 1 Line M00 Raw Data Profile

VLF-EM raw data
Line: Harte Gold Flat Lakes Area Middle Grid Line M00 Azimuth: $\quad-30.2$


Middle Grid NAA Figure 2 Line M00 Model 4000 Ohm with Fraser Picks


Transmitter: NAA
Vertical Exaggeration: 1.0

## Middle Grid NAA Figure 3 Line M2E Raw Data Profile



Middle Grid NAA Figure 4 Line M2E Model 4000 Ohm with Fraser Picks


## Middle Grid NAA Figure 5 Line M4E Raw Data Profile



Middle Grid NAA Figure 6 Line M4E Model 4000 Ohm with Fraser Picks


Transmitter: NAA
Vertical Exaggeration: 1.0

## Middle Grid NAA Figure 7 Line M6E Raw Data Profile



Middle Grid NAA Figure 8 Line M6E Model 4000 Ohm with Fraser Picks

Line: Harte Gold Flat Lakes Area Middie Grid LIne M6E


## NML Figures

Middle Grid NML Figure 1 Line M00 Raw Data Profile

VLF-EM raw data
Line: Harte Gold Flat Lakes Area Middle Grid Line M00 Azimuth: $\quad-30.2$



Middle Grid NML Figure 2 Line M00 Model 4000 Ohm with Fraser Picks


Transmitter: NML
Vertical Exaggeration: 1.0

## Middle Grid NML Figure 3 Line M2E Raw Data Profile



Middle Grid NML Figure 4 Line M2E Model 4000 Ohm with Fraser Picks

Line: Harte Gold Flat Lakes Area Middle Grid LIne M2E


Transmitter: NML
Vertical Exaggeration: 1.0

## Middle Grid NML Figure 5 Line M4E Raw Data Profile



Middle Grid NML Figure 6 Line M4E Model 4000 Ohm with Fraser Picks

Line: Harte Gold Flat Lakes Area Middle Grid Line M4E


Transmitter: NML
Vertical Exaggeration: 1.0

## Middle Grid NML Figure 7 Line M6E Raw Data Profile



Middle Grid NML Figure 8 Line M6E Model 4000 Ohm with Fraser Picks


Transmitter: NML

# APPENDIX C 

Flat Lake Grid

## NAA Figures

Flat Lake Grid NAA Figure 1 Line F00 Raw Data Profile


Flat Lake Grid NAA Figure 2 Model 4000 Ohm with Fraser Picks


## Flat Lake Grid NAA Figure 3 Line F2E Raw Data Profile



Flat Lake Grid NAA Figure 4 Line F2E Model 4000 Ohm with Fraser Picks


Transmitter: NAA

## Flat Lake Grid NAA Figure 5 Line F4E Raw Data Profile



Flat Lake Grid NAA Figure 6 Line F4E Model 4000 Ohm with Fraser Picks


## Flat Lake Grid NAA Figure 7 Line F6E Raw Data Profile



Flat Lake Grid NAA Figure 8 Line F6E Model 4000 Ohm with Fraser Picks


## NML Figures

Flat Lake Grid NML Figure 1 Line FOO Raw Data Profile


Flat Lake Grid NML Figure 2 Line FOO Model 4000 Ohm with Fraser Picks


## Flat Lake Grid NML Figure 3 Line F2E Raw Data Profile



Flat Lake Grid NML Figure 4 Line F2E Model 4000 Ohm with Fraser Picks


## Flat Lake Grid NML Figure 5 Line F4E Raw Data Profile



Flat Lake Grid NML Figure 6 Line F4E Model 4000 Ohm with Fraser Picks


Transmitter: NML
Vertical Exaggeration: 1.0

## Flat Lake Grid NML Figure 7 Line F6E Raw Data Profile



Flat Lake Grid NML Figure 8 Line F6E Model 4000 Ohm with Fraser Picks

Line: Harte Gold Flat Lakes Area - Flat Lake Grid Line F6E


Transmitter: NML
Vertical Exaggeration: 1.0

Appendix C - Superior Exploration, Adventure \& Climbing Co. Ltd. - Invoice

Appendix D - Superior Exploration, Adventure \& Climbing Co. Ltd. Harte Gold - Flat Lakes Area - Raw VLF Data West Grid / Middle Grid / Flat Lake Grid

|  |  | Harte Gold - Flat Lakes Area - Raw VLF Data |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | West Grid / Middle Grid / Flat Lake Grid |  |  |  |  |  |  |
|  |  | Ground VLF Survey conducted by Superior Exploration |  |  |  |  |  |  |
|  |  | Fieldwork from March 22 - April 4, 2019 |  |  |  |  |  |  |
|  |  |  |  |  | NAA |  | NML |  |
| Line Number | StationID | X | Y | Z | In-Phase | OutPhase | In-Phase | OutPhase |
| W00 | 3+00N | 649640 | 5420459 | 364 | 4 | 0 | 4 | 2 |
| woo | 3+20N | 649629 | 5420479 | 363 | 2 | 0 | 2 | 0 |
| woo | 3+40N | 649621 | 5420496 | 364 | 4 | 0 | 2 | 0 |
| woo | 3+60N | 649615 | 5420511 | 363 | 4 | 0 | 2 | 0 |
| W00 | 3+80N | 649604 | 5420531 | 364 | 2 | 0 | 2 | 2 |
| W00 | 4+00N | 649596 | 5420556 | 364 | 2 | -2 | 2 | 2 |
| W00 | 4+20N | 649587 | 5420569 | 364 | 2 | -2 | 2 | 0 |
| W00 | 4+40N | 649576 | 5420584 | 364 | 0 | -2 | 0 | 0 |
| woo | 4+60N | 649566 | 5420603 | 364 | 2 | 0 | 2 | 2 |
| W00 | 4+80N | 649550 | 5420617 | 364 | 2 | 0 | 2 | 4 |
| W00 | 5+00N | 649538 | 5420634 | 363 | 2 | 0 | 4 | 2 |
| W00 | 5+20N | 649525 | 5420647 | 364 | 2 | 0 | 2 | 2 |
| woo | 5+40N | 649514 | 5420665 | 364 | 2 | 2 | 2 | 4 |
| W00 | 5+60N | 649507 | 5420685 | 363 | 4 | 2 | 2 | 4 |
| woo | $5+80 \mathrm{~N}$ | 649500 | 5420704 | 361 | 4 | 2 | 4 | 4 |
| woo | 6+00N | 649495 | 5420725 | 362 | 4 | 4 | 4 | 4 |
| W00 | 6+20N | 649483 | 5420740 | 360 | 6 | 2 | 8 | 2 |
| W00 | 6+40N | 649473 | 5420756 | 358 | 4 | 2 | 6 | 2 |
| W00 | 6+60N | 649462 | 5420772 | 358 | 4 | 2 | 6 | 2 |
| W00 | 6+80N | 649450 | 5420790 | 357 | 14 | 6 | 16 | 8 |
| W00 | 7+00N | 649441 | 5420808 | 357 | 16 | 8 | 14 | 8 |
| W00 | 7+20N | 649429 | 5420823 | 357 | 16 | 10 | 14 | 10 |
| woo | 7+40N | 649424 | 5420842 | 356 | 16 | 12 | 18 | 12 |
| W00 | 7+60N | 649414 | 5420864 | 355 | 10 | 18 | 10 | 20 |
| W00 | 7+80N | 649402 | 5420878 | 355 | 8 | 30 | 8 | 28 |
| W00 | 8+00N | 649393 | 5420894 | 355 | -16 | 30 | -18 | 32 |
| W00 | $8+20 \mathrm{~N}$ | 649385 | 5420910 | 356 | -30 | 30 | -28 | 28 |
| W00 | $8+40 \mathrm{~N}$ | 649374 | 5420928 | 356 | -40 | 20 | -38 | 18 |
| W00 | 8+60N | 649367 | 5420947 | 356 | -46 | 20 | -40 | 20 |
| woo | 8+80N | 649356 | 5420965 | 355 | -55 | 18 | -50 | 20 |
| woo | $9+00 \mathrm{~N}$ | 649346 | 5420983 | 356 | -66 | 20 | -50 | 20 |
| woo | $9+20 \mathrm{~N}$ | 649334 | 5421001 | 358 | -30 | 22 | -26 | 20 |
| W00 | $9+40 \mathrm{~N}$ | 649321 | 5421019 | 359 | -34 | 16 | -28 | 18 |
| woo | 9+60N | 649313 | 5421038 | 359 | -38 | 16 | -30 | 18 |
| woo | 9+80N | 649303 | 5421057 | 363 | -30 | 14 | -14 | 16 |
| W00 | 10+00N | 649296 | 5421074 | 364 | -16 | 12 | -10 | 12 |


| W00 | 10+20N | 649291 | 5421091 | 364 | -16 | 12 | -6 | 14 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| W00 | 10+40N | 649280 | 5421110 | 367 | -4 | 12 | 6 | 18 |
| W00 | 10+60N | 649270 | 5421124 | 370 | 2 | 12 | 6 | 14 |
| W00 | 10+80N | 649260 | 5421144 | 371 | 6 | 12 | 14 | 12 |
| W00 | 11+00N | 649247 | 5421162 | 372 | 6 | 12 | 20 | 12 |
| W00 | 11+20N | 649233 | 5421178 | 373 | 6 | 12 | 16 | 12 |
| W00 | $11+40 \mathrm{~N}$ | 649223 | 5421191 | 376 | 6 | 12 | 14 | 12 |
| W00 | $11+60 \mathrm{~N}$ | 649215 | 5421210 | 376 | 12 | 12 | 24 | 12 |
| W00 | $11+80 \mathrm{~N}$ | 649203 | 5421223 | 376 | 18 | 12 | 26 | 12 |
| W00 | $12+00 \mathrm{~N}$ | 649192 | 5421240 | 375 | 8 | 6 | 20 | 8 |
| W00 | $12+20 \mathrm{~N}$ | 649180 | 5421256 | 376 | -2 | 0 | 12 | 0 |
| W00 | $12+40 \mathrm{~N}$ | 649169 | 5421276 | 374 | 2 | -2 | 4 | 0 |
| W00 | $12+60 \mathrm{~N}$ | 649160 | 5421294 | 374 | 10 | 2 | 12 | 2 |
| W00 | $12+80 \mathrm{~N}$ | 649152 | 5421315 | 375 | 10 | 6 | 10 | 4 |
| W00 | 13+00N | 649143 | 5421332 | 375 | 10 | 0 | 8 | 4 |
| W00 | $13+20 \mathrm{~N}$ | 649137 | 5421349 | 374 | 10 | 0 | 16 | 4 |
| W00 | $13+40 \mathrm{~N}$ | 649123 | 5421367 | 371 | 16 | -10 | 20 | 2 |
| W00 | $13+60 \mathrm{~N}$ | 649112 | 5421380 | 368 | 18 | -18 | 22 | -16 |
| W00 | $13+80 \mathrm{~N}$ | 649098 | 5421398 | 361 | 20 | -12 | 22 | -14 |
| W00 | 14+00N | 649087 | 5421415 | 360 | 26 | -10 | 28 | -10 |
| W00 | $14+20 \mathrm{~N}$ | 649077 | 5421431 | 359 | 28 | -16 | 30 | -18 |
| W00 | $14+40 \mathrm{~N}$ | 649071 | 5421449 | 359 | 30 | -18 | 32 | -20 |
| W00 | $14+60 \mathrm{~N}$ | 649067 | 5421470 | 359 | 14 | -18 | 16 | -20 |
| W00 | $14+80 \mathrm{~N}$ | 649060 | 5421489 | 359 | 14 | -6 | 16 | -8 |
| W00 | $15+00 \mathrm{~N}$ | 649050 | 5421507 | 358 | 12 | 10 | 12 | 6 |
| w00 | 15+20N | 649045 | 5421526 | 358 | 8 | 12 | 8 | 10 |
| W00 | 15+40N | 649038 | 5421542 | 359 | 4 | 10 | 10 | 10 |
| W00 | 15+60N | 649028 | 5421562 | 358 | -10 | 10 | 10 | 10 |
| W00 | $15+80 \mathrm{~N}$ | 649016 | 5421579 | 358 | -14 | 12 | -14 | 14 |
| W00 | 16+00N | 649005 | 5421598 | 358 | -18 | 12 | -20 | 14 |
| W00 | 16+20N | 648997 | 5421614 | 359 | -2 | 14 | -4 | 14 |
| W00 | 16+40N | 648986 | 5421636 | 361 | 14 | 16 | 16 | 16 |
| W00 | 16+60N | 648974 | 5421655 | 360 | 50 | 20 | 52 | 18 |
| W00 | $16+80 \mathrm{~N}$ | 648959 | 5421672 | 360 | 30 | 14 | 32 | 12 |
| W00 | 17+00N | 648948 | 5421686 | 360 | 30 | 10 | 28 | 10 |
| W00 | $17+20 \mathrm{~N}$ | 648938 | 5421698 | 360 | 20 | 8 | 18 | 6 |
| W00 | $17+40 \mathrm{~N}$ | 648926 | 5421713 | 358 | 4 | 4 | 4 | 2 |
| W00 | $17+60 \mathrm{~N}$ | 648918 | 5421727 | 360 | -20 | 4 | -22 | 4 |
| W00 | $17+80 \mathrm{~N}$ | 648908 | 5421742 | 362 | -46 | 4 | -48 | 6 |
| W00 | 18+00N | 648895 | 5421762 | 362 | -34 | 4 | -36 | 4 |
| W00 | $18+20 \mathrm{~N}$ | 648885 | 5421780 | 362 | -20 | 4 | -18 | 4 |
| W00 | $18+40 \mathrm{~N}$ | 648874 | 5421794 | 363 | -56 | 4 | -54 | 6 |
| W00 | $18+60 \mathrm{~N}$ | 648864 | 5421811 | 363 | -40 | 6 | -38 | 8 |
| W00 | $18+80 \mathrm{~N}$ | 648851 | 5421827 | 363 | -18 | 10 | -16 | 10 |
| W00 | 19+00N | 648839 | 5421845 | 362 | -10 | 10 | -10 | 10 |


| woo | 19+20N | 648829 | 5421862 | 364 | -4 | 8 | -6 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| woo | 19+40N | 648820 | 5421876 | 364 | -4 | 8 | -6 | 8 |
| woo | 19+60N | 648810 | 5421892 | 362 | -2 | 4 | -4 | 6 |
| W00 | 19+80N | 648800 | 5421906 | 362 | -2 | 4 | -2 | 4 |
| W2E | 2+60N | 649834 | 5420540 | 363 | 2 | 0 | 2 | 2 |
| W2E | 2+80N | 649827 | 5420555 | 364 | 2 | 4 | 2 | 0 |
| W2E | $3+00 \mathrm{~N}$ | 649818 | 5420569 | 361 | 4 | -2 | 2 | -2 |
| W2E | $3+20 \mathrm{~N}$ | 649811 | 5420586 | 363 | 2 | -4 | 2 | -2 |
| W2E | $3+40 \mathrm{~N}$ | 649800 | 5420604 | 362 | 2 | -4 | 2 | -4 |
| W2E | $3+60 \mathrm{~N}$ | 649789 | 5420616 | 362 | 4 | -2 | 2 | -4 |
| W2E | $3+80 \mathrm{~N}$ | 649782 | 5420635 | 362 | 4 | -2 | 2 | -2 |
| W2E | 4+00N | 649769 | 5420650 | 362 | 4 | 2 | 4 | 2 |
| W2E | 4+20N | 649757 | 5420669 | 363 | 4 | 2 | 4 | 2 |
| W2E | 4+40N | 649748 | 5420688 | 363 | 4 | 0 | 2 | 0 |
| W2E | 4+60N | 649740 | 5420704 | 362 | 4 | 2 | 4 | 2 |
| W2E | 4+80N | 649729 | 5420724 | 364 | 0 | 4 | 4 | 2 |
| W2E | 5+00N | 649721 | 5420742 | 363 | -2 | 2 | 4 | 2 |
| W2E | 5+20N | 649707 | 5420759 | 362 | -4 | 2 | -2 | 2 |
| W2E | 5+40N | 649697 | 5420775 | 362 | -4 | 4 | -6 | 4 |
| W2E | 5+60N | 649686 | 5420791 | 361 | -4 | 4 | -6 | 4 |
| W2E | 5+80N | 649676 | 5420808 | 361 | -2 | 2 | -4 | 2 |
| W2E | 6+00N | 649666 | 5420821 | 362 | 2 | 2 | 4 | 2 |
| W2E | 6+20N | 649657 | 5420836 | 361 | 4 | 0 | 4 | 2 |
| W2E | 6+40N | 649647 | 5420855 | 361 | 4 | 0 | 4 | 2 |
| W2E | 6+60N | 649635 | 5420874 | 362 | 4 | 2 | 6 | 2 |
| W2E | 6+80N | 649626 | 5420893 | 362 | 4 | 4 | 8 | 4 |
| W2E | 7+00N | 649615 | 5420909 | 359 | 6 | 6 | 6 | 4 |
| W2E | $7+20 \mathrm{~N}$ | 649607 | 5420927 | 358 | 6 | 6 | 6 | 4 |
| W2E | 7+40N | 649594 | 5420946 | 358 | 6 | 8 | 6 | 6 |
| W2E | $7+60 \mathrm{~N}$ | 649582 | 5420961 | 358 | 8 | 8 | 8 | 6 |
| W2E | 7+80N | 649576 | 5420979 | 358 | 10 | 10 | 6 | 8 |
| W2E | 8+00N | 649564 | 5420995 | 356 | 2 | 14 | 2 | 18 |
| W2E | $8+20 \mathrm{~N}$ | 649557 | 5421014 | 356 | -6 | 16 | -4 | 20 |
| W2E | $8+40 \mathrm{~N}$ | 649548 | 5421033 | 356 | -12 | 18 | -14 | 22 |
| W2E | $8+60 \mathrm{~N}$ | 649535 | 5421050 | 358 | -18 | 22 | -20 | 24 |
| W2E | 8+80N | 649525 | 5421070 | 358 | -30 | 20 | -28 | 20 |
| W2E | $9+00 \mathrm{~N}$ | 649514 | 5421090 | 360 | -50 | 16 | -52 | 16 |
| W2E | $9+20 \mathrm{~N}$ | 649505 | 5421106 | 360 | -46 | 14 | -44 | 8 |
| W2E | $9+40 \mathrm{~N}$ | 649498 | 5421123 | 360 | -40 | 12 | -42 | 14 |
| W2E | $9+60 \mathrm{~N}$ | 649486 | 5421135 | 363 | -30 | 10 | -32 | 16 |
| W2E | 9+80N | 649476 | 5421152 | 366 | -18 | 10 | -22 | 16 |
| W2E | 10+00N | 649465 | 5421170 | 372 | -10 | 8 | -12 | 14 |
| W2E | 10+20N | 649455 | 5421185 | 376 | -4 | 8 | -6 | 8 |
| W2E | 10+40N | 649444 | 5421202 | 378 | -4 | 8 | -6 | 8 |
| W2E | 10+60N | 649436 | 5421218 | 380 | -4 | 8 | -2 | 8 |


| W2E | 10+80N | 649425 | 5421233 | 382 | 6 | 8 | 6 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| W2E | 11+00N | 649416 | 5421254 | 382 | 14 | 12 | 20 | 18 |
| W2E | 11+20N | 649406 | 5421273 | 382 | 30 | 16 | 34 | 22 |
| W2E | 11+40N | 649396 | 5421291 | 382 | 30 | 16 | 34 | 18 |
| W2E | 11+60N | 649385 | 5421305 | 383 | 32 | 18 | 36 | 16 |
| W2E | 11+80N | 649376 | 5421321 | 386 | 40 | 20 | 44 | 22 |
| W2E | 12+00N | 649364 | 5421337 | 388 | 40 | 20 | 42 | 22 |
| W2E | 12+20N | 649357 | 5421355 | 392 | -2 | -10 | -4 | -6 |
| W2E | 12+40N | 649346 | 5421374 | 394 | -2 | -6 | -4 | -4 |
| W2E | 12+60N | 649336 | 5421389 | 394 | 8 | -6 | 8 | -6 |
| W2E | $12+80 \mathrm{~N}$ | 649330 | 5421406 | 395 | 4 | -8 | 8 | -6 |
| W2E | 13+00N | 649316 | 5421425 | 395 | 4 | -10 | 10 | -8 |
| W2E | 13+20N | 649306 | 5421443 | 392 | 10 | -12 | 12 | -12 |
| W2E | $13+40 \mathrm{~N}$ | 649298 | 5421465 | 388 | 10 | -12 | 12 | -14 |
| W2E | $13+60 \mathrm{~N}$ | 649288 | 5421481 | 383 | 20 | -14 | 22 | -16 |
| W2E | 13+80N | 649276 | 5421502 | 382 | 24 | -20 | 26 | -20 |
| W2E | 14+00N | 649269 | 5421519 | 374 | 26 | -22 | 28 | -24 |
| W2E | 14+20N | 649259 | 5421536 | 370 | 26 | -26 | 28 | -26 |
| W2E | 14+40N | 649247 | 5421548 | 363 | 30 | -26 | 32 | -28 |
| W2E | 14+60N | 649241 | 5421567 | 355 | 40 | -24 | 42 | -26 |
| W2E | 14+80N | 649228 | 5421586 | 355 | 60 | -20 | 62 | -22 |
| W2E | 15+00N | 649217 | 5421603 | 354 | 48 | -20 | 46 | -22 |
| W2E | 15+20N | 649207 | 5421620 | 352 | 16 | -16 | 18 | -18 |
| W2E | 15+40N | 649201 | 5421639 | 356 | 10 | -8 | 12 | -10 |
| W2E | 15+60N | 649190 | 5421653 | 354 | -2 | -2 | 2 | -2 |
| W2E | 15+80N | 649178 | 5421673 | 355 | -10 | 10 | -8 | 10 |
| W2E | 16+00N | 649168 | 5421689 | 355 | -20 | 12 | -20 | 14 |
| W2E | 16+20N | 649161 | 5421708 | 355 | -34 | 14 | -36 | 16 |
| W2E | 16+40N | 649154 | 5421725 | 355 | -60 | 12 | -62 | 14 |
| W2E | 16+60N | 649143 | 5421748 | 355 | -80 | 10 | -82 | 14 |
| W2E | 16+80N | 649137 | 5421765 | 356 | -58 | 10 | -60 | 12 |
| W2E | 17+00N | 649127 | 5421775 | 358 | -40 | 12 | -42 | 10 |
| W2E | 17+20N | 649118 | 5421789 | 358 | -32 | 12 | -30 | 12 |
| W2E | 17+40N | 649110 | 5421804 | 360 | -28 | 10 | -30 | 10 |
| W2E | 17+60N | 649098 | 5421823 | 360 | -30 | 10 | -30 | 12 |
| W2E | 17+80N | 649086 | 5421842 | 361 | -30 | 8 | -28 | 10 |
| W2E | $18+00 \mathrm{~N}$ | 649077 | 5421860 | 363 | -26 | 12 | -24 | 10 |
| W2E | $18+20 \mathrm{~N}$ | 649064 | 5421877 | 363 | -14 | 16 | -12 | 8 |
| W2E | $18+40 \mathrm{~N}$ | 649052 | 5421894 | 364 | -4 | 8 | -6 | 6 |
| W2E | $18+60 \mathrm{~N}$ | 649039 | 5421916 | 363 | -4 | 8 | -6 | 6 |
| W2E | 18+80N | 649028 | 5421935 | 364 | -20 | 8 | -18 | 6 |
| W2E | 19+00N | 649017 | 5421954 | 363 | -22 | 8 | -20 | 6 |
| W2E | 19+20N | 649008 | 5421972 | 364 | -24 | 12 | -22 | 14 |
| W2E | 19+40N | 648997 | 5421991 | 364 | -28 | 16 | -26 | 16 |
| W2E | 19+60N | 648984 | 5422012 | 363 | -28 | 14 | -24 | 16 |


| W2E | 19+80N | 648974 | 5422030 | 365 | -28 | 14 | -28 | 18 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| W4E | 2+60N | 650006 | 5420635 | 355 | 4 | -2 | 4 | -4 |
| W4E | 2+80N | 649997 | 5420648 | 355 | 2 | 0 | 2 | -2 |
| W4E | $3+00 \mathrm{~N}$ | 649988 | 5420666 | 357 | -2 | 0 | 2 | 0 |
| W4E | 3+20N | 649983 | 5420685 | 357 | 0 | 2 | -2 | 2 |
| W4E | 3+40N | 649975 | 5420701 | 357 | 0 | 2 | -2 | 0 |
| W4E | 3+60N | 649960 | 5420716 | 357 | 0 | 2 | 2 | -2 |
| W4E | 3+80N | 649951 | 5420732 | 355 | 2 | 0 | 2 | -2 |
| W4E | 4+00N | 649943 | 5420754 | 355 | 2 | -2 | 2 | 0 |
| W4E | 4+20N | 649931 | 5420767 | 354 | 0 | -2 | 0 | 0 |
| W4E | 4+40N | 649915 | 5420784 | 354 | 0 | -2 | 0 | -2 |
| W4E | 4+60N | 649907 | 5420802 | 353 | 0 | -2 | 0 | -2 |
| W4E | 4+80N | 649900 | 5420819 | 354 | 2 | -2 | 2 | -2 |
| W4E | 5+00N | 649895 | 5420837 | 354 | 4 | -2 | 2 | -2 |
| W4E | $5+20 \mathrm{~N}$ | 649884 | 5420860 | 351 | 4 | -2 | 4 | -4 |
| W4E | $5+40 \mathrm{~N}$ | 649874 | 5420877 | 351 | 4 | 0 | 4 | -2 |
| W4E | $5+60 \mathrm{~N}$ | 649863 | 5420890 | 352 | 4 | 2 | 4 | 0 |
| W4E | 5+80N | 649851 | 5420909 | 353 | 4 | 2 | 4 | 4 |
| W4E | 6+00N | 649843 | 5420928 | 354 | 6 | 2 | 4 | 4 |
| W4E | 6+20N | 649832 | 5420945 | 351 | 4 | 2 | 4 | 4 |
| W4E | 6+40N | 649822 | 5420959 | 352 | 4 | 0 | 4 | 4 |
| W4E | 6+60N | 649807 | 5420974 | 350 | 4 | 0 | 4 | 4 |
| W4E | 6+80N | 649800 | 5420995 | 351 | 4 | 2 | 4 | 4 |
| W4E | 7+00N | 649788 | 5421012 | 351 | 4 | 4 | 6 | 4 |
| W4E | 7+20N | 649784 | 5421033 | 351 | 4 | 4 | 6 | 2 |
| W4E | 7+40N | 649779 | 5421051 | 351 | 4 | 4 | 4 | 2 |
| W4E | 7+60N | 649766 | 5421067 | 350 | 4 | 6 | 6 | 4 |
| W4E | 7+80N | 649759 | 5421085 | 350 | 6 | 6 | 6 | 6 |
| W4E | 8+00N | 649751 | 5421103 | 350 | 6 | 8 | 6 | 6 |
| W4E | 8+20N | 649733 | 5421121 | 348 | 4 | 12 | 2 | 10 |
| W4E | 8+40N | 649722 | 5421132 | 349 | -2 | 14 | -4 | 14 |
| W4E | 8+60N | 649710 | 5421149 | 347 | -10 | 14 | -12 | 20 |
| W4E | 8+80N | 649695 | 5421167 | 350 | -20 | 16 | -22 | 20 |
| W4E | $9+00 \mathrm{~N}$ | 649688 | 5421183 | 349 | -28 | 18 | -26 | 20 |
| W4E | $9+20 \mathrm{~N}$ | 649681 | 5421202 | 348 | -32 | 10 | -36 | 12 |
| W4E | 9+40N | 649666 | 5421218 | 350 | -60 | 4 | -58 | 2 |
| W4E | 9+60N | 649663 | 5421235 | 349 | -64 | -8 | -60 | 0 |
| W4E | 9+80N | 649652 | 5421251 | 354 | -60 | -10 | -58 | -12 |
| W4E | 10+00N | 649641 | 5421269 | 361 | -34 | -4 | -36 | -4 |
| W4E | 10+20N | 649630 | 5421285 | 367 | -20 | 0 | -22 | 2 |
| W4E | 10+40N | 649620 | 5421301 | 372 | -10 | 0 | -14 | 2 |
| W4E | 10+60N | 649610 | 5421319 | 374 | -4 | 0 | -2 | 2 |
| W4E | 10+80N | 649601 | 5421336 | 378 | 2 | 2 | 0 | 2 |
| W4E | 11+00N | 649592 | 5421355 | 382 | 6 | 2 | 4 | 2 |
| W4E | $11+20 \mathrm{~N}$ | 649582 | 5421371 | 375 | 24 | 8 | 22 | 6 |


| W4E | $11+40 N$ | 649572 | 5421388 | 376 | 50 | 8 | 52 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| W4E | $11+60 N$ | 649559 | 5421405 | 384 | 44 | 10 | 44 | 10 |
| W4E | $11+80 N$ | 649555 | 5421425 | 384 | 36 | 8 | 38 | 8 |
| W4E | $12+00 N$ | 649546 | 5421446 | 389 | 28 | 4 | 26 | 6 |
| W4E | $12+20 N$ | 649543 | 5421464 | 391 | 18 | -6 | 16 | 0 |
| W4E | $12+40 N$ | 649537 | 5421488 | 384 | 6 | -14 | 8 | -12 |
| W4E | $12+60 N$ | 649526 | 5421501 | 381 | 6 | -16 | 4 | -16 |
| W4E | $12+80 N$ | 649511 | 5421517 | 384 | 12 | -16 | 14 | -18 |
| W4E | $13+00 N$ | 649495 | 5421536 | 387 | 24 | -18 | 26 | -20 |
| W4E | $13+20 N$ | 649484 | 5421551 | 387 | 24 | -16 | 26 | -20 |
| W4E | $13+40 N$ | 649475 | 5421567 | 385 | 26 | -20 | 28 | -20 |
| W4E | $13+60 N$ | 649468 | 5421585 | 382 | 26 | -20 | 30 | -22 |
| W4E | $13+80 N$ | 649457 | 5421599 | 378 | 26 | -24 | 36 | -26 |
| W4E | $14+00 N$ | 649447 | 5421614 | 373 | 46 | -24 | 46 | -26 |
| W4E | $14+20 N$ | 649432 | 5421631 | 370 | 50 | -24 | 52 | -26 |
| W4E | $14+40 N$ | 649422 | 5421652 | 358 | 70 | -26 | 72 | -24 |
| W4E | $14+60 N$ | 649411 | 5421670 | 355 | 68 | -24 | 70 | -23 |
| W4E | $14+80 N$ | 649398 | 5421687 | 353 | 66 | -24 | 68 | -26 |
| W4E | $15+00 N$ | 649388 | 5421706 | 353 | 60 | -24 | 62 | -26 |
| W4E | $15+20 N$ | 649378 | 5421723 | 353 | 56 | -24 | 58 | -26 |
| W4E | $15+40 N$ | 649368 | 5421741 | 353 | 40 | -20 | 42 | -22 |
| W4E | $15+60 N$ | 649358 | 5421757 | 355 | 16 | 10 | 14 | 10 |
| W4E | $15+80 N$ | 649347 | 5421775 | 355 | -2 | 10 | 0 | 10 |
| W4E | $16+00 N$ | 649340 | 5421794 | 356 | -12 | 12 | -10 | 12 |
| W4E | $16+20 N$ | 649333 | 5421811 | 356 | -26 | 18 | -26 | 20 |
| W4E | $16+40 N$ | 649327 | 5421832 | 356 | -60 | 18 | -62 | 20 |
| W4E | $16+60 N$ | 649316 | 5421850 | 355 | -80 | 18 | -82 | 20 |
| W4E | $16+80 N$ | 649304 | 5421871 | 361 | -54 | 18 | -56 | 20 |
| W4E | $17+00 N$ | 649295 | 5421885 | 364 | -44 | 20 | -46 | 20 |
| W4E | $17+20 N$ | 649290 | 5421900 | 367 | -26 | 18 | -24 | 20 |
| W4E | $17+40 N$ | 649276 | 5421917 | 367 | -24 | 18 | -22 | 16 |
| W4E | $17+60 N$ | 649264 | 5421930 | 369 | -24 | 14 | -22 | 14 |
| W4E | $17+80 N$ | 649253 | 5421947 | 364 | -20 | 14 | -18 | 14 |
| W4E | $18+00 N$ | 649242 | 5421966 | 363 | -14 | 12 | -12 | 12 |
| W4E | $18+20 N$ | 649232 | 5421984 | 363 | -10 | 12 | -10 | 12 |
| W4E | $18+40 N$ | 649225 | 5422001 | 363 | -8 | 12 | -10 | 12 |
| W4E | $18+60 N$ | 649215 | 5422021 | 365 | -12 | 10 | -14 | 12 |
| W4E | $18+80 N$ | 649203 | 5422037 | 366 | -20 | 6 | -22 | 8 |
| W4E | $19+00 N$ | 649192 | 5422054 | 368 | -16 | 8 | -14 | 10 |
| W4E | $19+20 N$ | 649181 | 5422071 | 370 | -14 | 10 | -12 | 12 |
| $19+40 N$ | 649170 | 5422087 | 370 | -16 | 10 | -14 | 12 |  |
| $19+60 N$ | 649159 | 5422105 | 372 | -18 | 12 | -16 | 12 |  |
| $19+80 N$ | 649147 | 5422124 | 374 | -20 | 14 | -20 | 14 |  |
| $2+60 N$ | 650176 | 5420742 | 354 | 2 | -2 | 2 | 0 |  |
| $2+80 N$ | 650167 | 5420756 | 354 | 4 | -2 | 2 | -2 |  |


| W6E | 3+00N | 650157 | 5420772 | 353 | 2 | 2 | 2 | -2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| W6E | 3+20N | 650149 | 5420787 | 354 | 2 | 2 | 2 | 0 |
| W6E | 3+40N | 650141 | 5420802 | 343 | 2 | 4 | 2 | 0 |
| W6E | 3+60N | 650132 | 5420818 | 353 | 2 | 4 | 2 | 2 |
| W6E | 3+80N | 650119 | 5420834 | 354 | 2 | 2 | 2 | 2 |
| W6E | 4+00N | 650108 | 5420853 | 354 | 2 | 0 | 2 | 4 |
| W6E | 4+20N | 650097 | 5420871 | 354 | 4 | 2 | 2 | 4 |
| W6E | 4+40N | 650087 | 5420888 | 354 | 4 | 2 | -2 | 2 |
| W6E | 4+60N | 650078 | 5420903 | 354 | 4 | 2 | -2 | 0 |
| W6E | 4+80N | 650068 | 5420921 | 353 | 4 | -2 | 0 | -2 |
| W6E | 5+00N | 650058 | 5420939 | 353 | 4 | 0 | 2 | 2 |
| W6E | 5+20N | 650049 | 5420953 | 354 | 4 | 0 | 2 | 2 |
| W6E | $5+40 \mathrm{~N}$ | 650041 | 5420968 | 353 | 4 | 2 | 4 | 4 |
| W6E | 5+60N | 650031 | 5420989 | 353 | 2 | 2 | 2 | 2 |
| W6E | $5+80 \mathrm{~N}$ | 650024 | 5421008 | 354 | 2 | 2 | 2 | -2 |
| W6E | 6+00N | 650016 | 5421029 | 353 | 2 | 0 | 2 | 0 |
| W6E | 6+20N | 650001 | 5421043 | 353 | 2 | -2 | 2 | 0 |
| W6E | 6+40N | 649989 | 5421057 | 354 | 2 | -4 | 4 | -2 |
| W6E | 6+60N | 649982 | 5421078 | 355 | 4 | -4 | 4 | -2 |
| W6E | 6+80N | 649973 | 5421096 | 355 | 4 | -4 | 4 | -2 |
| W6E | 7+00N | 649966 | 5421115 | 353 | 6 | -4 | 8 | -6 |
| W6E | 7+20N | 649957 | 5421128 | 353 | 4 | -4 | 6 | -4 |
| W6E | 7+40N | 649942 | 5421146 | 354 | 4 | -4 | 4 | -2 |
| W6E | 7+60N | 649935 | 5421162 | 353 | 4 | -2 | 4 | 0 |
| W6E | 7+80N | 649923 | 5421180 | 352 | 4 | -2 | 4 | 0 |
| W6E | 8+00N | 649910 | 5421195 | 353 | 4 | -2 | 6 | 2 |
| W6E | 8+20N | 649903 | 5421212 | 354 | 4 | 2 | 4 | 4 |
| W6E | 8+40N | 649890 | 5421230 | 353 | 2 | 4 | 4 | 4 |
| W6E | 8+60N | 649881 | 5421249 | 353 | 2 | 6 | 4 | 6 |
| W6E | 8+80N | 649869 | 5421265 | 353 | 2 | 10 | 4 | 10 |
| W6E | $9+00 \mathrm{~N}$ | 649859 | 5421283 | 354 | 2 | 10 | 0 | 12 |
| W6E | $9+20 \mathrm{~N}$ | 649849 | 5421300 | 351 | -4 | 16 | -4 | 14 |
| W6E | 9+40N | 649839 | 5421317 | 352 | -8 | 18 | -10 | 16 |
| W6E | 9+60N | 649831 | 5421333 | 352 | -20 | 18 | -18 | 20 |
| W6E | 9+80N | 649824 | 5421347 | 352 | -26 | 14 | -24 | 16 |
| W6E | 10+00N | 649814 | 5421367 | 351 | -38 | 10 | -40 | 12 |
| W6E | 10+20N | 649801 | 5421390 | 353 | -30 | 4 | -32 | 6 |
| W6E | 10+40N | 649791 | 5421410 | 367 | -16 | 0 | -24 | 6 |
| W6E | 10+60N | 649781 | 5421423 | 373 | -8 | 4 | -10 | 6 |
| W6E | 10+80N | 649771 | 5421437 | 378 | 2 | 8 | -8 | 6 |
| W6E | 11+00N | 649758 | 5421454 | 382 | 4 | 10 | 8 | 6 |
| W6E | $11+20 \mathrm{~N}$ | 649751 | 5421474 | 384 | 10 | 10 | 10 | 8 |
| W6E | 11+40N | 649740 | 5421492 | 384 | 14 | 10 | 12 | 10 |
| W6E | $11+60 \mathrm{~N}$ | 649729 | 5421510 | 383 | 16 | 8 | 18 | 8 |
| W6E | 11+80N | 649716 | 5421525 | 382 | 22 | 8 | 26 | 6 |


| W6E | 12+00N | 649702 | 5421545 | 383 | 28 | 10 | 30 | 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| W6E | $12+20 \mathrm{~N}$ | 649694 | 5421563 | 384 | 22 | -2 | 26 | -8 |
| W6E | $12+40 \mathrm{~N}$ | 649684 | 5421576 | 382 | 18 | -6 | 20 | -8 |
| W6E | $12+60 \mathrm{~N}$ | 649676 | 5421593 | 382 | 24 | -2 | 22 | 0 |
| W6E | $12+80 \mathrm{~N}$ | 649665 | 5421608 | 381 | 24 | -6 | 22 | -8 |
| W6E | $13+00 \mathrm{~N}$ | 649653 | 5421624 | 384 | 26 | -10 | 24 | -12 |
| W6E | $13+20 \mathrm{~N}$ | 649639 | 5421641 | 380 | 30 | -10 | 26 | -12 |
| W6E | $13+40 \mathrm{~N}$ | 649629 | 5421660 | 378 | 32 | -12 | 32 | -14 |
| W6E | $13+60 \mathrm{~N}$ | 649627 | 5421679 | 374 | 42 | -14 | 44 | -16 |
| W6E | $13+80 \mathrm{~N}$ | 649623 | 5421699 | 368 | 54 | -8 | 52 | -10 |
| W6E | 14+00N | 649620 | 5421718 | 363 | 68 | -4 | 66 | -6 |
| W6E | $14+20 \mathrm{~N}$ | 649610 | 5421739 | 362 | 60 | -10 | 62 | -12 |
| W6E | $14+40 \mathrm{~N}$ | 649604 | 5421751 | 357 | 50 | -12 | 56 | -14 |
| W6E | $14+60 \mathrm{~N}$ | 649600 | 5421771 | 358 | 36 | -14 | 38 | -16 |
| W6E | $14+80 \mathrm{~N}$ | 649591 | 5421790 | 357 | 28 | -16 | 26 | -16 |
| W6E | $15+00 \mathrm{~N}$ | 649581 | 5421809 | 358 | 18 | -20 | 18 | -20 |
| W6E | 15+20N | 649571 | 5421827 | 359 | 24 | -28 | 26 | -30 |
| W6E | 15+40N | 649561 | 5421845 | 358 | 40 | -28 | 42 | -30 |
| W6E | $15+60 \mathrm{~N}$ | 649551 | 5421861 | 358 | 40 | -22 | 42 | -24 |
| W6E | $15+80 \mathrm{~N}$ | 649540 | 5421879 | 358 | 14 | -8 | 16 | -8 |
| W6E | 16+00N | 649529 | 5421895 | 359 | -12 | 8 | -10 | 8 |
| W6E | 16+20N | 649518 | 5421912 | 358 | -24 | 18 | -20 | 16 |
| W6E | $16+40 \mathrm{~N}$ | 649507 | 5421929 | 358 | -38 | 18 | -40 | 20 |
| W6E | $16+60 \mathrm{~N}$ | 649498 | 5421946 | 356 | -58 | 18 | -60 | 20 |
| W6E | $16+80 \mathrm{~N}$ | 649487 | 5421965 | 357 | -70 | 16 | -72 | 20 |
| W6E | 17+00N | 649476 | 5421981 | 360 | -80 | 16 | -82 | 20 |
| W6E | 17+20N | 649460 | 5421994 | 364 | -50 | 18 | -52 | 20 |
| W6E | 17+40N | 649450 | 5422011 | 368 | -40 | 24 | -42 | 22 |
| W6E | 17+60N | 649442 | 5422022 | 368 | -26 | 22 | -24 | 22 |
| W6E | 17+80N | 649428 | 5422038 | 372 | -24 | 20 | -24 | 22 |
| W6E | 18+00N | 649415 | 5422055 | 376 | -22 | 20 | -24 | 22 |
| W6E | $18+20 \mathrm{~N}$ | 649409 | 5422075 | 374 | -18 | 16 | -16 | 18 |
| W6E | $18+40 \mathrm{~N}$ | 649402 | 5422094 | 374 | -14 | 14 | -16 | 14 |
| W6E | $18+60 \mathrm{~N}$ | 649393 | 5422112 | 370 | -8 | 10 | -8 | 12 |
| W6E | $18+80 \mathrm{~N}$ | 649386 | 5422132 | 369 | -6 | 12 | -6 | 10 |
| W6E | 19+00N | 649379 | 5422151 | 368 | -6 | 14 | -8 | 12 |
| W6E | 19+20N | 649369 | 5422169 | 368 | -10 | 16 | -10 | 14 |
| W6E | 19+40N | 649358 | 5422189 | 370 | -12 | 18 | -12 | 14 |
| W6E | 19+60N | 649348 | 5422208 | 372 | -14 | 18 | -14 | 16 |
| W6E | 19+80N | 649340 | 5422225 | 372 | -16 | 20 | -16 | 18 |
|  |  |  |  |  |  |  |  |  |
| M00 | $3+00 \mathrm{~N}$ | 651240 | 5421907 | 365 | -2 | 2 | -2 | 2 |
| M00 | $3+20 \mathrm{~N}$ | 651228 | 5421926 | 365 | 0 | 0 | 0 | -2 |
| M00 | $3+40 \mathrm{~N}$ | 651217 | 5421947 | 365 | 2 | 0 | 2 | -4 |
| M00 | $3+60 \mathrm{~N}$ | 651204 | 5421968 | 364 | 4 | -2 | 2 | -6 |


| M00 | 3+80N | 651193 | 5421988 | 364 | 6 | -8 | 4 | -8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| M00 | 4+00N | 651182 | 5422010 | 365 | 8 | -12 | 6 | -10 |
| M00 | $4+20 \mathrm{~N}$ | 651170 | 5422031 | 364 | 8 | -10 | 8 | -8 |
| M00 | 4+40N | 651160 | 5422047 | 365 | 6 | -8 | 6 | -6 |
| M00 | 4+60N | 651151 | 5422065 | 365 | 4 | -6 | 4 | -4 |
| M00 | 4+80N | 651138 | 5422081 | 366 | 4 | -6 | 4 | -4 |
| M00 | $5+00 \mathrm{~N}$ | 651129 | 5422102 | 366 | 6 | -6 | 4 | -4 |
| M00 | $5+20 \mathrm{~N}$ | 651122 | 5422119 | 365 | 2 | -6 | 2 | -4 |
| M00 | $5+40 \mathrm{~N}$ | 651108 | 5422132 | 364 | 2 | -4 | 2 | -4 |
| M00 | $5+60 \mathrm{~N}$ | 651092 | 5422148 | 365 | 4 | -4 | 4 | -4 |
| M00 | $5+80 \mathrm{~N}$ | 651083 | 5422160 | 365 | 4 | -6 | 6 | -4 |
| M00 | 6+00N | 651077 | 5422181 | 366 | 4 | -6 | 6 | -4 |
| M00 | $6+20 \mathrm{~N}$ | 651065 | 5422201 | 367 | 8 | -6 | 8 | -4 |
| M00 | $6+40 \mathrm{~N}$ | 651054 | 5422217 | 368 | 12 | -8 | 12 | -6 |
| M00 | 6+60N | 651040 | 5422230 | 369 | 14 | -8 | 16 | -8 |
| M00 | 6+80N | 651022 | 5422245 | 369 | 12 | -8 | 10 | -6 |
| M00 | 7+00N | 651012 | 5422267 | 370 | 8 | -4 | 10 | -4 |
| M00 | 7+20N | 651009 | 5422285 | 370 | -2 | 2 | -4 | 2 |
| M00 | 7+40N | 651000 | 5422304 | 370 | -8 | 4 | -6 | 4 |
| M00 | 7+60N | 650991 | 5422321 | 372 | -10 | 10 | -8 | 8 |
| M00 | $7+80 \mathrm{~N}$ | 650977 | 5422338 | 370 | -10 | 10 | -10 | 10 |
| M00 | 8+00N | 650968 | 5422357 | 372 | -12 | 10 | -10 | 12 |
| M00 | $8+20 \mathrm{~N}$ | 650957 | 5422374 | 371 | -10 | 10 | -16 | 10 |
| M00 | $8+40 \mathrm{~N}$ | 650944 | 5422384 | 373 | -10 | 8 | -16 | 10 |
| M00 | $8+60 \mathrm{~N}$ | 650933 | 5422406 | 375 | -10 | 8 | -14 | 10 |
| M00 | 8+80N | 650923 | 5422421 | 376 | -10 | 6 | -8 | 6 |
| M00 | $9+00 \mathrm{~N}$ | 650918 | 5422436 | 376 | -10 | 6 | -6 | 6 |
| M00 | $9+20 \mathrm{~N}$ | 650911 | 5422452 | 377 | -4 | 4 | -2 | 6 |
| M00 | $9+40 \mathrm{~N}$ | 650902 | 5422472 | 377 | 6 | 2 | 6 | 6 |
| M00 | $9+60 \mathrm{~N}$ | 650890 | 5422497 | 377 | 8 | 0 | 4 | 2 |
| M00 | $9+80 \mathrm{~N}$ | 650876 | 5422518 | 377 | 8 | -2 | 4 | 0 |
| M00 | 10+00N | 650866 | 5422537 | 377 | 8 | -4 | 4 | -4 |
| M00 | 10+20N | 650860 | 5422556 | 377 | 8 | -6 | 4 | -4 |
| M00 | 10+40N | 650850 | 5422570 | 377 | 10 | -8 | 4 | -4 |
| M00 | 10+60N | 650842 | 5422581 | 375 | 6 | -8 | 4 | -4 |
| M00 | 10+80N | 650828 | 5422605 | 376 | -2 | -8 | -6 | -4 |
| M00 | 11+00N | 650817 | 5422621 | 378 | 0 | -12 | -2 | -10 |
| M00 | 11+20N | 650810 | 5422635 | 379 | 12 | -10 | 14 | -8 |
| M00 | 11+40N | 650799 | 5422650 | 379 | 24 | -10 | 26 | -8 |
| M00 | $11+60 \mathrm{~N}$ | 650787 | 5422665 | 378 | 32 | -10 | 30 | -10 |
| M00 | 11+80N | 650777 | 5422682 | 378 | 32 | -16 | 34 | -18 |
| M00 | $12+00 \mathrm{~N}$ | 650765 | 5422700 | 378 | 30 | -16 | 28 | -18 |
| M00 | $12+20 \mathrm{~N}$ | 650757 | 5422717 | 377 | 30 | -20 | 28 | -18 |
| M00 | $12+40 \mathrm{~N}$ | 650744 | 5422734 | 378 | 30 | -20 | 28 | -18 |
| M00 | $12+60 \mathrm{~N}$ | 650731 | 5422752 | 378 | 40 | -20 | 42 | -20 |


| M00 | 12+80N | 650722 | 5422778 | 372 | 50 | -18 | 50 | -20 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| M00 | 13+00N | 650716 | 5422796 | 364 | 64 | -18 | 70 | -20 |
| M00 | $13+20 \mathrm{~N}$ | 650710 | 5422812 | 360 | 54 | -20 | 56 | -22 |
| M00 | $13+40 \mathrm{~N}$ | 650705 | 5422829 | 358 | 26 | -20 | 28 | -22 |
| M00 | $13+60 \mathrm{~N}$ | 650695 | 5422846 | 360 | 20 | -20 | 20 | -22 |
| M00 | $13+80 \mathrm{~N}$ | 650688 | 5422865 | 362 | 14 | -20 | 20 | -20 |
| M00 | 14+00N | 650683 | 5422885 | 360 | 6 | -14 | 6 | -12 |
| M00 | $14+20 \mathrm{~N}$ | 650676 | 5422907 | 361 | 6 | -8 | 6 | -10 |
| M00 | $14+40 \mathrm{~N}$ | 650669 | 5422923 | 360 | 4 | -8 | 4 | -8 |
| M00 | $14+60 \mathrm{~N}$ | 650659 | 5422940 | 360 | 4 | -2 | 4 | -4 |
| M00 | $14+80 \mathrm{~N}$ | 650652 | 5422959 | 361 | 4 | 4 | 2 | 2 |
| M00 | $15+00 \mathrm{~N}$ | 650646 | 5422978 | 360 | 0 | 8 | 2 | 8 |
| M00 | $15+20 \mathrm{~N}$ | 650634 | 5422995 | 359 | -4 | 14 | -4 | 16 |
| M00 | 15+40N | 650629 | 5423014 | 360 | -14 | 20 | -12 | 20 |
| M00 | $15+60 \mathrm{~N}$ | 650617 | 5423030 | 361 | -30 | 22 | -28 | 22 |
| M00 | $15+80 \mathrm{~N}$ | 650597 | 5423042 | 361 | -60 | 18 | -64 | 20 |
| M00 | $16+00 \mathrm{~N}$ | 650586 | 5423058 | 362 | -70 | 10 | -68 | 10 |
| M00 | $16+20 \mathrm{~N}$ | 650569 | 5423065 | 360 | -80 | -8 | -78 | -12 |
| M00 | $16+40 \mathrm{~N}$ | 650555 | 5423079 | 361 | -100 | -10 | -98 | -12 |
| M00 | $16+60 \mathrm{~N}$ | 650543 | 5423101 | 375 | -50 | 6 | -50 | 10 |
| M00 | $16+80 \mathrm{~N}$ | 650533 | 5423119 | 379 | -34 | 8 | -26 | 10 |
| M00 | 17+00N | 650519 | 5423136 | 380 | -28 | 8 | -24 | 10 |
| M00 | 17+20N | 650512 | 5423155 | 380 | -20 | 12 | -14 | 12 |
| M00 | $17+40 \mathrm{~N}$ | 650500 | 5423175 | 380 | -10 | 10 | -8 | 12 |
| M00 | $17+60 \mathrm{~N}$ | 650489 | 5423194 | 380 | 2 | 6 | 2 | 12 |
| M00 | $17+80 \mathrm{~N}$ | 650479 | 5423213 | 382 | 6 | 6 | 8 | 10 |
| M00 | 18+00N | 650468 | 5423232 | 382 | 6 | 4 | 10 | 8 |
| M2E | 2+80N | 651408 | 5422016 | 364 | -4 | -4 | -2 | -4 |
| M2E | $3+00 \mathrm{~N}$ | 651401 | 5422028 | 364 | -4 | -4 | 0 | -2 |
| M2E | $3+20 \mathrm{~N}$ | 651388 | 5422041 | 365 | 2 | -4 | 4 | -2 |
| M2E | $3+40 \mathrm{~N}$ | 651379 | 5422058 | 365 | 4 | -4 | 6 | -4 |
| M2E | $3+60 \mathrm{~N}$ | 651369 | 5422078 | 364 | 4 | -4 | 6 | -6 |
| M2E | $3+80 \mathrm{~N}$ | 651363 | 5422096 | 364 | 4 | -4 | 6 | -4 |
| M2E | 4+00N | 651354 | 5422113 | 364 | 4 | -4 | 4 | -2 |
| M2E | 4+20N | 651341 | 5422131 | 364 | 4 | -2 | 4 | -4 |
| M2E | 4+40N | 651333 | 5422153 | 364 | 4 | -2 | 4 | -4 |
| M2E | 4+60N | 651319 | 5422169 | 363 | 4 | -2 | 6 | -4 |
| M2E | 4+80N | 651310 | 5422190 | 364 | 6 | -2 | 6 | -4 |
| M2E | 5+00N | 651297 | 5422209 | 364 | 6 | -2 | 4 | -4 |
| M2E | $5+20 \mathrm{~N}$ | 651288 | 5422223 | 366 | 6 | -2 | 4 | -4 |
| M2E | 5+40N | 651281 | 5422238 | 366 | 8 | -2 | 6 | -4 |
| M2E | 5+60N | 651275 | 5422251 | 366 | 14 | -2 | 12 | -4 |
| M2E | $5+80 \mathrm{~N}$ | 651262 | 5422269 | 368 | 10 | -2 | 10 | -4 |
| M2E | 6+00N | 651251 | 5422287 | 370 | 4 | 0 | 4 | 0 |
| M2E | 6+20N | 651243 | 5422303 | 371 | 4 | 0 | 4 | 0 |


| M2E | 6+40N | 651231 | 5422318 | 372 | 4 | 0 | 4 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| M2E | 6+60N | 651221 | 5422337 | 373 | -4 | 2 | -4 | 0 |
| M2E | 6+80N | 651208 | 5422352 | 374 | -4 | 0 | -4 | 0 |
| M2E | 7+00N | 651200 | 5422372 | 374 | -2 | 0 | -2 | 2 |
| M2E | 7+20N | 651189 | 5422390 | 373 | -2 | 0 | -2 | 2 |
| M2E | 7+40N | 651173 | 5422407 | 373 | -2 | 0 | -2 | 2 |
| M2E | 7+60N | 651167 | 5422425 | 372 | -4 | 4 | -6 | 4 |
| M2E | 7+80N | 651156 | 5422444 | 373 | -12 | 6 | -12 | 8 |
| M2E | 8+00N | 651145 | 5422458 | 371 | -12 | 8 | -14 | 10 |
| M2E | 8+20N | 651134 | 5422472 | 376 | -10 | 6 | -14 | 6 |
| M2E | 8+40N | 651126 | 5422490 | 376 | -10 | 4 | -14 | 4 |
| M2E | 8+60N | 651122 | 5422510 | 375 | -8 | 0 | -18 | 0 |
| M2E | 8+80N | 651111 | 5422531 | 377 | 6 | -2 | 6 | -4 |
| M2E | 9+00N | 651103 | 5422554 | 376 | 10 | -4 | 12 | -6 |
| M2E | $9+20 \mathrm{~N}$ | 651096 | 5422565 | 376 | 18 | -4 | 18 | -4 |
| M2E | 9+40N | 651080 | 5422583 | 377 | 26 | -4 | 28 | -6 |
| M2E | 9+60N | 651072 | 5422599 | 376 | 20 | -4 | 22 | -6 |
| M2E | 9+80N | 651061 | 5422618 | 375 | 16 | -8 | 20 | -6 |
| M2E | 10+00N | 651050 | 5422631 | 374 | 6 | -10 | 8 | -8 |
| M2E | 10+20N | 651038 | 5422646 | 375 | 4 | -10 | 4 | -8 |
| M2E | 10+40N | 651030 | 5422664 | 374 | 6 | -10 | -2 | -8 |
| M2E | 10+60N | 651021 | 5422682 | 377 | 10 | -10 | 8 | -8 |
| M2E | 10+80N | 651016 | 5422697 | 376 | 14 | -12 | 16 | -14 |
| M2E | 11+00N | 651002 | 5422718 | 376 | 20 | -14 | 22 | -16 |
| M2E | 11+20N | 650993 | 5422734 | 376 | 20 | -10 | 24 | -12 |
| M2E | 11+40N | 650977 | 5422751 | 375 | 22 | -10 | 24 | -10 |
| M2E | 11+60N | 650967 | 5422771 | 364 | 22 | -16 | 22 | -18 |
| M2E | 11+80N | 650962 | 5422792 | 362 | 24 | -16 | 22 | -16 |
| M2E | $12+00 \mathrm{~N}$ | 650957 | 5422809 | 362 | 20 | -16 | 18 | -14 |
| M2E | $12+20 \mathrm{~N}$ | 650946 | 5422825 | 361 | 10 | -18 | 14 | -12 |
| M2E | $12+40 \mathrm{~N}$ | 650939 | 5422844 | 360 | 6 | -20 | -4 | -12 |
| M2E | $12+60 \mathrm{~N}$ | 650930 | 5422862 | 362 | 10 | -20 | 0 | -16 |
| M2E | $12+80 \mathrm{~N}$ | 650921 | 5422880 | 362 | 20 | -20 | 12 | -18 |
| M2E | 13+00N | 650911 | 5422897 | 362 | 20 | -20 | 18 | -20 |
| M2E | $13+20 \mathrm{~N}$ | 650900 | 5422913 | 361 | 26 | -20 | 18 | -20 |
| M2E | 13+40N | 650892 | 5422929 | 361 | 26 | -20 | 24 | -20 |
| M2E | $13+60 \mathrm{~N}$ | 650882 | 5422944 | 363 | 20 | -20 | 16 | -20 |
| M2E | $13+80 \mathrm{~N}$ | 650871 | 5422961 | 362 | 16 | -18 | 14 | -18 |
| M2E | 14+00N | 650858 | 5422979 | 363 | 8 | -12 | 8 | -14 |
| M2E | $14+20 \mathrm{~N}$ | 650846 | 5422998 | 364 | 0 | -6 | 0 | -8 |
| M2E | 14+40N | 650836 | 5423013 | 364 | -4 | -4 | -4 | -2 |
| M2E | $14+60 \mathrm{~N}$ | 650825 | 5423032 | 361 | -6 | 2 | -6 | 4 |
| M2E | 14+80N | 650814 | 5423049 | 362 | -6 | 4 | -6 | 6 |
| M2E | 15+00N | 650806 | 5423065 | 361 | -6 | 10 | -6 | 8 |
| M2E | 15+20N | 650795 | 5423081 | 362 | -6 | 14 | -6 | 14 |


| M2E | 15+40N | 650784 | 5423099 | 362 | -10 | 16 | -12 | 14 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| M2E | 15+60N | 650775 | 5423116 | 362 | -24 | 20 | -22 | 22 |
| M2E | 15+80N | 650767 | 5423133 | 363 | -40 | 16 | -42 | 18 |
| M2E | $16+00 \mathrm{~N}$ | 650753 | 5423152 | 363 | -70 | 8 | -68 | 12 |
| M2E | $16+20 \mathrm{~N}$ | 650746 | 5423171 | 363 | -70 | 4 | -70 | 6 |
| M2E | $16+40 \mathrm{~N}$ | 650735 | 5423184 | 366 | -64 | 2 | -58 | 8 |
| M2E | $16+60 \mathrm{~N}$ | 650727 | 5423197 | 376 | -50 | 2 | -44 | 10 |
| M2E | $16+80 \mathrm{~N}$ | 650718 | 5423217 | 382 | -30 | 6 | -38 | 14 |
| M2E | $17+00 \mathrm{~N}$ | 650708 | 5423239 | 386 | -20 | 6 | -20 | 14 |
| M2E | $17+20 \mathrm{~N}$ | 650699 | 5423259 | 387 | -20 | 8 | -20 | 14 |
| M2E | $17+40 \mathrm{~N}$ | 650691 | 5423278 | 387 | -16 | 8 | -18 | 10 |
| M2E | $17+60 \mathrm{~N}$ | 650680 | 5423295 | 387 | -8 | 8 | -6 | 10 |
| M2E | $17+80 \mathrm{~N}$ | 650670 | 5423309 | 385 | 4 | 10 | 8 | 10 |
| M2E | 18+00N | 650656 | 5423333 | 386 | 8 | 12 | 10 | 12 |
| M4E | $3+00 \mathrm{~N}$ | 651575 | 5422130 | 363 | -4 | -4 | -4 | -6 |
| M4E | $3+20 \mathrm{~N}$ | 651559 | 5422147 | 364 | -6 | -6 | -4 | -6 |
| M4E | $3+40 \mathrm{~N}$ | 651549 | 5422164 | 364 | -4 | -6 | -4 | -6 |
| M4E | $3+60 \mathrm{~N}$ | 651540 | 5422182 | 362 | -4 | -6 | -6 | -6 |
| M4E | $3+80 \mathrm{~N}$ | 651531 | 5422196 | 362 | -4 | -8 | -6 | -8 |
| M4E | 4+00N | 651518 | 5422212 | 362 | 0 | -6 | -2 | -6 |
| M4E | 4+20N | 651506 | 5422227 | 362 | 6 | -2 | 4 | -2 |
| M4E | 4+40N | 651499 | 5422242 | 364 | 10 | -8 | 10 | -6 |
| M4E | 4+60N | 651489 | 5422262 | 366 | 10 | -10 | 10 | -10 |
| M4E | 4+80N | 651477 | 5422279 | 366 | 10 | -8 | 12 | -8 |
| M4E | 5+00N | 651470 | 5422300 | 367 | 6 | -8 | 8 | -8 |
| M4E | $5+20 \mathrm{~N}$ | 651459 | 5422318 | 369 | 6 | -4 | 8 | -4 |
| M4E | 5+40N | 651454 | 5422337 | 368 | 6 | -4 | 8 | -4 |
| M4E | $5+60 \mathrm{~N}$ | 651441 | 5422352 | 367 | 6 | -4 | 6 | -4 |
| M4E | $5+80 \mathrm{~N}$ | 651429 | 5422369 | 369 | 4 | -2 | 6 | -4 |
| M4E | 6+00N | 651424 | 5422392 | 364 | 4 | -2 | 6 | -4 |
| M4E | 6+20N | 651417 | 5422409 | 363 | 4 | -2 | 6 | -4 |
| M4E | 6+40N | 651406 | 5422419 | 365 | 4 | 0 | 6 | 2 |
| M4E | 6+60N | 651395 | 5422443 | 365 | 6 | 0 | 6 | 2 |
| M4E | 6+80N | 651382 | 5422456 | 365 | 8 | -2 | 10 | -4 |
| M4E | 7+00N | 651371 | 5422479 | 366 | 8 | -2 | 10 | -4 |
| M4E | $7+20 \mathrm{~N}$ | 651365 | 5422493 | 368 | 8 | -2 | 10 | -4 |
| M4E | 7+40N | 651355 | 5422508 | 368 | 6 | -2 | 8 | -4 |
| M4E | $7+60 \mathrm{~N}$ | 651344 | 5422521 | 369 | 4 | -2 | 6 | -4 |
| M4E | $7+80 \mathrm{~N}$ | 651333 | 5422543 | 370 | 0 | 2 | 2 | 4 |
| M4E | 8+00N | 651328 | 5422562 | 370 | -4 | 4 | -4 | 6 |
| M4E | $8+20 \mathrm{~N}$ | 651321 | 5422582 | 371 | -6 | 6 | -6 | 8 |
| M4E | $8+40 \mathrm{~N}$ | 651316 | 5422598 | 372 | -4 | 4 | -6 | 4 |
| M4E | 8+60N | 651302 | 5422617 | 373 | 2 | 0 | 2 | 4 |
| M4E | 8+80N | 651282 | 5422631 | 372 | 8 | -2 | 8 | -4 |
| M4E | 9+00N | 651268 | 5422643 | 373 | 10 | -4 | 8 | -4 |


| M4E | 9+20N | 651254 | 5422656 | 372 | 12 | -4 | 12 | -6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| M4E | $9+40 \mathrm{~N}$ | 651245 | 5422677 | 371 | 16 | -6 | 18 | -8 |
| M4E | 9+60N | 651236 | 5422694 | 370 | 20 | -10 | 22 | -8 |
| M4E | $9+80 \mathrm{~N}$ | 651224 | 5422709 | 369 | 16 | -10 | 14 | -8 |
| M4E | 10+00N | 651219 | 5422730 | 369 | 14 | -8 | 14 | -6 |
| M4E | 10+20N | 651213 | 5422752 | 367 | 12 | -6 | 12 | -6 |
| M4E | 10+40N | 651204 | 5422763 | 368 | 10 | -4 | 12 | -6 |
| M4E | $10+60 \mathrm{~N}$ | 651191 | 5422783 | 362 | 10 | -4 | 12 | -6 |
| M4E | $10+80 \mathrm{~N}$ | 651178 | 5422804 | 361 | 8 | -6 | 10 | -6 |
| M4E | $11+00 \mathrm{~N}$ | 651171 | 5422817 | 360 | 4 | -6 | 6 | -4 |
| M4E | $11+20 \mathrm{~N}$ | 651163 | 5422833 | 361 | -4 | -2 | -4 | -4 |
| M4E | $11+40 \mathrm{~N}$ | 651152 | 5422851 | 362 | -6 | -2 | -4 | -2 |
| M4E | $11+60 \mathrm{~N}$ | 651143 | 5422868 | 362 | -10 | -2 | -6 | -6 |
| M4E | $11+80 \mathrm{~N}$ | 651132 | 5422886 | 361 | -10 | -2 | -4 | -6 |
| M4E | $12+00 \mathrm{~N}$ | 651126 | 5422904 | 360 | -2 | -2 | 4 | -6 |
| M4E | $12+20 \mathrm{~N}$ | 651119 | 5422925 | 361 | 4 | -2 | 10 | -6 |
| M4E | $12+40 \mathrm{~N}$ | 651111 | 5422944 | 360 | 4 | -4 | 10 | -8 |
| M4E | $12+60 \mathrm{~N}$ | 651108 | 5422965 | 360 | 4 | -4 | 6 | -8 |
| M4E | $12+80 \mathrm{~N}$ | 651102 | 5422983 | 359 | 4 | -4 | 4 | -4 |
| M4E | $13+00 \mathrm{~N}$ | 651089 | 5423000 | 361 | 2 | 0 | 2 | -4 |
| M4E | $13+20 \mathrm{~N}$ | 651079 | 5423017 | 361 | -4 | 2 | -4 | -4 |
| M4E | $13+40 \mathrm{~N}$ | 651071 | 5423036 | 361 | -4 | 2 | -4 | 2 |
| M4E | $13+60 \mathrm{~N}$ | 651061 | 5423054 | 360 | -4 | 2 | -4 | 2 |
| M4E | $13+80 \mathrm{~N}$ | 651052 | 5423071 | 361 | -4 | 4 | -4 | 2 |
| M4E | 14+00N | 651041 | 5423086 | 361 | -8 | 4 | -6 | 2 |
| M4E | $14+20 \mathrm{~N}$ | 651027 | 5423102 | 361 | -6 | 4 | -6 | 4 |
| M4E | 14+40N | 651016 | 5423120 | 360 | -2 | 4 | -4 | 4 |
| M4E | $14+60 \mathrm{~N}$ | 651006 | 5423137 | 359 | -4 | 4 | -4 | 4 |
| M4E | 14+80N | 650997 | 5423153 | 362 | -4 | 6 | -4 | 4 |
| M4E | 15+00N | 650988 | 5423172 | 361 | -6 | 10 | -4 | 10 |
| M4E | $15+20 \mathrm{~N}$ | 650978 | 5423191 | 362 | -6 | 14 | -8 | 14 |
| M4E | 15+40N | 650969 | 5423206 | 361 | -10 | 18 | -12 | 20 |
| M4E | 15+60N | 650959 | 5423221 | 361 | -16 | 18 | -18 | 20 |
| M4E | 15+80N | 650949 | 5423242 | 361 | -26 | 16 | -28 | 18 |
| M4E | 16+00N | 650942 | 5423261 | 362 | -40 | 10 | -44 | 18 |
| M4E | $16+20 \mathrm{~N}$ | 650930 | 5423280 | 360 | -44 | 6 | -52 | 8 |
| M4E | 16+40N | 650917 | 5423298 | 362 | -80 | 4 | -70 | 8 |
| M4E | $16+60 \mathrm{~N}$ | 650906 | 5423312 | 369 | -50 | -8 | -30 | 6 |
| M4E | $16+80 \mathrm{~N}$ | 650895 | 5423332 | 373 | -30 | -8 | -28 | 4 |
| M4E | 17+00N | 650885 | 5423348 | 378 | -20 | -8 | -12 | 4 |
| M4E | $17+20 \mathrm{~N}$ | 650874 | 5423369 | 383 | -8 | -6 | -10 | 4 |
| M4E | $17+40 \mathrm{~N}$ | 650865 | 5423381 | 383 | -6 | -2 | -8 | 10 |
| M4E | $17+60 \mathrm{~N}$ | 650853 | 5423396 | 383 | 4 | -10 | -6 | 10 |
| M4E | $17+80 \mathrm{~N}$ | 650845 | 5423410 | 384 | 10 | -10 | 10 | 10 |
| M4E | $18+00 \mathrm{~N}$ | 650835 | 5423427 | 385 | 12 | -12 | 12 | 10 |


| M6E | 3+00N | 651740 | 5422237 | 364 | -4 | -6 | -6 | -6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| M6E | $3+20 \mathrm{~N}$ | 651732 | 5422251 | 364 | -2 | -6 | -4 | -6 |
| M6E | $3+40 \mathrm{~N}$ | 651718 | 5422262 | 365 | 4 | -6 | 6 | -6 |
| M6E | $3+60 \mathrm{~N}$ | 651709 | 5422279 | 364 | 8 | -6 | 10 | -6 |
| M6E | 3+80N | 651704 | 5422298 | 365 | 16 | -8 | 14 | -6 |
| M6E | 4+00N | 651693 | 5422314 | 366 | 20 | -10 | 18 | -12 |
| M6E | 4+20N | 651682 | 5422331 | 365 | 36 | -16 | 34 | -14 |
| M6E | 4+40N | 651670 | 5422347 | 365 | 32 | -12 | 30 | -14 |
| M6E | 4+60N | 651656 | 5422362 | 367 | 30 | -12 | 30 | -10 |
| M6E | 4+80N | 651649 | 5422382 | 367 | 16 | -12 | 14 | -10 |
| M6E | $5+00 \mathrm{~N}$ | 651643 | 5422400 | 366 | 10 | -12 | 12 | -10 |
| M6E | 5+20N | 651631 | 5422419 | 365 | 8 | -8 | 10 | -8 |
| M6E | 5+40N | 651622 | 5422439 | 364 | 6 | -8 | 8 | -8 |
| M6E | $5+60 \mathrm{~N}$ | 651610 | 5422458 | 365 | 6 | -4 | 8 | -4 |
| M6E | $5+80 \mathrm{~N}$ | 651601 | 5422475 | 365 | 6 | -2 | 6 | -4 |
| M6E | 6+00N | 651590 | 5422491 | 365 | 6 | -2 | 4 | -2 |
| M6E | 6+20N | 651579 | 5422507 | 365 | 4 | 0 | 4 | 0 |
| M6E | $6+40 \mathrm{~N}$ | 651569 | 5422524 | 365 | 4 | 2 | 4 | 2 |
| M6E | 6+60N | 651558 | 5422540 | 365 | 4 | 2 | 0 | 2 |
| M6E | 6+80N | 651548 | 5422555 | 364 | 6 | 6 | 6 | 6 |
| M6E | 7+00N | 651540 | 5422572 | 365 | 8 | 10 | 8 | 10 |
| M6E | $7+20 \mathrm{~N}$ | 651532 | 5422589 | 366 | 10 | 28 | 6 | 14 |
| M6E | $7+40 \mathrm{~N}$ | 651521 | 5422608 | 366 | -10 | 28 | -12 | 18 |
| M6E | $7+60 \mathrm{~N}$ | 651508 | 5422626 | 366 | -34 | 30 | -42 | 30 |
| M6E | 7+80N | 651497 | 5422640 | 366 | -40 | 36 | -22 | 24 |
| M6E | 8+00N | 651488 | 5422659 | 368 | -24 | 22 | -16 | 20 |
| M6E | 8+20N | 651478 | 5422676 | 368 | -24 | 20 | -20 | 20 |
| M6E | 8+40N | 651469 | 5422694 | 368 | -20 | 20 | -20 | 18 |
| M6E | 8+60N | 651459 | 5422717 | 368 | -20 | 20 | -20 | 16 |
| M6E | $8+80 \mathrm{~N}$ | 651451 | 5422733 | 370 | -20 | 18 | -12 | 14 |
| M6E | $9+00 \mathrm{~N}$ | 651443 | 5422753 | 370 | -8 | 16 | -4 | 8 |
| M6E | $9+20 \mathrm{~N}$ | 651437 | 5422766 | 369 | -4 | 12 | -2 | 6 |
| M6E | $9+40 \mathrm{~N}$ | 651425 | 5422782 | 368 | 4 | 8 | 6 | 4 |
| M6E | 9+60N | 651413 | 5422801 | 370 | 8 | 6 | 8 | 2 |
| M6E | $9+80 \mathrm{~N}$ | 651401 | 5422815 | 370 | 10 | 6 | 10 | 2 |
| M6E | 10+00N | 651387 | 5422830 | 371 | 6 | 6 | 6 | 0 |
| M6E | 10+20N | 651378 | 5422845 | 370 | 2 | 4 | 2 | 0 |
| M6E | 10+40N | 651369 | 5422868 | 371 | 0 | 4 | 0 | 2 |
| M6E | 10+60N | 651361 | 5422887 | 369 | -4 | 2 | -4 | 2 |
| M6E | 10+80N | 651356 | 5422904 | 370 | -4 | 4 | -6 | 2 |
| M6E | 11+00N | 651343 | 5422921 | 368 | -10 | 8 | -8 | 4 |
| M6E | 11+20N | 651332 | 5422937 | 366 | -8 | 8 | -6 | 4 |
| M6E | $11+40 \mathrm{~N}$ | 651321 | 5422956 | 366 | -4 | 8 | -6 | 2 |
| M6E | $11+60 \mathrm{~N}$ | 651310 | 5422973 | 364 | 2 | 8 | -2 | 0 |
| M6E | $11+80 \mathrm{~N}$ | 651300 | 5422988 | 364 | 8 | 6 | 12 | -2 |


| M6E | 12+00N | 651293 | 5423002 | 363 | 10 | 0 | 16 | -6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| M6E | $12+20 \mathrm{~N}$ | 651280 | 5423030 | 362 | 12 | -4 | 12 | -8 |
| M6E | $12+40 \mathrm{~N}$ | 651271 | 5423046 | 364 | 8 | -4 | 4 | -8 |
| M6E | $12+60 \mathrm{~N}$ | 651261 | 5423064 | 362 | 4 | -4 | 2 | -6 |
| M6E | $12+80 \mathrm{~N}$ | 651251 | 5423080 | 362 | 8 | -6 | 4 | -6 |
| M6E | $13+00 \mathrm{~N}$ | 651240 | 5423099 | 363 | 8 | -6 | 8 | -6 |
| M6E | $13+20 \mathrm{~N}$ | 651233 | 5423112 | 362 | 10 | -6 | 10 | -6 |
| M6E | 13+40N | 651222 | 5423128 | 361 | 14 | -8 | 12 | -6 |
| M6E | $13+60 \mathrm{~N}$ | 651210 | 5423148 | 362 | 16 | -10 | 12 | -10 |
| M6E | 13+80N | 651200 | 5423164 | 362 | 10 | -8 | 10 | -8 |
| M6E | 14+00N | 651187 | 5423181 | 363 | 6 | -8 | 6 | -8 |
| M6E | $14+20 \mathrm{~N}$ | 651177 | 5423195 | 362 | 6 | -4 | 6 | -6 |
| M6E | $14+40 \mathrm{~N}$ | 651165 | 5423214 | 363 | -4 | -2 | 0 | -6 |
| M6E | $14+60 \mathrm{~N}$ | 651159 | 5423231 | 361 | -4 | 0 | -4 | 0 |
| M6E | $14+80 \mathrm{~N}$ | 651155 | 5423243 | 361 | -4 | 2 | -4 | 0 |
| M6E | 15+00N | 651151 | 5423270 | 362 | -4 | 6 | -4 | 2 |
| M6E | $15+20 \mathrm{~N}$ | 651147 | 5423290 | 362 | -4 | 6 | -4 | 6 |
| M6E | $15+40 \mathrm{~N}$ | 651139 | 5423307 | 362 | -6 | 10 | -8 | 10 |
| M6E | $15+60 \mathrm{~N}$ | 651131 | 5423326 | 362 | -10 | 10 | -8 | 10 |
| M6E | $15+80 \mathrm{~N}$ | 651125 | 5423344 | 362 | -14 | 10 | -16 | 10 |
| M6E | $16+00 \mathrm{~N}$ | 651117 | 5423362 | 362 | -20 | 8 | -22 | 14 |
| M6E | $16+20 \mathrm{~N}$ | 651103 | 5423381 | 362 | -30 | 8 | -32 | 16 |
| M6E | $16+40 \mathrm{~N}$ | 651092 | 5423398 | 363 | -30 | -2 | -40 | 14 |
| M6E | $16+60 \mathrm{~N}$ | 651083 | 5423412 | 363 | -30 | -10 | -36 | 10 |
| M6E | $16+80 \mathrm{~N}$ | 651071 | 5423431 | 364 | -20 | -20 | -26 | 6 |
| M6E | 17+00N | 651057 | 5423446 | 368 | -4 | -22 | -22 | 6 |
| M6E | $17+20 \mathrm{~N}$ | 651048 | 5423465 | 372 | 10 | -22 | -16 | 0 |
| M6E | 17+40N | 651038 | 5423480 | 378 | 12 | -20 | -10 | 2 |
| M6E | $17+60 \mathrm{~N}$ | 651028 | 5423495 | 382 | 8 | -17 | -8 | 4 |
| M6E | $17+80 \mathrm{~N}$ | 651017 | 5423514 | 383 | 6 | -10 | -4 | 6 |
| M6E | $18+00 \mathrm{~N}$ | 651006 | 5423532 | 382 | 4 | -8 | -4 | 8 |
|  |  |  |  |  |  |  |  |  |
| FOO | $3+00 \mathrm{~N}$ | 653246 | 5423300 | 345 | 6 | 4 | 4 | 4 |
| FOO | $3+20 \mathrm{~N}$ | 653240 | 5423321 | 352 | 4 | 2 | 4 | 2 |
| FOO | $3+40 \mathrm{~N}$ | 653233 | 5423342 | 354 | 4 | 0 | 2 | 0 |
| FOO | $3+60 \mathrm{~N}$ | 653220 | 5423355 | 354 | 2 | 0 | 2 | 2 |
| FOO | $3+80 \mathrm{~N}$ | 653209 | 5423373 | 353 | 2 | 0 | 2 | 2 |
| FOO | 4+00N | 653201 | 5423392 | 353 | 2 | 0 | 2 | 4 |
| FOO | 4+20N | 653188 | 5423409 | 353 | 4 | 0 | 4 | 2 |
| FOO | 4+40N | 653179 | 5423426 | 354 | 4 | 0 | 4 | 2 |
| FOO | 4+60N | 653173 | 5423445 | 353 | 4 | 0 | 4 | 2 |
| FOO | 4+80N | 653169 | 5423470 | 354 | 4 | 0 | 4 | 0 |
| FOO | $5+00 \mathrm{~N}$ | 653158 | 5423487 | 354 | 4 | 2 | 4 | 2 |
| FOO | $5+20 \mathrm{~N}$ | 653143 | 5423497 | 353 | 4 | 4 | 4 | 4 |
| F00 | $5+40 \mathrm{~N}$ | 653130 | 5423512 | 353 | 6 | 6 | 4 | 6 |


| FOO | 5+60N | 653118 | 5423529 | 353 | 6 | 6 | 4 | 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FOO | $5+80 \mathrm{~N}$ | 653110 | 5423548 | 354 | 4 | 6 | 4 | 6 |
| FOO | 6+00N | 653105 | 5423569 | 353 | 4 | 8 | 4 | 6 |
| FOO | 6+20N | 653098 | 5423589 | 353 | 4 | 10 | 2 | 8 |
| FOO | 6+40N | 653086 | 5423606 | 354 | -4 | 20 | -2 | 20 |
| FOO | 6+60N | 653073 | 5423619 | 355 | -8 | 26 | -6 | 24 |
| FOO | 6+80N | 653061 | 5423634 | 356 | -18 | 30 | -16 | 26 |
| FOO | 7+00N | 653047 | 5423652 | 356 | -28 | 22 | -26 | 24 |
| FOO | 7+20N | 653040 | 5423668 | 355 | -40 | 18 | -42 | 20 |
| FOO | 7+40N | 653032 | 5423686 | 355 | -60 | 12 | -46 | 18 |
| FOO | 7+60N | 653023 | 5423705 | 357 | -70 | 4 | -72 | 6 |
| F00 | 7+80N | 653018 | 5423723 | 360 | -54 | 4 | -62 | 6 |
| F00 | 8+00N | 653008 | 5423738 | 368 | -44 | 4 | -46 | 6 |
| F00 | $8+20 \mathrm{~N}$ | 652993 | 5423756 | 372 | -26 | 4 | -24 | 6 |
| F00 | $8+40 \mathrm{~N}$ | 652983 | 5423776 | 376 | -14 | 0 | -16 | 0 |
| F00 | 8+60N | 652978 | 5423795 | 374 | -6 | -2 | -8 | -4 |
| F00 | 8+80N | 652972 | 5423814 | 370 | 2 | -6 | 2 | -6 |
| F00 | 9+00N | 652963 | 5423829 | 366 | 8 | -8 | 6 | -8 |
| F00 | 9+20N | 652949 | 5423847 | 353 | 44 | -12 | 46 | -10 |
| F00 | 9+40N | 652931 | 5423862 | 354 | 36 | -22 | 38 | -24 |
| F00 | 9+60N | 652917 | 5423875 | 354 | 32 | -20 | 32 | -20 |
| F00 | 9+80N | 652911 | 5423894 | 353 | 28 | -18 | 24 | -18 |
| FOO | 10+00N | 652900 | 5423912 | 352 | 24 | -22 | 22 | -18 |
| FOO | 10+20N | 652893 | 5423926 | 354 | 12 | -20 | 10 | -18 |
| FOO | 10+40N | 652881 | 5423946 | 353 | 4 | -12 | 4 | -10 |
| FOO | 10+60N | 652874 | 5423965 | 354 | -4 | -6 | -4 | -8 |
| FOO | 10+80N | 652870 | 5423982 | 355 | -6 | -4 | -8 | -6 |
| FOO | 11+00N | 652863 | 5424004 | 353 | -6 | -4 | -8 | -4 |
| FOO | 11+20N | 652854 | 5424020 | 352 | -6 | -4 | -8 | -4 |
| FOO | $11+40 \mathrm{~N}$ | 652844 | 5424038 | 352 | 0 | -4 | -2 | -4 |
| FOO | 11+60N | 652833 | 5424054 | 354 | 2 | -4 | 0 | -4 |
| FOO | 11+80N | 652818 | 5424068 | 352 | 4 | -4 | 2 | -2 |
| F00 | $12+00 \mathrm{~N}$ | 652808 | 5424082 | 352 | 2 | -4 | 2 | -2 |
| FOO | $12+20 \mathrm{~N}$ | 652798 | 5424103 | 352 | 2 | -2 | 2 | 0 |
| FOO | $12+40 \mathrm{~N}$ | 652786 | 5424119 | 352 | 4 | 0 | 4 | 2 |
| FOO | $12+60 \mathrm{~N}$ | 652773 | 5424135 | 352 | 4 | 0 | 4 | 2 |
| FOO | $12+80 \mathrm{~N}$ | 652757 | 5424150 | 352 | 4 | 0 | 4 | 2 |
| FOO | 13+00N | 652748 | 5424168 | 352 | 4 | 0 | 2 | 0 |
| F2E | $3+00 \mathrm{~N}$ | 653423 | 5423402 | 354 | 2 | 2 | 4 | 2 |
| F2E | $3+20 \mathrm{~N}$ | 653413 | 5423420 | 354 | 2 | 2 | 2 | 2 |
| F2E | $3+40 \mathrm{~N}$ | 653405 | 5423436 | 354 | 4 | 2 | 2 | 4 |
| F2E | $3+60 \mathrm{~N}$ | 653396 | 5423454 | 353 | 4 | 2 | 2 | 4 |
| F2E | $3+80 \mathrm{~N}$ | 653388 | 5423473 | 353 | 4 | 2 | 2 | 4 |
| F2E | $4+00 \mathrm{~N}$ | 653378 | 5423494 | 354 | 4 | 2 | 2 | 2 |
| F2E | $4+20 \mathrm{~N}$ | 653369 | 5423513 | 353 | 4 | 2 | 2 | 2 |


| F2E | 4+40N | 653359 | 5423530 | 354 | 4 | 0 | 2 | -2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F2E | 4+60N | 653349 | 5423546 | 354 | 4 | 0 | 2 | 0 |
| F2E | 4+80N | 653337 | 5423563 | 354 | 4 | 2 | 2 | 0 |
| F2E | 5+00N | 653329 | 5423579 | 353 | 6 | 2 | 4 | 2 |
| F2E | $5+20 \mathrm{~N}$ | 653319 | 5423601 | 354 | 6 | 2 | 4 | 4 |
| F2E | $5+40 \mathrm{~N}$ | 653313 | 5423615 | 354 | 6 | 6 | 8 | 6 |
| F2E | $5+60 \mathrm{~N}$ | 653297 | 5423633 | 354 | 8 | 6 | 6 | 6 |
| F2E | $5+80 \mathrm{~N}$ | 653288 | 5423654 | 354 | 4 | 10 | 6 | 10 |
| F2E | 6+00N | 653283 | 5423670 | 353 | 4 | 28 | 6 | 16 |
| F2E | 6+20N | 653271 | 5423686 | 354 | 4 | 24 | 4 | 16 |
| F2E | $6+40 \mathrm{~N}$ | 653257 | 5423702 | 354 | 2 | 20 | 0 | 16 |
| F2E | 6+60N | 653246 | 5423719 | 353 | -10 | 18 | -12 | 18 |
| F2E | 6+80N | 653233 | 5423737 | 355 | -20 | 18 | -22 | 20 |
| F2E | 7+00N | 653228 | 5423753 | 356 | -26 | 18 | -26 | 16 |
| F2E | $7+20 \mathrm{~N}$ | 653217 | 5423770 | 357 | -30 | 16 | -32 | 14 |
| F2E | 7+40N | 653207 | 5423789 | 358 | -46 | 6 | -48 | 8 |
| F2E | $7+60 \mathrm{~N}$ | 653194 | 5423811 | 360 | -60 | -6 | -58 | -4 |
| F2E | 7+80N | 653186 | 5423824 | 364 | -42 | -16 | -34 | -14 |
| F2E | $8+00 \mathrm{~N}$ | 653179 | 5423840 | 369 | -24 | -12 | -22 | -14 |
| F2E | 8+20N | 653170 | 5423859 | 376 | -16 | -10 | -18 | -12 |
| F2E | $8+40 \mathrm{~N}$ | 653162 | 5423881 | 379 | -6 | -10 | -8 | -8 |
| F2E | 8+60N | 653156 | 5423902 | 376 | 8 | -8 | 2 | -8 |
| F2E | $8+80 \mathrm{~N}$ | 653146 | 5423917 | 367 | 12 | -8 | 10 | -8 |
| F2E | $9+00 \mathrm{~N}$ | 653138 | 5423934 | 359 | 20 | -8 | 22 | -8 |
| F2E | $9+20 \mathrm{~N}$ | 653130 | 5423950 | 357 | 36 | -8 | 34 | -10 |
| F2E | $9+40 \mathrm{~N}$ | 653118 | 5423966 | 358 | 20 | -8 | 22 | -10 |
| F2E | $9+60 \mathrm{~N}$ | 653104 | 5423985 | 357 | 18 | -10 | 14 | -10 |
| F2E | $9+80 \mathrm{~N}$ | 653092 | 5424003 | 358 | 16 | -10 | 14 | -10 |
| F2E | 10+00N | 653081 | 5424020 | 356 | 16 | -12 | 14 | -12 |
| F2E | 10+20N | 653071 | 5424035 | 358 | 16 | -14 | 14 | -14 |
| F2E | 10+40N | 653061 | 5424050 | 356 | 10 | -12 | 10 | -10 |
| F2E | 10+60N | 653054 | 5424066 | 356 | 8 | -10 | 6 | -8 |
| F2E | 10+80N | 653044 | 5424081 | 356 | 2 | -8 | 2 | -6 |
| F2E | 11+00N | 653035 | 5424094 | 358 | -6 | -4 | -6 | -6 |
| F2E | $11+20 \mathrm{~N}$ | 653025 | 5424108 | 358 | -4 | -4 | -4 | -2 |
| F2E | $11+40 \mathrm{~N}$ | 653015 | 5424122 | 358 | -4 | -4 | -4 | -2 |
| F2E | $11+60 \mathrm{~N}$ | 653008 | 5424137 | 359 | -4 | -2 | -2 | -2 |
| F2E | $11+80 \mathrm{~N}$ | 652998 | 5424156 | 358 | -4 | -2 | 0 | -2 |
| F2E | 12+00N | 652990 | 5424177 | 359 | 0 | -2 | 4 | -2 |
| F2E | $12+20 \mathrm{~N}$ | 652978 | 5424196 | 359 | 2 | 0 | 3 | 0 |
| F2E | $12+40 \mathrm{~N}$ | 652968 | 5424214 | 359 | 2 | 2 | 2 | 2 |
| F2E | $12+60 \mathrm{~N}$ | 652959 | 5424228 | 359 | 2 | 4 | 2 | 4 |
| F2E | $12+80 \mathrm{~N}$ | 652948 | 5424243 | 362 | 4 | 2 | 2 | 2 |
| F2E | $13+00 \mathrm{~N}$ | 652933 | 5424259 | 360 | 4 | 2 | 2 | 2 |
| F2E | $13+20 \mathrm{~N}$ | 652921 | 5424272 | 360 | 0 | 0 | -2 | 0 |


| F2E | 13+40N | 652914 | 5424285 | 359 | -4 | -2 | -4 | -2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F2E | $13+60 \mathrm{~N}$ | 652909 | 5424297 | 358 | -4 | 0 | -2 | 0 |
| F2E | $13+80 \mathrm{~N}$ | 652897 | 5424311 | 358 | 4 | 2 | 2 | 4 |
| F4E | 2+40N | 653630 | 5423462 | 359 | -2 | -2 | -2 | 0 |
| F4E | 2+60N | 653623 | 5423475 | 357 | 0 | -2 | 2 | -2 |
| F4E | 2+80N | 653620 | 5423491 | 358 | 2 | -2 | 2 | -4 |
| F4E | $3+00 \mathrm{~N}$ | 653608 | 5423512 | 358 | 4 | -2 | 2 | -2 |
| F4E | $3+20 \mathrm{~N}$ | 653597 | 5423529 | 359 | 4 | -2 | 4 | -2 |
| F4E | $3+40 \mathrm{~N}$ | 653584 | 5423542 | 360 | 6 | 0 | 6 | 0 |
| F4E | $3+60 \mathrm{~N}$ | 653573 | 5423557 | 359 | 6 | 2 | 6 | 2 |
| F4E | $3+80 \mathrm{~N}$ | 653563 | 5423575 | 358 | 6 | 4 | 6 | 4 |
| F4E | 4+00N | 653553 | 5423597 | 359 | 6 | 8 | 6 | 6 |
| F4E | 4+20N | 653548 | 5423614 | 359 | 8 | 8 | 6 | 8 |
| F4E | 4+40N | 653543 | 5423631 | 359 | 10 | 10 | 8 | 10 |
| F4E | 4+60N | 653531 | 5423647 | 359 | 6 | 10 | 6 | 10 |
| F4E | 4+80N | 653519 | 5423664 | 359 | 4 | 10 | 4 | 10 |
| F4E | 5+00N | 653505 | 5423682 | 359 | 4 | 10 | 4 | 10 |
| F4E | 5+20N | 653496 | 5423696 | 360 | 4 | 10 | 4 | 12 |
| F4E | 5+40N | 653486 | 5423718 | 358 | 4 | 12 | 4 | 14 |
| F4E | 5+60N | 653477 | 5423733 | 360 | 2 | 14 | -2 | 16 |
| F4E | $5+80 \mathrm{~N}$ | 653463 | 5423749 | 360 | -2 | 16 | -4 | 18 |
| F4E | 6+00N | 653454 | 5423770 | 360 | -10 | 12 | -8 | 16 |
| F4E | 6+20N | 653445 | 5423786 | 361 | -14 | 12 | -18 | 14 |
| F4E | $6+40 \mathrm{~N}$ | 653434 | 5423800 | 361 | -20 | 12 | -22 | 12 |
| F4E | 6+60N | 653426 | 5423820 | 359 | -24 | 8 | -26 | 10 |
| F4E | 6+80N | 653415 | 5423838 | 359 | -36 | 4 | -34 | 8 |
| F4E | 7+00N | 653406 | 5423858 | 362 | -40 | 2 | -42 | 6 |
| F4E | $7+20 \mathrm{~N}$ | 653397 | 5423872 | 364 | -44 | -24 | -48 | -16 |
| F4E | 7+40N | 653387 | 5423889 | 366 | -54 | -30 | -52 | -18 |
| F4E | 7+60N | 653377 | 5423905 | 372 | -36 | -24 | -38 | -16 |
| F4E | 7+80N | 653368 | 5423923 | 380 | -16 | -20 | -14 | -16 |
| F4E | 8+00N | 653362 | 5423938 | 382 | 2 | -18 | 2 | -18 |
| F4E | 8+20N | 653356 | 5423962 | 372 | 14 | -16 | 16 | -20 |
| F4E | $8+40 \mathrm{~N}$ | 653341 | 5423983 | 377 | 26 | -14 | 28 | -20 |
| F4E | $8+60 \mathrm{~N}$ | 653329 | 5423997 | 371 | 28 | -14 | 30 | -18 |
| F4E | 8+80N | 653316 | 5424013 | 367 | 36 | -10 | 34 | -14 |
| F4E | $9+00 \mathrm{~N}$ | 653306 | 5424032 | 364 | 50 | -10 | 52 | -12 |
| F4E | $9+20 \mathrm{~N}$ | 653299 | 5424048 | 362 | 40 | -10 | 44 | -14 |
| F4E | $9+40 \mathrm{~N}$ | 653289 | 5424064 | 360 | 34 | -12 | 32 | -14 |
| F4E | $9+60 \mathrm{~N}$ | 653278 | 5424079 | 360 | 22 | -16 | 24 | -18 |
| F4E | 9+80N | 653268 | 5424096 | 360 | 20 | -20 | 20 | -22 |
| F4E | 10+00N | 653263 | 5424109 | 361 | 16 | -16 | 14 | -14 |
| F4E | 10+20N | 653251 | 5424128 | 361 | 8 | -14 | 6 | -14 |
| F4E | 10+40N | 653239 | 5424147 | 362 | 0 | -12 | -2 | -14 |
| F4E | 10+60N | 653226 | 5424163 | 362 | -2 | -12 | -2 | -14 |


| F4E | 10+80N | 653217 | 5424180 | 362 | -2 | -12 | -4 | -14 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F4E | 11+00N | 653209 | 5424196 | 362 | -4 | -12 | -4 | -14 |
| F4E | $11+20 \mathrm{~N}$ | 653199 | 5424214 | 363 | -6 | -10 | -4 | -8 |
| F4E | $11+40 \mathrm{~N}$ | 653189 | 5424231 | 361 | -6 | -6 | -4 | -4 |
| F4E | $11+60 \mathrm{~N}$ | 653178 | 5424252 | 362 | -2 | 0 | -2 | 0 |
| F4E | $11+80 \mathrm{~N}$ | 653167 | 5424268 | 363 | 2 | 2 | 0 | 2 |
| F4E | $12+00 \mathrm{~N}$ | 653156 | 5424285 | 362 | 4 | 0 | 2 | 2 |
| F4E | $12+20 \mathrm{~N}$ | 653145 | 5424303 | 363 | 4 | 0 | 4 | 0 |
| F4E | $12+40 \mathrm{~N}$ | 653135 | 5424318 | 361 | 6 | -2 | 6 | 0 |
| F4E | $12+60 \mathrm{~N}$ | 653127 | 5424337 | 363 | 4 | 2 | 6 | 2 |
| F4E | $12+80 \mathrm{~N}$ | 653119 | 5424356 | 362 | 4 | 2 | 6 | 4 |
| F4E | $13+00 \mathrm{~N}$ | 653112 | 5424370 | 361 | 2 | 2 | 2 | 2 |
| F4E | $13+20 \mathrm{~N}$ | 653100 | 5424389 | 361 | 2 | 2 | 2 | 2 |
| F4E | $13+40 \mathrm{~N}$ | 653089 | 5424408 | 362 | 4 | 4 | 2 | 4 |
| F4E | $13+60 \mathrm{~N}$ | 653079 | 5424422 | 361 | 4 | 2 | 2 | 4 |
| F4E | $13+80 \mathrm{~N}$ | 653070 | 5424439 | 361 | 4 | 2 | 4 | 4 |
| F4E | 14+OON | 653056 | 5424457 | 362 | 8 | 2 | 6 | 2 |
| F6E | 2+40N | 653807 | 5423552 | 357 | -2 | 2 | 0 | 0 |
| F6E | 2+60N | 653798 | 5423568 | 356 | -2 | 2 | -2 | 0 |
| F6E | 2+80N | 653787 | 5423587 | 357 | -2 | 0 | -2 | 2 |
| F6E | $3+00 \mathrm{~N}$ | 653780 | 5423607 | 358 | 2 | 0 | -2 | 2 |
| F6E | $3+20 \mathrm{~N}$ | 653771 | 5423620 | 357 | 2 | 2 | 0 | 2 |
| F6E | $3+40 \mathrm{~N}$ | 653759 | 5423639 | 358 | 2 | 2 | 2 | 2 |
| F6E | $3+60 \mathrm{~N}$ | 653751 | 5423654 | 357 | 4 | 2 | 6 | 2 |
| F6E | $3+80 \mathrm{~N}$ | 653740 | 5423674 | 357 | 6 | 2 | 8 | 0 |
| F6E | 4+00N | 653729 | 5423692 | 357 | 6 | 2 | 10 | -2 |
| F6E | 4+20N | 653720 | 5423707 | 357 | 6 | 0 | 8 | -4 |
| F6E | 4+40N | 653708 | 5423722 | 357 | 6 | -2 | 6 | -4 |
| F6E | 4+60N | 653699 | 5423741 | 356 | 8 | -2 | 10 | -2 |
| F6E | 4+80N | 653689 | 5423757 | 357 | 10 | -2 | 12 | 0 |
| F6E | 5+00N | 653679 | 5423778 | 357 | 10 | 0 | 12 | 0 |
| F6E | $5+20 \mathrm{~N}$ | 653671 | 5423794 | 357 | 4 | 8 | 4 | 6 |
| F6E | 5+40N | 653661 | 5423814 | 358 | -6 | 10 | -6 | 12 |
| F6E | $5+60 \mathrm{~N}$ | 653651 | 5423832 | 359 | -16 | 16 | -14 | 14 |
| F6E | $5+80 \mathrm{~N}$ | 653642 | 5423849 | 357 | -20 | 12 | -20 | 20 |
| F6E | 6+00N | 653633 | 5423870 | 357 | -10 | 12 | -12 | 16 |
| F6E | 6+20N | 653624 | 5423885 | 358 | -16 | 6 | -18 | 12 |
| F6E | 6+40N | 653614 | 5423900 | 357 | -24 | 4 | -30 | 10 |
| F6E | 6+60N | 653606 | 5423916 | 357 | -20 | 0 | -26 | 8 |
| F6E | 6+80N | 653598 | 5423931 | 358 | -16 | -4 | -24 | 8 |
| F6E | 7+00N | 653593 | 5423945 | 359 | -24 | -18 | -24 | 8 |
| F6E | 7+20N | 653577 | 5423966 | 360 | -30 | -26 | -34 | -24 |
| F6E | 7+40N | 653561 | 5423986 | 363 | -2 | -40 | -20 | -22 |
| F6E | 7+60N | 653552 | 5424004 | 367 | 12 | -38 | 6 | -20 |
| F6E | 7+80N | 653545 | 5424022 | 375 | 34 | -36 | 32 | -34 |


| F6E | $8+00 \mathrm{~N}$ | 653528 | 5424042 | 380 | 34 | -22 | 28 | -20 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F6E | $8+20 N$ | 653519 | 5424056 | 380 | 36 | -20 | 24 | -18 |
| F6E | $8+40 N$ | 653513 | 5424074 | 379 | 36 | -18 | 34 | -16 |
| F6E | $8+60 N$ | 653500 | 5424090 | 374 | 46 | -16 | 44 | -16 |
| F6E | $8+80 N$ | 653489 | 5424107 | 365 | 52 | -16 | 50 | -16 |
| F6E | $9+00 N$ | 653484 | 5424128 | 360 | 60 | -16 | 58 | -16 |
| F6E | $9+20 N$ | 653475 | 5424139 | 360 | 56 | -16 | 54 | -20 |
| F6E | $9+40 N$ | 653462 | 5424159 | 360 | 34 | -20 | 34 | -22 |
| F6E | $9+60 N$ | 653455 | 5424177 | 361 | 30 | -24 | 28 | -32 |
| F6E | $9+80 N$ | 653440 | 5424194 | 361 | 10 | -22 | 18 | -22 |
| F6E | $10+00 N$ | 653425 | 5424209 | 360 | 7 | -20 | 8 | -16 |
| F6E | $10+20 N$ | 653417 | 5424230 | 360 | 4 | -12 | 4 | -16 |
| F6E | $10+40 N$ | 653411 | 5424246 | 360 | -2 | -10 | -4 | -12 |
| F6E | $10+60 N$ | 653406 | 5424264 | 360 | -4 | -8 | -6 | -8 |
| F6E | $10+80 N$ | 653400 | 5424284 | 359 | -4 | -4 | -2 | -4 |
| F6E | $11+00 N$ | 653391 | 5424303 | 360 | -4 | 2 | -2 | 0 |
| F6E | $11+20 N$ | 653380 | 5424320 | 359 | -4 | 6 | -2 | 4 |
| F6E | $11+40 N$ | 653370 | 5424341 | 359 | -4 | 2 | -2 | 4 |
| F6E | $11+60 N$ | 653358 | 5424355 | 360 | -4 | 2 | -4 | 4 |
| F6E | $11+80 N$ | 653345 | 5424370 | 359 | 0 | 0 | 0 | 4 |
| F6E | $12+00 N$ | 653334 | 5424387 | 359 | 2 | 0 | 2 | 2 |
| F6E | $12+20 N$ | 653324 | 5424407 | 358 | 4 | -2 | 2 | 2 |
| F6E | $12+40 N$ | 653314 | 5424423 | 358 | 2 | 0 | 2 | 0 |
| F6E | $12+60 N$ | 653302 | 5424439 | 358 | 2 | 0 | 2 | 2 |
| F6E | $12+80 N$ | 653288 | 5424452 | 358 | 2 | 2 | 2 | 2 |
| F6E | $13+00 N$ | 653274 | 5424469 | 358 | 2 | 2 | 2 | 2 |
| F6E | $13+20 N$ | 653266 | 5424490 | 358 | 2 | 0 | 2 | 0 |
| F6E | $13+40 N$ | 653259 | 5424506 | 358 | 2 | 0 | 2 | 0 |
| F6E | $13+60 N$ | 653253 | 5424518 | 358 | 2 | 0 | 2 | 0 |
| F6E | $13+80 N$ | 653241 | 5424543 | 359 | 2 | 0 | 2 | 0 |
| F6E | $14+00 N$ | 653233 | 5424559 | 358 | 2 | 2 | 2 | 0 |
| F6E | $14+20 N$ | 653226 | 5424572 | 359 | 2 | 2 | 0 | 2 |




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