Monster Copper Resources Inc

2003 GEOLOGICAL RECONNAISSANCE, GRAVITY SURVEY AND DIAMOND DRILLING ON THE MONSTER PROPERTY, Monster 1-192, 207-216, 231-240, 263-265, Cookie 1-58 and CO 1-4 Claims

YMIP REFERENCE NUMBER 03-014

Located in the Ogilvie Mountains
Dawson Mining District,
NTS 116B/13
64°49' North Latitude
139°50' West Longitude

-prepared for-
MONSTER COPPER RESOURCES INC.
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YEIP
2003-014
2003

Dates worked: June 25 to July 12, 2003

2003 EXPLORATION PROGRAM ON THE MONSTER PROPERTY

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SUMMARY

In 2001, Monster Copper Resources Inc. acquired 100% interest in the 273 claim Monster/Cookie Property and the 12 claim Scary Property in the Ogilvie Mountains area of the Yukon Territory from Blackstone Ventures Inc. The four claims comprising the CO property, which occurs within the Monster property, were optioned by Monster Copper in 2002. The properties occur along two long, linear, structurally controlled belts of intrusive, iron oxide-rich hydrothermal breccia, each with anomalous to ore grade occurrences of Cu, Co, Au and Ag. Associated alteration includes carbonatization, hematization and albitization. The breccia belts are correlative with the more widely known hydrothermal intrusive breccias in the Wernecke Mountains, 250 km to the east. These latter breccias have been explored to the tune of $US 5.5 million by Newmont and associates. By contrast, the breccia belts (collectively known as the Wernecke Breccia) in the Ogilvie Mountains have received very little attention.

Since 1993, Blackstone Ventures Inc has controlled and intermittently explored the ground along the Ogilvie Mountains breccia belts which is considered to be most prospective. Grab samples from these claims contain up to 44.8% Cu, 1.04 g/t Au, 2.8% Co and 176 ppm Ag (different samples). None of the showings have been drilled, and neither gravity nor IP had been employed prior to Monster Copper's involvement. In 2001 Monster Copper spent 13 days in the field on its properties, conducting geological reconnaissance/due diligence and performing a gravity survey over part of the Monster/Cookie property. In 2002, Monster Copper spent a further 13 days on the Monster/Cookie/CO property, conducting geological reconnaissance and sampling, obtaining density measurements on a suite of representative samples, and completing a gravity survey designed to infill and expand upon the 2001 survey. A major gravity anomaly on the Monster claims was interpreted from the 2002 work; this anomaly had two east-southeast trending components, each thought to be caused by a significant dense body.

Monster Copper ran a field program from June 25 to July 12 in 2003. The program was based at an outfitter's camp at the edge of an airstrip 10 km north of the Monster claims, and consisted of detailed gravity surveying and one diamond drill hole. The objective of the gravity surveying was to refine the existing gravity anomaly in order to define additional drill holes. The objective of the drill hole was to test the southernmost dense body interpreted from the 2002 gravity survey. Geological reconnaissance proceeded as time allowed during the program. This report documents the results of the 2003 exploration program.

A much-improved set of elevation data was obtained during the 2003 geophysical program, enabling very accurate calculations of the terrain correction, and detailed gravity information was collected in the region of the main gravity anomaly. Unfortunately, refinement of the anomaly with the additional information lead to a substantial diminishment in the amplitude of the anomaly. The significant dense body thought to exist in the region of drill hole MON03-1 was not corroborated by the 2003 geophysical program. Hole MON03-1 penetrated a complicated mixture of Wernecke Breccia and Quartet Group shale (or Wernecke Breccia with several large clasts of shale), cut by several diorite dikes. One mineralized clast of andesite was encountered; this clast produced an intersection of 0.47 m @ 1.7% Cu. No particularly dense rocks were noted. It must be concluded that the main gravity anomaly, as known after this year's refinement, is not of exploration interest to Monster Copper.

The main recommendation is to fully compile all available data, and then to choose new targets for detailed gravity surveying. Such targets could be chosen from structural interpretations of magnetic and satellite data.

$326,470.12 was spent on the Monster claims, and $1,014.38 was spent on a brief visit to the Cookie claims. The cost of the program was higher than expected because of difficulties mobilizing the drill rig and associated equipment.

1.0 INTRODUCTION

The Monster Project is located in the southern Ogilvie Mountains, approximately 85 km north of Dawson City in the Yukon Territory (Fig. 1). The project consists of two properties, Monster/Cookie and Scary. The Monster/Cookie Property is the largest of these properties and consists of the contiguous Monster and Cookie claim groups, as well as the recently optioned, four claim CO claim group, which occurs within the Monster claim group. The property was staked in 1993 and 1994 (small portion in 1998) to cover numerous hematite-rich breccias and associated Cu-Co-Au geochemical anomalies. The breccias belong to the Wernecke Breccia, which is the name given to a widespread group of Middle Proterozoic, intrusive, hydrothermal breccias best documented in the Wernecke Mountains 250 km east of the Monster Project (Fig. 2). The Wernecke Breccia has been extensively explored in the Wernecke Mountains for IOCG (Iron Oxide Copper-Gold, also known as Olympic Dam-type) mineralization, but exploration for this deposit type in the Ogilvie Mountains has been more restricted.

The Monster/Cookie and Scary properties were purchased by Monster Copper Resources Inc. (Monster Copper) from Blackstone Ventures Inc. (Blackstone); Blackstone has intermittently explored the properties since 1993. In 2001, Monster Copper conducted a reconnaissance geology/geophysical program with the objective of gaining confidence that the geological environment was prospective for IOCG deposits, examining the known showings, and commencing initial geophysical work to help define one or more drill targets. This exploration program consisted of geological reconnaissance, minor rock sampling and a gravity survey that covered almost half of the Monster/Cookie property. Geological reconnaissance and rock sampling was done on the Scary property. An apparent gravity anomaly in the northeast part of the Monster claims was partially delineated during this program (Setterfield and Tykajlo, 2002). In July of 2002, a second program of geological reconnaissance and gravity surveying was undertaken. This work focused mainly on the area of the interpreted gravity anomaly, but also expanded the geophysical and geological coverage. The 2002 program defined an area of anomalous gravity response, including an apparent discrete anomaly considered worthy of drilling (Setterfield and Tykajlo, 2003). In 2003, further detailed gravity surveying was undertaken, geological reconnaissance continued, and a 194.51 m diamond drill hole was drilled. Land Use permits YA3F970 and LQ00099 were obtained for the 2003 program. This report documents the results of work undertaken in 2003. It is submitted in support of a claim for payment of a YMIP grant (reference number 03-014), and is identical to the report submitted for assessment purposes.

2.0 LIST OF CLAIMS

The Monster/Cookie property comprises 277 contiguous quartz mineral claims, located in the Dawson Mining District (Table 1; Figs. 1, 3 and 4). Government records indicate that the Monster and Cookie claims are 100% owned by Monster Copper Resources Inc. and the CO claims are owned by Earl Dodson.

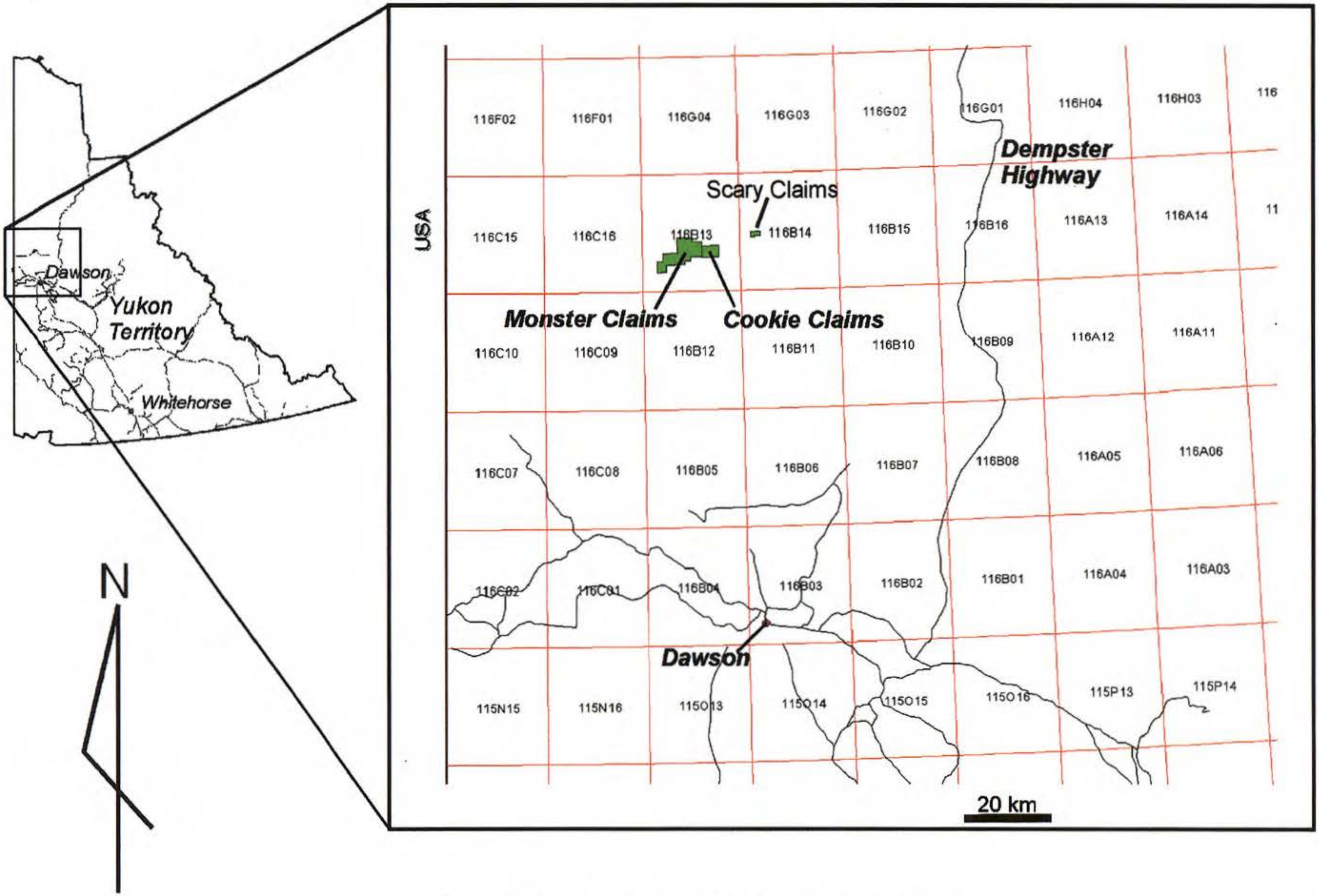


Figure 1: Project Area Location Map

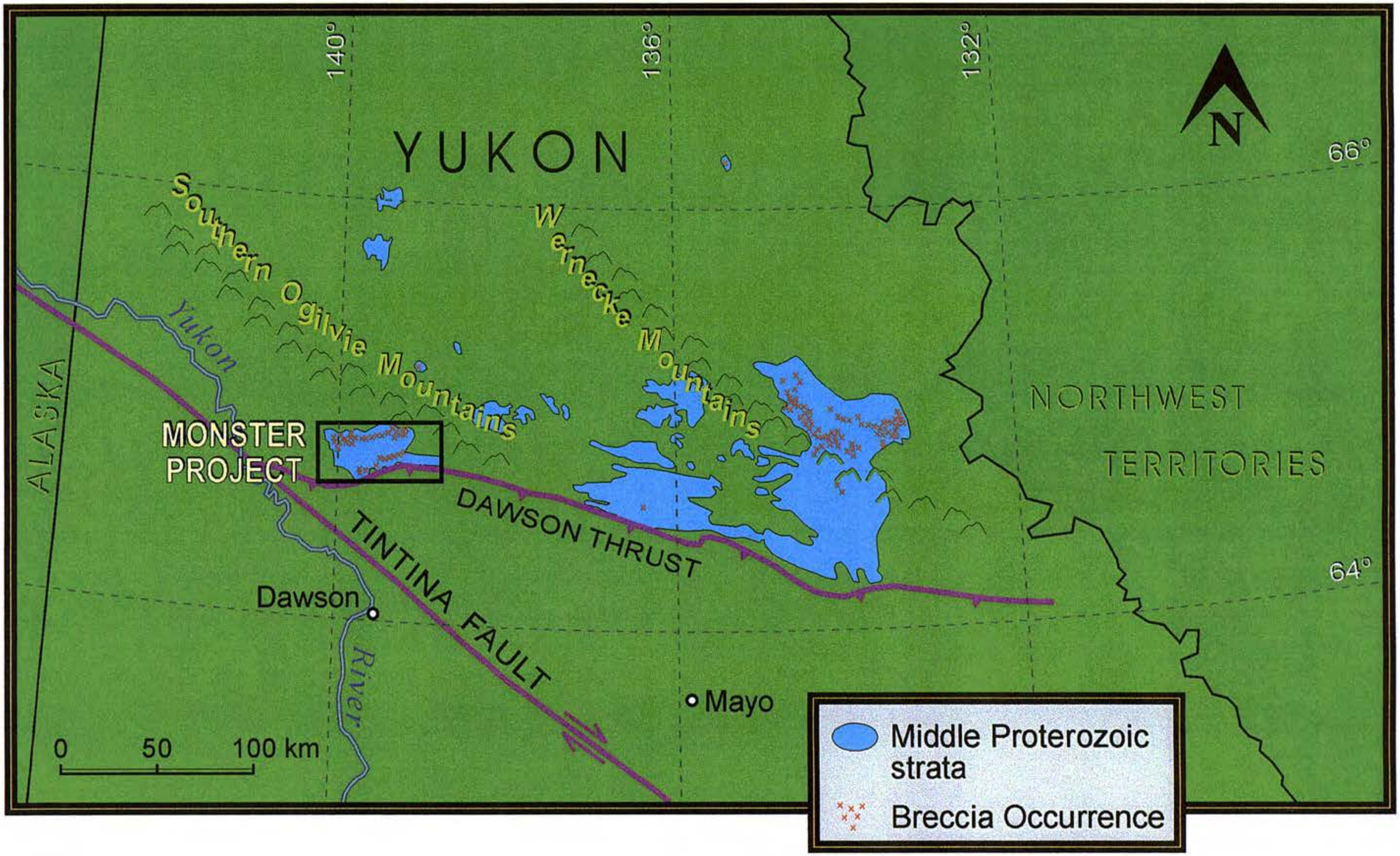
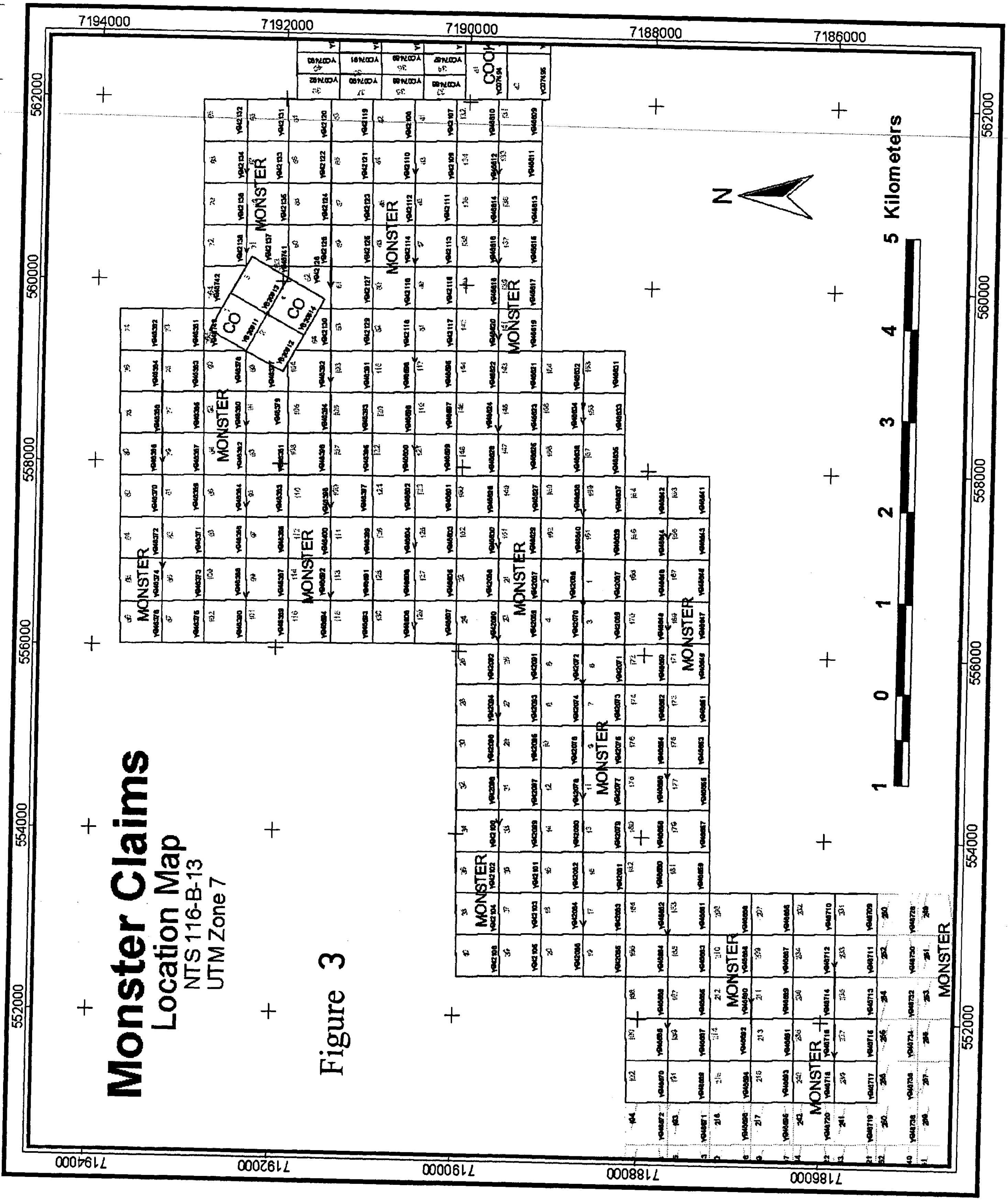


Figure 2: Location of Middle Proterozoic assemblages and occurrences of the Wernecke Breccia, Yukon Territory



Monster Claims
Location Map
NTS 116-B-13
UTM Zone 7
Figure 3
N
5 Kilometers
1 0 1 2 3 4 5
7194000
7192000
7190000
7188000
7186000
562000
560000
558000
556000
554000
552000
MONSTER
CO
COOK

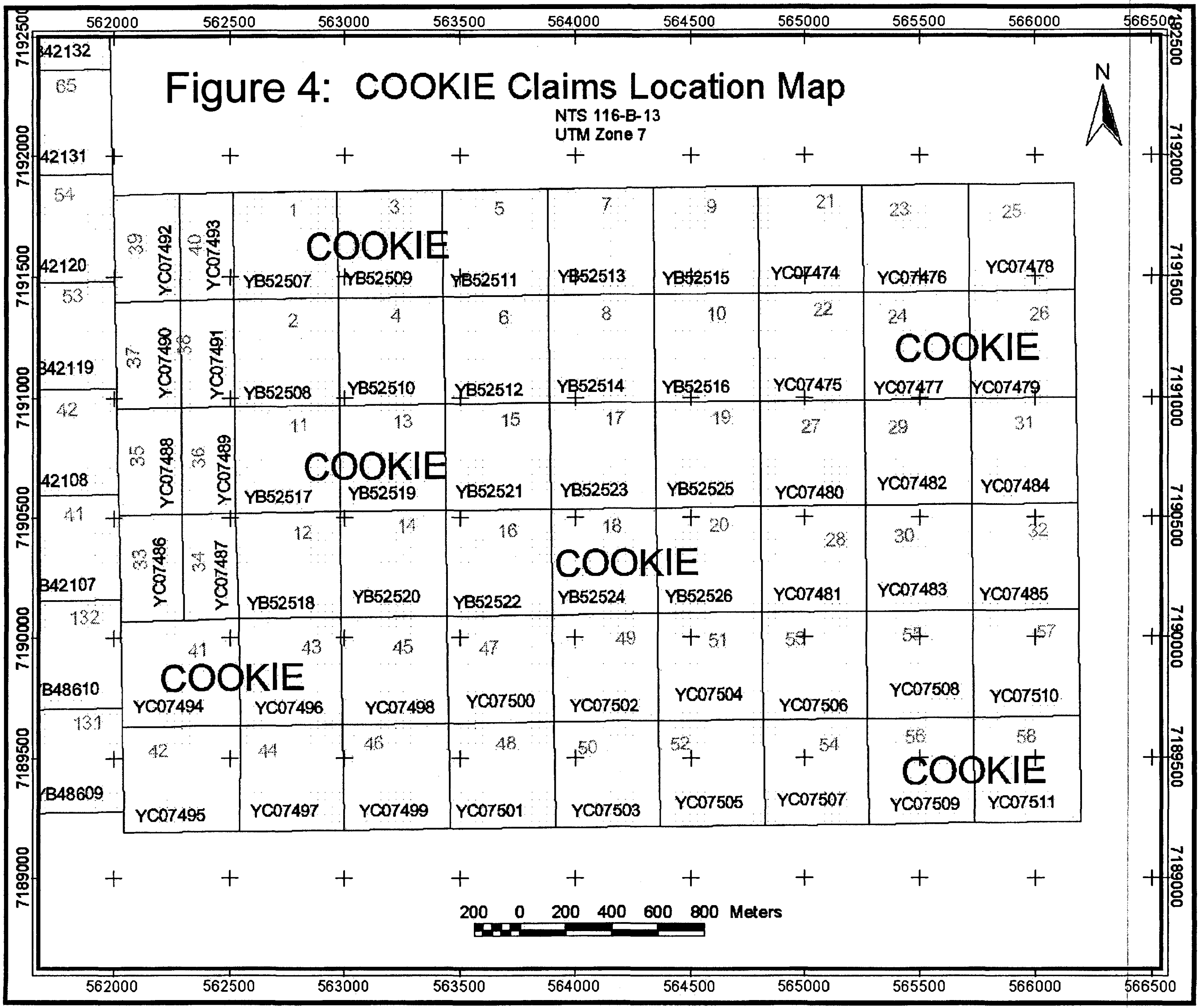


Figure 4: COOKIE Claims Location Map

Table 1: Claim Data

Claim Name	Grant Number	No. of Claims	Expiry Date*	Owner
Monster 1-12	YB42067-078	12	Dec. 31, 2007	Monster Copper Resources Inc
Monster 13-18	YB42079-084	6	Dec. 31, 2006	Monster Copper Resources Inc
Monster 19	YB42085	1	Dec. 31, 2007	Monster Copper Resources Inc
Monster 20	YB42086	1	Dec. 31, 2006	Monster Copper Resources Inc
Monster 21-32	YB42087-098	12	Dec. 31, 2007	Monster Copper Resources Inc
Monster 33	YB42099	1	Dec. 31, 2006	Monster Copper Resources Inc
Monster 34	YB42100	1	Dec. 31, 2007	Monster Copper Resources Inc
Monster 35-40	YB42101-106	6	Dec. 31, 2006	Monster Copper Resources Inc
Monster 41-46	YB42107-112	6	Dec. 31, 2007	Monster Copper Resources Inc
Monster 47-52	YB42113-118	6	Dec. 31, 2009	Monster Copper Resources Inc
Monster 53-57	YB42119-123	5	Dec. 31, 2007	Monster Copper Resources Inc
Monster 58-64	YB42124-130	7	Dec. 31, 2009	Monster Copper Resources Inc
Monster 65-68	YB42131-134	4	Dec. 31, 2007	Monster Copper Resources Inc
Monster 69-72	YB42135-138	4	Dec. 31, 2009	Monster Copper Resources Inc
Monster 73-80	YB48361-368	8	Dec. 31, 2008	Monster Copper Resources Inc
Monster 81-88	YB48369-376	8	Dec. 31, 2006	Monster Copper Resources Inc
Monster 89-94	YB48377-382	6	Dec. 31, 2008	Monster Copper Resources Inc
Monster 95	YB48383	1	Dec. 31, 2006	Monster Copper Resources Inc
Monster 96	YB48384	1	Dec. 31, 2008	Monster Copper Resources Inc
Monster 97-102	YB48385-390	6	Dec. 31, 2006	Monster Copper Resources Inc
Monster 103-106	YB48391-394	4	Dec. 31, 2008	Monster Copper Resources Inc
Monster 107-110	YB48395-398	4	Dec. 31, 2006	Monster Copper Resources Inc
Monster 111	YB48399	1	Dec. 31, 2008	Monster Copper Resources Inc
Monster 112	YB48400	1	Dec. 31, 2006	Monster Copper Resources Inc
Monster 113	YB48591	1	Dec. 31, 2008	Monster Copper Resources Inc
Monster 114	YB48592	1	Dec. 31, 2006	Monster Copper Resources Inc
Monster 115	YB48593	1	Dec. 31, 2008	Monster Copper Resources Inc
Monster 116	YB48594	1	Dec. 31, 2006	Monster Copper Resources Inc
Monster 117-122	YB48595-600	6	Dec. 31, 2008	Monster Copper Resources Inc
Monster 123	YB48601	1	Dec. 31, 2006	Monster Copper Resources Inc
Monster 124	YB48602	1	Dec. 31, 2008	Monster Copper Resources Inc
Monster 125	YB48603	1	Dec. 31, 2006	Monster Copper Resources Inc
Monster 126	YB48604	1	Dec. 31, 2008	Monster Copper Resources Inc
Monster 127	YB48605	1	Dec. 31, 2006	Monster Copper Resources Inc
Monster 128	YB48606	1	Dec. 31, 2008	Monster Copper Resources Inc
Monster 129	YB48607	1	Dec. 31, 2006	Monster Copper Resources Inc
Monster 130	YB48608	1	Dec. 31, 2008	Monster Copper Resources Inc
Monster 131-143	YB48609-621	13	Dec. 31, 2006	Monster Copper Resources Inc
Monster 144	YB48622	1	Dec. 31, 2008	Monster Copper Resources Inc
Monster 145	YB48623	1	Dec. 31, 2006	Monster Copper Resources Inc
Monster 146	YB48624	1	Dec. 31, 2008	Monster Copper Resources Inc
Monster 147	YB48625	1	Dec. 31, 2006	Monster Copper Resources Inc
Monster 148	YB48626	1	Dec. 31, 2008	Monster Copper Resources Inc

Claim Name	Grant Number	No. of Claims	Expiry Date*	Owner
Monster 149-179	YB48627-657	31	Dec. 31, 2006	Monster Copper Resources Inc
Monster 180	YB48658	1	Dec. 31, 2005	Monster Copper Resources Inc
Monster 181	YB48659	1	Dec. 31, 2006	Monster Copper Resources Inc
Monster 182	YB48660	1	Dec. 31, 2005	Monster Copper Resources Inc
Monster 183-192	YB48661-670	10	Dec. 31, 2006	Monster Copper Resources Inc
Monster 207-216	YB48685-694	10	Dec. 31, 2006	Monster Copper Resources Inc
Monster 231-240	YB48709-718	10	Dec. 31, 2006	Monster Copper Resources Inc
Monster 263-265	YB48741-743	3	Dec. 31, 2008	Monster Copper Resources Inc
Cookie 1-20	YB52507-526	20	Dec. 31, 2006	Monster Copper Resources Inc
Cookie 21-24	YC07474-477	4	Dec. 31, 2006	Monster Copper Resources Inc
Cookie 25-26	YC07478-479	2	Dec. 31, 2005	Monster Copper Resources Inc
Cookie 27	YC07480	1	Dec. 31, 2006	Monster Copper Resources Inc
Cookie 28	YC07481	1	Dec. 31, 2005	Monster Copper Resources Inc
Cookie 29	YC07482	1	Dec. 31, 2006	Monster Copper Resources Inc
Cookie 30-32	YC07483-485	3	Dec. 31, 2005	Monster Copper Resources Inc
Cookie 33-41	YC07486-494	9	Dec. 31, 2006	Monster Copper Resources Inc
Cookie 42	YC07495	1	Dec. 31, 2005	Monster Copper Resources Inc
Cookie 43	YC07496	1	Dec. 31, 2006	Monster Copper Resources Inc
Cookie 44	YC07497	1	Dec. 31, 2005	Monster Copper Resources Inc
Cookie 45	YC07498	1	Dec. 31, 2006	Monster Copper Resources Inc
Cookie 46	YC07499	1	Dec. 31, 2005	Monster Copper Resources Inc
Cookie 47	YC07500	1	Dec. 31, 2006	Monster Copper Resources Inc
Cookie 48	YC07501	1	Dec. 31, 2005	Monster Copper Resources Inc
Cookie 49	YC07502	1	Dec. 31, 2006	Monster Copper Resources Inc
Cookie 50	YC07503	1	Dec. 31, 2005	Monster Copper Resources Inc
Cookie 51	YC07504	1	Dec. 31, 2006	Monster Copper Resources Inc
Cookie 52-58	YC07505-511	7	Dec. 31, 2005	Monster Copper Resources Inc
CO 1-4	YB30611-614	4	Dec. 31, 2007	Earl Dodson
Total		277		

* Claim Expiry dates do not reflect the recently-applied for claim renewals which this report supports.

3.0 LOCATION, ACCESS AND GEOGRAPHY

The Monster/Cookie Property is located 85 km north-northwest of Dawson City, at the headwaters of Coal Creek, which enters the Yukon River 65 km northwest of Dawson City. The approximate center of the claims is latitude 64° 49' North and longitude 139° 50' West.

The property is located approximately 75 km west of the Dempster Highway (Yukon Highway 11). The Monster/Cookie Property may be accessed by fixed wing aircraft from Dawson City to a 600 m long outfitter's gravel airstrip on the South Tatonduk River (64° 55.7'N, 139° 52.3'W) and hence by helicopter to the property (some 10 km). Dawson City has regular air service from Whitehorse, and also has a full complement of hotels, equipment, expediters, helicopter companies etc.

The area lies in the western portion of the southern Ogilvie Mountains, 50 km north of the Tintina Trench. This region was unaffected by continental glaciation during the Pleistocene (Lane, 1990) resulting in rounded mountainous terrain. Locally, alpine glaciation has created steep cirques and sharp ridges on many of the mountains on the property. Elevations on the Monster Property range from around 900 m Above Sea Level (<3000') in the Coal Creek valley to about 2000 m Above Sea Level (>6500') on the highest peaks. Most of the property is above treeline, and is covered by alpine grasses, moss and shrubs. Thick stands of spruce are found in some of the major creek and river valleys. Outcrop is abundant on the uppermost slopes of the mountains and less so on ridge crests; valleys and the lower parts of the slopes are typically scree covered.

4.0 PROPERTY EXPLORATION HISTORY

Original exploration in the 1970's in the Wernecke Mountains was for red bed copper, Sullivan-style sedex deposits, and to a lesser extent unconformity associated uranium. Numerous mineral occurrences associated with the Wernecke Breccia (see below) were discovered during this work. Recent exploration in the Wernecke Mountains has concentrated on the breccias and their perceived potential for IOCG deposits. A joint venture between Pamicon Developments/Equity Engineering, Newmont Mining and Westmin Resources has spent US$5.5 million in the Wernecke Mountains since 1993 (Gorton and Stammers, 2000). This work has not been well documented (at least in publicly available documents), but a number of prospects were developed and at least partially tested. Some of the better intersections include 110 m @ .3% Cu/.06 g/t Au, 75 m @ .41% Cu/.3 g/t Au, 21 m @ 2.0% Cu/.2 g/t Au/.2% Co, and 5.5 m @ 0.5% Cu/.21 g/t Au (Gorton and Stammers, 2000).

The amount of exploration conducted to date in the Ogilvie Mountains is negligible compared to that completed in the Wernecke Mountains, although from geological considerations the potential in the two places should be similar. In the mid to late 1970's several companies, including Hudson Bay, Cyprus Anvil and UMEX/Shell, explored in the Ogilvie Mountains, primarily for carbonate-hosted Pb-Zn in the Gillespie Lake Group. The presence of the Wernecke Breccia was noted at this time, and UMEX/Shell conducted mapping, soil geochemistry, IP and magnetic surveys around some of the breccia occurrences. No further work was done in the area until the early 1990's, when Major General Resources (now Commander Resources Ltd) and Placer Dome worked on the Lala (now called the Olympic) breccia/mineralization occurrence in the eastern part of the North Belt of Wernecke Breccia (Fig. 5).

In 1993 a preliminary exploration program was carried out by the privately funded Monster Joint Venture (which became Pendisle Resources Ltd.) on the Monster 1-72 Claims (Fig. 3). This work was followed by stream sediment sampling and additional staking in the spring of 1994. Exploration in 1994 consisted of fly camp based geological mapping and rock, soil and stream sediment sampling over most of the Monster Property and the other properties within the project area (Baknes, 1995; Falls and Baknes, 1995). This work indicated several areas of promising mineralization, including the 4900 Zone and East Cu-Co Zone in the Monster West area, the Cobalt Cirque in the Monster East area and the Choc Zone in the Monster Southwest area (Fig. 6).

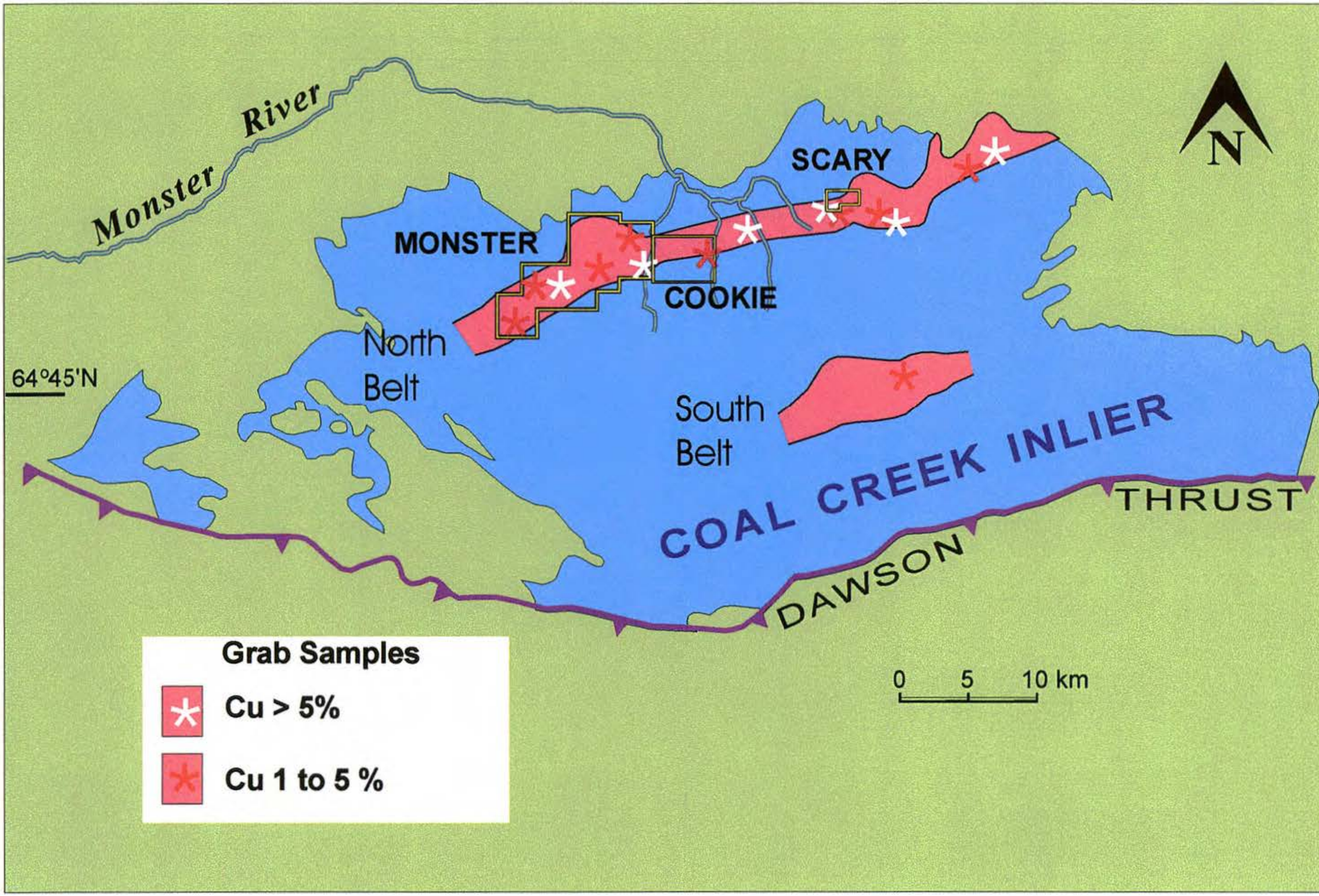


Figure 5: Location of belts of Wernecke Breccia, Monster Project properties and areas of known mineralization in the Coal Creek Inlier of the Ogilvie Mountains (cf. Fig. 2).

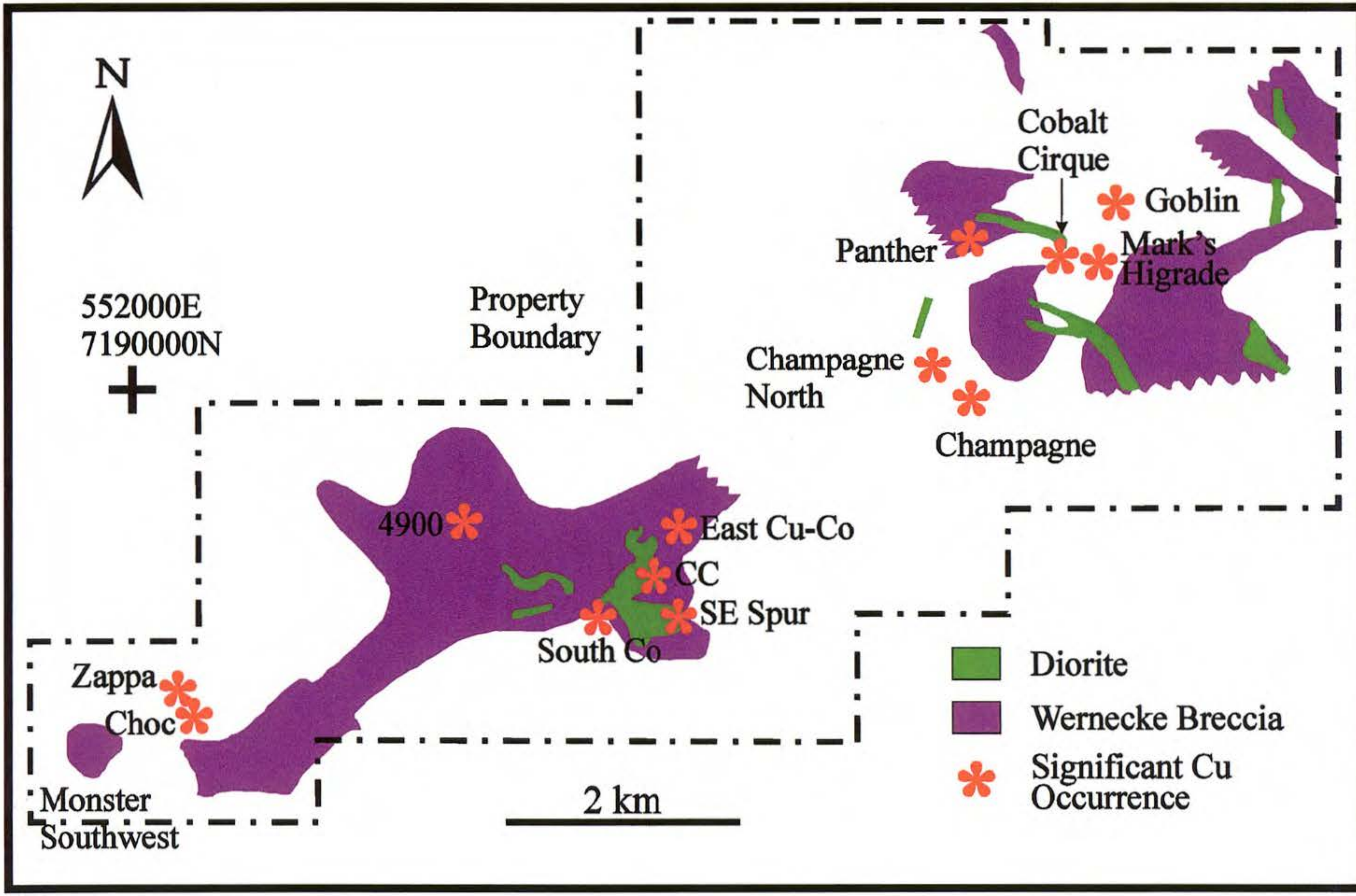


Figure 6: Location of significant Cu showings on the Monster Property. Modified after Caulfield, (1995).

In 1996, Blackstone Resources Inc., a successor to Pendisle, flew an airborne magnetic and radiometric geophysical survey over the entire Northern and Southern belts of Wernecke Breccia defined by Lane (1990; Fig. 5), including a detailed survey over the Monster Property itself. The survey was flown on north-south lines spaced 1 km apart over most of the area and 250 m apart over the Monster claims. This survey and all available data were subsequently evaluated in detail by Etheridge Henley Williams, a consulting firm with abundant expertise in searching for IOCG deposits in Australia (EHW, 1997). Etheridge Henley Williams targetted magnetic and structural features in the Monster East-Cookie area, the Monster West area and the Monster Southwest area. In 1998, based mainly on these recommendations, Blackstone staked the Cookie 21-58 claims (Fig. 4) and completed further mapping and soil sampling in several restricted areas (Jones, 1999).

In August of 2001, Monster Copper conducted a reconnaissance geology/geophysical (gravity) program on the Monster/Cookie property (Setterfield and Tykajlo, 2002). This work served to reinforce Monster Copper's confidence in the prospectivity of the geological environment, and partially delineated an apparent gravity anomaly in the northeast part of the Monster claims. In July of 2002, Monster Copper completed a second program of gravity surveying and reconnaissance geology. The program defined an area of anomalous gravity which was suggested by preliminary modelling to be caused by two subvertical, east-southeast trending bodies, approximately 250 m wide, each with a density on the order of 3.1 g/cm^3 (Setterfield and Tykajlo, 2003). Several samples with a density in excess of 3.0 g/cm^3 were discovered in the region of the gravity anomaly (Fig. 7). These include hematite-dominant and siderite-rich samples. One of the siderite-rich samples returned an assay of 2.2% Cu, and all the high density, iron-rich samples are considered to be very positive indicators.

5.0 2003 EXPLORATION PROGRAM

Subsequent to the 2002 exploration program, Monster Copper felt that while more gravity data would be desirable, available data was sufficient to enable targeting of an initial drill hole. In the interests of cost efficiency, it was thus decided to undertake further gravity surveying concurrently with drilling. The objective of the first drill hole was to test the southernmost dense body interpreted from the 2002 gravity survey (Fig. 7). The objective of the gravity surveying was to refine the existing gravity anomaly in order to define additional drill holes. Geological reconnaissance proceeded as time allowed during the program.

An attempt was made to mobilize the camping equipment, drill and associated gear overland from the Dempster Highway in March and April. This attempt was only partially successful, and approximately half of the necessary equipment had to be transported by air from Dawson in June. This dual mobilization ended up adding significantly to the cost of the program. An outfitters camp 10 km from the Monster property was used as a base of operations for the 2003 program. The outfitter's five cabins were supplemented by three tents, and the camp was variably occupied by three to eleven people from June 25 to July 11. Helicopter support was provided for the whole of this time period. One 194.51 m hole was drilled and 247 gravity data points were acquired.

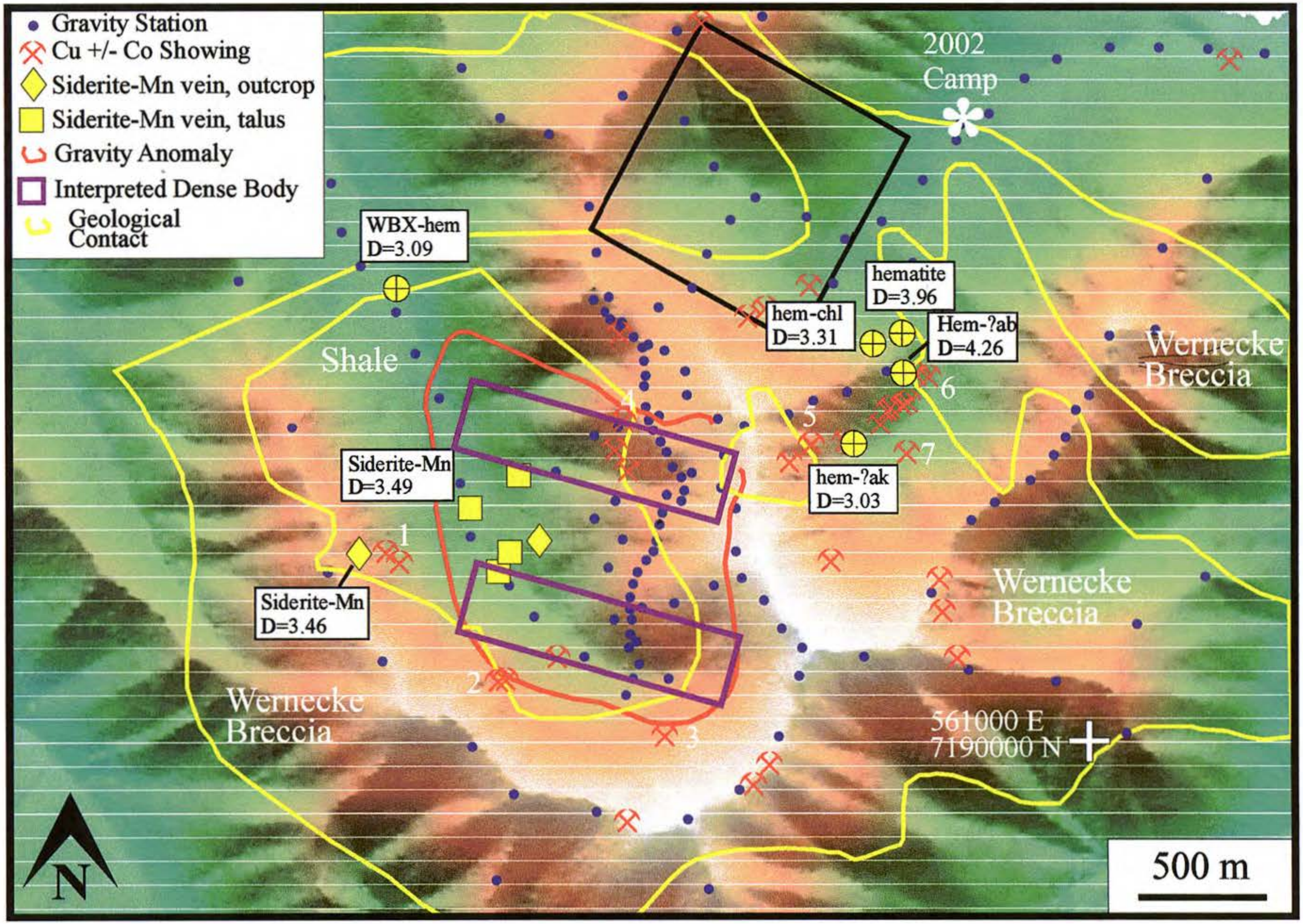


Figure 7: Main Gravity Anomaly, Showings, Dense Samples and Interpreted Dense Bodies. 1: M-203 and M-216 (2.2% and 9.5% Cu, grabs, Siderite-Mn veins); 2: Champagne North (11.35% Cu, grab); 3: Champagne East (3.4% Cu, grab); 4: Panther (1.3% Cu, grab); 5: Cobalt Cirque (4.2% Cu, 295 ppb Au, grab); 6: Goblin (0.34% Cu, 0.04% Co, 1 m chip): 7: Mark's High Grade (3.5% Cu, 2.72% Co, 50 cm chip).

6.0 REGIONAL GEOLOGY

Proterozoic strata of northwestern Canada have been divided into three distinct tectonostratigraphic units (Young et al., 1979). Sequence A comprises deformed, predominantly sedimentary rocks varying in age from 1.7 to approximately 1.0 Ga. The Belt/Purcell Supergroup, which hosts the Sullivan deposit, and the Wernecke Supergroup, host to the Wernecke Breccia, are members of Sequence A. Sequence B consists of marine platform and terrestrial sedimentary rocks aged 1.0 to 0.78 Ma, possibly recording development of an intracratonic basin in the interior of a supercontinent (Rainbird, 1995). The Pinguicula Group in the Wernecke Mountains and the Fifteenmile Group in the Ogilvie Mountains overlie the Wernecke Supergroup. Latest work (Thorkelson, 2000) has shown that as originally defined, these groups straddle the boundary between Sequence A and Sequence B; that part of the Pinguicula Group which occurs in Sequence B has been renamed the Hematite Creek Group. Sequence C (0.78 to 0.56 Ga.) contains rifted to passive margin sedimentary rocks developed during fragmentation of this supercontinent. Contacts between individual sequences are characterized by well developed unconformities (Young et al., 1979).

Proterozoic strata of the Wernecke Supergroup within the Wernecke Mountains consist of a minimum of 14 km of mostly fine-grained terrigenous and carbonate rocks, and are interpreted to comprise a possible intracratonic rift basin (Thorkelson, 2000). The Wernecke Supergroup has been subdivided into three conformable groups: i) Fairchild Lake Group (oldest), ii) Quartet Group and iii) Gillespie Lake Group (youngest). The stratigraphic base of the Wernecke is not exposed.

The Fairchild Lake Group (4 km thick) consists of grey-green laminated siltstone, mudstone, fine sandstone and minor carbonate (Delaney, 1981). Metamorphic grade is greenschist with localized development of schists and phyllite. The Fairchild Lake Group is comprised of five formations, with distinctive carbonate beds in the middle and top of the group. Delaney (1981) sees the Fairchild Lake Group as being deposited in deep water by southerly flowing currents.

The Quartet Group (5 km thick) is a monotonous succession of dark grey siltstone, sandstone, mudstone and minor silty dolomite (Delaney, 1981). The base of the Quartet Group is underlain by a pyritic carbonaceous claystone, which possibly represents a sediment starved basin. Overlying siltstone-mudstone rhythmites record a gradual increase of sediment into the basin. These rhythmites grade upward into a thick siliclastic unit typical of a shallow marine setting, such as sub-tidal to inter-tidal facies.

The Gillespie Lake Group (4 km thick) consists of a dominantly orange dolomite with minor intercalations of sand and clay (Delaney, 1981). The base of the Gillespie Lake Group is characterized by shallow marine silicic sediments, with a gradual increase in dolomite up section. Paleocurrents on these silicic sediments indicate a southerly transport. Patches of relict limestone are common throughout the section, implying that much of the group was originally limestone. Thorkelson (1995) postulated that shallow water to partly emergent conditions existed during evolution of the Gillespie Lake Group.

The Wernecke Supergroup is locally overlain by the amygdaloidal, intermediate to mafic Slab volcanics in the Wernecke Mountains. Clasts of these volcanics have been noted in the Wernecke Breccia. Thorkelson (1995) states "a volcanic succession at least 250 m thick was deposited subaerially on a substrate of deformed Wernecke Supergroup prior to generation of Wernecke Breccia". Unfortunately these volcanics are not widespread, and their interpreted stratigraphic position corresponds to the transition between the Wernecke Supergroup and the Pinguicula Group, which is the site of a major unconformity. Thus the volcanics could have been much more extensive than is now the case.

Dikes and intrusions of diorite, syenite, gabbro and lesser basalt cut the Wernecke Supergroup. In the Wernecke Mountains, the dioritic to syenitic Bonnet Plume River series of intrusions has been dated at 1710 to 1720 Ma (Thorkelson et al., 2001). Some dikes are truncated by the unconformity with the overlying Pinguicula Group, whereas others pass through it. Lamprophyre dikes, comprised of phlogopite + clinopyroxene and perovskite, also occur in the Wernecke Supergroup, but these are likely to be of Paleozoic age.

The rocks described above have been intruded by the Wernecke Breccia, which is the term given to a collection of hydrothermal breccias thought to have been intruded at approximately 1600 Ma (Thorkelson, 2000). The breccia typically consists of subangular, altered clasts in a fine-grained, hydrothermal matrix of varying amounts of carbonate, albite, hematite or chlorite. Trace to significant amounts of Cu, Co and Au occur in the breccia. Breccia zones range in area from 0.1 to 10 km^2 (Thorkelson, 2000).

Although described above for the Wernecke Mountains, these stratigraphic relationships are also valid for the Ogilvie Mountains (Table 2). No volcanics have been found in the Ogilvies, but rare amygdaloidal (i.e. high level) mafic dikes occur. This part of the Ogilvie Mountains is cored by the Coal Creek Inlier, an east-trending window of Middle Proterozoic rocks of the Wernecke Supergroup that have been cut by two belts of Wernecke Breccia (Fig. 5) and by mafic sills and dikes.

Table 2: Table of Formations in the Project Area

Sequence	Group	Predominant Rock Types	Intrusive Event
B	Fifteenmile (Unit R5)	Mudstone, Limestone	
A	Fifteenmile (Units R1 to R4)	Dolomite	
A			Wernecke Breccia
A	Gillespie Lake	Dolomite	Mafic Dikes
A	Quartet	Siltstone	Mafic Dikes
A	Fairchild Lake	Siltstone, Sandstone, Carbonate	Mafic Dikes

The Coal Creek Inlier has been mapped at 1:250,000 scale by Green (1972). The breccias were examined in some detail as part of an MSc thesis by Lane (1990); this mapping was released as a government 1:50,000 scale map (Lane and Godwin, 1992). The Geological Survey of Canada has re-mapped the Dawson map area at a scale of 1:50,000 (Thompson et al., 1992).

7.0 PROPERTY GEOLOGY

Monster Copper's 2001 and 2002 exploration programs both involved extensive reconnaissance examinations of the property geology to confirm previous mapping, and a minor amount of geological reconnaissance was conducted in 2003. These examinations have led to modification of Thompson et al.'s (1992) geology map (Fig. 8; Map 1). The Monster/Cookie Property is underlain predominantly by Quartet and to a lesser extent Gillespie Lake Group sediments that have been intruded by a discontinuous, ENE-trending belt of Wernecke Breccia and by diorite intrusions (Fig. 8). The Quartet Group consists of grey to black shale, bedded on a mm to cm scale, and with highly variable orientation. The shale is locally replaced by light brown carbonate, interpreted to be of hydrothermal origin, and to be the same material which commonly forms the matrix to the Wernecke Breccia (see below). The Gillespie Lake Group is represented by light grey, thickly bedded (5 cm to 1 m) dolomite, which locally weathers orange-brown and is some locations is stromatolitic.

The Wernecke Breccia consists predominantly of clasts of Wernecke Supergroup sediments in a matrix variably consisting of light brown iron carbonate, a red hematite-stained feldspar (?albite), and hematite or hematite-chlorite. Minor hydrothermal magnetite was noted on the Cookie claim group. Clasts vary in size from several mm to several hundred m, and are commonly altered to carbonate, albite or hematite. Some clasts contain veins of hematite which do not penetrate into the matrix, indicating multiple episodes of hydrothermal activity/brecciation. Rare clasts of apparent granite and basalt were noted. The matrix mineralogy varies inconsistently and with no evident pattern, other than a tendency for feldspar-rich matrix to occur proximal to mafic dikes. In several locations transitions from undisturbed host rock (both Quartet and Gillespie Lake groups) to veined (carbonate ± quartz) and broken host rock to Wernecke Breccia were observed, over 100 to 1000 m intervals. Medium-grained to lesser fine-grained, non-magnetic to magnetic mafic dikes typically cross-cut the breccia, although in some instances the breccia cuts and engulfs specific dikes, and clasts of dike material are locally incorporated into the breccia.

Nine mineralized zones previously documented by Blackstone were examined in 2001 and 2003, and 30 new "showings" were discovered in the course of the three programs on the Monster claims (Table 3; M216; Fig. 8). Copper ± cobalt mineralization is abundant in and adjacent to the Wernecke Breccia, and occurs in four main geologic settings. The most common setting is in sedimentary rocks, typically shale of the Quartet Group, either immediately adjacent to the breccia, or in large clasts within the breccia. In this setting, copper occurs in veins of iron carbonate ± quartz, or along bedding planes and fractures in the sediment. Malachite/azurite, with minor amounts of chalcopyrite, are the typical minerals, and erythrite (cobalt bloom) occurs at several showings. A second setting that mineralization occurs in is close to (within 10 m of) mafic dikes. Several showings are of this style, with the copper in sediments, breccia, or carbonate-quartz veins. Malachite, chalcopyrite, bornite and erythrite were all seen in this setting. The third setting for mineralization is as disseminations within the Wernecke Breccia. This is most common in the iron carbonate breccia, although examples of copper in hematite breccia were also seen. Malachite is the most common mineral, but disseminated chalcopyrite was also noted. The fourth setting is in siderite veins which contain abundant Mn along fractures. Examples of each of the first three types of mineralization are numerous, and are distributed across the Monster/Cookie property. The siderite-Mn veins have been noted only in the northeast part of the Monster claims, proximal to the gravity anomaly (see below).

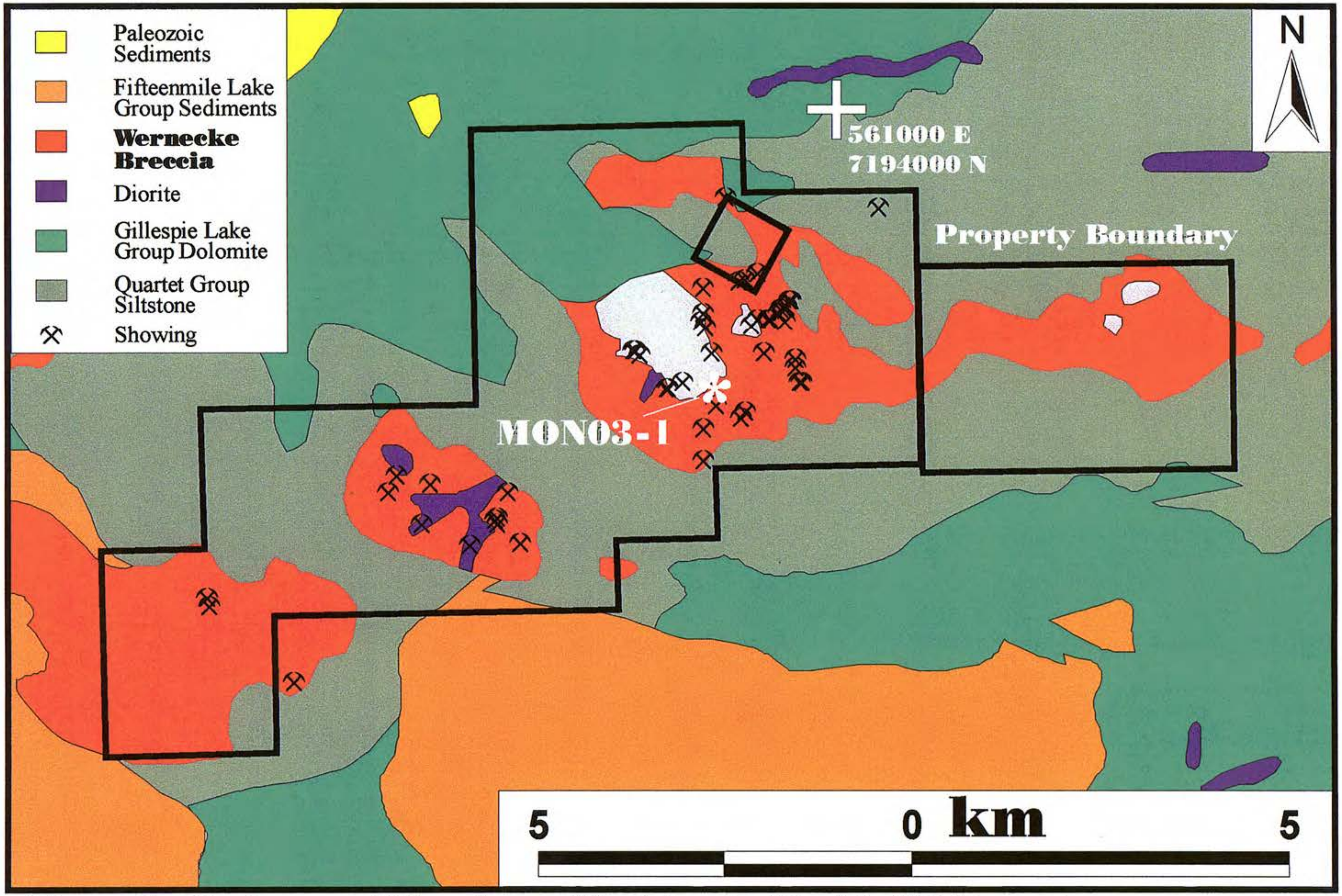


Figure 8: Geology and Showings of the Monster/Cookie/CO Property. Modified after Thompson et al. (1992).

Table 3: Showings on the Monster Property

NAME	EASTING	NORTHING	Visited	DESCRIPTION
Previously discovered				
Zappa	552520	7187445		Cpy, bn, cobaltite in structure in silica-carbonate altered dolomite
Choc	552555	7187345		
South Dolomite	553690	7186340		
CC (a)	556396	7188507	2001	Malachite, py, cpy on contact between albitic WBX and carbonate altered WBX
CC (b)	556367	7188483	2001	Large clast of jasper/shale in WBX. Malachite and azurite on bedding planes.
CC (c)	556378	7188436	2001	Malachite disseminated in Fe-rich WBX
East Cu-Co	556539	7188850	2001	Malachite, cpy and cobaltite in bedding planes and fractures over large area in shale/sandstone sequence.
Champagne	559145	7189280		Cobaltite, cpy, bornite at contact between dolomite and shale
Champagne North	558694	7190228	2001	Malachite on bedding planes in 100 x 100 m block of black shale within WBX
Champagne East	559315	7190010		
Panther	559152	7191229	2001	Steeply dipping, strongly silicified sediments within WBX. contains disseminated bn, malachite, cobaltite, py
Cobalt Cirque	559890	7191140		Large zone of Cu-Co mineralization in shales and dolomite (?) near diorite. ("Dolomite" is probably hydrothermal)
Mark's Higrade	560258	7191102	2001, 2002	Cpy, bornite, malachite in qtz vein on margin of dike cutting WBX. Cobaltite associated with nearby dikes
Goblin	560345	7191402	2001, 2002	Malachite on bedding planes and fractures in shale, and in carbonate veinlets. Close to WBX.
4900 Zone	555037	7189061	2002	W part showing: py-mal-cpy in WBX-cb
4900 Zone	554927	7188859	2002	E part: minor malachite in WBX-cb float
South Co	556020	7188166	2002	Malachite, azurite, Co in Sh-cb
SE Spur	556694	7188181	2002	50 m clast Sh w malachite on bedding planes
Discovered by Monster Copper				
M-9	559804	7191067	2001	Malachite in qtz vns cutting shale, and on local fault plane. Within WBX
M-18	559145	7191570	2001	Malachite on bedding planes in small block of silicified sediment within WBX, close to diorite dike
M-22	558660	7190225	2001	Malachite, pyrite, azurite in qtz-sericite shear in WBX
M-37B	560453	7190316	2001, 2002	Abundant malachite in Wernecke Breccia with carbonate-albite-hematite alteration
M-41	561514	7192624	2001	FLOAT of black shale with malachite and azurite on bedding planes
M3iii	559961	7190685	2001	5% disseminated py
M6	559660	7189822	2001	Disseminated malachite in WBX
M10	559804	7191067	2001	CuOH in q vns in WBX
M35	560397	7190494	2001	Disseminated cpy, py in DOLM
M37	560467	7190315	2001	Malachite disseminated in WBX
M40	558889	7190312	2001	Arsenopyrite bearing float
M42	560298	7191409	2002	Malachite, py on bedding planes in Sh nr WBX ct
M57	560264	7191303	2002	Malachite on bedding planes in Sh and in cb vns
M57	560244	7191292	2002	Malachite on bedding planes in Sh and in cb vns
M63	560197	7191283	2002	Malachite on bedding planes in Sh and in cb vns
M63	560187	7191271	2002	Malachite on bedding planes in Sh and in cb vns
M66	560156	7191221	2002	Malachite in cb-q vn
M69	560043	7191140	2002	Malachite on bedding planes in Sh and in WBX-cb
M73	560019	7191147	2002	Minor malachite in WBX
M96	559883	7191752	2002	Malachite on bedding planes and fractures in Sh
M101	559708	7191665	2002	Cpy in q vnlets in DI
M102	559640	7191633	2002	Malachite on fractures in DI
M114	559464	7192769	2002	Malachite in WBX (WBX = fault)
M121	555485	7188977	2002	Py, cpy in matrix of WBX
M127	555395	7188420	2002	Disseminated malachite in WBX-cb
M130	560384	7190620	2002	50 m clast Sh w malachite on bedding planes
M154	559174	7191034	2002	Malachite on bedding planes and fractures in Sh
M154	559122	7191118	2002	Malachite on bedding planes and fractures in Sh
M191	559166	7189677	2002	Malachite on bedding planes and fractures in Sh
M196	559721	7189903	2002	Malachite on fractures in WBX
M202	558241	7190719	2002	Minor cpy-py in siderite vns
M203	558214	7190722	2002	Minor cpy-py in siderite vns
M216	558285	7190676	2003	Minor cpy-py in siderite vns
M222	559278	7190278	2003	Malachite on bedding planes and fractures in Sh

8.0 GRAVITY SURVEY

MWH Geo-surveys Ltd. (MWH) of Vernon, B.C, under contract to Monster Copper, completed a program of gravity surveying over 11 claims in the interior of the Monster group of claims. Surveying was completed between June 27 and July 8, 2003. The field survey crew consisted of a gravity meter operator and a GPS receiver operator. Data was processed in the field and in offices of MWH after completion of the field data acquisition work.

The survey program was helicopter-supported from Monster Copper's base of operations 10 km north of the claims, and consisted of 247 unique station points, and 3 station repeats (required for quality control), for a total program of 250 data points (Maps 2 and 3). The survey was tied to the Canadian Gravity Standardization Network (CGSN) via a base station located at the Dawson airport (details in Appendix D). Station points were spaced at approximately 50 x 75 m centers. Field data collected by MWH included gravity, elevation (determined by differential GPS (DGPS)), and local elevation data (derived using a laser rangefinder) around a 170 m radius from each station point. Data was reduced to simple Bouguer gravity anomaly using a Bouguer density of 2.75 g/cm^3. Local elevation data was used to calculate inner terrain corrections, using a terrain density of 2.75 g/cm^3. Inner terrain corrections were computed for Hammer Zones (Hammer, 1939) B through D, which collectively account for terrain effects of a circle of terrain with 170 m radius from the station point. Gravity data acquired and processed to inner terrain corrected Bouguer anomaly values, was further processed to a Complete Bouguer Gravity Anomaly (CBGA) by MWH Geosurveys. The CBGA includes the inner terrain correction plus outer terrain effects from 170 m to 22 km radius from the gravity station point (equivalent to Hammer Zones (Hammer, 1939) E through M). CBGA values, station elevations, and supporting principal fact data is tabulated in Appendix E. Station numbers and locations, posted CBGA values, and GPS derived elevation data are shown on Map 2. CBGA values are contoured in Map 3.

Physical property determinations of Wernecke Breccia and shale country rocks in the area of the survey (Setterfield and Tykajlo, 2003) yielded a mean density of about 2.75 g/cm^3. Therefore, both Bouguer and terrain density used for 2003 survey corrections was 2.75 g/cm^3.

All terrain effects were calculated using commercial terrain correction software (LaserTC✦ and RasterTC✦) as described in MWH's survey report (Appendix D). A detailed 5 m grid cell digital elevation model (DEM) of the area of the Monster claims (derived from historical (early 1990's) contour data based on an orthophoto survey completed by Blackstone) was provided to MWH by Monster Copper for use in calculation of the near terrain correction. A 90 m grid cell DEM of Yukon, made available from the Yukon Department of Renewable Resources Geographic Information System (RRGIS), was used to complete terrain corrections to the maximum radius of 22 km.

After full terrain correction, the gravity anomaly initially detected in 2001 and refined in 2002, is further refined with 2003 survey data. Application of detailed DEM to the terrain correction calculation, including use of local laser rangefinder-derived elevation data, has resulted in significant improvement in terrain correction accuracy, which in turn has resulted in a decrease in anomaly amplitude reported in 2002 (Setterfield and Tykajlo, 2003). The gravity relief has diminished to about 3 mgal over the surveyed area, and amplitude of the east-southeast trending anomalies mapped in 2002 has diminished to less than 1 mGal. The density contrasts required to produce these anomaly trends is on the order of 0.1 to 0.15 g/cm^3-thus it is not necessary to invoke the presence of dense, iron-rich material to explain the trends.

9.0 DIAMOND DRILL HOLE RESULTS

Monster Copper drilled the 194.51 m diamond drill hole MON03-1 to test the southernmost of the two dense bodies interpreted from the 2002 gravity survey data. The hole was drilled by E. Caron Diamond Drilling Ltd of Whitehorse between June 29 and July 7. It was collared at 559225 E, 7190193 N (Fig. 8, Map 1) and drilled at an angle of -50° at an azimuth of 015°. The down-hole geology is shown in Table 4 and on Figure 9; Cu, Au and Ag assays are shown in Table 5, and all analyses are provided in Appendix C. Photographs of the core are presented in Appendix F.

The drill hole is dominated by variably altered (differing combinations of albite and ankerite) Wernecke Breccia (Table 4). The Wernecke Breccia is composed mostly of subangular clasts of sediment in a matrix of rock flour, carbonate and lesser hematite. Rare apparent andesite clasts are present. Intervals of black shale up to 40 m in length may represent in-place country rock, but more likely are large clasts within the Wernecke Breccia. Three diorite dikes cut the Wernecke Breccia. One small fault zone was encountered, as was a hydraulic breccia with clasts of sediment and Wernecke Breccia cemented by ankerite and minor hematite. The only significant mineralization occurred within a 50 cm wide clast of andesite, which has chalcopyrite disseminated throughout and occurring in stringers; this clast ran 1.7% Cu (Table 5). The density of a number of samples was measured during the program (Table 6)-none of them were particularly dense. Note that a newly discovered copper showing in siderite veins 1 km west-northwest of the drill hole ran 9.5% Cu (M-216; Appendix C).

Table 5: Cu, Au and Ag Assays from Hole MON03-1

From	To	Sample	Description	Cu (ppm)	Au (ppb)	Ag (ppm)
12.24	13.21	326	Wernecke Breccia with pyrite ± chalcopyrite	195	0	2.3
23.75	24.75	327	Fault Breccia	438	0	3.2
31.87	32.23	328	Shale with trace chalcoyrite	1133	0	2.3
136.68	137.81	329	Hydraulic breccia with ankerite-hematite cement	31	0	0
175.66	176.13	330	Andesite clast with 2% chalcopyrite	16633	12	4.2

Table 4: Geology of Drill Hole MON03-1

From (m)	To (m)	Rock Code	Comments
0	3.2	O/B	Several miscellaneous pieces of float (overburden)
3.2	12.24	SHAL-py	Shale; somewhat broken, bedding subparallel to CA. Cb, q veins various orientations make up 5% of interval. Py up to 2%, typically 0.25%, in lenses parallel to bedding, rarely cross-cutting.
12.24	14.53	WBX-py-cpy	Wernecke Breccia; jumbled shale clasts with cb and rock flour matrix. One 5 cm clast of plagioclase porphyritic material. Minor disseminated py, local trace chalcopyrite
14.53	15.95	SHAL-py	Shale; thinly bedded, bedding subparallel CA
15.95	23.75	WBX	Wernecke Breccia ; jumbled up clasts of black shale, apparent diorite, and apparent fine-grained, plagioclase porphyritic intermediate dike. Probably little clast movement. Cut by q, cb veins, variable orientation. Little alteration. Transitional contact with underlying unit; contact taken at first appearance of graphite
23.75	26.53	FTBX	Fault Breccia; highly broken core with intermittent graphite and white soft calcite, angular clasts of shale. Sharp contact with underlying unit.
26.53	27.48	ht-WBX-py	Wernecke Breccia; small subround clasts of variably altered shale, lesser diorite in rock flour matrix
27.48	32.22	bx-SHAL-py-cpy	Shale; broken, bleached shale. Cpy at end of unit, in lenses and veinlets
32.22	69.46	SHAL-py	Black shale, contorted thin bedding (20 to 90 to CA). Irregular distribution of <0.3 cm lenses and stringers of py. Very thin, variably oriented cb, q veinlets. Contact with underlying unit 40 to CA
69.46	71.4	WBX-py	Wernecke Breccia; subangular clasts up to 5 cm. All sedimentary clasts, variably altered. Matrix hematite, rock flour. Gradational contact with underlying unit. Trace local disseminated py
71.4	72.41	WBX-ab	Wernecke Breccia; red, strongly altered (albitized). Gradational contact with underlying unit
72.41	84.95	WBX	Wernecke Breccia; subround albitized clasts up to 5 cm in black matrix (rock flour, minor hematite)
84.95	90.98	fg-DIOR-ab-ep	Diorite; fine-grained, massive, black to pink, variably albitized diorite dike, epidote locally on fractures.
90.98	99.64	WBX-py-cpy	Wernecke Breccia; mostly red clasts up to 5 cm in a black rock flour +/- hematite matrix. Very local trace disseminated pyrite and chalcopyrite

99.64	107.5	fg-am-DIOR	Diorite; fine-grained, apparently amygdaloidal dike which has broken up on its margins and which has also incorporated some clasts from the WBX. Result is an 8 m section variably of massive fine-grained dike and of clasts floating in an igneous matrix; contacts on both sides are gradational. Some dike clasts are moderately magnetic (up to 0.6 on the MS meter).
107.5	121.25	WBX-ab	Wernecke Breccia with subangular clasts of albitized sediment in matrix of rock flour, chlorite and hematite.
121.25	128.84	WBX	"Fresh" Wernecke Breccia, with angular clasts of fresh fg sandstone in matrix of rock flour with minor specularite.
128.84	134.62	mg-DIOR	Diorite; medium-grained, non-magnetic dike. Upper contact has diorite clasts within WBX, lower contact sharp, 40 to CA
134.62	136.68	WBX	"Fresh" Wernecke Breccia, with angular clasts of fresh fine-grained sandstone in matrix of rock flour with minor specularite.
136.68	139.75	HCBX-ak-hem	Hydraulic breccia with angular clasts of interpreted in place sediment/WBX in matrix of white to pink ?ankerite, local acicular hematite crystals, minor green elongate crystals of ??actinolite. Roman measured this as slightly higher density than surrounding rocks.
139.75	146.28	WBX-ab	Wernecke Breccia with clasts of variably altered sediment (some ab alteration) in minor albite rich matrix
146.28	175.66	WBX-py	Wernecke Breccia; inhomogeneous with subangular, variably altered clasts of sediment (+ fine-grained intrusive?) in matrix of black rock flour, lesser hematite, rare chlorite. Local trace disseminated pyrite
175.66	176.15	ANDS-cpy-py	Clast of apparent andesite with plagioclase phenocrysts, total of 2% cpy, disseminated and in randomly oriented stringers. Minor disseminated pyrite.
176.15	178.4	WBX	Wernecke Breccia; inhomogeneous with subangular, variably altered clasts of sediment (+ fine-grained intrusive?) in matrix of black rock flour, lesser hematite, rare chlorite. Transitional to underlying unit.
178.4	194.51	WBX-ak	Wernecke Breccia with angular clasts of sediment and lesser dike material in matrix dominated by ankerite
194.51			End of Hole

Minerals: ab-albite; ak-ankerite; cb-carbonate; cpy-chalcopyrite; ep-epidote; hem-hematite; py-pyrite; q-quartz

Textures: bx-brecciated; fg-fine-grained; ht-heterolithic; mg-medium-grained

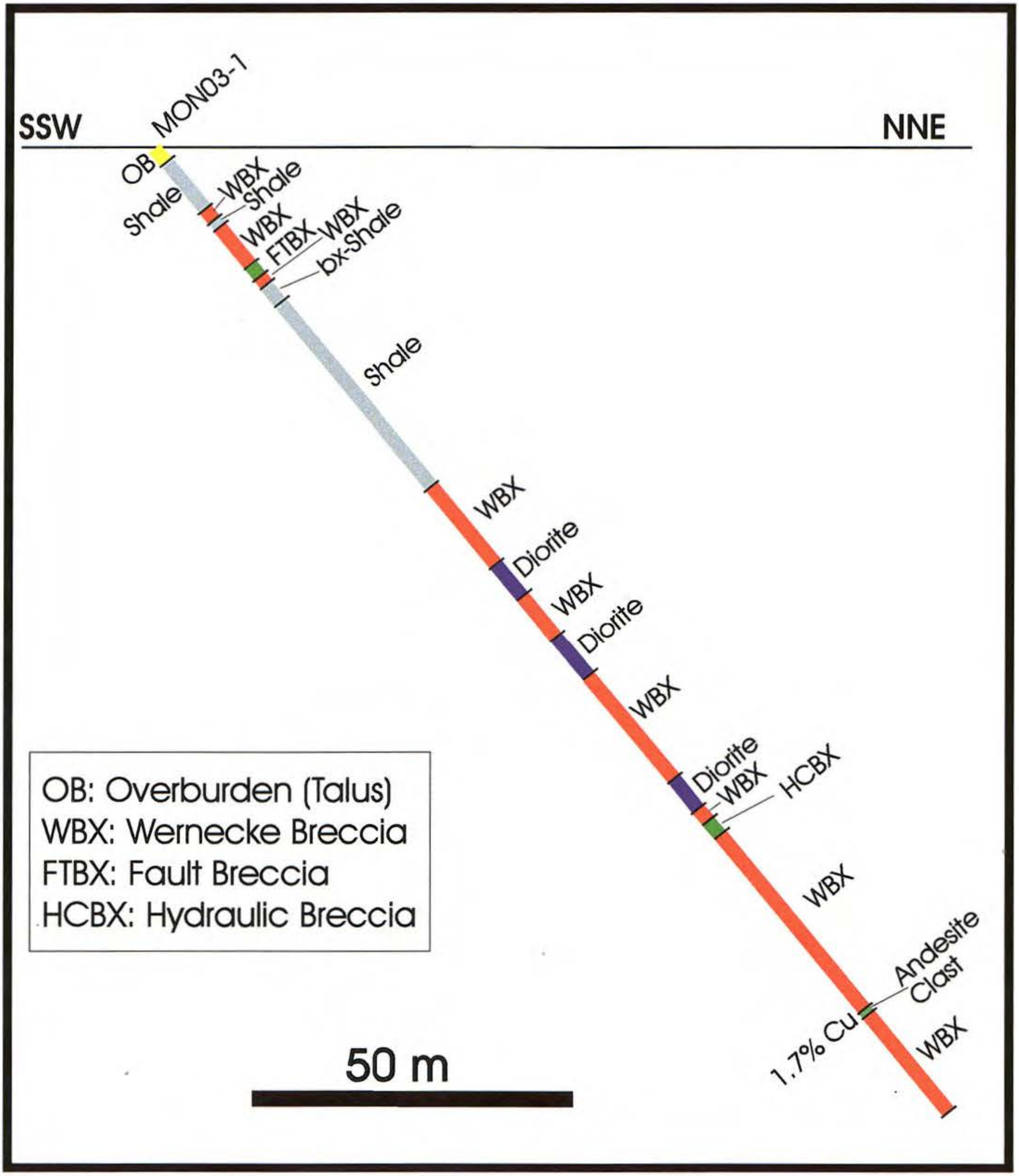


Figure 9: Simplified Geology of Drill Hole MON03-1 (collared at 559225 E, 7190193 N).

Table 6: Physical Property Measurements for Drill Hole MON03-1

Depth (m)	Rock Type	Density gcm^{-3}	Magnetic Suscept-ibility		Depth (m)	Rock Type	Density gcm^{-3}	Magnetic Suscept-ibility
12.5	Shale	2.73	0.10		114.63	Wernecke Bx	2.70	0.54
28.66	Shale	2.71	0.10		123.78	Wernecke Bx	2.77	0.27
44.51	Shale	2.72	0.07		129.84	Diorite	2.86	3.12
50.61	Shale	2.67	0.03		137.16	Wernecke Bx	2.80	0.21
56.71	Shale	2.70	0.07		142.65	Wernecke Bx	3.13	0.20
56.71	Wernecke Bx	2.69	0.07		145.39	Wernecke Bx	2.74	0.16
70.27	Wernecke Bx	2.73	1.00		148.44	Wernecke Bx	2.77	0.91
73.48	Wernecke Bx	2.65	0.34		160.32	Wernecke Bx	2.72	0.54
79.12	Wernecke Bx	2.79	1.15		166.42	Wernecke Bx	2.77	0.16
85.06	Wernecke Bx	2.75	0.21		170.08	Wernecke Bx	2.76	0.67
88.11	Wernecke Bx	2.70	0.14		178.00	Wernecke Bx	2.68	0.38
96.34	Wernecke Bx	2.73	0.16		181.05	Wernecke Bx	2.86	0.32
101.52	Wernecke Bx	2.80	1.09		184.4	Wernecke Bx	2.84	0.21
107.32	Wernecke Bx	2.84	2.45		188.98	Wernecke Bx	2.87	03.2
107.32	Wernecke Bx	2.84	2.45		194.46	Wernecke Bx	2.82	0.25

10.0 CONCLUSIONS AND RECOMMENDATIONS

A much-improved set of elevation data was obtained during Monster Copper's 2003 geophysical program, enabling very accurate calculations of the terrain correction. Detailed gravity information was collected in the region of the main gravity anomaly. Unfortunately, refinement of the anomaly with the additional information lead to a substantial diminishment in the amplitude of the anomaly. The significant dense body thought to exist in the region of drill hole MON03-1 was not corroborated by the 2003 geophysical program. Hole MON03-1 penetrated a complicated mixture of Wernecke Breccia and Quartet Group shale (or Wernecke Breccia with several large clasts of shale), cut by several diorite dikes. One mineralized clast of andesite was encountered; this clast produced an intersection of 0.47 m @ 1.7% Cu. No particularly dense rocks were noted. It must be concluded that the main gravity anomaly, as known after this year's refinement, is not of exploration interest to Monster Copper.

The main recommendation is to fully compile all available data, and then to choose new targets for detailed gravity surveying. Such targets could be chosen from structural interpretations of magnetic and satellite data.

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Kevin McNabb (Gravity Surveyor/Data Processor)
MWH Geo-Surveys Ltd
2916 - 29th Street
Vernon, BC
V1T 5A6

Marshall McNabb (GPS Surveyor)
MWH Geo-Surveys Ltd
2916 - 29th Street
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V1T 5A6

Nick Bodnar (Drill Foreman)
E. Caron Diamond Drilling Limited
7 Roundel Road,
Whitehorse, Yukon Territory
Y1A 3H3

Joe Lavallee (Driller)
E. Caron Diamond Drilling Limited
7 Roundel Road,
Whitehorse, Yukon Territory
Y1A 3H3

Robin Brown (Driller)
E. Caron Diamond Drilling Limited
7 Roundel Road,
Whitehorse, Yukon Territory
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Jimmy Rodrique (Driller)
E. Caron Diamond Drilling Limited
7 Roundel Road,
Whitehorse, Yukon Territory
Y1A 3H3

APPENDIX B

STATEMENT OF EXPENDITURES

STATEMENT OF EXPENDITURES
MONSTER/COOKIE PROPERTY
Monster 1-192, 207-216, 231-240, 263-265, Cookie 1-58 and CO 1-4 Claims
June 25 to July 12, 2003

CANADA) In the matter of an evaluation program on the Monster/Cookie Property

I, Tom Setterfield, of Monster Copper Resources Inc., 21 Tripp Crescent, Ottawa, Ontario, do solemnly declare that a program consisting of geological reconnaissance, rock sampling, gravity surveying and diamond drilling was carried out on the Monster 1-192, 207-216, 231-240, 263-265, Cookie 1-58 and CO 1-4 Mineral Claims in the period June 25 to July 12, 2003. The following expenses were incurred during the course of this work (includes mobilization costs incurred in March and April; does not include reporting costs):

$326,470.12 on the Monster claim group,
$1,014.38 on the Cookie claim group,

see Table B1 for details

And I make this solemn declaration conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath and by virtue of the Canada Evidence Act.

Declared at Ottawa in the)
Province of Ontario this)

9th day of January, 2004) Tom Setterfield

Table B1: Expenses Incurred in Planning, Undertaking and Interpreting Monster Copper's 2002 Exploration Program in the Ogilvie Mountains

Expense	Amount	YMIP Eligible
Monster Personnel Salaries: Planning, Mobilization	$ 2,540.00	
Monster Personnel Salaries: Fieldwork	$ 8,090.00	$ 8,090.00
Travel & Accommodation	$ 5,852.00	
Meals, Groceries	$ 2,433.00	$ 2,433.00
Vehicle Rental	$ 2972.00	$ 2972.00
Helicopter Charter	$114,592.00	$114,592.00
Airplane Charter	$ 17,496.00	$ 17,496.00
Geophysical Contractor Fees	$ 19,156.00	$ 19,156.00
Drilling (Includes Mobilization)	$136,340.00	$136,340.00
Camp Costs (Rental, Maintenance, Consumables)	$ 17,826.00	$ 17,826.00
Chemical Analyses	$ 187.50	$ 187.50
Total	**$327,484.50**	**$319,092.50**

APPENDIX C

CERTIFICATES OF ANALYSIS

Invoice No.: A03-1857
Work Order: A03-1857
Invoice Date: 22-SEP-03
Date Submitted: 03-SEP-03
Your Reference: NONE
Account Number: 3378

INS CONSULTING
21 TRIPP CRESCENT
NEPEAN, ONTARIO
K2J 1C5 CANADA
ATTN: TOM SETTERFIELD

CERTIFICATE OF ANALYSIS

15 ROCKS(PREP.REV5) were submitted for analysis.

The following analytical packages were requested. Please see our current fee schedule for elements and detection limits.

REPORT A03-1857 CODE 1H INAA(INAAGEO.REV1)
REPORT A03-1857B CODE 1H TOTAL DIGESTION ICP(TOTAL.REV2)

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

CERTIFIED BY :

DR E.HOFFMAN/GENERAL MANAGER

ACTIVATION LABORATORIES LTD.
1336 Sandhill Drive, Ancaster, Ontario Canada L9G 4V5 TELEPHONE +1.905.648.9611 or +1.888.228.5227 FAX +1.905.648.9613

Activation Laboratories Ltd. Work Order: A03-1857 Report: A03-1857

Sample ID	Au ppb	Ag ppm	As ppm	Ba ppm	Br ppm	Ca %	Co ppm	Cr ppm	Cs ppm	Fe %	Hf ppm	Hg ppm	Ir ppb	Mo ppm
N-1	490	-5	3.8	140	10.7	5	11	15	-1	3.99	-1	-1	-5	-1
N-2	322	-5	2.2	680	4.1	3	22	40	2	6.27	3	-1	-5	2
N-7	10	-5	1.1	200	-0.5	6	29	104	-1	6.37	3	-1	-5	-1
N-10	-2	-5	2.1	840	4	-1	6	45	-1	2.36	3	-1	-5	-1
N-11	92	-5	2.8	380	-0.5	1	22	238	6	4.68	3	-1	-5	3
N-15	4	-5	2.4	660	5.4	-1	4	14	3	2.37	6	-1	-5	-1
N-16A	7	-5	3.1	100	3	-1	1	24	2	1.19	1	-1	-5	-1
N-16B	-2	-5	2.1	130	6	-1	2	19	3	0.87	-1	-1	-5	-1
N-18	-2	-5	3.5	730	-0.5	-1	-1	138	4	3.91	3	-1	-5	-1
326	-2	-5	11.9	310	0.9	2	19	49	3	2.62	2	4	-5	5
327	-2	-5	13.8	1900	0.9	7	20	37	3	2.07	2	-1	-5	5
328	-2	-5	32	240	-0.5	5	31	42	3	2.41	1	-1	-5	5
329	-2	-5	1.5	380	3.8	16	7	21	3	2.37	3	-1	-5	3
330	12	-5	28.6	3000	-0.5	2	64	61	3	3.88	4	-1	-5	7
M-216	-2	19	89.2	430	-0.5	-1	53	13	-1	34.7	-1	1	-5	-1
DMMAS-16-2	635	-5	2340	350	2.6	8	68	141	2	8.27	-1	-1	-5	-2
DMMAS-16-1	665	-5	2230	420	3.1	9	68	152	2	8.21	3	-1	-5	-2
Accepted DMMAS-16	617±98		2210±299	391±298	2.1±2.0	7±2	63±6	140±20		7.99±0.54	2±2			

Sample ID	Na %	Ni ppm	Rb ppm	Sb ppm	Sc ppm	Se ppm	Sn %	Sr %	Ta ppm	Th ppm	U ppm	W ppm	Zn ppm	La ppm	Ce ppm	Nd ppm	Sm ppm
N-1	0.05	-20	21	-0.1	4.7	-3	-0.01	-0.05	-0.5	-0.2	-0.5	-1	-50	32.5	61	24	6.5
N-2	0.29	-20	92	0.2	7.3	-3	-0.01	-0.05	-0.5	4.5	1.7	-1	-50	35.1	77	32	5.5
N-7	2.66	48	-15	-0.1	31.9	-3	-0.02	-0.05	1.5	3.9	-0.5	-1	-50	20.3	43	14	4.7
N-10	0.18	50	106	-0.1	4.7	-3	-0.01	-0.05	-0.5	26.2	1.6	-1	-50	23.8	39	14	2.6
N-11	2.08	133	131	-0.1	13.4	-3	-0.01	-0.05	-0.5	6	1.9	4	56	21.7	42	19	2.9
N-15	1.97	-22	194	-0.1	4.1	-3	-0.01	-0.05	1.6	27.5	24.7	-1	324	73.4	154	60	10.4
N-16A	0.03	-20	34	-0.1	1.5	-3	-0.01	-0.05	-0.5	5	128	3	-50	13	25	12	2.6
N-16B	0.05	-20	55	-0.1	0.5	-3	-0.01	-0.05	-0.5	3.3	0.9	-1	-50	6	12	7	0.8
N-18	0.35	-28	-15	-0.1	44.6	-3	-0.02	-0.05	1	5.4	-0.5	5	-50	17.1	34	19	3
326	0.45	39	51	2.8	8.1	-3	-0.01	-0.05	-0.5	7.3	3.7	-1	6070	11.8	26	9	2
327	0.45	-20	42	2.6	5.8	-3	-0.01	-0.05	-0.5	7.1	4.1	-1	5630	13.7	30	11	2.8
328	0.77	40	66	6	5.9	-3	-0.01	-0.05	0.5	7.6	4	-1	1380	11.7	26	11	2
329	0.8	-20	41	0.5	5.7	-3	-0.01	-0.05	-0.5	8.1	7.1	3	-50	27.5	62	20	4.8
330	0.33	50	120	2	9.9	-3	-0.01	-0.05	-0.5	10.4	3.6	3	132	5.7	15	6	1.5
M-216	0.02	219	-15	12.2	8.4	31	-0.01	-0.05	-0.5	0.9	1.9	-1	243	2.3	5	-5	0.9
DMMAS-16-2	0.74	140	40	6.7	18.5	-3	-0.03	-0.05	-0.5	0.8	-0.5	15	248	12.1	24	11	3.7
DMMAS-16-1	0.72	-25	48	7.8	18	-3	-0.03	-0.05	-0.5	1.1	-0.5	17	242	12.1	24	10	3.9
Accepted DMMAS-16	0.72±0.06		40±28	8.2±2.8	18.3±1.6					1.2±0.8		18±3	240±50	1.5±1.3	23±7	11±4	3.7±0.4

Sample ID	Eu ppm	Tb ppm	Yb ppm	Lu ppm	Mass g
N-1	1.6	0.8	2	0.3	26.16
N-2	1.2	-0.5	1.3	0.21	23.65
N-7	1.3	-0.5	2.8	0.43	27.79
N-10	0.5	-0.5	0.8	0.12	19.31
N-11	1	-0.5	1.3	0.22	26.93
N-15	1.1	-0.5	1.2	0.19	23.58
N-16A	0.4	-0.5	0.3	-0.05	23.51
N-16B	0.2	-0.5	0.2	-0.05	20.46
N-18	0.8	-0.5	1.2	0.18	20.64
326	0.2	-0.5	0.9	0.13	23.04
327	0.6	-0.5	1.1	0.16	22.36
328	0.2	-0.5	1.1	0.16	24.14
329	1.2	0.9	4.1	0.62	22
330	0.4	-0.5	2.5	0.38	24.08
M-216	0.3	-0.5	1.6	0.25	34.63
DMMAS-16-2	1.4	0.9	3.7	0.55	25.64
DMMAS-16-1	1.2	-0.5	3.8	0.57	25.36
Accepted DMMAS-16	1.2±.4		3.6±.6	0.55±.23	

Activation Laboratories Ltd. Work Order No. A03-1857 Report No. A03-1857B

'Near Total' Digestion Analysis: Code 1H

SAMPLE	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	Be	Bi	Ca	K	Mg	P	Sr	Ti	V	Y	S
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	%	%	ppm	%	ppm	ppm	%
N-1	1.5	-0.3	25361	576	2	17	68	1	0.39	-1	47	4.58	0.38	2.44	-0.001	12	0.02	-2	22	2.013
N-2	2.3	-0.3	20841	541	1	23	47	18	2.52	-1	194	2.72	3.71	0.64	0.058	125	0.23	67	13	1.153
N-7	0.7	2.2	129	995	-1	45	-3	67	5.53	2	3	6.26	0.78	4.44	0.049	250	0.66	233	22	0.018
N-10	0.4	1.7	65	164	-1	45	4	46	5.23	1	-2	0.43	4.82	2.47	0.044	80	0.17	55	7	0.010
N-11	2.7	1.1	3253	478	3	133	6	65	4.75	1	2	1.33	2.60	1.97	0.021	213	0.28	100	8	1.179
N-15	1.3	2.8	64	122	4	4	46	296	4.48	2	-2	0.15	4.64	0.41	0.039	101	0.15	27	11	0.528
N-16A	-0.3	0.6	47	34	2	3	42	29	1.27	-1	-2	0.79	0.68	0.13	0.243	14	0.03	11	5	0.011
N-16B	-0.3	1.0	33	26	-1	5	-3	23	2.54	-1	-2	0.07	1.61	0.16	0.009	9	-0.01	4	1	0.006
N-18	0.4	2.1	27	20	1	11	-3	26	5.24	1	-2	0.14	2.75	0.18	0.034	15	0.27	90	6	0.009
326	2.3	9.2	195	643	5	35	1500	4653	3.77	1	3	1.88	3.08	3.86	0.037	27	0.25	119	8	0.496
326 /R	2.3	9.2	199	638	5	36	1485	4619	3.79	1	3	1.87	3.54	3.84	0.036	27	0.25	120	8	0.504
327	3.2	10.3	438	2214	2	21	4066	4125	2.72	-1	3	6.46	1.84	4.11	0.032	48	0.12	59	9	0.393
328	2.3	2.6	1133	1881	1	38	256	1029	3.14	1	-2	5.10	1.46	4.04	0.026	41	0.15	60	9	0.392
329	-0.3	0.4	31	5045	-1	8	11	42	2.13	-1	8	14.51	2.57	8.25	0.058	63	0.14	23	24	0.020
330	4.2	-0.3	16633	645	7	52	43	115	4.30	1	4	1.79	5.91	2.65	-0.001	43	0.25	158	11	1.365
M-216	18.7	-0.3	95114	37572	-1	213	334	171	0.22	-1	-2	0.15	0.09	0.40	-0.001	-1	0.01	-2	4	7.999

SAMPLE	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	Be	Bi	Ca	K	Mg	P	Sr	Ti	V	Y	S
AN-G cert		**0.08**	**19**	**310**	**0.2**	**35**	**2**	**20**	**15.78**	**0.3**	**0.03**	**11.36**	**0.108**	**1.08**	**0.004**	**76**	**0.133**	**70**	**7.5**	**0.014**
AN-G	-0.3	1.0	31	315	-1	36	-3	26	4.14	-1	-2	11.58	0.04	0.84	0.002	61	0.10	67	3	0.015
SDC-1 cert	**0.041**	**(.08**	**30**	**883**	**(.25**	**38**	**25**	**103**	**8.338**	**3.0**	**0.26**	**1.001**	**2.722**	**1.019**	**0.069**	**183**	**0.606**	**102**	**40**	**0.065**
SDC-1	-0.3	1.7	44	937	1	37	22	111	4.07	3	-2	0.92	2.90	0.98	0.045	157	0.59	100	22	0.065
DNC-1 cert	**(.027**	**(.182**	**96**	**1154**	**(.7**	**247**	**6.3**	**66**	**9.687**	**1**	**(.02**	**8.055**	**0.19**	**6.06**	**0.037**	**145**	**0.287**	**148**	**18**	**(0.039**
DNC-1	0.4	2.5	115	1110	-1	247	8	70	7.09	-1	3	8.30	0.20	6.13	0.019	131	0.27	140	14	0.063
SCO-1 cert	**0.134**	**0.14**	**28.7**	**410**	**1.37**	**27**	**31**	**103**	**7.24**	**1.84**	**0.37**	**1.87**	**2.30**	**1.64**	**0.090**	**174**	**0.38**	**131**	**26**	**0.063**
SCO-1	0.5	2.8	41	409	3	27	30	109	7.50	2	-2	2.04	2.69	1.94	0.066	168	0.36	133	25	0.077
GXR-6 cert	**1.3**	**(1**	**66**	**1008**	**2.4**	**27**	**101**	**118**	**17.68**	**1.4**	**(.29**	**0.179**	**1.87**	**0.61**	**0.035**	**35**	**0.498**	**186**	**14**	**0.016**
GXR-6	0.8	2.0	85	1011	1	26	101	138	4.76	2	2	0.14	1.54	0.17	0.040	29	0.51	213	3	0.018
GXR-2 cert	**17**	**4.1**	**76**	**1008**	**(2.1**	**21**	**690**	**530**	**16.46**	**1.7**	**(.69**	**0.929**	**1.37**	**0.85**	**0.105**	**160**	**0.3**	**52**	**17**	**0.031**
GXR-2	16.0	4.4	84	458	2	17	604	431	5.06	2	-2	0.49	1.21	0.71	0.040	112	0.26	49	5	0.018
GXR-1 cert	**31**	**3.3**	**1110**	**853**	**18**	**41**	**730**	**760**	**3.52**	**1.22**	**1380**	**0.958**	**0.05**	**0.22**	**0.065**	**275**	**0.036**	**80**	**32**	**0.257**
GXR-1	31.0	3.4	1175	898	17	35	743	670	1.69	-1	1388	0.88	0.05	0.19	0.041	279	0.03	78	28	0.247
GXR-4 cert	**4**	**(.86**	**6520**	**155**	**310**	**42**	**52**	**73**	**7.20**	**1.9**	**19**	**1.01**	**4.01**	**1.66**	**0.120**	**221**	**0.29**	**87**	**14**	**1.770**
GXR-4	3.8	0.9	6498	157	311	43	53	76	4.98	2	20	1.07	4.60	1.91	0.085	225	0.27	88	12	1.768

Note: Certificate data underlined are recommended values; other values are proposed except those preceded by a "(" which are information values.
Barite, gahnite, chromite, cassiterite, zircon, sphene, magnetite, and sulphates may not be totally dissolved.
Aluminium and Yttrium may only be paritally extracted.
Sulphur associated with barite will not be extracted. Rutile, ilmenite and monazite may not be fully extracted.

Clients are advised to obtain assays for Ag>100 ppm and Pb>5000 ppm due to potential solubility problems.
Values for Cu, Ni, Zn, Mo greater than 1% should be assayed if accuracy better than+/-10-15% is required.
Values above 1% are for informational purposes only and should not be relied upon for promotional or ore reserve calculations. Assays are recommended for this purpose.
Sulphur will precipitate in samples containing massive sulphides.

C. Douglas Read, B. Sc.
Laboratory Manager, Activation Laboratories Ltd.

Negative values indicate less than the reporting limit
99999 indicates greater than 10%

9/19/2003
3:37 PM

APPENDIX D

REPORT ON GRAVITY SURVEY

MWH
Geo-Surveys,
Inc.

Logistical Summary
Monster Grid, Dawson Region, Yukon

for Monster Copper Resources Ltd.

MWH Geo-Surveys Ltd.
July, 2003

INTRODUCTION:

From June 27 to July 8, 2003, MWH Geo-Surveys Ltd. carried out a gravity survey on the Monster Grid, in the Dawson City region of the Yukon Territory at the request of Monster Copper Resources Ltd. The survey operation was helicopter supported with gravity stations accessed on foot.

PROJECT SCHEDULE:

The following is the project timeline.

- Mobilization to Dawson City: June 27
- Start of Production: June 28
- Weather days: July 3, 4
- Conclusion of survey: July 7
- Demobilization: July 8, 2003

A total of 247 unique stations were surveyed during the 7 production days of the 2003 project. The project now has 564 gravity stations and 20 repeats occupied during the 2001, 2002 & 2003 seasons.

FIELD OPERATIONS:

Within the defined survey area; gravity stations were established at 50 meter intervals. Line spacing was 75 meters.

Survey Personnel: The personnel involved on this project were:

- Kevin MacNabb — Gravity / GPS & Data processing
- Marshall MacNabb — GPS Surveying

Gravity Instrumentation and Field Procedures: The gravity meter used on this project was a LaCoste & Romberg Aliod 100X gravity meter; serial # 332. All gravity readings were taken within loops to and from a base established at the location of a 2001 & 2002 station, to allow for correction of instrument drift. The base station value was derived from base ties conducted from the IGSN base in Dawson City (9378-1978 value 982,076.911) during the 2001 season. Approximately 4 per cent of the gravity stations (20 stations) have been repeated during the surveys with a standard deviation of repeats of .024 milligals.

GPS Survey Instrumentation and Field Procedure: Three Ashtech Z Xtreme dual frequency GPS receivers were used on this project. Real-time Kinematic positioning was used for

MWH Geo-Surveys, Inc., 955 South Virginia Street #116, Reno, Nevada 89502 (775)333-6609
MWH Geo-Surveys Ltd. 2916 - 29th Street, Vernon, B.C. V1T 5A6 (250) 542-9897

determining gravity station positions. However, prior to the start of the RTK positioning, a small network of control sites was established by post-processed static GPS observations. The principle control site from 2001 & 2002 was reoccupied to establish the 2003 control locations. The static control sessions were processed and adjusted by least squares by Trimble Total Control processing software.

The RTK acceptance criteria were set at 18 millimeters horizontal and 27 millimeters vertical. Elevation mask angle was 10 degrees with a 1 second epoch.

DATA REDUCTION and INTEGRITY:

GPS Processing: All static sessions were downloaded into Trimble Total Control for processing and network adjustment. GPS data was processed using the most current NGS ant_info.003 antenna models. Orthometric elevations were derived from geoidal heights using the Canada HT_01 geoid model. All final GPS positions were exported in NAD83 geographic and UTM Zone 7 coordinates and subsequently used in the Bouguer gravity calculations.

Gravity: The L&R Aliod 100X meter converts to milligals internally. Additional corrections were made for earth tides, drift between base ties and an adjustment to the defined base value. The results from these calculations are listed as Observed Gravity. The Observed Gravity values were corrected to Bouguer Gravity using survey positions provided from the GPS processing and the following formula:

$$g_B = g_{obs} - \gamma + (.3086 \times h) - (.04193\rho \times h) + dg_T$$

where:

g_B = Bouguer Gravity

g_{obs} = Observed Gravity

γ = Theoretical Gravity

dg_T = Terrain correction

h = Station elevation metres

ρ = Density gm/cc

There are several theoretical gravity formulae available. We have used the most recently published formula (1998) from The United States National Imagery and Mapping Agency (NIMA). According to this new formula, the theoretical gravity (γ) obtained from the gravity field of the WGS84 reference ellipsoid is

$$\gamma = (978032.53359)\left(\frac{1 + 0.00193185265241\sin^2(\phi)}{\sqrt{1 - 0.00669437999014\sin^2(\phi)}}\right) \text{ milligals}$$

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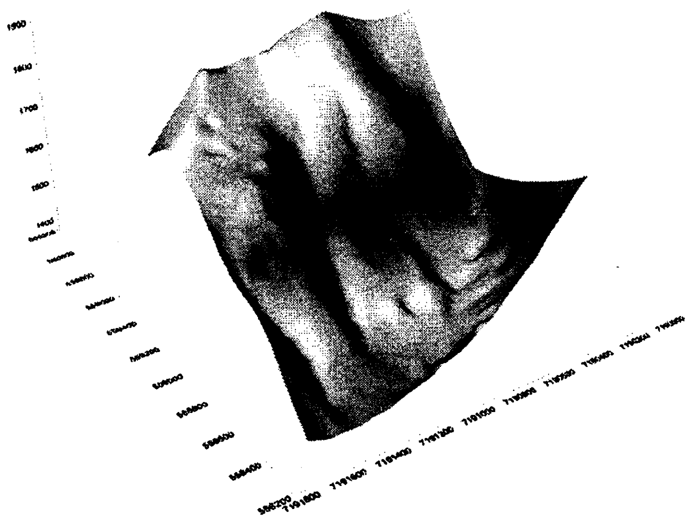
where (ϕ) is the geodetic latitude. Using this formula requires a small Atmospheric Gravity Correction (δ) because the WGS84 Earth's gravitational constant includes the mass of the atmosphere. This correction is given by

$$\delta = 0.87e^{-0.118\left[\left(\frac{h}{1000}\right)^{1.047}\right]}$$

where h is the elevation with respect to sea level.

Bouguer gravity data was calculated using densities of 2.5, 2.67 and 2.75 gm/cc.

Figure 1; Monster Inner Terrain DEM



Terrain Corrections: The survey area is very rugged with sharp mountain ridges in the near distance. Terrain corrections are critical to the success of the survey. Whereas the inner zone terrain corrections of 2001 and 2002 were derived from recording slope measurements for the various sectors of the B, C & D zones of the Hammer chart (outer radius 170 meters) with a small optical inclinometer, the corrections for 2003 were produced from a local digital elevation model. The local DEM was creating by compiling GPS positions from 2001, 2002 & 2003 gravity stations, plus additional in-fill GPS positions acquired this year, as well as, positions collected by a Laser Atlanta laser ranging device. Within the region of the detailed grid, 640 GPS positions and 1,760 Laser positions were merged to enable digital computation of inner terrain corrections.

From the gravity site to an outer radius of 170 meters, LaserTC version 1.63, was used to calculate inner terrain corrections. LaserTC is a program specifically designed to calculate accurate near-station terrain corrections for land gravity stations accompanied by data sets of irregularly-spaced terrain samples. These terrain samples were provided by our 2,400 point GPS/Laser DEM. By fitting a smooth surface to these elevation samples using procedures developed by Renka (1984, 1996a, 1996b) a surface is calculated and then numerically integrated along radial lines from a minimum radius (Rmin=1 meter) to a maximum radius (Rmax=170 meter), using an adaptive integrator. The basic method is the same as that

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described by Cogbill (1990) for calculating the innermost part of a terrain correction calculated from Digital Elevation Models. Terrain corrections were calculated assuming a constant terrain density of 2.00 gm/cc.

The second stage of the terrain corrections involved the zone from 170 to 2,000 meters radius. A detailed DEM supplied by Monster Copper was utilized for these terrain calculations. Prior to using the DEM the mean vertical offset between the DEM and our surveyed positions was computed. After correcting the DEM for this offset, RasterTC was used to calculate the middle zone terrain corrections from the 10 meter DEM grid. The terrain correction code used by RasterTC was developed by Allen Cogbill; see *Geophysics* (Cogbill, 1990). The regularly sampled terrain data are used as input to a triangulation and interpolation method made available in Renka (1984) which is accurate, fairly rapid, and general enough to accommodate situations in which some of the terrain data near a station might be missing or sparse, due perhaps to a station being located near the edge of the available DTM coverage.

The final stage of the terrain corrections involved the zone from 2 to 20 kilometers radius. A 90 meter regional DEM, again supplied by Monster Copper, was utilized for the far zone terrain corrections. Again, RasterTC was used to calculate terrain corrections.

In all cases the terrain correction value is scaled from the listed value at 2.0 gm/cc to match the computed bouguer density.

The inner terrain calculations for earlier data have been reprocessed using the new inner zone DEM. Line profiles of the detail line surveyed in 2002 are included in Appendix I. Two bouguer gravity profiles with similar densities show data utilizing the 2002 inclinometer derived inner terrain corrections as well as the 2003 DEM derived ITC. While the overall profiles are similar the improved methodology for calculating inner zone terrain corrections has yielded an improved data set based on a surveyed DEM rather than estimated slopes.

SUMMARY:

There were no technical or logistical problems during the course of this survey. The high accuracy of the gravity measurements, terrain corrections and GPS positions will yield a reliable data set from which geophysical decisions may be based.

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Appendix I

✓Bouguer Contour Maps
✓Test Line Profile
✓ Summary Data Listing
✓Equipment Specifications

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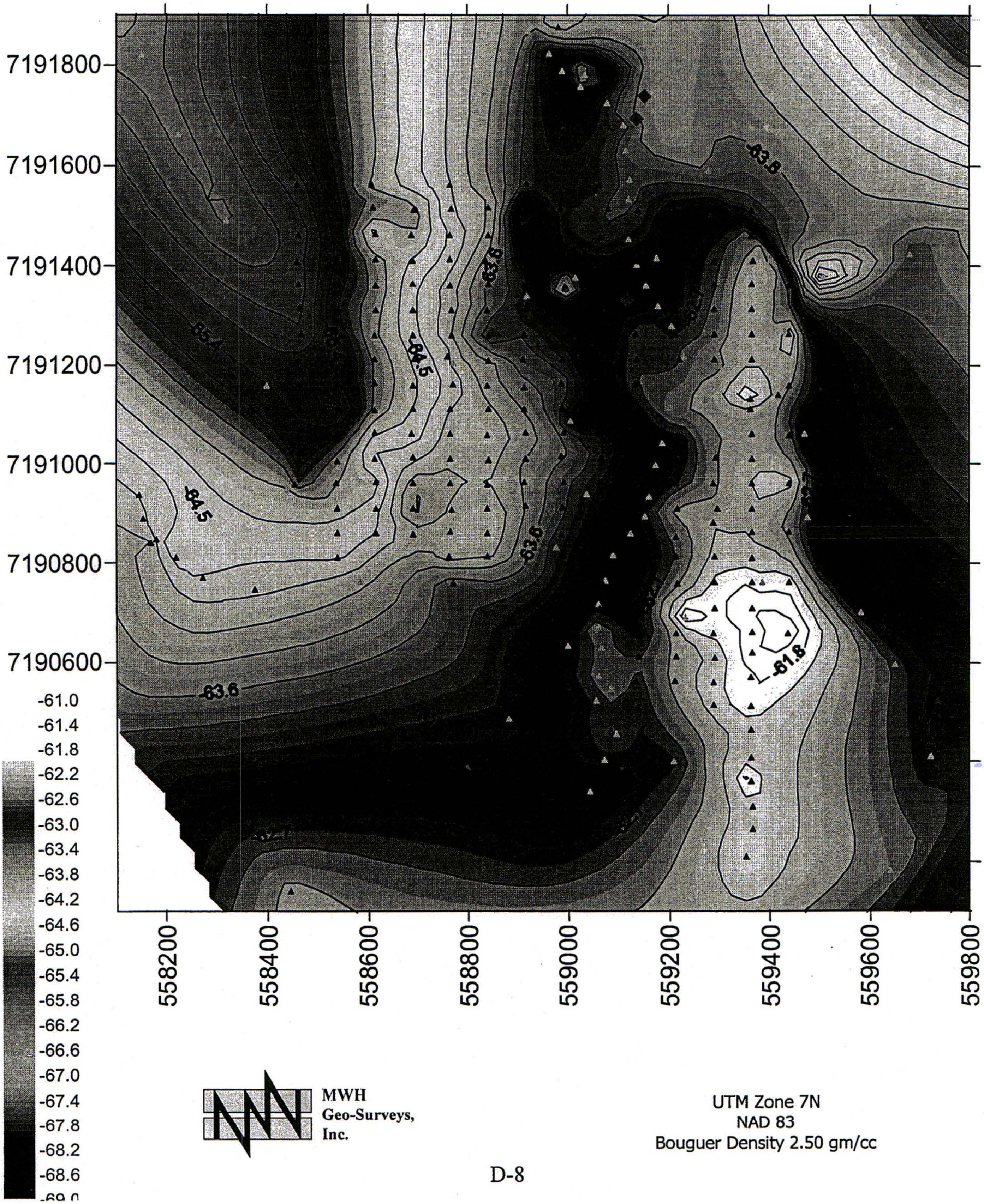
2003 Monster Grid; Gravity Survey



MWH
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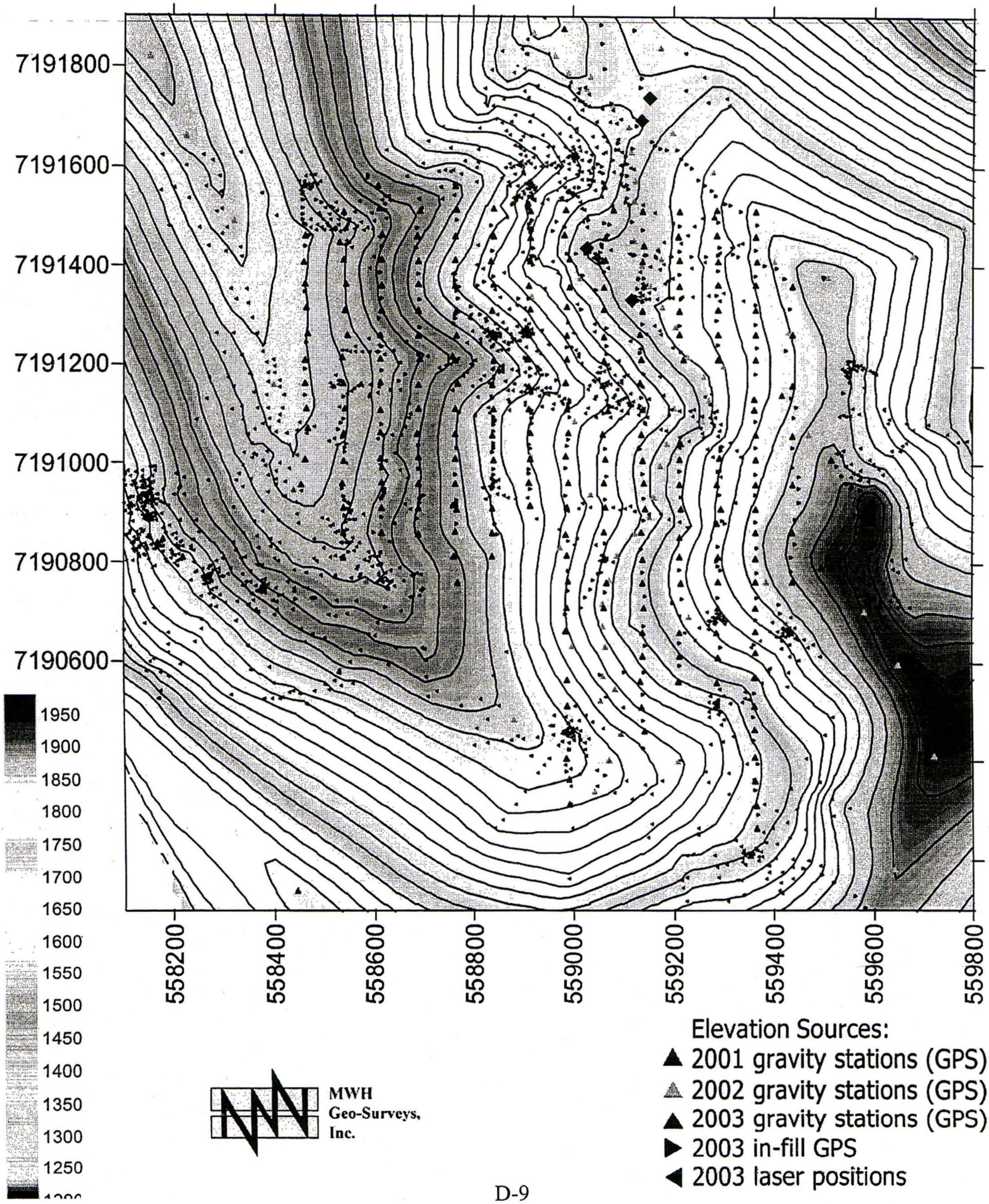
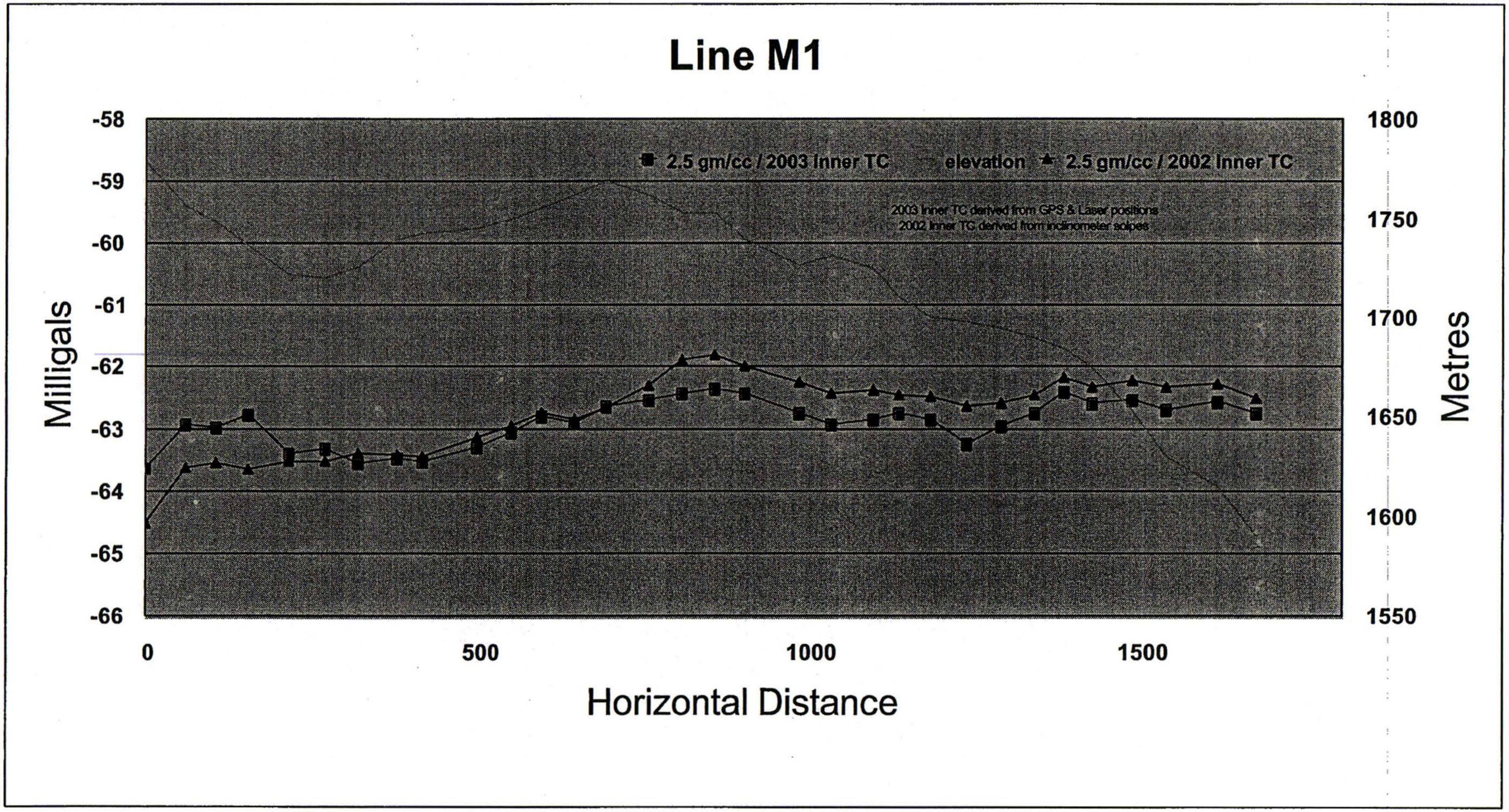
Inc.

UTM Zone 7N
NAD 83
Bouguer Density 2.50 gm/cc

2003 Monster Grid; Gravity Survey

Local Digital Elevation Model





Line M1
2.5 gm/cc / 2003 Inner TC
elevation
2.5 gm/cc / 2002 Inner TC
2003 Inner TC derived from GPS & Laser positions
2002 Inner TC derived from inclinometer solpes
Milligals
-58
-59
-60
-61
-62
-63
-64
-65
-66
Metres
1800
1750
1700
1650
1600
1550
0
500
1000
1500
Horizontal Distance

MWH Geo-Surveys, Inc.

GRAVITY SURVEY: Monster Project, Yukon

for Monster Copper Resources Inc.

Boug density #1:	2.50	unique stations:	566
Boug density #2:	2.67	repeats:	18
Boug density #3:	2.75	avg repeatability:	0.028

1	1	rp01214	11.47	689	5307.31	0.67	0.030	5400.76	981,845.934	1.84	*	n/a	4.17	6.02	982280.44	1710.96	561844.1	7194470.2	-78.34	-90.02	-95.52
1	2	rp01214	12.17	689	5298.51	0.63	0.037	5391.80	981,836.973	1.03	*	n/a	5.27	6.30	982280.40	1755.26	561523.0	7194397.1	-77.87	-89.85	-95.48
1	3	rp01214	12.41	689	5306.55	0.75	0.042	5400.03	981,845.195	1.50	*	n/a	4.51	6.01	982280.19	1725.84	561264.5	7194048.5	-75.80	-87.59	-93.14
1	4	rp01214	13.10	689	5318.13	0.74	0.045	5411.81	981,856.973	0.99	*	n/a	3.87	4.87	982280.11	1688.19	560809.1	7193908.2	-73.04	-84.66	-90.13
1	5	rp01214	13.50	689	5296.63	0.69	0.046	5389.92	981,835.084	1.12	*	6.38	5.49	12.99	982280.19	1785.76	560163.5	7194047.8	-64.98	-76.60	-82.07
1	6	rp01214	14.11	689	5311.09	0.69	0.046	5404.63	981,849.794	0.58	*	2.22	4.36	7.16	982279.99	1733.46	559886.8	7193711.2	-68.01	-79.76	-85.29
1	7	rp01214	14.35	689	5335.24	0.74	0.044	5429.21	981,874.374	0.51	*	1.70	3.01	5.22	982280.12	1632.29	559565.5	7193892.0	-66.60	-77.79	-83.06
1	8	rp01214	14.51	689	5324.02	0.72	0.041	5417.79	981,862.951	1.20	*	1.26	3.45	5.91	982280.18	1668.67	559330.6	7193993.3	-69.81	-81.21	-86.57
1	9	rp01214	15.53	689	5318.31	0.70	0.027	5411.96	981,857.119	0.87	*	3.41	3.77	8.05	982279.71	1701.71	559796.8	7193259.2	-65.77	-77.21	-82.60
1	10	rp01214	16.20	689	5313.95	0.75	0.018	5407.53	981,852.688	1.21	*	4.46	3.59	9.27	982279.53	1721.06	559584.2	7192966.4	-64.55	-76.03	-81.43
1	11	rp01214	16.51	689	5313.19	0.67	0.008	5406.72	981,851.880	0.74	*	3.89	3.85	8.48	982279.50	1726.36	559251.9	7192906.8	-65.23	-76.82	-82.27
1	11	rp01215	10.13	689	5313.24	0.69	-0.016	5406.76	981,851.905	0.74	*	3.89	3.85	8.48	982279.50	1726.36	559251.9	7192906.8	-65.21	-76.79	-82.24
1	12	rp01215	10.35	689	5330.15	0.65	-0.008	5423.95	981,869.101	0.53	*	2.92	2.84	6.29	982279.62	1653.88	559061.7	7193091.9	-65.64	-76.89	-82.19
1	13	rp01215	11.04	689	5320.05	0.70	0.002	5413.70	981,858.846	0.78	*	3.60	3.34	7.71	982279.34	1700.59	559040.7	7192656.7	-64.32	-75.79	-81.19
1	14	rp01215	11.35	689	5341.56	0.53	0.013	5435.54	981,880.683	0.87	*	3.36	2.27	6.50	982279.31	1601.42	558558.4	7192572.7	-64.16	-75.03	-80.14
1	15	rp01215	11.50	689	5351.85	0.65	0.018	5446.05	981,891.191	0.40	*	3.07	1.92	5.38	982279.43	1553.89	558407.0	7192763.4	-64.87	-75.49	-80.49
1	16	rp01215	12.48	689	5327.08	0.54	0.033	5420.84	981,865.965	1.02	*	3.78	2.99	7.80	982279.26	1667.13	558748.2	7192508.6	-63.83	-75.05	-80.33
1	17	rp01215	16.18	689	5445.42	0.65	0.024	5541.24	981,986.337	0.16	*	5.97	2.93	9.06	982279.60	1043.55	562658.8	7193041.7	-69.29	-75.96	-79.10
1	18	rp01215	16.41	689	5448.12	0.63	0.017	5543.98	981,989.068	0.13	*	n/a	2.94	3.07	982279.73	1024.23	562867.2	7193257.5	-78.12	-85.15	-88.47
1	19	rp01215	17.04	689	5448.97	0.55	0.009	5544.81	981,989.895	0.10	*	n/a	2.82	2.92	982279.87	1023.63	563085.2	7193479.4	-77.74	-84.79	-88.11
1	20	rp01215	17.22	689	5450.13	0.49	0.003	5545.97	981,991.048	0.20	*	n/a	2.68	2.88	982280.03	1017.27	563214.8	7193738.5	-78.09	-85.10	-88.39
1	21	rp01215	17.33	689	5452.01	0.43	-0.001	5547.86	981,992.937	0.15	*	n/a	2.63	2.77	982280.15	1008.25	563318.4	7193928.5	-78.29	-85.24	-88.51
1	22	rp01216	12.40	689	5318.07	0.65	0.016	5411.69	981,856.734	1.33	*	4.04	3.22	8.59	982279.08	1706.56	558901.8	7192226.2	-63.85	-75.28	-80.66
1	23	rp01216	13.22	689	5306.51	0.67	0.025	5399.94	981,844.987	0.83		5.02	3.67	9.51	982278.85	1756.66	558981.6	7191875.4	-64.01	-75.72	-81.23
1	24	rp01216	13.36	689	5315.34	0.66	0.028	5408.93	981,853.968	0.61		3.29	3.56	7.45	982278.74	1726.14	559138.0	7191693.9	-63.71	-75.38	-80.87
1	25	rp01216	14.01	689	5299.29	0.67	0.031	5392.60	981,837.643	0.67		4.33	4.76	9.76	982278.61	1795.44	559283.4	7191502.0	-62.90	-74.87	-80.50
1	26	rp01216	14.33	689	5292.04	0.48	0.033	5385.17	981,830.209	0.60		4.06	5.51	10.18	982278.38	1831.13	559418.6	7191140.2	-62.31	-74.50	-80.23
1	27	rp01216	15.02	689	5272.49	0.59	0.033	5365.31	981,810.350	0.51		5.97	6.57	13.04	982278.15	1907.77	559497.2	7190792.5	-62.74	-75.23	-81.11
1	28	rp01218	11.26	689	5260.52	0.66	-0.041	5353.08	981,798.104	1.26	*	7.39	6.94	15.59	982277.98	1950.59	559734.0	7190522.6	-62.90	-75.48	-81.40
1	28	rp01219	17.50	689	5260.69	0.62	-0.018	5353.27	981,798.127	1.26	*	7.39	6.94	15.59	982277.98	1950.59	559734.0	7190522.6	-62.88	-75.46	-81.38
1	28	rp01222	17.15	689	5260.73	0.65	-0.052	5353.28	981,798.134	1.26	*	7.39	6.94	15.59	982277.98	1950.59	559734.0	7190522.6	-62.87	-75.45	-81.37
1	28	rp01216	15.30	689	5260.47	0.73	0.031	5353.13	981,798.162	1.26	*	7.39	6.94	15.59	982277.98	1950.59	559734.0	7190522.6	-62.85	-75.43	-81.35
1	29	rp01218	11.52	689	5265.27	0.70	-0.035	5357.94	981,802.952	1.91	*	7.64	6.40	15.95	982277.95	1924.57	559968.9	7190487.8	-62.89	-75.25	-81.07
1	29	rp01216	16.21	689	5265.27	0.69	0.022	5357.99	981,803.020	1.91	*	7.64	6.40	15.95	982277.95	1924.57	559968.9	7190487.8	-62.82	-75.18	-81.00
1	30	rp01216	17.04	689	5290.58	0.71	0.011	5383.73	981,828.763	2.25	*	5.72	4.25	12.23	982278.12	1818.53	560237.6	7190736.5	-63.50	-75.42	-81.03
1	30	rp01217	16.55	689	5290.59	0.72	0.011	5383.75	981,828.775	2.25	*	5.72	4.25	12.23	982278.12	1818.53	560237.6	7190736.5	-63.49	-75.41	-81.02
1	31	rp01216	17.44	689	5303.35	0.60	-0.002	5396.68	981,841.708	1.63	*	5.51	3.65	10.79	982278.29	1763.84	560389.0	7191012.9	-63.67	-75.33	-80.82
1	32	rp01217	11.24	689	5368.78	0.69	-0.026	5463.25	981,908.255	2.01	*	3.77	1.28	7.06	982279.23	1434.53	561697.7	7192484.5	-69.83	-79.46	-83.99
1	33	rp01217	12.18	689	5336.65	0.66	-0.009	5430.57	981,875.581	1.59	*	5.40	1.87	8.86	982279.12	1591.15	561304.5	7192334.5	-68.23	-78.82	-83.81
1	34	rp01217	13.11	689	5310.55	0.68	0.006	5404.04	981,849.054	1.82	*	7.08	2.85	11.75	982278.95	1704.09	561130.8	7192068.0	-67.96	-79.11	-84.35
1	35	rp01217	14.07	689	5291.44	0.69	0.017	5384.61	981,829.628	2.19	*	9.18	3.57	14.94	982278.74	1783.22	561102.3	7191750.1	-67.07	-78.51	-83.90
1	36	rp01217	15.03	689	5302.61	0.47	0.022	5395.91	981,840.934	1.06	*	6.47	3.96	11.49	982278.59	1758.61	560848.1	7191503.2	-64.94	-76.50	-81.94
1	37	rp01217	15.40	689	5304.38	0.55	0.021	5397.74	981,842.760	1.53	*	6.04	3.62	11.19	982278.45	1751.85	560708.2	7191266.9	-64.72	-76.26	-81.68
1	38	rp01218	12.31	689	5303.38	0.64	-0.023	5396.70	981,841.710	1.01	*	5.00	3.51	9.52	982277.93	1767.07	560376.5	7190435.5	-64.23	-76.02	-81.57
1	39	rp01218	12.58	689	5309.04	0.77	-0.018	5402.51	981,847.509	1.18	*	6.07	3.19	10.44	982277.90	1732.58	560717.9	7190390.4	-64.28	-75.74	-81.13
1	40	rp01218	13.37	689	5326.03	0.62	-0.006	5419.76	981,864.749	1.95	*	6.08	2.04	10.07	982277.78	1645.11	560989.6	7190192.7	-65.21	-76.08	-81.19
1	41	rp01218	14.17	689	5334.48	0.61	0.001	5428.36	981,873.340	1.61	*	4.49	1.79	7.89	982278.05	1618.34	561028.8	7190614.0	-65.07	-75.94	-81.05
1	42	rp01218	14.40	689	5361.83	0.60	0.005	5456.18	981,901.160	1.12	*	3.22	1.18	5.52	982278.17	1492.18	561290.7	7190796.5	-66.04	-76.21	-81.00
1	43	rp01221	9.39	689	5434.99	0.64	-0.059	5530.55	981,975.448	0.28	*	2.00	2.59	4.87	982278.38	1103.91	562342.2	7191091.5	-71.89	-79.35	-82.85
1	43	rp01218	15.31	689	5434.90	0.65	0.008	5530.53	981,975.499	0.28	*	2.00	2.59	4.87	982278.38	1103.91	562342.2	7191091.5	-71.84	-79.29	-82.80
1	44	rp01218	16.04	689	5438.75	0.42	0.007	5534.37	981,979.334	0.11	*	2.67	2.87	5.65	982278.79	1079.52	562417.6	7191755.8	-72.42	-79.63	-83.03
1	45	rp01218	16.35	689	5439.82	0.59	0.005	5535.51	981,980.469	0.28	*	2.18	2.90	5.35	982279.03	1076.90	562444.2	7192130.7	-72.42	-79.64	-83.04
1	47	rp01219	11.14	689	5365.34	0.66	-0.056	5459.71	981,904.589	0.69	*	2.28	1.52	4.48	982278.93	1494.39	557542.3	7191940.4	-64.22	-74.49	-79.32
1	48	rp01219	12.16	689	5313.48	0.58	-0.042	5406.94	981,851.818	1.00	*	6.27	3.16	10.43	982278.55	1714.94	557744.9	7191373.5	-64.23	-75.57	-80.91
1	49	rp01219	12.46	689	5299.20	0.55	-0.035	5392.41	981,837.286	1.20	*	6.33	4.01	11.55	982278.20	1780.91	557883.7	7190814.8	-63.57	-75.29	-80.80
1	50	rp01219	13.19	689	5289.98	0.65	-0.027	5383.07	981,827.942	1.21	*	6.66	4.27	12.14	982277.98	1822.71	558092.2	7190470.8	-63.43	-75.39	-81.02
1	51	rp01219	13.53	689	5288.84	0.64	-0.021	5381.91	981,826.784	1.30	*	5.78	4.57	11.65	982277.76	1835.70	558445.7	7190139.3	-62.34	-74.44	-80.13
1	52	rp01219	14.14	689	5282.54	0.45	-0.017	5375.45	981,820.318	1.29	*	6.41	5.14	12.84	982277.64	1860.04	558603.3	7189954.7	-62.25	-74.41	-80.14
1	53	rp01219	14.45	689	5320.28	0.53	-0.012	5413.87	981,858.742	1.21	*	3.52	3.11	7.84	982277.45	1703.67	558538.0	7189621.6	-61.74	-73.22	-78.62
1	54	rp01219	15.05	689	5326.57	0.60	-0.010	5420.29	981,865.162	1.10	*	3.73	2.55	7.38	982277.33	1670.20	558484.3	7189429.9	-62.60	-73.88	-79.19
1	55	rp01219	16.15	689	5278.13	0.57	-0.007	5371.01	981,815.870	1.47	*	6.12	5.32	12.91	982277.59	1882.94	558926.7	7189888.5	-61.89	-74.22	-80.02
1	56	rp01219	17.02	689	5263.71	0.55	-0.010	5356.33	981,801.187	1.36	*	7.41	6.56	15.32	982277.57	1936.96	559286.2	7189860.5	-62.52	-75.03	-80.91
1	58	rp01221	9.04	689	5439.80	0.55	-0.057	5535.42	981,980.315	0.16	*	2.48	2.91	5.55	982278.91	1074.03	562428.5	7191937.9	-72.80	-79.98	-83.36
1	59	rp01221	9.23	689	5436.80	0.53	-0.058	5532.36	981,977.256	0.09	*	2.40	2.74	5.23	982278.58	1091.63	562386.9	7191413.1	-72.34	-79.68	-83.13
1	60	rp01221	9.50	689	5435.10	0.56	-0.059	5530.64	981,975.535	0.11	*	2.08	2.55	4.74	982278.23	1103.52	562298.0	7190848.5	-71.90	-79.36	-82.87
1	61	rp01221	10.01	689	5433.49	0.54	-0.059	5528.99	981,973.890	0.24	*	1.93	2.50	4.66	982278.07	1113.26	562259.7	7190600.6	-71.49	-79.03	-82.58
1	62	rp01221	10.14	689	5431.84	0.62	-0.059	5527.34	981,972.236	0.29	*	1.77	2.44	4.50	982277.91	1122.94	562201.9	7190352.8	-71.22	-78.85	-82.43
1	63	rp01221	10.53	689	5431.71	0.66	-0.059	5527.22	981,972.116	0.20	*	1.71	2.46	4.37	982277.76	1125.57	562126.4	7190106.2	-70.81	-78.46	-82.06
1	64	rp01221	11.14	689	5430.81	0.59	-0.059	5526.28	981,971.178	0.09	*	1.37	2.42	3.89	982277.60	1132.22	562096.1	7189853.5	-70.85	-78.59	-82.23
1	65	rp01221	11.27	689	5430.78	0.64	-0.058	5526.27	981,971.163	0.15	*	1.24	2.37	3.76	982277.45	1132.97	562050.0	7189612.4	-70.71	-78.47	-82.12
1	66	rp01221	11.39	689	5429.96	0.77	-0.058	5525.47	981,970.369	0.05	*	1.27	2.37	3.68	982277.31	1137.75	561959.1	7189381.6	-70.49	-78.29	-81.96
1	57	rp01221	11.59	589	5429.08	0.67	-0.057	5524.55	981,969.444	0.05	*	1.23	2.32	3.60	982277.15	1144.89	561893.3	7189131.0	-69.91	-77.76	-81.46

1	68	rp01221	12.16	689	5428.57	0.72	-0.055	5524.05	981,968.941	0.02	*	1.46	2.19	3.67	982276.99	1148.11	561978.7	7188880.5	-69.51	-77.38	-81.08
1	69	rp01221	12.29	689	5427.63	0.71	-0.055	5523.09	981,967.982	0.01	*	2.06	2.11	4.18	982276.84	1153.74	562006.4	7188645.7	-68.53	-76.40	-80.10
1	70	rp01221	12.41	689	5427.47	0.62	-0.054	5522.90	981,967.793	0.02	*	2.27	2.11	4.40	982276.71	1157.29	561937.3	7188429.3	-67.59	-75.47	-79.18
1	71	rp01221	12.56	689	5426.90	0.71	-0.053	5522.35	981,967.241	0.02	*	n/a	2.01	2.03	982276.55	1160.99	561876.5	7188182.9	-70.19	-78.29	-82.10
1	72	rp01221	13.13	689	5426.58	0.70	-0.051	5522.02	981,966.914	0.00	*	n/a	1.92	1.92	982276.41	1166.99	561836.9	7187946.8	-69.28	-77.44	-81.28
1	73	rp01221	13.25	689	5425.78	0.63	-0.050	5521.19	981,966.080	0.00	*	n/a	1.80	1.80	982276.25	1174.00	561823.3	7187693.2	-68.68	-76.90	-80.77
1	74	rp01221	13.47	689	5425.24	0.68	-0.047	5520.66	981,965.548	0.03	*	n/a	1.71	1.74	982276.10	1179.28	561838.4	7187458.3	-68.07	-76.33	-80.21
1	75	rp01221	14.02	689	5424.37	0.63	-0.046	5519.76	981,964.648	0.02	*	n/a	1.64	1.65	982275.94	1185.05	561887.9	7187213.9	-67.75	-76.05	-79.96
1	76	rp01221	14.21	689	5422.37	0.68	-0.044	5517.74	981,962.631	0.10	*	n/a	1.63	1.73	982275.80	1198.65	561729.2	7186989.3	-66.75	-75.15	-79.10
1	77	rp01221	14.34	689	5418.56	0.61	-0.043	5513.84	981,958.734	0.45	*	n/a	1.48	1.93	982275.69	1215.44	561534.4	7186813.7	-66.88	-75.38	-79.38
1	78	rp01221	14.55	689	5422.81	0.50	-0.042	5518.13	981,963.024	0.02	*	n/a	1.61	1.63	982275.79	1197.26	561947.8	7186964.1	-66.75	-75.15	-79.10
1	79	rp01221	15.09	689	5417.99	0.55	-0.040	5513.25	981,958.138	0.33	*	n/a	1.37	1.70	982275.66	1225.30	562109.5	7186764.5	-65.70	-74.29	-78.33
1	80	rp01221	15.26	689	5413.20	0.57	-0.039	5508.38	981,953.272	0.13	*	n/a	1.22	1.35	982275.52	1256.10	562258.6	7186561.9	-64.60	-73.44	-77.60
1	85	rp01222	8.51	689	5351.03	0.56	-0.041	5445.13	981,890.029	0.98	*	n/a	1.45	2.43	982275.57	1550.01	558341.5	7186604.9	-66.65	-77.50	-82.60
1	86	rp01222	9.11	689	5356.53	0.66	-0.042	5450.76	981,895.651	1.20	*	n/a	1.28	2.49	982275.58	1526.12	558584.2	7186614.7	-65.83	-76.50	-81.52
1	87	rp01222	9.25	689	5359.84	0.75	-0.044	5454.15	981,899.044	1.33	*	n/a	1.18	2.51	982275.54	1509.69	558823.0	7186563.7	-65.73	-76.28	-81.24
1	88	rp01222	9.38	689	5361.45	0.66	-0.044	5455.76	981,900.652	1.08	*	n/a	1.17	2.25	982275.55	1504.27	559089.3	7186571.8	-65.54	-76.07	-81.03
1	89	rp01222	10.00	689	5358.77	0.63	-0.045	5453.02	981,897.913	1.14	*	n/a	1.30	2.43	982275.61	1520.93	559295.0	7186685.6	-64.73	-75.37	-80.37
1	90	rp01222	10.15	689	5351.30	0.66	-0.047	5445.43	981,890.320	0.97	*	n/a	1.56	2.52	982275.66	1557.75	559530.4	7186763.0	-64.75	-75.64	-80.77
1	91	rp01222	10.37	689	5330.59	0.60	-0.048	5424.35	981,869.232	1.54	*	n/a	2.36	3.90	982275.74	1646.11	559725.3	7186917.0	-66.20	-77.60	-82.97
1	92	rp01222	11.02	689	5317.86	0.68	-0.049	5411.42	981,856.302	0.93	*	n/a	2.65	3.58	982275.89	1704.03	559807.6	7187164.9	-67.87	-79.71	-85.29
1	93	rp01222	11.21	689	5315.36	0.60	-0.050	5408.85	981,853.732	1.11	*	n/a	2.92	4.02	982276.04	1717.30	559713.0	7187394.7	-67.33	-79.23	-84.83
1	94	rp01222	11.40	689	5299.34	0.70	-0.051	5392.58	981,837.462	1.18	*	4.13	3.78	9.10	982276.19	1777.29	559663.6	7187644.4	-65.18	-77.08	-82.68
1	95	rp01222	12.10	689	5294.43	0.70	-0.052	5387.59	981,832.462	1.63	*	2.55	3.83	8.01	982276.33	1794.14	559573.6	7187872.4	-68.25	-80.36	-86.06
1	96	rp01222	12.32	689	5299.88	0.65	-0.052	5393.11	981,837.990	1.17	*	3.15	3.77	8.09	982276.45	1777.38	559370.0	7188053.8	-66.16	-78.14	-83.78
1	97	rp01222	12.54	689	5305.40	0.64	-0.052	5398.73	981,843.603	1.53	*	3.36	3.45	8.34	982276.62	1752.86	559317.3	7188324.9	-65.40	-77.19	-82.74
1	98	rp01222	13.17	689	5302.80	0.64	-0.052	5396.08	981,840.955	1.78	*	4.03	3.68	9.49	982276.78	1761.15	559357.4	7188578.8	-65.08	-76.82	-82.35
1	99	rp01222	13.45	689	5302.37	0.62	-0.052	5395.64	981,840.510	1.46	*	4.44	3.74	9.64	982276.88	1767.41	559479.6	7188749.3	-64.18	-75.95	-81.50
1	100	rp01222	14.03	689	5319.02	0.65	-0.052	5412.59	981,857.454	1.20	*	2.41	2.69	6.29	982276.90	1700.75	559732.4	7188770.8	-65.01	-76.60	-82.06
1	101	rp01222	14.15	689	5324.71	0.64	-0.052	5418.37	981,863.238	1.10	*	1.85	2.44	5.39	982276.92	1673.70	559974.7	7188800.2	-65.89	-77.36	-82.76
1	102	rp01222	14.31	689	5319.07	0.63	-0.051	5412.63	981,857.498	1.53	*	2.17	2.40	6.10	982276.90	1687.92	560239.3	7188785.1	-67.82	-79.34	-84.76
1	103	rp01222	15.16	689	5317.64	0.73	-0.051	5411.21	981,856.070	1.17	*	2.80	2.89	6.86	982277.06	1711.34	559459.1	7189014.7	-63.68	-75.30	-80.76
1	104	rp01222	15.34	689	5312.54	0.67	-0.051	5406.00	981,850.862	1.13	*	3.33	3.32	7.78	982277.21	1735.30	559443.4	7189269.4	-63.01	-74.72	-80.23
1	105	rp01222	16.10	689	5281.13	0.63	-0.050	5374.03	981,818.890	1.10	*	5.99	5.23	12.31	982277.40	1867.63	559366.5	7189591.2	-62.55	-74.81	-80.59
1	106	rp01222	16.41	689	5272.35	0.69	-0.051	5365.12	981,809.973	1.13	*	5.99	6.18	13.29	982277.64	1905.94	559485.9	7189973.7	-62.67	-75.12	-80.99
1	107	rp01223	9.49	689	5406.71	0.65	-0.026	5501.82	981,946.671	0.91	*	n/a	1.13	2.04	982280.34	1253.09	564344.7	7194295.3	-75.77	-84.53	-88.65
1	108	rp01223	10.06	689	5396.45	0.65	-0.027	5491.38	981,936.234	1.12	*	n/a	1.10	2.22	982280.19	1301.03	564262.5	7194058.3	-76.07	-85.15	-89.43
1	109	rp01223	10.24	689	5382.33	0.63	-0.028	5477.01	981,921.864	1.53	*	n/a	1.17	2.70	982280.04	1365.52	564192.1	7193820.9	-76.54	-86.05	-90.52
1	110	rp01223	10.49	689	5363.64	0.66	-0.031	5458.00	981,902.859	1.21	*	n/a	1.46	2.67	982279.88	1449.46	564152.6	7193581.0	-78.32	-88.42	-93.18
1	111	rp01223	11.08	689	5352.07	0.66	-0.033	5446.23	981,891.090	1.43	*	n/a	1.78	3.21	982279.73	1501.89	564020.3	7193342.1	-78.57	-89.00	-93.91
1	112	rp01223	11.24	689	5344.89	0.59	-0.034	5438.90	981,883.764	1.48	*	n/a	1.96	3.43	982279.59	1534.72	563932.9	7193124.9	-78.80	-89.44	-94.46
1	113	rp01223	11.49	689	5341.36	0.56	-0.037	5435.30	981,880.162	1.67	*	n/a	2.01	3.68	982279.46	1552.51	563783.9	7192925.2	-78.34	-89.10	-94.16
1	114	rp01223	12.05	689	5333.16	0.62	-0.039	5426.98	981,871.840	1.62	*	n/a	2.14	3.76	982279.32	1589.30	563713.9	7192692.3	-78.91	-89.92	-95.10
1	115	rp01223	12.23	689	5327.76	0.63	-0.040	5421.48	981,866.349	1.64	*	n/a	2.39	4.03	982279.15	1619.36	563703.4	7192434.4	-77.78	-88.98	-94.25
1	116	rp01223	12.16	689	5338.24	0.61	-0.040	5432.14	981,877.004	1.28	*	n/a	2.14	3.42	982279.00	1585.96	563733.3	7192191.3	-74.54	-85.56	-90.74
1	117	rp01223	13.02	689	5333.73	0.62	-0.044	5427.55	981,872.420	1.52	*	n/a	2.02	3.54	982278.85	1603.52	563738.2	7191943.7	-75.24	-86.37	-91.61
1	118	rp01223	13.22	689	5323.87	0.52	-0.046	5417.49	981,862.357	1.81	*	n/a	2.52	4.33	982278.69	1649.34	563784.7	7191705.0	-74.83	-86.22	-91.58
1	119	rp01223	13.49	689	5305.81	0.59	-0.049	5399.13	981,844.006	1.82	*	n/a	3.41	5.23	982278.53	1725.80	563824.3	7191461.9	-76.32	-88.18	-93.75
1	120	rp01223	14.16	689	5292.92	0.66	-0.051	5386.04	981,830.913	1.44	*	n/a	4.33	5.76	982278.38	1786.60	563909.3	7191235.5	-76.20	-88.45	-94.21
1	121	rp01223	14.48	689	5269.42	0.74	-0.054	5362.15	981,807.028	1.81	*	n/a	5.94	7.75	982278.23	1877.78	563909.4	7191005.6	-78.88	-91.60	-97.59
1	123	rp01224	9.45	689	5411.64	0.64	-0.005	5506.85	981,951.697	0.32	*	n/a	1.13	1.45	982276.55	1254.01	564918.4	7188258.9	-67.50	-76.32	-80.46
1	124	rp01224	10.01	689	5414.39	0.60	-0.006	5509.64	981,954.486	0.42	*	n/a	1.45	1.87	982276.76	1221.53	565287.0	7188585.0	-71.01	-79.56	-83.58
1	125	rp01224	10.15	689	5415.10	0.60	-0.007	5510.36	981,955.209	0.25	*	n/a	1.58	1.84	982276.82	1218.81	565502.1	7188700.0	-70.95	-79.49	-83.50
1	126	rp01224	10.30	689	5417.57	0.58	-0.007	5512.86	981,957.716	0.24	*	n/a	1.78	2.03	982276.92	1202.23	565698.3	7188847.7	-71.68	-80.08	-84.03
1	127	rp01224	10.43	689	5419.88	0.56	-0.008	5515.21	981,960.059	0.43	*	n/a	2.00	2.43	982276.98	1186.77	565914.7	7188944.9	-72.05	-80.30	-84.18
1	128	rp01224	11.01	689	5425.53	0.57	-0.010	5520.95	981,965.813	0.43	*	n/a	2.27	2.69	982277.02	1155.21	566153.9	7189020.4	-72.44	-80.44	-84.21
1	129	rp01224	11.15	689	5429.52	0.66	-0.012	5525.04	981,969.898	0.04	*	n/a	2.52	2.57	982277.09	1137.12	566374.3	7189124.6	-72.27	-80.15	-83.86
1	130	rp01224	11.30	689	5431.54	0.68	-0.014	5527.10	981,971.958	0.07	*	n/a	2.47	2.54	982277.23	1124.22	566461.2	7189356.3	-73.01	-80.80	-84.47
1	131	rp01224	11.47	689	5432.13	0.65	-0.016	5527.69	981,972.548	0.07	*	n/a	2.61	2.68	982277.38	1118.07	566408.2	7189595.4	-73.65	-81.39	-85.04
1	147	rp01225	7.59	689	5350.72	0.52	-0.003	5444.84	981,889.790	0.39	*	2.89	2.12	5.40	982277.15	1567.47	555517.2	7189066.7	-61.20	-71.91	-76.96
1	148	rp01225	8.27	689	5329.52	0.65	0.004	5423.33	981,868.271	1.10	*	5.29	2.95	9.35	982277.16	1648.09	555767.2	7189106.5	-61.37	-72.32	-77.47
1	149	rp01225	8.51	689	5303.15	0.60	0.008	5396.49	981,841.434	1.53	*	8.76	3.94	14.24	982277.19	1744.00	556003.4	7189168.5	-62.57	-73.79	-79.07
1	150	rp01225	9.12	689	5297.12	0.62	0.011	5390.36	981,835.307	1.31	*	9.90	4.14	15.34	982277.09	1767.44	556221.4	7189016.2	-62.45	-73.74	-79.06
1	151	rp01225	9.32	689	5316.82	0.61	0.012	5410.40	981,855.348	1.25	*	7.59	3.15	12.00	982276.94	1690.42	556255.5	7188764.6	-62.12	-73.15	-78.34
1	152	rp01225	9.59	689	5343.21	0.67	0.014	5437.27	981,882.214	1.36	*	5.26	1.95	8.57	982276.82	1581.13	556404.1	7188556.1	-61.70	-72.24	-77.20
1	153	rp01225	10.12	689	5359.10	0.60	0.014	5453.41	981,898.358	1.24	*	4.90	1.33	7.46	982276.69	1508.02	556552.6	7188353.1	-61.71	-71.83	-76.59
1	154	rp01225	10.29	689	5379.34	0.65	0.014	5474.02	981,918.963	1.28	*	4.03	1.00	6.31	982276.56	1412.07	556651.7	7188128.7	-61.96	-71.49	-75.97
1	155	rp01225	11.07	689	5412.59	0.53	0.012	5507.80	981,952.750	1.41	*	2.51	1.20	5.12	982276.44	1246.06	556823.8	7187912.4	-63.38	-71.83	-75.80
1	156	rp01225	11.41	689	5427.90	0.67	0.009	5523.41	981,968.363	0.89	*	3.79	1.56	6.24	982276.48	1153.56	557061.7	7187975.4	-65.26	-72.95	-76.57
1	2000	rp01224	18.45	689	5405.08	0.56	-0.078	5500.08	981,945.007	0.05	*	2.60	1.18	3.82	982279.41	1273.23	560600.4	7192725.1	-70.17	-78.92	-83.04
1	2000	rp01217	8.57	689	5405.02	0.53	-0.069	5500.02	981,945.020	0.05	*	2.60	1.18	3.82	982279.41	1273.23	560600.4	7192725.1	-70.16	-78.91	-83.03
1	2000	rp01214	8.43	689	5404.83	0.58	-0.032	5499.88	981,945.059	0.05	*	2.60	1.18	3.82	982279.41	1273.23	560600.4	7192725.1	-70.12	-78.87	-82.99
1	2000	rp01218	18.36	689	5405.10	0.56	-0.021	5500.16	981,945.093	0.05	*	2.60	1.18	3.82	982279.41	1273.23	560600.4	7192725.1	-70.08	-78.84	-82.95
camp	1000	km02186	8.45	725	5483.13	0.00	-0.013	5590.55	981,943.492	0.12	*	3.73	1.11	4.95	982279.30	1275.97	560355.0	7192547.1	-69.60	-78.28	-82.36
M1	520	km02195	8.35	725	5378.78	0.00	-0.083	5484.00	981,837.529	1.87		6.37	3.99	12.23	982278.85	1778.53	558921.6	7191868.9	-63.61	-75.25	-80.72
M1	521	km02195	8.45	725	5386.17	0.00	-0.083	5491.54	981,845.070	1.47		5.01	3.85	10.33	982278.82	1756.49	558962.6	7191822.7	-62.91	-74.55	-80.03
M1	522	km02195	8.50	725	5388.80	0.10	-0.082	5494.26	981,847.785	1.11		4.57	3.79	9.47	982278.80	1748.09	558990.0	7191789.4	-62.95	-74.61	-80.09
M1	523	km02195	8.56	725	5392.22	0.00	-0.082	5497.72	981,851.244	1.27		3.86	3.65	8.78	982278.78	1736.16	559027.0	7191757.1	-62.77	-74.40	-79.87
M1	524	km02195	9.03	725	5396.34	0.00	-0.082	5501.92	981,855.448	0.50		3.31	3.49	7.30	982278.76	1721.57	559080.1	7191724.9	-63.38	-75.03	-80.51
M1	525	km02195	9.07	725	5396.46	0.00	-0.082	5502.04	981,855.571	0.70		3.18	3.52	7.40	982278.73	1720.56	559110.6	7191680.8	-63.30	-74.94	-80.42
M1	526	km02195	9.14	725	5395.00	0.00	-0.082	5500.55	981,854.081	0.67		3.19	3.61	7.47	982278.70	1726.19	559116.7	7191630.1	-63.52	-75.19	-80.68
M1	527	km02195	9.20	725	5391.95	0.00	-0.082	5497.44	981,850.969	0.73		3.37	3.77	7.87	982278.66	1739.20	559124.9	7191572.1	-63.45	-75.18	-80.70

M1	528	km02195	9.27	725	5391.11	0.00	-0.081	5496.58	981,850.113	0.57		3.49	3.83	7.88	982278.64	1742.94	559121.6	7191533.0	-63.50	-75.25	-80.78
M1	529	km02195	9.35	725	5390.92	0.00	-0.081	5496.39	981,849.919	0.24		3.62	3.93	7.79	982278.59	1745.29	559122.7	7191453.7	-63.28	-75.06	-80.60
M1	530	km02195	9.43	725	5390.14	0.00	-0.081	5495.60	981,849.124	0.18		3.66	4.04	7.88	982278.55	1749.71	559138.5	7191402.7	-63.04	-74.84	-80.39
M1	531	km02195	9.50	725	5389.08	0.00	-0.080	5494.51	981,848.043	0.23		3.68	4.12	8.03	982278.53	1755.18	559155.2	7191361.7	-62.78	-74.61	-80.18
M1	532	km02195	9.58	725	5387.35	0.00	-0.080	5492.75	981,846.278	0.35		3.67	4.22	8.24	982278.50	1761.93	559179.8	7191318.6	-62.88	-74.74	-80.32
M1	533	km02195	10.06	725	5385.83	0.00	-0.079	5491.20	981,844.728	0.51		3.66	4.31	8.48	982278.47	1769.18	559206.3	7191277.9	-62.63	-74.52	-80.11
M1	534	km02195	10.13	725	5387.34	0.00	-0.079	5492.74	981,846.270	0.82		3.35	4.28	8.45	982278.44	1762.16	559230.0	7191218.3	-62.52	-74.36	-79.93
M1	535	km02195	10.22	725	5389.26	0.00	-0.078	5494.70	981,848.230	0.95		3.15	4.30	8.39	982278.41	1753.28	559262.7	7191179.6	-62.42	-74.20	-79.75
M1	536	km02195	10.30	725	5389.11	0.00	-0.077	5494.55	981,848.078	1.19		3.11	4.28	8.58	982278.38	1753.11	559271.7	7191129.9	-62.34	-74.11	-79.64
M1	537	km02195	10.39	725	5391.66	0.00	-0.076	5497.15	981,850.681	1.37		3.08	4.11	8.55	982278.35	1739.90	559259.9	7191087.3	-62.43	-74.11	-79.60
M1	538	km02195	10.55	725	5394.62	0.00	-0.075	5500.17	981,853.702	1.16		3.15	3.68	7.99	982278.33	1726.95	559188.8	7191043.1	-62.73	-74.37	-79.84
M1	539	km02195	11.04	725	5393.56	0.00	-0.073	5499.09	981,852.623	1.09		3.20	3.70	7.99	982278.30	1731.25	559174.7	7190997.4	-62.90	-74.56	-80.05
M1	540	km02195	11.13	725	5394.75	0.00	-0.072	5500.31	981,853.839	1.19		3.21	3.68	8.09	982278.26	1724.81	559162.6	7190933.9	-62.84	-74.45	-79.91
M1	541	km02195	11.22	725	5397.77	0.00	-0.071	5503.39	981,856.921	1.30		3.07	3.59	7.96	982278.24	1710.95	559152.3	7190896.7	-62.72	-74.24	-79.66
M1	542	km02195	11.33	725	5400.26	0.00	-0.069	5505.94	981,859.467	1.17		3.02	3.40	7.59	982278.22	1699.98	559123.5	7190861.3	-62.85	-74.32	-79.72
M1	543	km02195	11.40	725	5400.74	0.00	-0.068	5506.43	981,859.958	1.06		2.99	3.25	7.30	982278.19	1697.48	559091.0	7190816.3	-63.21	-74.69	-80.09
M1	544	km02195	11.48	725	5401.56	0.00	-0.066	5507.27	981,860.796	1.09		2.99	3.19	7.26	982278.16	1694.71	559073.5	7190765.8	-62.94	-74.41	-79.80
M1	545	km02195	11.58	725	5402.76	0.00	-0.066	5508.49	981,862.021	1.17		2.96	3.14	7.26	982278.13	1689.59	559060.9	7190719.4	-62.74	-74.17	-79.55
M1	546	km02195	12.07	725	5404.14	0.00	-0.063	5509.90	981,863.433	1.29		2.84	3.11	7.24	982278.10	1684.27	559060.4	7190673.3	-62.41	-73.80	-79.16
M1	547	km02195	12.15	725	5406.15	0.00	-0.061	5511.95	981,865.486	1.23		2.76	3.06	7.05	982278.08	1674.46	559067.4	7190632.2	-62.57	-73.90	-79.24
M1	548	km02195	12.25	725	5410.87	0.15	-0.059	5516.82	981,870.350	1.22		2.66	2.81	6.68	982278.04	1652.85	559060.9	7190573.1	-62.53	-73.74	-79.02
M1	549	km02195	12.37	725	5415.48	0.00	-0.057	5521.48	981,875.010	1.06		2.81	2.53	6.40	982278.01	1630.78	559054.9	7190522.4	-62.68	-73.76	-78.98
M1	550	km02195	13.23	725	5418.07	0.56	-0.047	5524.30	981,877.836	0.91		3.42	2.35	6.68	982277.97	1615.63	559094.6	7190456.4	-62.56	-73.51	-78.66
M1	551	km02195	13.50	725	5423.08	0.22	-0.041	5529.32	981,882.849	0.51		4.05	2.02	6.57	982277.94	1590.76	559071.4	7190403.8	-62.72	-73.50	-78.57
Monster	16	km02196	9.18	725	5357.00	0.00	-0.066	5461.80	981,815.313	0.94	*	n/a	5.69	6.63	982277.93	1854.95	564158.1	7190520.3	-76.34	-89.00	-94.95
Monster	17	km02196	8.50	725	5375.19	0.00	-0.066	5480.36	981,833.879	1.13	*	n/a	4.83	5.96	982277.85	1788.13	564137.4	7190386.5	-72.14	-84.38	-90.14
Monster	18	km02196	8.32	725	5382.97	0.00	-0.066	5488.29	981,841.818	0.84	*	n/a	3.97	4.81	982277.79	1758.14	564236.0	7190283.8	-71.69	-83.81	-89.51
Monster	19	km02196	16.22	725	5384.11	0.00	-0.040	5489.48	981,842.950	1.11	*	n/a	3.70	4.81	982277.68	1754.85	564288.3	7190113.6	-71.12	-83.22	-88.91
Monster	24	km02196	9.45	725	5351.49	0.20	-0.066	5456.23	981,809.751	1.56	*	n/a	6.48	8.04	982278.04	1881.33	564254.8	7190708.5	-74.88	-87.60	-93.59
Monster	24	km02189	11.12	725	5395.37	0.00	0.039	5501.05	981,853.878	0.62		3.30	3.57	7.49	982278.74	1727.09	559138.7	7191693.1	-63.55	-75.23	-80.72
Monster	25	km02196	15.16	725	5348.48	0.00	-0.046	5453.12	981,806.595	1.19	*	n/a	6.62	7.80	982278.12	1894.89	564294.1	7190839.8	-75.64	-88.48	-94.53
Monster	25	km02196	10.05	725	5348.39	0.15	-0.066	5453.06	981,806.568	1.19	*	n/a	6.62	7.80	982278.12	1894.89	564294.1	7190839.8	-75.67	-88.51	-94.55
Monster	26	km02196	10.27	725	5351.80	0.00	-0.066	5456.49	981,809.999	0.91	*	n/a	6.68	7.59	982278.17	1883.42	564487.4	7190925.1	-74.90	-87.68	-93.69
Monster	27	km02196	11.20	725	5342.53	0.00	-0.066	5447.03	981,800.533	1.60	*	n/a	7.08	8.68	982278.23	1912.33	564634.6	7191018.1	-77.16	-90.05	-96.12
Monster	28	km02196	11.53	725	5345.25	0.00	-0.065	5449.81	981,803.307	1.55	*	n/a	7.05	8.60	982278.30	1904.57	564697.9	7191127.7	-76.13	-88.98	-95.02
Monster	29	km02196	12.18	725	5340.27	0.28	-0.063	5444.81	981,798.309	1.36	*	n/a	8.06	9.42	982278.39	1924.25	564816.3	7191291.1	-76.20	-89.12	-95.19
Monster	30	km02196	12.47	725	5323.04	0.00	-0.061	5427.15	981,780.642	2.39	*	n/a	8.40	10.79	982278.43	1977.94	564888.0	7191361.3	-81.24	-94.43	-100.63
Monster	31	km02196	13.12	725	5315.16	0.00	-0.060	5419.11	981,772.598	1.96	*	n/a	9.70	11.66	982278.55	2006.00	564888.4	7191550.1	-82.61	-95.91	-102.18
Monster	32	km02196	13.46	725	5306.77	0.00	-0.056	5410.55	981,764.038	2.25	*	n/a	9.74	11.99	982278.64	2027.76	564975.8	7191695.3	-86.40	-99.84	-106.16
Monster	88	km02185	14.32	725	5486.24	0.65	-0.023	5593.91	981,946.769	1.33	*	3.11	1.55	5.98	982278.45	1254.09	561846.2	7191224.3	-68.65	-77.08	-81.05
Monster	89	km02185	14.11	725	5485.31	0.29	-0.020	5592.85	981,945.714	0.93	*	3.45	1.55	5.93	982278.58	1258.00	561862.2	7191433.1	-69.11	-77.57	-81.56
Monster	90	km02185	13.50	725	5481.73	0.65	-0.017	5589.31	981,942.179	1.59	*	3.45	1.58	6.62	982278.72	1273.40	561868.1	7191662.4	-68.78	-77.30	-81.31
Monster	91	km02185	13.27	725	5483.16	0.28	-0.013	5590.66	981,943.529	1.27	*	3.37	1.56	6.21	982278.88	1267.76	561866.7	7191916.7	-69.26	-77.77	-81.77
Monster	97	km02185	12.20	725	5499.77	0.07	-0.006	5607.55	981,960.427	0.18	*	2.05	1.64	3.86	982279.48	1196.99	561780.3	7192853.3	-70.31	-78.51	-82.37
Monster	98	km02185	15.55	725	5496.62	0.24	-0.037	5604.36	981,957.211	0.28	*	2.87	1.54	4.69	982279.46	1201.85	561530.0	7192822.9	-71.48	-79.65	-83.50
Monster	98	km02185	12.00	725	5496.57	0.24	-0.004	5604.34	981,957.218	0.28	*	2.87	1.54	4.69	982279.46	1201.85	561530.0	7192822.9	-71.48	-79.64	-83.49
Monster	99	km02185	11.40	725	5494.37	0.17	-0.004	5602.08	981,954.956	0.33	*	3.12	1.43	4.88	982279.47	1206.53	561309.0	7192837.4	-72.56	-80.75	-84.60
Monster	100	km02185	11.07	725	5490.89	0.14	-0.004	5598.52	981,951.398	0.36	*	2.81	1.36	4.53	982279.48	1233.45	561119.6	7192845.4	-71.07	-79.48	-83.44
Monster	101	km02185	10.52	725	5489.51	0.00	-0.004	5597.06	981,949.951	0.08	*	2.59	1.28	3.94	982279.48	1244.89	560931.8	7192843.9	-70.92	-79.46	-83.48
Monster	102	km02185	10.32	725	5486.80	0.06	-0.006	5594.32	981,947.204	0.17	*	2.43	1.21	3.81	982279.45	1262.50	560728.4	7192801.1	-70.22	-78.89	-82.98
Monster	103	km02185	10.11	725	5483.83	0.00	-0.007	5591.27	981,944.155	0.00	*	3.26	1.14	4.41	982279.32	1275.12	560465.1	7192587.3	-69.82	-78.53	-82.63
Monster	104	km02185	9.42	725	5483.57	0.07	-0.011	5591.02	981,943.913	0.04	*	4.07	1.11	5.21	982279.26	1272.26	560339.7	7192483.8	-69.58	-78.20	-82.26
Monster	105	km02185	16.47	725	5479.33	0.07	-0.047	5586.66	981,939.501	0.45	*	4.05	1.10	5.60	982279.16	1305.79	560205.5	7192327.5	-66.58	-75.41	-79.56
Monster	106	km02186	9.28	725	5468.43	0.38	-0.002	5575.68	981,928.612	0.44	*	3.32	1.06	4.82	982279.06	1365.13	560045.2	7192171.0	-66.24	-75.57	-79.95
Monster	107	km02186	9.50	725	5466.88	0.38	0.003	5574.10	981,927.033	0.48	*	4.07	1.02	5.57	982279.02	1367.70	559902.5	7192103.5	-66.32	-75.60	-79.96
Monster	108	km02186	10.05	725	5464.52	0.15	0.006	5571.62	981,924.551	0.64	*	5.95	1.02	7.60	982278.91	1368.82	559854.7	7191928.1	-65.93	-75.04	-79.32
Monster	112	km02187	12.00	725	5456.92	0.00	0.033	5563.85	981,916.638	0.55	*	3.39	1.12	5.06	982278.86	1423.44	560221.8	7191869.5	-65.83	-75.55	-80.12
Monster	113	km02187	11.38	725	5462.25	0.00	0.032	5569.29	981,922.078	0.51	*	3.21	1.08	4.79	982278.95	1396.31	560164.0	7192012.1	-66.35	-75.89	-80.39
Monster	114	km02188	17.32	725	5513.90	0.00	-0.028	5621.92	981,974.658	0.38	*	3.94	1.46	5.78	982280.10	1127.20	557555.4	7193754.1	-68.52	-76.07	-79.62
Monster	115	km02188	16.58	725	5507.13	0.00	-0.011	5615.03	981,967.764	0.33	*	2.60	1.37	4.30	982279.99	1172.78	557656.6	7193577.0	-67.87	-75.86	-79.62
Monster	116	km02188	16.40	725	5501.42	0.04	-0.003	5609.23	981,961.958	0.32	*	3.00	1.27	4.60	982279.84	1196.18	557733.7	7193355.3	-68.39	-76.53	-80.36
Monster	117	km02188	16.18	725	5494.92	0.00	0.001	5602.59	981,955.318	0.42	*	3.68	1.25	5.34	982279.71	1214.95	557775.0	7193141.7	-70.14	-78.34	-82.20
Monster	119	km02188	15.42	725	5489.03	0.15	0.014	5596.64	981,949.364	0.28	*	4.13	1.18	5.58	982279.40	1254.97	557860.7	7192652.4	-67.32	-75.79	-79.78
Monster	120	km02188	15.16	725	5486.77	0.04	0.023	5594.31	981,947.032	0.20	*	4.49	1.19	5.88	982279.19	1262.98	557901.3	7192319.9	-67.44	-75.94	-79.94
Monster	121	km02188	14.58	725	5483.44	0.00	0.031	5590.91	981,943.627	0.04	*	4.31	1.16	5.51	982279.06	1283.84	557937.8	7192128.5	-66.94	-75.62	-79.71
Monster	122	km02193	8.34	725	5480.84	0.31	-0.088	5588.23	981,941.607	0.00	*	4.61	1.12	5.73	982278.98	1292.00	558013.7	7191998.9	-66.94	-75.66	-79.76
Monster	123	km02193	8.53	725	5478.29	0.00	-0.085	5585.54	981,938.912	0.43	*	5.70	1.02	7.15	982278.87	1299.07	558151.9	7191822.2	-66.30	-74.95	-79.02
Monster	124	km02193	9.27	725	5469.32	0.00	-0.077	5576.39	981,929.771	0.55		5.82	0.89	7.26	982278.66	1342.48	558319.3	7191491.3	-66.25	-75.20	-79.41
Monster	125	km02188	13.07	725	5463.18	0.00	0.049	5570.25	981,922.966	0.52		5.53	0.88	6.93	982278.44	1381.10	558400.3	7191158.8	-65.39	-74.64	-79.00
Monster	126	km02193	9.57	725	5457.81	0.00	-0.071	5564.65	981,918.033	0.64		5.72	0.90	7.25	982278.31	1405.74	558439.0	7190949.6	-64.76	-74.16	-78.59
Monster	127	km02193	10.31	725	5448.20	0.00	-0.058	5554.86	981,908.243	0.50		4.88	1.06	6.45	982278.19	1461.58	558584.7	7190763.4	-64.05	-73.92	-78.56
Monster	129	km02193	11.10	725	5433.13	0.00	-0.044	5539.50	981,892.883	0.40		4.30	1.59	6.29	982278.00	1541.40	558880.3	7190486.8	-63.16	-73.62	-78.53
Monster	130	km02193	11.58	725	5422.37	0.00	-0.028	5528.54	981,881.922	0.45		4.10	1.91	6.46	982277.90	1594.36	559043.3	7190339.9	-63.01	-73.83	-78.92
Monster	131	km02193	12.27	725	5414.05	0.00	-0.013	5520.06	981,873.449	0.81		3.72	2.57	7.10	982277.93	1633.49	559209.9	7190401.3	-62.75	-73.79	-78.98
Monster	132	km02189	12.07	725	5367.52	0.00	0.054	5472.65	981,825.463	0.74		5.61	5.53	11.87	982278.55	1845.42	559402.4	7191410.1	-62.19	-74.34	-80.06
Monster	133	km02189	12.27	725	5369.95	0.00	0.058	5475.13	981,827.943	0.67		4.62	5.64	10.93	982278.46	1837.09	559430.5	7191267.6	-62.50	-74.67	-80.39
Monster	134	km02191	17.14	725	5362.95	0.00	0.035	5467.97	981,821.083	0.63		4.93	5.77	11.32	982278.33	1864.28	559471.3	7191062.3	-63.20	-75.52	-81.32
Monster	135	km02191	16.50	725	5357.54	0.00	0.044	5462.46	981,815.561	0.52		5.37	6.28	12.16	982278.22	1888.04	559474.8	7190893.8	-62.72	-75.14	-80.99
Monster	136	km02191	16.28	725	5348.67	0.00	0.052	5453.41	981,806.514	0.50		6.32	6.62	13.44	982278.09	1923.52	559582.6	7190702.9	-62.82	-75.38	-81.30
Monster	137	km02191	16.10	725	5344.93	0.00	0.056	5449.60	981,802.699	1.24		6.60	6.80	14.64	982278.03	1935.46	559650.1	7190596.8	-62.63	-75.18	-81.09
Monster	138	km02189	11.25	725	5381.42	0.00	0.044	5486.82	981,839.647	0.50		4.37	4.41	9.28	982278.67	1785.27	559279.6	7191590.3	-63.63	-75.57	-81.18
Monster	139	km02186	14.02	725	5391.52	0.10	0.000	5497.11	981,849.997	0.33		3.54	3.79	7.65	982278.72	1743.85	559199.1	7191669.8	-63.80	-75.58	-81.13

Monster	140	km02186	13.24	725	5392.82	0.06	0.007	5498.44	981,851.327	1.09		3.98	3.65	8.72	982278.79	1739.44	559033.7	7191782.3	-62.11	-73.77	-79.26
Monster	141	km02186	13.00	725	5394.64	0.00	0.010	5500.28	981,853.172	1.25		4.29	3.31	8.84	982278.96	1723.30	558932.2	7192050.1	-63.57	-75.11	-80.53
Monster	142	km02195	15.47	725	5344.42	0.00	-0.018	5449.01	981,802.543	0.75	*	6.68	7.08	14.51	982277.91	1935.65	559722.1	7190411.1	-62.79	-75.35	-81.27
Monster	143	km02195	16.10	725	5352.94	0.00	-0.015	5457.70	981,811.240	1.22	*	5.72	6.15	13.09	982277.77	1902.43	559640.3	7190180.9	-62.49	-74.94	-80.80
Monster	144	km02189	13.18	725	5355.08	0.00	0.062	5459.96	981,812.761	0.40		7.55	5.68	13.63	982278.52	1883.64	559507.8	7191379.5	-64.88	-77.15	-82.92
Monster	145	km02189	13.55	725	5373.66	0.00	0.061	5478.92	981,831.714	2.36	*	5.88	4.23	12.47	982278.55	1805.07	559679.7	7191424.5	-63.42	-75.23	-80.78
Monster	146	km02189	14.30	725	5388.38	0.00	0.056	5493.94	981,846.718	1.96	*	5.30	3.37	10.63	982278.59	1741.99	559779.1	7191479.1	-63.61	-75.12	-80.54
Monster	147	km02189	15.02	725	5405.87	0.00	0.049	5511.78	981,864.550	2.23	*	4.34	2.52	9.09	982278.62	1662.80	559906.6	7191510.4	-63.88	-74.96	-80.17
Monster	148	km02189	15.36	725	5425.91	0.36	0.039	5532.33	981,885.093	2.14	*	3.56	1.67	7.37	982278.68	1568.52	560064.4	7191592.4	-64.75	-75.31	-80.27
Monster	149	km02191	11.32	725	5384.04	0.00	0.019	5489.47	981,842.484	0.73		3.39	4.67	8.78	982278.42	1778.69	559300.4	7191199.3	-62.51	-74.44	-80.06
Monster	150	km02191	12.03	725	5399.78	0.05	0.032	5505.56	981,858.586	1.33		3.08	3.63	8.04	982278.38	1704.43	559204.0	7191113.8	-62.42	-73.89	-79.28
Monster	151	km02191	12.35	725	5415.32	0.00	0.045	5521.42	981,874.447	0.76		3.00	2.50	6.26	982278.37	1635.43	559005.1	7191087.8	-62.84	-73.96	-79.20
Monster	152	km02191	13.05	725	5421.89	0.10	0.054	5528.16	981,881.203	0.51		2.93	2.13	5.58	982278.33	1601.44	558916.6	7191020.7	-63.82	-74.76	-79.91
Monster	155	km02187	14.42	725	5373.14	0.06	0.011	5478.36	981,831.136	1.90	*	7.62	3.98	13.50	982278.56	1788.98	560795.0	7191445.7	-65.99	-77.60	-83.06
Monster	156	km02187	15.14	725	5380.89	0.00	0.002	5486.24	981,839.012	1.50	*	6.52	3.77	11.78	982278.49	1766.49	560755.8	7191335.5	-64.78	-76.37	-81.83
Monster	157	km02187	15.40	725	5389.53	0.00	-0.006	5495.05	981,847.818	1.27	*	5.28	3.41	9.96	982278.39	1734.00	560616.2	7191168.1	-64.78	-76.29	-81.71
Monster	158	km02187	16.10	725	5385.40	0.00	-0.016	5490.82	981,843.591	2.90	*	5.52	3.51	11.93	982278.34	1750.32	560480.1	7191083.9	-63.16	-74.62	-80.01
Monster	160	km02187	17.58	725	5349.00	0.00	-0.048	5453.65	981,806.410	2.50	*	12.47	4.87	19.84	982278.73	1861.80	560926.7	7191731.1	-68.13	-79.72	-85.17
Monster	206	km02192	15.37	725	5399.35	0.00	0.058	5505.13	981,858.483	0.77	*	6.69	3.47	10.93	982277.10	1685.93	555186.6	7189005.8	-61.40	-72.49	-77.71
Monster	207	km02192	16.02	725	5397.62	0.00	0.056	5503.36	981,856.716	1.26	*	6.70	3.26	11.22	982277.24	1683.21	555040.9	7189212.8	-63.49	-74.54	-79.73
Monster	208	km02192	16.30	725	5420.21	0.00	0.052	5526.41	981,879.764	0.82	*	3.54	2.39	6.75	982277.39	1596.95	554978.3	7189451.9	-63.78	-74.59	-79.68
Monster	209	km02192	16.56	725	5421.47	0.00	0.047	5527.69	981,881.045	0.83	*	3.49	2.28	6.59	982277.52	1582.73	554895.3	7189642.4	-65.71	-76.43	-81.48
Monster	210	km02192	15.02	725	5409.92	0.00	0.058	5515.92	981,869.270	1.15	*	6.03	2.91	10.09	982276.97	1638.53	555176.1	7188794.0	-61.21	-72.03	-77.12
Monster	211	km02192	14.17	725	5429.60	0.00	0.052	5535.99	981,889.343	1.31	*	4.64	2.18	8.13	982276.88	1554.01	555109.8	7188624.3	-60.70	-71.09	-75.98
Monster	212	km02192	8.39	725	5516.21	0.28	-0.074	5624.32	981,977.667	0.38	*	2.52	1.74	4.64	982276.26	1119.18	556812.1	7187615.5	-64.74	-72.32	-75.89
Monster	213	km02192	9.05	725	5511.88	0.00	-0.067	5619.82	981,973.171	0.48	*	2.33	1.49	4.31	982276.28	1147.66	556541.5	7187642.5	-63.86	-71.67	-75.35
Monster	214	km02192	9.50	725	5502.96	0.00	-0.051	5610.74	981,964.086	0.64	*	2.32	1.23	4.20	982276.34	1194.07	556255.7	7187733.4	-63.69	-71.84	-75.68
Monster	215	km02192	10.29	725	5514.55	0.00	-0.035	5622.58	981,975.927	0.45	*	2.80	1.46	4.71	982276.34	1131.37	555994.6	7187719.2	-63.98	-71.64	-75.25
Monster	216	km02192	10.59	725	5502.67	0.34	-0.026	5610.57	981,963.921	0.64	*	1.81	1.20	3.65	982276.33	1202.05	555720.7	7187712.1	-62.90	-71.16	-75.04
Monster	217	km02192	11.40	725	5492.71	0.00	-0.004	5600.33	981,953.678	0.55	*	1.94	0.94	3.43	982276.36	1253.46	555481.7	7187762.3	-62.97	-71.61	-75.68
Monster	231	km02190	9.58	725	5403.49	0.00	-0.007	5509.29	981,862.065	1.41	*	5.84	3.58	10.83	982276.55	1671.53	553525.4	7188086.4	-60.33	-71.33	-76.50
Monster	232	km02190	10.19	725	5422.77	0.00	0.006	5528.98	981,881.748	1.22	*	4.30	2.54	8.06	982276.69	1591.39	553548.1	7188300.0	-60.58	-71.24	-76.25
Monster	239	km02190	9.34	725	5381.43	0.05	-0.014	5486.79	981,839.561	1.59	*	7.72	4.97	14.27	982276.41	1758.29	553461.8	7187875.8	-60.71	-72.03	-77.36
Monster	240	km02190	9.01	725	5370.08	0.00	-0.029	5475.18	981,827.951	1.54	*	8.65	6.31	16.50	982276.24	1802.05	553426.9	7187609.1	-60.44	-71.89	-77.27
Monster	241	km02190	12.36	725	5385.75	0.00	0.058	5491.25	981,844.019	1.69	*	6.94	4.64	13.27	982276.28	1739.27	553698.4	7187678.7	-61.26	-72.53	-77.83
Monster	242	km02190	11.30	725	5404.76	0.00	0.037	5510.63	981,863.400	1.73	*	5.24	3.50	10.46	982276.23	1662.77	553885.1	7187593.0	-60.93	-71.89	-77.05
Monster	243	km02190	11.53	725	5420.88	0.00	0.044	5527.09	981,879.854	1.14	*	4.04	2.51	7.70	982276.17	1591.89	554059.0	7187488.2	-62.31	-73.00	-78.04
Monster	244	km02190	8.41	725	5378.28	0.00	-0.038	5483.54	981,836.310	1.99	*	7.31	5.79	15.10	982276.21	1775.14	553284.5	7187555.3	-59.30	-70.67	-76.02
Monster	245	km02190	13.20	725	5382.87	0.00	0.066	5488.32	981,841.086	0.86	*	7.07	5.45	13.39	982276.14	1759.70	553170.3	7187438.8	-59.73	-71.14	-76.50
Monster	246	km02190	13.50	725	5367.63	0.00	0.069	5472.78	981,825.538	2.13	*	9.72	6.10	17.95	982276.06	1805.20	552993.3	7187322.2	-60.23	-71.57	-76.91
Monster	247	km02190	14.15	725	5373.88	0.00	0.069	5479.15	981,831.914	1.77	*	9.63	6.04	17.45	982276.04	1784.49	552818.5	7187281.7	-58.68	-69.92	-75.21
Monster	248	km02190	14.45	725	5391.07	0.00	0.067	5496.69	981,849.451	1.76	*	7.48	4.97	14.21	982275.96	1719.52	552718.8	7187143.2	-58.36	-69.40	-74.60
Monster	249	km02190	15.08	725	5405.09	0.00	0.062	5511.00	981,863.753	1.27	*	7.50	4.08	12.86	982275.87	1661.31	552555.3	7186988.2	-57.51	-68.26	-73.32
Monster	264	km02194	9.08	725	5531.84	0.00	-0.087	5640.17	981,993.578	0.09	*	3.84	2.01	5.94	982276.67	1051.54	551053.2	7188152.2	-61.39	-68.39	-71.68
Monster	265	km02194	10.04	725	5533.65	0.00	-0.079	5642.02	981,995.424	0.06	*	3.62	2.02	5.71	982276.53	1040.32	551059.6	7187924.2	-61.98	-68.91	-72.18
Monster	266	km02194	10.21	725	5534.19	0.10	-0.076	5642.61	981,996.008	0.30	*	3.94	1.99	6.22	982276.39	1037.42	551085.6	7187700.6	-61.20	-68.07	-71.30
Monster	267	km02194	10.40	725	5535.60	0.00	-0.071	5644.02	981,997.419	0.23	*	4.13	2.04	6.39	982276.23	1030.40	551129.0	7187450.9	-60.85	-67.66	-70.86
Monster	268	km02194	10.55	725	5536.64	0.00	-0.069	5645.08	981,998.480	0.08	*	3.89	2.06	6.03	982276.13	1026.80	551108.0	7187277.8	-60.87	-67.67	-70.88
Monster	269	km02194	11.15	725	5539.01	0.00	-0.063	5647.51	982,000.900	0.07	*	3.86	2.07	6.00	982275.95	1015.01	551103.3	7186988.4	-60.71	-67.43	-70.60
Monster	270	km02194	11.42	725	5540.95	0.00	-0.054	5649.50	982,002.884	0.43	*	4.01	2.20	6.64	982275.85	1003.99	551095.9	7186829.3	-60.08	-66.67	-69.77
Monster	271	km02194	12.13	725	5543.26	0.00	-0.045	5651.86	982,005.244	0.20	*	3.88	2.36	6.44	982275.71	992.05	551093.4	7186615.5	-60.26	-66.78	-69.85
Monster	272	km02194	12.37	725	5548.00	0.00	-0.038	5656.71	982,010.085	0.30	*	4.82	2.55	7.67	982275.60	958.36	551180.0	7186430.0	-60.64	-66.82	-69.73
Monster	273	km02194	13.13	725	5550.45	0.00	-0.026	5659.22	982,012.590	0.26	*	4.65	2.62	7.53	982275.46	947.39	551258.2	7186207.1	-60.40	-66.51	-69.39
Monster	274	km02194	14.05	725	5553.44	0.00	-0.010	5662.28	982,015.649	0.41	*	4.07	2.84	7.31	982275.29	934.74	551260.2	7185928.8	-60.02	-66.07	-68.91
Monster	275	km02194	15.05	725	5556.77	0.00	0.006	5665.70	982,019.053	0.42	*	3.16	3.08	6.66	982275.08	920.87	551317.3	7185598.8	-60.05	-66.05	-68.87
Monster	278	km02190	17.15	725	5526.40	0.00	0.020	5634.72	981,987.477	1.04	*	5.67	1.27	7.99	982275.34	1064.95	553152.2	7186059.3	-60.86	-67.78	-71.03
Monster	288	km02188	11.23	725	5388.51	0.00	0.041	5494.05	981,846.757	0.41		3.63	4.21	8.25	982278.56	1757.83	559178.1	7191417.7	-63.29	-75.12	-80.68
Monster	288	km02191	11.14	725	5388.34	0.00	0.011	5493.85	981,846.842	0.41		3.63	4.21	8.25	982278.56	1757.83	559178.1	7191417.7	-63.20	-75.03	-80.60
Monster	289	km02188	11.45	725	5395.11	0.06	0.045	5500.81	981,853.515	1.31		3.83	3.61	8.75	982278.54	1724.77	559015.2	7191377.3	-62.63	-74.18	-79.61
Monster	290	km02188	12.12	725	5412.36	0.00	0.048	5518.40	981,871.107	1.39		3.14	2.84	7.37	982278.53	1643.70	558917.0	7191339.4	-63.26	-74.35	-79.57
Monster	291	km02188	12.37	725	5439.77	0.05	0.050	5546.38	981,899.093	1.13		3.68	1.53	6.34	982278.45	1508.33	558770.1	7191203.6	-64.07	-74.29	-79.09
Monster	292	km02191	15.42	725	5365.89	0.29	0.063	5471.08	981,824.170	0.83		4.54	5.94	11.30	982278.14	1854.27	559386.3	7190762.0	-61.99	-74.24	-80.01
Monster	293	km02191	14.58	725	5386.18	0.00	0.068	5491.70	981,844.774	0.85		3.39	4.47	8.72	982278.10	1770.89	559233.2	7190691.3	-61.57	-73.45	-79.04
Monster	295	km02191	13.39	725	5414.17	0.23	0.062	5520.33	981,873.380	1.20		2.74	2.61	6.55	982278.08	1637.66	558999.5	7190633.4	-62.80	-73.91	-79.14
Monster	296	km02187	12.36	725	5437.84	0.00	0.032	5544.38	981,897.168	1.71	*	3.38	1.57	6.66	982278.74	1510.74	560449.1	7191686.0	-65.39	-75.59	-80.39
Monster	500	km02186	10.35	725	5456.32	0.32	0.011	5563.31	981,916.237	0.24	*	2.91	1.15	4.30	982279.07	1430.12	559752.3	7192189.2	-66.04	-75.87	-80.49
Monster	501	km02188	9.43	725	5453.75	0.04	0.011	5560.61	981,913.300	0.21	*	3.14	1.23	4.57	982279.11	1447.52	559554.8	7192263.3	-65.14	-75.07	-79.74
Monster	501	km02186	10.55	725	5453.56	0.05	0.012	5560.42	981,913.337	0.21	*	3.14	1.23	4.57	982279.11	1447.52	559554.8	7192263.3	-65.10	-75.03	-79.70
Monster	502	km02186	11.15	725	5445.70	0.03	0.014	5552.39	981,905.307	0.46	*	2.76	1.44	4.67	982279.19	1486.55	559393.8	7192380.0	-65.13	-75.33	-80.13
Monster	503	km02186	11.57	725	5427.18	0.00	0.015	5533.49	981,886.397	1.57	*	2.12	2.09	5.78	982279.29	1577.56	559279.2	7192556.2	-64.20	-74.95	-80.01
Monster	504	km02192	12.15	725	5485.71	0.00	0.012	5593.20	981,946.552	0.85	*	2.22	0.85	3.92	982276.45	1287.84	555343.6	7187910.1	-62.57	-71.42	-75.58
Monster	505	km02192	12.43	725	5476.85	0.00	0.023	5584.17	981,937.524	0.45	*	2.41	0.83	3.69	982276.63	1334.63	555207.7	7188193.4	-62.52	-71.72	-76.05
Monster	506	km02192	13.27	725	5453.93	0.00	0.039	5560.80	981,914.154	1.41	*	3.24	1.27	5.92	982276.77	1440.80	555170.8	7188441.4	-61.62	-71.39	-75.98
Monster	507	km02193	9.09	725	5473.45	0.00	-0.081	5580.60	981,933.979	0.71	*	5.83	0.96	7.49	982278.77	1320.82	558224.4	7191662.2	-66.28	-75.05	-79.18
Monster	508	km02193	13.00	725	5410.43	0.33	0.000	5516.48	981,869.873	1.27		2.67	2.83	6.76	982278.03	1654.97	559084.8	7190546.9	-62.46	-73.69	-78.97
Monster	509	km02193	13.42	725	5416.75	0.00	0.015	5522.85	981,876.235	1.12		2.94	2.40	6.46	982278.21	1622.44	558977.1	7190832.4	-63.29	-74.31	-79.49
Monster	510	km02193	14.13	725	5410.30	0.53	0.025	5516.44	981,869.830	1.00		2.97	2.73	6.70	982278.27	1652.86	559035.8	7190939.7	-63.26	-74.47	-79.75
Monster	511	km02193	15.23	725	5398.72	0.00	0.038	5504.47	981,857.864	0.29		3.41	3.17	6.87	982278.83	1710.55	559173.9	7191838.5	-63.81	-75.42	-80.89
Monster	512	km02193	15.47	725	5412.67	0.18	0.040	5518.76	981,872.159	1.42	*	3.12	2.31	6.84	982278.88	1641.57	559305.1	7191913.0	-63.66	-74.78	-80.01
Monster	513	km02193	16.10	725	5430.76	0.00	0.040	5537.17	981,890.563	0.99	*	3.03	1.69	5.71	982278.97	1555.28	559365.7	7192042.0	-64.34	-74.94	-79.93
Monster	514	km02193	16.35	725	5445.52	0.44	0.039	5552.36	981,905.758	0.69	*	2.97	1.33	4.99	982279.06	1484.00	559455.0	7192175.4	-64.66	-74.81	-79.59
Monster	552	km02197	8.24	725	5508.65	0.00	-0.045	5616.55	981,970.147	0.23	*	1.68	1.26	3.16	982276.14	1171.82	555220.9	7187396.2	-63.26	-71.34	-75.15

Monster	218	km02197	8.45	725	5508.88	0.00	-0.044	5616.79	981,970.379	0.64	*	2.06	1.26	3.97	982276.22	1166.04	555161.8	7187514.4	-63.27	-71.24	-75.00
Monster	219	km02197	9.02	725	5510.17	0.00	-0.044	5618.10	981,971.685	0.34	*	3.47	1.13	4.94	982276.34	1153.55	555031.1	7187707.0	-63.42	-71.22	-74.89
Monster	220	km02197	9.21	725	5503.61	0.00	-0.043	5611.41	981,964.989	0.66	*	3.68	0.94	5.28	982276.46	1187.99	554813.0	7187896.1	-62.79	-70.80	-74.58
Monster	221	km02197	9.42	725	5498.10	0.16	-0.044	5605.84	981,959.414	0.34	*	3.68	0.83	4.86	982276.57	1219.00	554629.8	7188071.1	-62.68	-70.95	-74.85
Monster	222	km02197	10.03	725	5492.27	0.00	-0.044	5599.84	981,953.405	0.44	*	3.36	0.81	4.60	982276.63	1252.21	554445.5	7188178.6	-62.30	-70.84	-74.86
Monster	223	km02197	10.27	725	5482.60	0.10	-0.045	5590.00	981,943.564	0.05	*	1.85	0.87	2.77	982276.76	1316.71	554314.7	7188391.9	-61.42	-70.57	-74.87
Monster	224	km02197	10.40	725	5486.18	0.00	-0.045	5593.63	981,947.184	0.20	*	1.85	0.87	2.92	982276.90	1296.39	554274.9	7188612.1	-61.89	-70.88	-75.12
Monster	225	km02197	10.55	725	5490.69	0.06	-0.046	5598.25	981,951.800	0.26	*	2.28	0.87	3.42	982277.06	1269.43	554200.3	7188851.1	-62.30	-71.06	-75.18
Monster	226	km02197	11.22	725	5496.65	0.26	-0.048	5604.39	981,957.929	0.50	*	2.78	0.90	4.18	982277.21	1231.58	554135.5	7189094.8	-63.09	-71.52	-75.48
Monster	227	km02197	11.15	725	5502.47	0.32	-0.048	5610.34	981,963.885	0.34	*	3.15	1.04	4.53	982277.36	1196.86	554008.3	7189326.2	-63.93	-72.07	-75.91
Monster	228	km02197	12.12	725	5506.10	0.00	-0.051	5613.94	981,967.469	0.64	*	2.93	1.19	4.76	982277.52	1176.64	553941.9	7189569.5	-64.33	-72.31	-76.07
Monster	229	km02197	12.42	725	5516.61	0.00	-0.053	5624.66	981,978.184	1.33	*	4.93	1.49	7.74	982277.73	1102.67	553989.7	7189898.7	-65.17	-72.37	-75.76
Monster	553	km02197	14.07	725	5531.99	0.00	-0.056	5640.35	981,993.843	0.13	*	n/a	2.04	2.17	982278.39	1038.43	554233.5	7190945.3	-70.23	-77.44	-80.84
MCR	2002-0024-332	km03179	14:05:37	332	5193.91	0.040	0.053	5514.436	981853.971	0.61		3.30	3.57	7.48	982278.74	1727.01	559138.8	7191693.5	-63.49	-75.17	-80.66
MCR	2002-0024-332	km03179	16:48:58	332	5193.91	0.040	0.008	5514.391	981853.967	0.61		3.30	3.57	7.48	982278.74	1727.01	559138.8	7191693.5	-63.50	-75.17	-80.67
MCR	MCR-0285-689	km03179	10:21:26	332	5193.00	0.050	-0.012	5509.326	981848.998	0.41		3.55	3.95	7.91	982278.62	1748.73	559140.2	7191512.0	-63.39	-75.18	-80.73
MCR	MCR-0284-689	km03179	10:27:20	332	5193.00	0.050	-0.010	5509.419	981849.091	0.22		3.59	4.00	7.82	982278.59	1749.25	559139.5	7191462.2	-63.27	-75.08	-80.63
MCR	MCR-0283-689	km03179	10:32:46	332	5193.00	0.050	-0.008	5509.629	981849.301	0.18		3.68	4.03	7.89	982278.56	1749.02	559139.6	7191411.9	-62.99	-74.78	-80.33
MCR	MCR-0282-689	km03179	10:38:52	332	5193.00	0.080	-0.005	5508.201	981847.872	0.27		3.75	4.08	8.11	982278.53	1754.81	559141.6	7191360.3	-62.94	-74.76	-80.32
MCR	MCR-0281-689	km03179	10:46:17	332	5193.00	0.060	-0.002	5506.876	981846.546	0.70		3.81	4.10	8.60	982278.49	1758.66	559140.1	7191310.9	-62.83	-74.64	-80.19
MCR	MCR-0280-689	km03179	10:52:20	332	5193.00	0.060	0.001	5512.201	981851.871	1.22		3.27	3.90	8.39	982278.47	1734.90	559136.2	7191263.6	-62.58	-74.23	-79.72
MCR	MCR-0279-689	km03179	10:59:37	332	5193.00	0.080	0.004	5516.594	981856.262	1.36		3.02	3.70	8.08	982278.44	1714.79	559138.7	7191213.2	-62.64	-74.18	-79.61
MCR	MCR-0278-689	km03179	11:07:57	332	5193.00	0.080	0.007	5522.779	981862.446	1.32		3.10	3.40	7.82	982278.41	1686.22	559135.6	7191164.5	-62.58	-73.93	-79.28
MCR	MCR-0277-689	km03179	11:14:53	332	5193.00	0.720	0.010	5526.033	981865.700	1.13		3.14	3.20	7.46	982278.38	1671.43	559139.8	7191111.7	-62.75	-74.03	-79.34
MCR	MCR-0276-689	km03179	11:23:39	332	5193.00	0.610	0.014	5521.633	981861.299	1.04		3.06	3.27	7.36	982278.34	1692.27	559138.5	7191062.6	-63.00	-74.44	-79.82
MCR	MCR-0275-689	km03179	11:33:19	332	5193.00	0.050	0.018	5517.978	981857.643	1.03		3.11	3.40	7.53	982278.31	1709.16	559139.2	7191010.1	-62.97	-74.51	-79.94
MCR	MCR-0274-689	km03179	11:53:55	332	5193.00	0.060	0.025	5517.041	981856.704	1.17		3.10	3.49	7.76	982278.28	1712.92	559143.4	7190963.2	-62.83	-74.38	-79.82
MCR	MCR-0273-332	km03179	12:39:16	332	5193.00	0.020	0.042	5517.318	981856.976	1.22		3.09	3.54	7.85	982278.25	1711.13	559144.5	7190911.0	-62.78	-74.31	-79.73
MCR	MCR-0272-332	km03179	12:48:26	332	5193.00	0.210	0.044	5517.987	981857.644	1.24		3.04	3.51	7.79	982278.22	1707.49	559137.8	7190862.6	-62.89	-74.40	-79.81
MCR	MCR-0271-332	km03179	12:56:28	332	5193.00	0.040	0.047	5513.721	981853.378	1.09		3.14	3.68	7.90	982278.18	1727.56	559139.3	7190808.3	-62.89	-74.54	-80.01
MCR	MCR-0270-332	km03179	13:03:46	332	5193.00	0.080	0.049	5512.486	981852.142	0.94		3.20	3.76	7.90	982278.15	1733.85	559141.1	7190761.7	-62.82	-74.51	-80.01
MCR	MCR-0269-332	km03179	13:09:43	332	5193.00	0.050	0.050	5512.956	981852.611	0.78		3.18	3.78	7.74	982278.12	1732.61	559143.4	7190710.5	-62.77	-74.47	-79.97
MCR	MCR-0268-332	km03179	13:15:38	332	5193.00	0.050	0.052	5515.689	981855.344	0.82		2.97	3.67	7.46	982278.09	1720.62	559139.4	7190659.8	-62.80	-74.44	-79.91
MCR	MCR-0267-332	km03179	13:22:51	332	5193.00	0.010	0.054	5518.592	981858.246	1.00		2.83	3.51	7.34	982278.06	1708.06	559139.3	7190612.5	-62.58	-74.13	-79.57
MCR	MCR-0266-332	km03179	13:31:33	332	5193.00	0.070	0.056	5523.520	981863.173	1.14		2.61	3.22	6.97	982278.03	1685.62	559135.2	7190562.7	-62.66	-74.08	-79.46
MCR	MCR-0265-332	km03179	13:39:23	332	5193.00	0.030	0.057	5528.025	981867.677	1.18		2.70	2.92	6.79	982278.00	1664.13	559138.7	7190510.4	-62.72	-74.01	-79.32
MCR	MCR-0264-332	km03179	13:49:07	332	5193.00	0.030	0.059	5533.450	981873.102	1.02		3.08	2.60	6.70	982277.97	1638.03	559141.6	7190462.5	-62.71	-73.82	-79.04
MCR	MCR-0241-332	km03179	14:41:55	332	5193.00	0.040	0.064	5521.935	981861.581	1.17		2.91	3.16	7.24	982278.12	1691.27	559063.9	7190710.9	-62.86	-74.30	-79.68
MCR	MCR-0242-332	km03179	14:48:05	332	5193.00	0.080	0.064	5521.793	981861.438	1.09		2.96	3.15	7.20	982278.16	1691.30	559067.5	7190760.4	-63.07	-74.52	-79.90
MCR	MCR-0254-332	km03179	15:44:11	332	5193.00	0.100	0.061	5511.929	981851.569	0.93		3.73	3.77	8.43	982278.53	1734.25	559064.7	7191359.5	-63.02	-74.67	-80.15
MCR	MCR-0255-332	km03179	15:50:13	332	5193.00	0.060	0.060	5509.490	981849.129	0.58		3.98	3.82	8.38	982278.56	1745.77	559065.4	7191413.3	-63.21	-74.94	-80.46
MCR	MCR-0256-332	km03179	15:56:02	332	5193.00	0.090	0.059	5511.420	981851.058	0.47		3.78	3.73	7.97	982278.59	1738.00	559066.3	7191459.9	-63.41	-75.12	-80.63
MCR	MCR-0312-332	km03179	16:15:10	332	5193.00	0.040	0.055	5504.643	981844.280	0.38		3.93	4.33	8.63	982278.62	1769.08	559215.0	7191511.5	-63.05	-74.93	-80.52
MCR	MCR-0311-332	km03179	16:20:38	332	5193.00	0.050	0.054	5504.966	981844.602	0.37		3.75	4.38	8.50	982278.59	1768.70	559212.9	7191461.9	-62.94	-74.83	-80.42
MCR	MCR-0310-332	km03179	16:26:43	332	5193.00	0.090	0.053	5504.747	981844.382	0.33		3.77	4.42	8.51	982278.56	1770.08	559214.9	7191413.6	-62.84	-74.73	-80.33
MCR	MCR-0309-332	km03179	16:32:20	332	5193.00	0.050	0.051	5505.428	981845.063	0.29		3.69	4.39	8.36	982278.52	1767.45	559214.9	7191361.5	-62.85	-74.74	-80.33
MCR	MCR-0308-332	km03179	16:37:41	332	5193.00	0.040	0.050	5504.886	981844.520	0.33		3.66	4.37	8.36	982278.49	1769.95	559214.6	7191311.0	-62.85	-74.76	-80.36
MCR	MCR-0307-332	km03179	16:42:55	332	5193.00	0.040	0.049	5504.856	981844.489	0.58		3.56	4.32	8.47	982278.46	1769.69	559214.4	7191262.5	-62.77	-74.66	-80.26
MCR	MCR-0306-332	km03179	16:48:54	332	5193.00	0.080	0.047	5507.723	981847.356	0.89		3.29	4.20	8.39	982278.43	1756.51	559222.2	7191212.1	-62.66	-74.47	-80.02
MCR	MCR-0333-332	km03179	16:57:40	332	5193.00	0.050	0.044	5503.045	981842.677	0.65		3.43	4.63	8.72	982278.43	1778.91	559291.7	7191213.0	-62.36	-74.30	-79.92
MCR	MCR-0333-332	km03179	17:08:18	332	5193.00	0.050	0.041	5503.024	981842.677	0.65		3.43	4.63	8.72	982278.43	1778.91	559291.7	7191213.0	-62.36	-74.30	-79.92
MCR	MCR-0334-332	km03179	17:13:22	332	5193.00	0.060	0.039	5502.043	981841.696	0.43		3.58	4.68	8.69	982278.46	1783.18	559290.0	7191263.3	-62.53	-74.51	-80.14
MCR	MCR-0335-332	km03179	17:20:48	332	5193.00	0.050	0.037	5500.456	981840.108	0.39		3.78	4.77	8.94	982278.49	1789.48	559290.2	7191312.4	-62.56	-74.56	-80.20
MCR	MCR-0336-332	km03179	17:26:07	332	5193.00	0.050	0.035	5499.379	981839.030	0.46		3.96	4.84	9.27	982278.52	1792.54	559290.2	7191362.5	-62.63	-74.62	-80.26
MCR	MCR-0337-332	km03179	17:31:45	332	5193.00	0.070	0.033	5498.293	981837.944	0.59		4.11	4.89	9.59	982278.55	1795.96	559290.2	7191411.4	-62.66	-74.64	-80.28
MCR	MCR-0338-332	km03179	17:36:32	332	5193.00	0.070	0.031	5498.041	981837.691	0.52		4.25	4.85	9.63	982278.59	1796.60	559289.0	7191465.2	-62.76	-74.75	-80.39
MCR	MCR-0339-332	km03179	17:42:18	332	5193.00	0.090	0.029	5497.524	981837.174	0.63		4.41	4.76	9.80	982278.62	1797.08	559288.8	7191513.9	-62.99	-74.97	-80.61
MCR	MCR-0366-332	km03180	09:14:08	332	5193.00	0.010	-0.027	5489.045	981828.747	0.62		5.54	5.04	11.20	982278.61	1828.26	559365.5	7191512.4	-63.31	-75.39	-81.08
MCR	MCR-0365-332	km03180	09:21:36	332	5193.00	0.070	-0.025	5489.425	981829.128	0.95		5.25	5.24	11.44	982278.58	1829.31	559366.1	7191462.6	-62.39	-74.46	-80.13
MCR	MCR-0364-332	km03180	09:27:16	332	5193.00	0.070	-0.022	5490.644	981830.346	0.69		4.88	5.35	10.92	982278.55	1826.57	559366.8	7191411.7	-62.34	-74.44	-80.13
MCR	MCR-0363-332	km03180	09:33:07	332	5193.00	0.050	-0.020	5492.354	981832.057	0.62		4.52	5.35	10.49	982278.52	1821.47	559364.3	7191362.6	-62.18	-74.27	-79.96
MCR	MCR-0362-332	km03180	09:39:12	332	5193.00	0.100	-0.017	5493.974	981833.677	0.56		4.22	5.28	10.07	982278.49	1815.86	559364.2	7191313.1	-62.20	-74.29	-79.98
MCR	MCR-0361-332	km03180	09:45:23	332	5193.00	0.060	-0.015	5495.075	981834.777	0.53		4.00	5.22	9.75	982278.46	1812.27	559364.9	7191262.5	-62.20	-74.29	-79.97
MCR	MCR-0360-332	km03180	09:52:43	332	5193.00	0.040	-0.012	5496.371	981836.074	0.60		3.74	5.18	9.52	982278.43	1807.12	559365.6	7191211.7	-62.21	-74.28	-79.96
MCR	MCR-0359-332	km03180	09:58:58	332	5193.00	0.040	-0.009	5496.359	981836.062	0.70		3.71	5.16	9.56	982278.38	1808.87	559361.3	7191132.8	-61.76	-73.84	-79.52
MCR	MCR-0358-332	km03180	10:06:14	332	5193.00	0.060	-0.006	5494.890	981834.593	0.83		3.73	5.17	9.72	982278.36	1812.49	559363.4	7191112.9	-62.28	-74.37	-80.06
MCR	MCR-0357-332	km03180	10:12:37	332	5193.00	0.060	-0.004	5492.676	981832.379	0.88		3.88	5.25	10.01	982278.33	1820.96	559365.2	7191063.0	-62.37	-74.50	-80.21
MCR	MCR-0356-332	km03180	10:19:42	332	5193.00	0.080	-0.001	5490.788	981830.491	0.71		4.09	5.37	10.17	982278.30	1829.72	559365.4	7191011.2	-62.25	-74.43	-80.16
MCR	MCR-0355-332	km03180	10:25:44	332	5193.00	0.050	0.002	5489.155	981828.858	0.71		4.23	5.48	10.42	982278.27	1836.44	559364.6	7190961.7	-62.17	-74.37	-80.11
MCR	MCR-0354-332	km03180	10:34:32	332	5193.00	0.040	0.006	5487.043	981826.746	0.75		4.42	5.60	10.77	982278.23	1844.19	559365.6	7190912.4	-62.23	-74.46	-80.21
MCR	MCR-0353-332	km03180	10:41:45	332	5193.00	0.050	0.009	5484.731	981824.434	0.78		4.64	5.75	11.17	982278.20	1852.99	559365.4	7190862.8	-62.21	-74.47	-80.24
MCR	MCR-0352-332	km03180	10:50:58	332	5193.00	0.060	0.013	5484.908	981824.611	0.75		4.60	5.82	11.17	982278.17	1852.46	559366.0	7190811.3	-62.11	-74.36	-80.13
MCR	MCR-0351-332	km03180	10:57:23	332	5193.00	0.040	0.016	5486.796	981826.499	0.81		4.42	5.79	11.03	982278.14	1845.46	559366.0	7190762.6	-61.80	-74.02	-79.76
MCR	MCR-0350-332	km03180	11:04:13	332	5193.00	0.060	0.019	5490.734	981830.438	0.89		3.99	5.59	10.47	982278.11	1830.28	559363.8	7190710.4	-61.62	-73.78	-79.50
MCR	MCR-0325-332	km03180	11:12:00	332	5193.00	0.060	0.021	5493.674	981833.378	1.02		4.01	5.15	10.19	982278.18	1815.37	559289.8	7190814.2	-62.14	-74.21	-79.90
MCR	MCR-0326-332	km03180	11:27:49	332	5193.00	0.060	0.028	5496.220	981835.924	1.23		3.78	4.98	9.99	982278.22	1803.96	559289.3	7190881.8	-62.21	-74.22	-79.87
MCR	MCR-0327-332	km03180	11:34:31	332	5193.00	0.110	0.031	5495.488	981835.192	1.07		3.83	4.99	9.89	982278.24	1807.42	559295.7	7190911.5	-62.37	-74.42	-80.08
MCR	MCR-0328-332	km03180	11:40:35	332	5193.00	0.050	0.033	5497.460	981837.164	1.02		3.73	4.81	9.57	982278.27	1799.58	559289.1	7190962.5	-62.44	-74.45	-80.10
MCR	MCR-0329-332	km03180	11:49:01	332	5193.00	0.090	0.036	5498.044	981837.748	1.09		3.75	4.74	9.57	982278.30	1797.01	559292.5	7191013.6	-62.40	-74.40	-80.04
MCR	MCR-0303-332	km03180	12:56:39	332	5193.00	0.040	0.057	5509.524	981849.229	1.19		3.25	3.94	8.38	982278.33	1745.64	559217.9	7191042.6	-62.91	-74.64	-80.16
MCR	MCR-0302-332	km03180	13:03:34	332	5193.00	0.040	0.059	5508.470	981848.175	1.19		3.29	3.99	8.47	982278.31	1750.68	559213.5	7191012.1	-62.80	-74.56	-80.10
MCR	MCR-0301-332	km03180	13:10:44	332	5193.00	0.020	0.060	5507.410	981847.115	1.11		3.31	4.11	8.53	982278.28	1755.52	559215.4	7190962.4	-62.76	-74.55	-80.10

MCR	MCR-0300-332	km03180	13:17:16	332	5193.00	0.050	0.061	5506.937	981846.642	1.43	3.33	4.20	8.96	982278.24	1757.36	559216.1	7190911.8	-62.29	-74.06	-79.59
MCR	MCR-0299-332	km03180	13:34:12	332	5193.00	0.020	0.064	5506.521	981846.226	1.27	3.29	4.27	8.82	982278.21	1758.82	559214.8	7190854.3	-62.55	-74.33	-79.88
MCR	MCR-0298-332	km03180	13:40:51	332	5193.00	0.070	0.065	5504.636	981844.341	1.06	3.42	4.36	8.84	982278.18	1767.54	559213.7	7190812.4	-62.61	-74.46	-80.03
MCR	MCR-0297-332	km03180	13:47:29	332	5193.00	0.030	0.066	5503.560	981843.265	0.91	3.53	4.45	8.88	982278.15	1773.01	559216.1	7190761.5	-62.49	-74.37	-79.96
MCR	MCR-0190-332	km03180	14:59:11	332	5193.00	0.020	0.067	5543.328	981883.034	0.65	3.01	2.10	5.76	982278.27	1591.18	558915.2	7190917.7	-63.79	-74.64	-79.75
MCR	MCR-0191-332	km03180	15:12:03	332	5193.00	0.070	0.065	5543.396	981883.102	0.55	3.03	2.10	5.68	982278.30	1591.57	558914.0	7190964.2	-63.77	-74.64	-79.75
MCR	MCR-0192-332	km03180	15:18:13	332	5193.00	0.060	0.065	5541.836	981881.542	0.51	3.03	2.13	5.66	982278.32	1599.57	558914.5	7191013.0	-63.75	-74.67	-79.81
MCR	MCR-0193-332	km03180	15:23:06	332	5193.00	0.060	0.064	5541.230	981880.936	0.50	2.96	2.11	5.56	982278.36	1602.45	558916.3	7191064.0	-63.93	-74.88	-80.03
MCR	MCR-0194-332	km03180	15:28:53	332	5193.00	0.130	0.063	5542.395	981882.101	0.71	3.01	2.08	5.80	982278.39	1596.20	558914.0	7191113.2	-63.77	-74.65	-79.77
MCR	MCR-0195-332	km03180	15:36:10	332	5193.00	0.060	0.062	5546.201	981885.908	1.00	3.28	2.05	6.33	982278.42	1574.96	558912.4	7191158.6	-63.66	-74.35	-79.38
MCR	MCR-0196-332	km03180	15:45:30	332	5193.00	0.040	0.060	5545.514	981885.221	1.38	3.29	2.19	6.86	982278.45	1576.22	558909.4	7191213.0	-63.46	-74.11	-79.12
MCR	MCR-0168-332	km03180	15:54:49	332	5193.00	0.100	0.058	5551.528	981891.235	0.95	3.31	1.75	6.01	982278.42	1549.67	558839.6	7191161.0	-63.89	-74.43	-79.38
MCR	MCR-0167-332	km03180	16:00:51	332	5193.00	0.060	0.056	5548.431	981888.138	0.71	3.04	1.80	5.55	982278.39	1566.83	558842.0	7191111.8	-64.04	-74.74	-79.77
MCR	MCR-0166-332	km03180	16:06:49	332	5193.00	0.060	0.055	5547.058	981886.765	0.62	2.95	1.84	5.40	982278.36	1573.70	558839.8	7191058.8	-64.16	-74.92	-79.98
MCR	MCR-0165-332	km03180	16:11:32	332	5193.00	0.050	0.053	5546.997	981886.704	0.56	2.97	1.88	5.41	982278.33	1574.13	558840.9	7191009.9	-64.09	-74.85	-79.91
MCR	MCR-0164-332	km03180	16:22:41	332	5193.00	0.030	0.050	5548.811	981888.518	0.53	3.02	1.84	5.39	982278.30	1565.61	558837.5	7190959.9	-64.00	-74.71	-79.74
MCR	MCR-0163-332	km03180	16:29:08	332	5193.00	0.070	0.048	5549.509	981889.216	0.51	3.08	1.81	5.39	982278.27	1561.28	558838.5	7190911.1	-64.16	-74.83	-79.85
MCR	MCR-0162-332	km03180	16:37:14	332	5193.00	0.070	0.046	5550.576	981890.283	0.55	3.13	1.76	5.43	982278.24	1555.26	558839.2	7190861.6	-64.24	-74.87	-79.87
MCR	MCR-0161-332	km03180	16:43:35	332	5193.00	0.090	0.044	5552.715	981892.422	0.69	3.36	1.68	5.74	982278.21	1543.70	558839.2	7190812.5	-64.04	-74.56	-79.51
MCR	MCR-0133-332	km03180	16:51:11	332	5193.00	0.070	0.041	5558.356	981898.063	0.54	3.53	1.45	5.52	982278.21	1516.70	558762.5	7190812.7	-64.19	-74.53	-79.40
MCR	MCR-0132-332	km03180	16:57:16	332	5193.00	0.060	0.039	5558.844	981898.551	1.23	3.80	1.41	6.44	982278.18	1512.10	558768.7	7190761.9	-63.45	-73.68	-78.50
MCR	MCR-0053-332	km03181	15:34:37	332	5225.00	0.080	0.065	5571.285	981911.003	0.41	5.14	1.01	6.55	982278.22	1445.51	558539.8	7190811.6	-64.47	-74.22	-78.80
MCR	MCR-0054-332	km03181	15:17:47	332	5225.00	0.090	0.066	5572.152	981911.870	0.44	4.87	1.01	6.32	982278.25	1442.67	558541.1	7190860.2	-64.50	-74.25	-78.83
MCR	MCR-0055-332	km03181	15:11:48	332	5225.00	0.060	0.066	5573.655	981913.373	0.44	4.84	0.99	6.26	982278.28	1434.85	558539.7	7190911.9	-64.70	-74.39	-78.95
MCR	MCR-0056-332	km03181	14:59:01	332	5225.00	0.080	0.066	5574.860	981914.577	0.53	4.79	0.97	6.28	982278.31	1428.53	558536.9	7190961.8	-64.78	-74.43	-78.97
MCR	MCR-0057-332	km03181	14:53:44	332	5225.00	0.070	0.066	5575.604	981915.321	0.56	4.75	0.96	6.27	982278.34	1424.39	558540.8	7191007.8	-64.92	-74.54	-79.07
MCR	MCR-0058-332	km03181	14:47:42	332	5225.00	0.010	0.066	5576.955	981916.671	0.41	4.83	0.95	6.18	982278.38	1416.66	558541.0	7191062.6	-65.29	-74.87	-79.37
MCR	MCR-0059-332	km03181	14:40:25	332	5225.00	0.050	0.065	5576.785	981916.501	0.38	4.70	0.96	6.03	982278.41	1416.41	558541.5	7191111.6	-65.74	-75.33	-79.84
MCR	MCR-0060-332	km03181	14:35:41	332	5225.00	0.070	0.065	5577.077	981916.793	0.39	4.54	0.97	5.90	982278.44	1417.67	558541.0	7191161.6	-65.38	-74.99	-79.51
MCR	MCR-0080-332	km03181	16:09:10	332	5225.00	0.080	0.060	5566.681	981906.401	0.53	3.93	1.16	5.62	982278.25	1474.16	558616.3	7190861.8	-64.43	-74.46	-79.18
MCR	MCR-0081-332	km03181	16:13:37	332	5225.00	0.100	0.059	5567.954	981907.674	0.56	3.96	1.15	5.67	982278.28	1467.47	558616.6	7190911.3	-64.48	-74.46	-79.16
MCR	MCR-0082-332	km03181	16:19:58	332	5225.00	0.070	0.058	5569.371	981909.091	0.63	4.05	1.12	5.81	982278.31	1458.66	558616.1	7190963.5	-64.72	-74.63	-79.29
MCR	MCR-0083-332	km03181	16:25:56	332	5225.00	0.080	0.057	5570.476	981910.197	1.21	4.12	1.10	6.42	982278.34	1451.58	558613.8	7191011.1	-64.32	-74.12	-78.73
MCR	MCR-0143-332	km03181	12:58:51	332	5225.00	0.040	0.046	5549.244	981888.955	1.20	3.08	1.93	6.20	982278.52	1559.02	558766.1	7191311.4	-64.12	-74.70	-79.68
MCR	MCR-0144-332	km03181	12:52:59	332	5225.00	0.040	0.044	5544.486	981884.198	1.22	3.09	2.03	6.33	982278.55	1581.83	558765.7	7191360.9	-64.09	-74.83	-79.88
MCR	MCR-0213-332	km03181	10:47:51	332	5225.00	0.070	-0.006	5533.681	981873.388	1.22	2.74	2.57	6.53	982278.10	1637.05	558986.6	7190663.2	-62.96	-74.08	-79.31
MCR	MCR-0214-332	km03181	10:54:46	332	5225.00	0.090	-0.003	5532.260	981871.967	1.24	2.76	2.60	6.60	982278.13	1643.29	558989.8	7190709.8	-63.05	-74.21	-79.45
MCR	MCR-0215-332	km03181	11:01:19	332	5225.00	0.070	0.000	5532.597	981872.304	1.27	2.82	2.56	6.65	982278.16	1640.80	558991.4	7190762.0	-63.19	-74.32	-79.56
MCR	MCR-0216-332	km03181	11:24:17	332	5225.00	0.050	0.010	5534.517	981874.225	1.20	2.90	2.49	6.59	982278.20	1631.49	558989.9	7190815.5	-63.27	-74.34	-79.55
MCR	MCR-0217-332	km03181	11:35:48	332	5225.00	0.080	0.015	5535.696	981875.405	1.01	2.96	2.45	6.42	982278.23	1626.45	558986.4	7190859.5	-63.36	-74.41	-79.61
MCR	MCR-0218-332	km03181	11:41:38	332	5225.00	0.100	0.017	5536.728	981876.436	0.79	3.05	2.43	6.27	982278.26	1622.12	558990.0	7190913.4	-63.44	-74.47	-79.66
MCR	MCR-0219-332	km03181	11:47:27	332	5225.00	0.100	0.020	5536.343	981876.052	0.78	3.01	2.44	6.23	982278.29	1624.38	558990.9	7190964.7	-63.45	-74.50	-79.70
MCR	MCR-0220-332	km03181	11:54:07	332	5225.00	0.050	0.022	5535.616	981875.326	0.65	2.98	2.42	6.05	982278.32	1628.21	558987.9	7191016.4	-63.65	-74.74	-79.96
MCR	MCR-0221-332	km03181	12:01:04	332	5225.00	0.060	0.025	5535.156	981874.865	0.67	2.96	2.43	6.05	982278.35	1631.02	558992.0	7191065.2	-63.57	-74.68	-79.91
MCR	MCR-0222-332	km03181	12:08:47	332	5225.00	0.070	0.028	5537.530	981877.240	0.82	3.10	2.40	6.32	982278.39	1618.72	558990.1	7191113.3	-63.39	-74.39	-79.57
MCR	MCR-0223-332	km03181	12:17:51	332	5225.00	0.040	0.031	5540.104	981879.814	0.98	3.30	2.44	6.71	982278.42	1603.21	558986.1	7191163.9	-63.52	-74.37	-79.48
MCR	MCR-0243-332	km03181	10:29:02	332	5225.00	0.040	-0.013	5523.941	981863.647	1.32	2.92	3.04	7.28	982278.19	1681.26	559063.3	7190809.2	-62.84	-74.20	-79.55
MCR	MCR-0244-332	km03181	10:22:46	332	5225.00	0.070	-0.016	5526.208	981865.913	1.07	2.96	2.97	7.00	982278.22	1671.12	559064.8	7190863.4	-63.03	-74.35	-79.68
MCR	MCR-0245-332	km03181	10:15:17	332	5225.00	0.100	-0.019	5527.424	981867.129	0.99	2.99	2.92	6.90	982278.26	1665.58	559065.8	7190914.2	-63.10	-74.38	-79.69
MCR	MCR-0246-332	km03181	10:09:23	332	5225.00	0.060	-0.022	5527.444	981867.149	0.89	3.01	2.89	6.79	982278.29	1665.74	559063.4	7190963.0	-63.22	-74.52	-79.83
MCR	MCR-0247-332	km03181	10:02:31	332	5225.00	0.060	-0.024	5526.974	981866.679	0.86	2.98	2.88	6.73	982278.32	1668.02	559066.4	7191012.9	-63.33	-74.65	-79.97
MCR	MCR-0248-332	km03181	09:55:20	332	5225.00	0.070	-0.027	5528.733	981868.437	0.77	3.03	2.81	6.61	982278.35	1660.37	559061.0	7191061.0	-63.31	-74.58	-79.88
MCR	MCR-0249-332	km03181	09:47:32	332	5225.00	0.050	-0.030	5531.672	981871.375	0.96	3.20	2.83	6.98	982278.38	1645.12	559070.5	7191110.5	-63.04	-74.18	-79.42
MCR	MCR-0251-332	km03181	09:19:26	332	5225.00	0.070	-0.041	5526.181	981865.883	1.48	2.97	3.20	7.65	982278.44	1669.21	559062.4	7191209.7	-62.86	-74.10	-79.40
MCR	MCR-0252-332	km03181	09:10:51	332	5225.00	0.080	-0.044	5520.854	981860.557	1.42	3.04	3.45	7.90	982278.47	1692.95	559064.2	7191259.1	-63.05	-74.45	-79.81
MCR	MCR-0253-332	km03181	09:03:29	332	5225.00	0.050	-0.046	5515.428	981855.130	1.27	3.38	3.67	8.31	982278.50	1718.07	559064.2	7191312.3	-62.89	-74.43	-79.86
MCR	MCR-0257-332	km03181	08:51:47	332	5225.00	0.130	-0.050	5514.175	981853.876	0.77	3.35	3.63	7.75	982278.63	1725.57	559082.0	7191514.6	-63.43	-75.07	-80.55
MCR	MCR-0030-332	km03182	14:24:00	332	5225.00	0.040	0.050	5578.337	981918.070	0.42	5.73	0.90	7.04	982278.31	1405.05	558456.3	7190958.4	-65.13	-74.55	-78.98
MCR	MCR-0031-332	km03182	14:29:49	332	5225.00	0.070	0.051	5579.042	981918.776	0.30	5.45	0.90	6.65	982278.35	1403.32	558462.9	7191009.8	-65.30	-74.73	-79.18
MCR	MCR-0032-332	km03182	14:34:39	332	5225.00	0.070	0.052	5579.975	981919.709	0.37	5.27	0.90	6.53	982278.39	1399.36	558469.2	7191073.2	-65.36	-74.78	-79.21
MCR	MCR-0033-332	km03182	14:40:42	332	5225.00	0.060	0.053	5581.065	981920.799	0.33	5.32	0.89	6.54	982278.41	1393.44	558465.6	7191111.4	-65.48	-74.86	-79.27
MCR	MCR-0034-332	km03182	14:46:06	332	5225.00	0.070	0.054	5580.936	981920.671	0.27	5.00	0.90	6.17	982278.44	1396.37	558463.3	7191161.9	-65.51	-74.94	-79.38
MCR	MCR-0035-332	km03182	14:51:20	332	5225.00	0.070	0.054	5580.540	981920.275	0.37	4.79	0.92	6.07	982278.47	1399.18	558464.5	7191209.8	-65.49	-74.95	-79.40
MCR	MCR-0036-332	km03182	14:56:01	332	5225.00	0.090	0.055	5580.292	981920.027	0.47	4.62	0.93	6.02	982278.50	1399.44	558467.6	7191261.9	-65.78	-75.25	-79.70
MCR	MCR-0037-332	km03182	15:09:33	332	5225.00	0.070	0.056	5580.574	981920.309	0.55	4.58	0.93	6.06	982278.54	1397.49	558465.0	7191314.9	-65.88	-75.32	-79.77
MCR	MCR-0038-332	km03182	15:14:57	332	5225.00	0.050	0.057	5580.305	981920.041	0.56	4.45	0.95	5.96	982278.57	1399.43	558463.7	7191364.2	-65.91	-75.38	-79.84
MCR	MCR-0039-332	km03182	15:23:21	332	5225.00	0.070	0.057	5580.841	981920.577	0.63	4.55	0.95	6.13	982278.60	1396.05	558461.4	7191408.1	-65.88	-75.31	-79.75
MCR	MCR-0040-332	km03182	15:29:27	332	5225.00	0.050	0.057	5581.083	981920.820	0.75	4.66	0.97	6.38	982278.63	1393.10	558463.7	7191462.6	-65.96	-75.34	-79.76
MCR	MCR-0041-332	km03182	15:57:10	332	5225.00	0.070	0.057	5575.175	981914.913	1.18	3.80	1.11	6.09	982278.69	1425.32	558460.9	7191561.0	-65.72	-75.36	-79.89
MCR	MCR-0062-332	km03182	16:54:15	332	5225.00	0.070	0.050	5574.224	981913.964	0.70	3.99	1.05	5.74	982278.50	1433.30	558547.2	7191259.3	-65.29	-75.02	-79.60
MCR	MCR-0063-332	km03182	16:59:53	332	5225.00	0.070	0.049	5573.553	981913.294	0.85	3.84	1.07	5.76	982278.53	1437.31	558542.8	7191310.0	-65.14	-74.90	-79.49
MCR	MCR-0064-332	km03182	16:45:43	332	5225.00	0.070	0.052	5572.457	981912.196	1.01	3.78	1.10	5.88	982278.56	1441.63	558545.8	7191362.8	-65.25	-75.03	-79.63
MCR	MCR-0065-332	km03182	16:40:36	332	5225.00	0.050	0.052	5573.049	981912.789	0.98	3.87	1.09	5.94	982278.59	1437.90	558540.1	7191412.9	-65.37	-75.11	-79.70
MCR	MCR-0066-332	km03182	16:23:58	332	5225.00	0.090	0.055	5574.027	981913.766	1.00	4.02	1.09	6.10	982278.62	1431.83	558530.8	7191449.2	-65.45	-75.14	-79.70
MCR	MCR-0067-332	km03182	16:08:36	332	5225.00	0.030	0.056	5570.388	981910.126	1.14	3.76	1.20	6.10	982278.65	1450.88	558540.1	7191510.2	-65.24	-75.07	-79.69
MCR	MCR-0084-332	km03182	13:33:34	332	5225.00	0.090	0.037	5571.031	981910.762	1.09	4.16	1.09	6.34	982278.37	1448.12	558615.2	7191064.3	-64.60	-74.38	-78.99
MCR	MCR-0084-332	km03181	16:35:46	332	5225.00	0.080	0.054	5571.082	981910.803	1.09	4.16	1.09	6.34	982278.37	1448.12	558615.2	7191064.3	-64.56	-74.34	-78.95
MCR	MCR-0085-332	km03182	13:24:16	332	5225.00	0.070	0.035	5571.275	981911.006	0.83	4.10	1.08	6.01	982278.40	1447.35	558614.7	7191110.2	-64.95	-74.75	-79.37
MCR	MCR-0107-332	km03182	12:32:46	332	5225.00	0.050	0.016	5561.501	981901.229	0.66	3.48	1.33	5.47	982278.24	1502.01	558690.1	7190857.7	-64.10	-74.34	-79.16
MCR	MCR-0108-332	km03182	12:39:24	332	5225.00	0.090	0.019	5561.098	981900.826	1.02	3.35	1.36	5.73	982278.27	1504.50	558690.1	7190911.2	-63.70	-73.94	-78.76
MCR	MCR-0109-332	km03182	12:45:36	332	5225.00	0.060	0.021	5561.697	981901.426	1.08	3.36	1.36	5.80	982278.30	1500.65	558690.8	7190961.0	-63.83	-74.04	-78.84
MCR	MCR-0110-332	km03182	12:50:45	332	5225.00	0.070	0.023	5561.643	981901.372	0.97	3.32	1.35	5.64	982278.34	1499.79	558689.5	7191013.3	-64.29	-74.51	-79.31

MCR	MCR-0111-332	km03182	12:56:22	332	5225.00	0.040	0.025	5561.917	981901.646	0.90	3.35	1.33	5.58	982278.37	1497.89	558689.0	7191061.2	-64.51	-74.71	-79.52
MCR	MCR-0112-332	km03182	13:01:59	332	5225.00	0.050	0.027	5562.738	981902.467	0.93	3.45	1.31	5.69	982278.40	1492.89	558691.3	7191111.1	-64.61	-74.76	-79.54
MCR	MCR-0113-332	km03182	13:08:47	332	5225.00	0.070	0.029	5563.383	981903.113	0.90	3.54	1.30	5.73	982278.43	1489.39	558689.8	7191160.4	-64.65	-74.78	-79.54
MCR	MCR-0133-332	km03182	12:24:03	332	5225.00	0.070	0.013	5558.401	981898.129	0.54	3.53	1.45	5.52	982278.21	1516.70	558762.5	7190812.7	-64.12	-74.46	-79.33
MCR	MCR-0134-332	km03182	12:17:10	332	5225.00	0.090	0.011	5555.990	981895.718	0.49	3.25	1.54	5.28	982278.24	1530.29	558765.0	7190863.4	-64.09	-74.55	-79.47
MCR	MCR-0135-332	km03182	12:10:39	332	5225.00	0.110	0.008	5555.908	981895.635	0.52	3.18	1.57	5.27	982278.27	1531.17	558766.2	7190908.5	-64.03	-74.50	-79.42
MCR	MCR-0136-332	km03182	12:04:39	332	5225.00	0.030	0.005	5555.842	981895.569	0.65	3.16	1.58	5.39	982278.30	1531.20	558764.1	7190961.4	-63.97	-74.43	-79.35
MCR	MCR-0137-332	km03182	11:58:47	332	5225.00	0.050	0.003	5554.825	981894.552	0.74	3.07	1.60	5.41	982278.33	1536.06	558764.8	7191011.7	-64.01	-74.50	-79.43
MCR	MCR-0138-332	km03182	11:54:09	332	5225.00	0.060	0.001	5553.736	981893.463	0.90	3.01	1.59	5.50	982278.36	1540.50	558765.7	7191062.2	-64.11	-74.62	-79.57
MCR	MCR-0139-332	km03182	11:39:42	332	5225.00	0.040	-0.005	5554.634	981894.359	0.82	3.14	1.55	5.51	982278.39	1535.84	558765.0	7191111.1	-64.18	-74.66	-79.59
MCR	MCR-0140-332	km03182	11:46:34	332	5225.00	0.080	-0.002	5556.888	981896.614	0.69	3.33	1.52	5.54	982278.43	1523.75	558768.7	7191161.8	-64.38	-74.77	-79.66
MCR	MCR-0226-332	km03182	09:46:30	332	5225.00	0.080	-0.048	5525.807	981865.528	1.49	3.08	3.18	7.75	982278.51	1670.00	558989.7	7191318.3	-63.00	-74.24	-79.53
MCR	MCR-0227-332	km03182	09:24:11	332	5225.00	0.030	-0.055	5520.634	981860.354	1.81	3.37	3.38	8.55	982278.53	1694.96	558994.2	7191358.7	-62.10	-73.45	-78.79
MCR	MCR-0228-332	km03182	09:14:17	332	5225.00	0.050	-0.058	5514.398	981854.118	1.43	3.86	3.49	8.78	982278.57	1719.31	558993.9	7191415.8	-63.12	-74.63	-80.05
MCR	MCR-0229-332	km03182	09:05:37	332	5225.00	0.100	-0.060	5517.106	981856.824	1.40	3.61	3.32	8.34	982278.60	1708.24	558985.4	7191463.0	-63.25	-74.72	-80.12
MCR	MCR-0258-332	km03182	08:27:49	332	5225.00	0.100	-0.070	5519.879	981859.596	1.10	2.97	3.39	7.46	982278.66	1700.37	559062.5	7191562.3	-63.25	-74.74	-80.14
MCR	MCR-0230-332	km03183	08:27:48	332	5235.00	0.040	-0.078	5521.841	981861.547	1.26	3.25	3.13	7.64	982278.63	1689.35	558987.4	7191513.0	-63.28	-74.67	-80.04
MCR	MCR-0200-332	km03183	08:40:28	332	5235.00	0.080	-0.076	5524.531	981864.238	1.74	3.50	2.96	8.19	982278.57	1673.71	558915.0	7191412.0	-63.03	-74.26	-79.55
MCR	MCR-0201-332	km03183	08:51:04	332	5235.00	0.080	-0.074	5527.221	981866.929	1.99	3.23	2.81	8.03	982278.60	1662.95	558915.6	7191460.0	-62.76	-73.93	-79.19
MCR	MCR-0202-332	km03183	09:00:10	332	5235.00	0.090	-0.073	5530.622	981870.331	2.26	2.98	2.65	7.89	982278.63	1648.66	558914.8	7191512.2	-62.48	-73.56	-78.78
MCR	MCR-0203-332	km03183	09:11:50	332	5235.00	0.070	-0.071	5535.339	981875.049	1.42	3.03	2.55	7.00	982278.67	1627.01	558919.1	7191565.2	-63.33	-74.33	-79.51
MCR	MCR-0175-332	km03183	09:51:00	332	5235.00	0.090	-0.062	5542.170	981881.883	1.25	3.06	2.13	6.44	982278.64	1593.03	558842.3	7191515.8	-64.09	-74.89	-79.98
MCR	MCR-0174-332	km03183	09:58:39	332	5235.00	0.200	-0.059	5539.253	981878.966	1.25	3.07	2.25	6.56	982278.61	1606.86	558840.5	7191461.1	-64.00	-74.89	-80.02
MCR	MCR-0173-332	km03183	10:06:39	332	5235.00	0.040	-0.057	5536.595	981876.309	1.38	3.11	2.37	6.87	982278.57	1619.09	558837.2	7191410.9	-63.75	-74.70	-79.86
MCR	MCR-0172-332	km03183	10:20:32	332	5235.00	0.030	-0.053	5535.829	981875.544	1.48	3.23	2.47	7.17	982278.54	1622.03	558842.0	7191363.4	-63.51	-74.46	-79.61
MCR	MCR-0145-332	km03183	10:29:22	332	5235.00	0.030	-0.051	5546.457	981886.173	1.06	3.05	1.93	6.04	982278.58	1572.96	558765.6	7191412.9	-64.33	-75.03	-80.07
MCR	MCR-0146-332	km03183	10:35:20	332	5235.00	0.080	-0.049	5549.292	981889.008	1.10	3.14	1.81	6.05	982278.61	1558.83	558764.4	7191462.3	-64.39	-74.99	-79.98
MCR	MCR-0147-332	km03183	10:41:34	332	5235.00	0.070	-0.047	5552.208	981891.924	1.28	3.45	1.76	6.49	982278.65	1543.16	558766.1	7191513.1	-64.15	-74.60	-79.52
MCR	MCR-0148-332	km03183	11:08:14	332	5235.00	0.110	-0.038	5553.011	981892.729	1.27	3.56	1.81	6.65	982278.68	1538.16	558764.1	7191562.0	-64.20	-74.60	-79.49
MCR	MCR-0120-332	km03183	11:17:29	332	5235.00	0.070	-0.035	5560.555	981900.273	1.01	3.75	1.50	6.25	982278.65	1499.80	558693.5	7191512.4	-64.94	-75.10	-79.88
MCR	MCR-0119-332	km03183	11:31:08	332	5235.00	0.050	-0.030	5558.514	981898.234	0.93	3.38	1.50	5.81	982278.62	1512.86	558689.2	7191460.2	-64.83	-75.12	-79.96
MCR	MCR-0118-332	km03183	11:38:47	332	5235.00	0.040	-0.028	5555.064	981894.784	1.09	3.13	1.59	5.81	982278.58	1530.90	558690.7	7191411.7	-64.58	-75.00	-79.90
MCR	MCR-0117-332	km03183	11:45:44	332	5235.00	0.040	-0.025	5554.365	981894.085	1.18	3.10	1.64	5.92	982278.55	1534.11	558690.2	7191362.5	-64.45	-74.88	-79.79
MCR	MCR-0116-332	km03183	11:51:49	332	5235.00	0.100	-0.023	5556.358	981896.080	1.20	3.13	1.61	5.93	982278.52	1524.20	558689.5	7191311.1	-64.43	-74.80	-79.67
MCR	MCR-0115-332	km03183	11:57:25	332	5235.00	0.050	-0.021	5561.681	981901.403	1.10	3.42	1.46	5.98	982278.49	1497.46	558690.6	7191260.9	-64.47	-74.63	-79.41
MCR	MCR-0114-332	km03183	12:06:44	332	5235.00	0.070	-0.017	5565.193	981904.915	0.86	3.83	1.32	6.01	982278.46	1479.46	558692.3	7191213.5	-64.56	-74.60	-79.32
MCR	MCR-0086-332	km03183	12:14:52	332	5235.00	0.070	-0.014	5571.081	981910.804	0.73	4.03	1.10	5.86	982278.44	1449.30	558614.9	7191165.9	-64.98	-74.81	-79.43
MCR	MCR-0087-332	km03183	12:20:28	332	5235.00	0.070	-0.012	5571.316	981911.039	0.70	4.07	1.13	5.90	982278.47	1448.06	558613.5	7191212.2	-64.98	-74.80	-79.42
MCR	MCR-0088-332	km03183	12:30:15	332	5235.00	0.070	-0.008	5568.280	981908.004	1.04	3.66	1.22	5.92	982278.50	1463.71	558612.8	7191260.7	-64.83	-74.76	-79.43
MCR	MCR-0089-332	km03183	12:46:14	332	5235.00	0.060	-0.003	5565.096	981904.821	1.11	3.36	1.30	5.78	982278.53	1480.09	558615.7	7191311.1	-64.88	-74.94	-79.67
MCR	MCR-0090-332	km03183	12:52:32	332	5235.00	0.050	-0.001	5564.060	981903.786	1.07	3.35	1.32	5.74	982278.56	1485.16	558616.2	7191361.3	-64.96	-75.06	-79.81
MCR	MCR-0091-332	km03183	12:58:29	332	5235.00	0.050	0.002	5564.283	981904.009	1.11	3.42	1.30	5.82	982278.59	1484.09	558616.2	7191413.0	-64.88	-74.97	-79.71
MCR	MCR-0092-332	km03183	13:05:06	332	5235.00	0.050	0.004	5566.024	981905.751	1.45	3.72	1.28	6.45	982278.62	1473.91	558616.3	7191463.3	-64.46	-74.42	-79.10
MCR	MCR-0094-332	km03183	13:23:35	332	5235.00	0.100	0.010	5559.304	981899.032	1.27	3.33	1.55	6.15	982278.68	1507.64	558609.4	7191562.8	-64.74	-74.97	-79.78
MCR	MCR-0093-332	km03183	13:30:29	332	5235.00	0.070	0.013	5564.468	981904.196	1.04	3.59	1.37	6.01	982278.66	1481.51	558610.7	7191517.2	-65.06	-75.11	-79.84
MCR	BASE1-0024-332	km03183	14:00:26	332	5235.00	0.040	0.022	5514.216	981853.946	0.61	3.30	3.57	7.48	982278.74	1727.01	559138.8	7191693.5	-63.52	-75.19	-80.69
MCR	BASE1-0024-332	km03183	14:01:49	332	5185.00	0.040	0.022	5514.177	981853.946	0.61	3.30	3.57	7.48	982278.74	1727.01	559138.8	7191693.5	-63.52	-75.19	-80.69
MCR	MCR-0381-332	km03183	14:44:34	332	5185.00	0.130	0.033	5474.326	981814.098	0.81	5.90	5.90	12.61	982278.29	1891.21	559516.0	7191011.9	-63.05	-75.46	-81.30
MCR	MCR-0380-332	km03183	14:56:16	332	5185.00	0.050	0.035	5468.725	981808.498	0.43	6.25	6.58	13.26	982278.16	1914.19	559511.1	7190812.3	-63.03	-75.54	-81.43
MCR	MCR-0370-332	km03183	15:28:47	332	5185.00	0.070	0.040	5489.509	981829.284	1.36	3.76	5.76	10.88	982278.08	1834.34	559435.3	7190660.1	-61.40	-73.55	-79.27
MCR	MCR-0371-332	km03183	15:49:14	332	5185.00	0.050	0.042	5478.828	981818.605	0.81	5.00	6.30	12.11	982278.14	1877.31	559439.3	7190762.1	-61.84	-74.19	-80.01
MCR	MCR-0372-332	km03183	15:57:13	332	5185.00	0.060	0.042	5477.122	981816.900	0.55	5.29	6.23	12.07	982278.20	1883.34	559439.5	7190862.9	-62.44	-74.83	-80.67
MCR	MCR-0373-332	km03183	16:04:00	332	5185.00	0.060	0.042	5482.337	981822.115	0.64	4.74	5.93	11.30	982278.26	1864.32	559438.9	7190961.5	-62.11	-74.44	-80.24
MCR	MCR-0374-332	km03183	16:12:23	332	5185.00	0.090	0.043	5484.910	981824.689	0.57	4.58	5.71	10.86	982278.33	1853.08	559438.4	7191060.7	-62.45	-74.74	-80.52
MCR	MCR-0375-332	km03183	16:18:54	332	5185.00	0.060	0.043	5488.632	981828.411	0.56	4.30	5.61	10.47	982278.39	1837.96	559438.5	7191159.8	-62.36	-74.57	-80.31
MCR	MCR-0376-332	km03183	16:25:40	332	5185.00	0.050	0.042	5487.325	981827.104	0.69	4.80	5.69	11.18	982278.45	1842.24	559439.9	7191263.1	-61.98	-74.16	-79.89
MCR	MCR-0377-332	km03183	16:32:16	332	5185.00	0.060	0.042	5483.130	981822.910	0.59	5.78	5.72	12.09	982278.51	1854.70	559439.9	7191362.0	-62.55	-74.74	-80.48
MCR	MCR-0250-332	km03186	08:17:44	332	5195.00	0.050	-0.067	5531.780	981871.557	1.22	3.14	2.91	7.27	982278.41	1642.60	559060.6	7191161.1	-63.04	-74.13	-79.35
MCR	MCR-0225-332	km03186	08:39:14	332	5195.00	0.080	-0.066	5531.160	981870.940	1.53	2.96	2.93	7.42	982278.48	1644.56	558990.1	7191260.6	-63.14	-74.24	-79.46
MCR	MCR-0224-332	km03186	08:46:31	332	5195.00	0.050	-0.065	5535.573	981875.353	1.37	3.03	2.69	7.09	982278.45	1623.97	558989.3	7191211.7	-63.31	-74.29	-79.45
MCR	MCR-0197-332	km03186	08:54:21	332	5195.00	0.030	-0.065	5540.274	981880.055	1.42	3.09	2.46	6.97	982278.48	1601.26	558913.8	7191261.8	-63.42	-74.24	-79.34
MCR	MCR-0198-332	km03186	09:11:02	332	5195.00	0.080	-0.065	5534.805	981874.588	1.56	3.05	2.71	7.32	982278.51	1627.29	558915.1	7191312.4	-63.17	-74.14	-79.31
MCR	MCR-0199-332	km03186	09:20:22	332	5195.00	0.040	-0.064	5529.422	981869.206	1.41	3.16	2.88	7.45	982278.54	1652.06	558912.2	7191361.3	-63.37	-74.51	-79.76
MCR	MCR-0171-332	km03186	09:28:29	332	5195.00	0.060	-0.064	5542.529	981882.315	1.40	3.07	2.28	6.75	982278.51	1590.90	558839.2	7191310.8	-63.57	-74.34	-79.40
MCR	MCR-0170-332	km03186	09:40:29	332	5195.00	0.050	-0.064	5548.119	981887.906	1.90	3.16	2.06	7.12	982278.49	1563.19	558840.5	7191261.7	-63.15	-73.68	-78.64
MCR	MCR-0169-332	km03186	09:46:12	332	5195.00	0.050	-0.064	5553.304	981893.091	1.15	3.64	1.82	6.61	982278.46	1537.15	558840.4	7191211.4	-63.88	-74.27	-79.16
MCR	MCR-0141-332	km03186	09:53:41	332	5195.00	0.070	-0.064	5560.418	981900.206	1.03	3.77	1.53	6.33	982278.46	1501.88	558760.5	7191219.1	-64.31	-74.47	-79.26
MCR	MCR-0142-332	km03186	10:02:33	332	5195.00	0.070	-0.063	5555.539	981895.328	1.23	3.40	1.72	6.36	982278.49	1527.18	558766.1	7191260.1	-64.01	-74.36	-79.23
MCR	MCR-0061-332	km03186	10:12:34	332	5215.00	0.070	-0.063	5576.235	981916.026	0.44	4.29	1.00	5.73	982278.47	1422.13	558538.2	7191215.3	-65.49	-75.14	-79.68
MCR	MCR-0340-332	km03186	11:22:47	332	5195.00	0.110	-0.061	5511.771	981851.570	0.84	2.88	3.69	7.40	982277.81	1742.02	559351.2	7190209.6	-62.00	-73.79	-79.34
MCR	MCR-0341-332	km03186	11:37:54	332	5195.00	0.130	-0.060	5514.191	981853.992	0.71	2.97	3.64	7.32	982277.84	1730.51	559365.3	7190266.5	-62.06	-73.78	-79.29
MCR	MCR-0342-332	km03186	11:44:08	332	5195.00	0.130	-0.059	5515.897	981855.698	0.69	2.95	3.59	7.23	982277.87	1722.37	559366.0	7190310.0	-62.15	-73.81	-79.30
MCR	MCR-0343-332	km03186	11:49:11	332	5195.00	0.090	-0.059	5516.988	981856.790	1.16	2.93	3.57	7.66	982277.90	1717.26	559361.2	7190362.3	-61.60	-73.19	-78.65
MCR	MCR-0344-332	km03186	11:54:39	332	5195.00	0.050	-0.059	5517.344	981857.146	0.92	2.96	3.63	7.51	982277.93	1714.02	559362.9	7190409.4	-62.13	-73.70	-79.15
MCR	MCR-0345-332	km03186	12:01:36	332	5195.00	0.110	-0.058	5513.967	981853.771	1.04	2.85	3.87	7.76	982277.97	1729.40	559362.7	7190464.6	-62.09	-73.76	-79.25
MCR	MCR-0346-332	km03186	12:11:08	332	5195.00	0.100	-0.058	5511.310	981851.114	1.22	2.83	4.13	8.18	982278.00	1741.21	559362.7	7190512.5	-61.85	-73.56	-79.08
MCR	MCR-0347-332	km03186	12:18:50	332	5195.00	0.060	-0.057	5508.280	981848.085	1.21	2.93	4.46	8.60	982278.03	1753.68	559361.4	7190571.4	-61.84	-73.61	-79.15
MCR	MCR-0348-332	km03186	12:29:58	332	5195.00	0.060	-0.056	5500.863	981840.669	1.27	3.22	4.90	9.39	982278.06	1786.39	559364.5	7190619.4	-61.63	-73.57	-79.18
MCR	MCR-0349-332	km03186	12:39:37	332	5195.00	0.060	-0.056	5495.243	981835.050	1.04	3.57	5.26	9.87	982278.08	1810.42	559364.8	7190661.8	-61.77	-73.84	-79.52
MCR	MCR-0324-332	km03186	12:59:00	332	5195.00	0.060	-0.054	5494.569	981834.379	0.89	3.96	5.16	10.01	982278.15	1812.34	559290.9	7190763.7	-61.95	-74.01	-79.69
MCR	MCR-0323-332	km03186	13:04:43	332	5195.00	0.070	-0.053	5497.509	981837.319	0.89	3.71	5.02	9.62	982278.12	1800.48	559291.3	7190710.7	-61.88	-73.90	-79.55
MCR	MCR-0322-332	km03186	14:03:40	332	5195.00	0.080	-0.047	5502.112	981841.930	0.88	3.36	4.71	8.95	982278.08	1781.43	559288.9	7190659.1	-61.96	-73.90	-79.51

MCR	MCR-0321-332	km03186	14:09:56	332	5195.00	0.050	-0.046	5506.178	981845.997	0.92	3.05	4.40	8.37	982278.06	1763.91	559290.1	7190611.1	-62.16	-74.03	-79.61
MCR	MCR-0320-332	km03186	14:16:39	332	5195.00	0.040	-0.046	5512.267	981852.086	1.12	2.82	4.00	7.93	982278.03	1737.13	559289.5	7190560.1	-62.04	-73.75	-79.26
MCR	MCR-0319-332	km03186	14:37:52	332	5195.00	0.050	-0.043	5519.395	981859.217	1.15	2.87	3.59	7.60	982278.00	1703.70	559288.1	7190513.5	-62.11	-73.61	-79.02
MCR	MCR-0293-332	km03186	15:22:35	332	5195.00	0.050	-0.038	5516.039	981855.866	1.01	2.75	3.67	7.43	982278.03	1720.19	559212.8	7190562.6	-62.35	-73.98	-79.45
MCR	MCR-0294-332	km03186	15:28:44	332	5195.00	0.050	-0.037	5511.938	981851.766	0.86	2.93	3.97	7.76	982278.06	1738.38	559215.3	7190611.8	-62.36	-74.09	-79.61
MCR	MCR-0295-332	km03186	15:35:49	332	5195.00	0.020	-0.036	5508.379	981848.208	0.80	3.16	4.21	8.17	982278.09	1753.51	559214.7	7190660.7	-62.35	-74.15	-79.71
MCR	MCR-0211-332	km03186	15:55:15	332	5195.00	0.070	-0.034	5539.447	981879.278	1.17	2.93	2.32	6.43	982278.04	1609.39	558989.8	7190564.8	-62.78	-73.70	-78.85
MCR	MCR-0210-332	km03186	16:04:08	332	5195.00	0.090	-0.033	5543.271	981883.102	0.94	3.30	2.12	6.35	982278.01	1590.51	558988.7	7190510.9	-62.87	-73.66	-78.74
MCR	MCR-0209-332	km03186	16:12:55	332	5195.00	0.080	-0.032	5546.340	981886.173	0.60	3.86	1.93	6.39	982277.98	1575.35	558989.9	7190459.6	-62.80	-73.49	-78.52
MCR	MCR-0208-332	km03186	16:28:56	332	5195.00	0.100	-0.031	5547.375	981887.210	0.35	4.20	1.78	6.33	982277.95	1570.29	558988.0	7190405.8	-62.84	-73.49	-78.51
MCR	MCR-0207-332	km03186	16:35:13	332	5195.00	0.100	-0.031	5545.199	981885.034	0.37	4.08	1.78	6.23	982277.92	1581.14	558991.5	7190362.7	-62.90	-73.64	-78.70
MCR	MCR-0206-332	km03186	16:48:00	332	5195.00	0.100	-0.030	5541.484	981881.321	0.48	3.90	1.86	6.24	982277.89	1598.47	558993.1	7190312.6	-63.04	-73.91	-79.02
MCR	MCR-0350-332	km03180	11:04:13	332	5193.00	0.060	0.019	5490.734	981830.438	0.89	4.15	5.58	10.62	982278.11	1830.28	559363.8	7190710.4	-61.43	-73.57	-79.29
MCR	f-0007-332	km03187	08:22:02	332	5210.00	0.070	-0.050	5559.057	981898.838	1.30	4.28	1.18	6.76	982278.18	1504.80	558376.7	7190747.6	-64.25	-74.40	-79.18
MCR	f-0006-332	km03187	08:45:51	332	5210.00	0.040	-0.048	5549.352	981889.113	1.32	3.67	1.43	6.43	982278.19	1554.03	558272.0	7190770.7	-64.37	-74.90	-79.85
MCR	f-0005-332	km03187	09:02:29	332	5210.00	0.040	-0.047	5547.478	981887.224	1.11	3.60	1.51	6.21	982278.21	1563.54	558220.7	7190811.3	-64.62	-75.23	-80.23
MCR	f-0002-332	km03187	09:17:40	332	5210.00	0.040	-0.047	5547.485	981887.219	1.42	3.56	1.54	6.52	982278.24	1563.31	558181.5	7190847.0	-64.31	-74.90	-79.88
MCR	f-0001-332	km03187	09:24:16	332	5210.00	0.040	-0.046	5545.455	981885.183	1.53	3.53	1.61	6.67	982278.23	1573.97	558169.8	7190839.2	-63.98	-74.63	-79.64
MCR	f-0003-332	km03187	09:41:29	332	5210.00	0.040	-0.046	5544.872	981884.585	1.66	3.42	1.63	6.71	982278.26	1576.12	558152.9	7190889.3	-64.12	-74.78	-79.80
MCR	f-0008-332	km03187	09:53:01	332	5210.00	0.060	-0.046	5546.712	981886.416	1.76	3.39	1.59	6.73	982278.29	1566.75	558145.6	7190937.6	-64.20	-74.79	-79.78

LaCoste & Romberg LLC

The first name in gravity since 1939

ALIOD 100 Electronic Beam Nulling

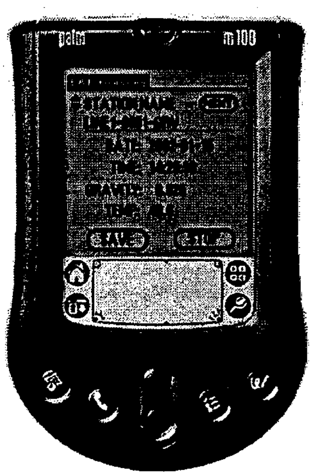
GETTING THE MOST FROM THE BEST SENSOR

LaCoste & Romberg, manufacturer of high precision gravity meters since 1939, is proud to introduce a new level of accuracy, precision and reliability with the new Aliod 100 linear electronic beam nulling system. This new beam nulling system is now available with new gravity meters and as an upgrade to your existing meters.*

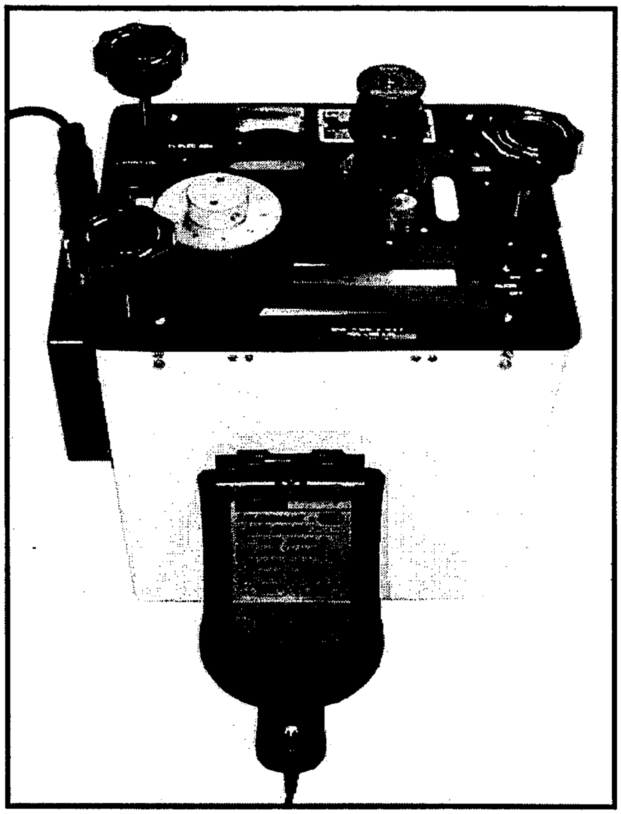
The Aliod 100 incorporates a new user-friendly LCD interface. No longer is there any need for a complicated lookup table as this new system displays the gravity directly in mGal on the LCD display. Meter temperature as well as battery voltage are displayed also. The new Aliod 100 beam nulling system has a range of 100 mGal with a resolution of either 0.01 or 0.001 mGal.** The greater range of the Aliod 100 also means good data is no longer dependent on the skill of the operator. Anyone who can level and unclamp the gravity meter is able to obtain consistant and accurate gravity data.

The Aliod 100 includes a Data Acquisition system using 24 bit converters for gravity and the levels, and 12 bit converters for the meter temperature and battery voltage. The Aliod 100 outputs a stream of ASCII data, which can be recorded by the included Palm™ handheld. All of the information displayed on the integrated LCD, plus station name, date, time and electronic levels are also displayed and recorded by the Palm handheld. Data stored on the Palm handheld can be uploaded to a PC in spreadsheet format.

The Aliod 100 includes our standard 1 year warranty



- New user-friendly interface
- Data logging w/Palm™ handheld
- Displays gravity directly in mGal
- Range of 100 mGal
- Data Resolution of 0.01 or 0.001 mGal**



System Specifications

Principle :	Linear electrostatic beam nulling
Range:	100 mGal
Data Resolution:	0.01 (0.001 mGal for Aliod 100x**)
Repeatability:	0.01 to 0.02 mGal
Linearity:	Better than 0.01% Full Scale
Electronic Drift:	<0.001 mGal /1000 hr.
Temp. Range:	0 to +45C
Integrated LCD:	2x20 character LCD with backlight
Output:	RS-232, External Port
Data Logging:	Palm™ handheld
Power Consumption:	12 Volts@0.190 Amp/2.3 Watts
Input:	10-15 VDC

* Electronic Levels required
** Export License may be required

Specifications subject to change.

Palm is a trademark of Palm, Inc.

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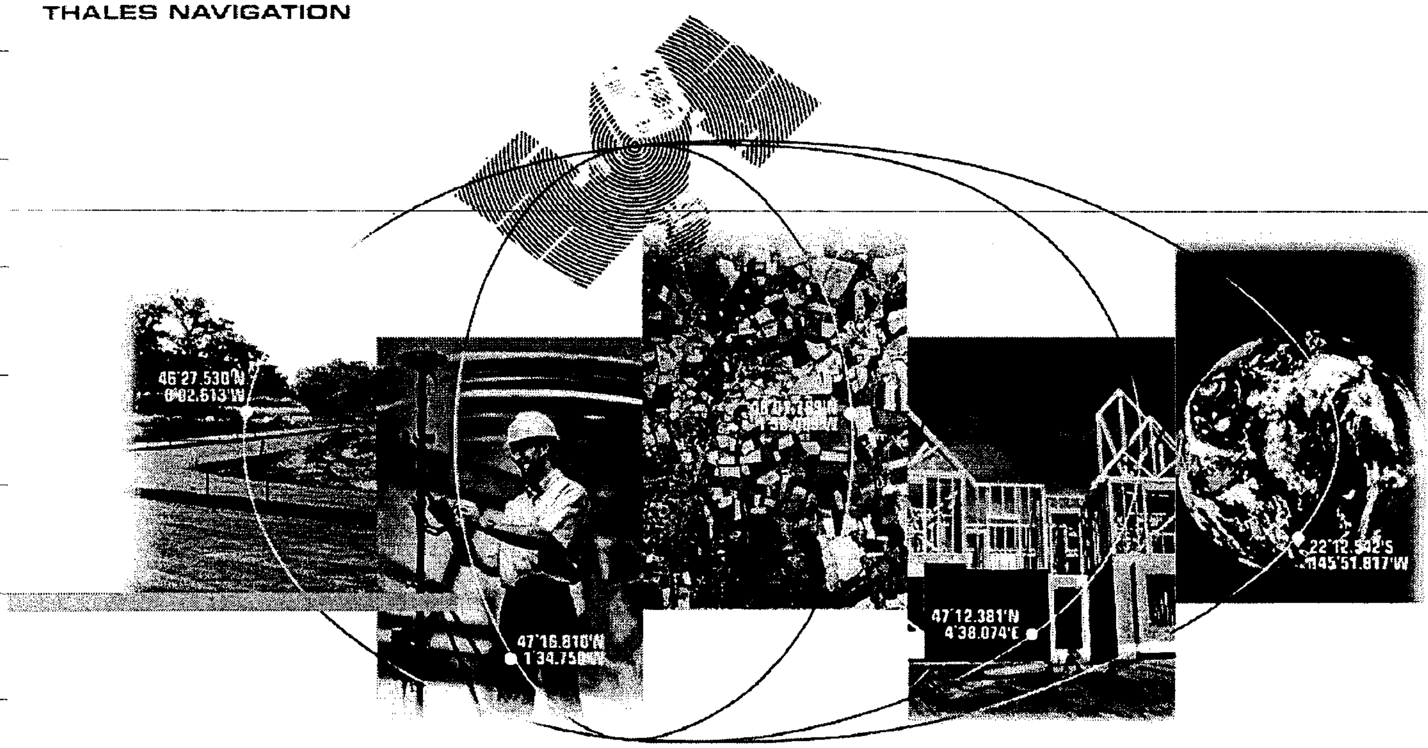
04/23/02



INSTANT-RTK TECHNOLOGY

Z-Xtreme Survey System

Z-Xtreme

The Ashtech® Z-Xtreme™ from Thales Navigation Professional Products is a rugged, weather-proof, dual-frequency GPS receiver designed to provide surveyors with cost-effective, centimeter-accurate positions in a variety of system configurations.

The Z-Xtreme receiver begins with state-of-the-art satellite electronics coupled with patented Z-Tracking™ to deliver the highest GPS signal reception level. A removable battery and flash memory card provide enough capacity to last all day for maximum utility. Components are completely integrated inside a weather-proof, high impact plastic housing, ensuring your investment is safe, rain or shine. Use the easy-to-operate interface on the front panel for important functions such as site information entry, survey status, and set-up of RTK base stations without the additional cost of a handheld controller. The result: Z-Xtreme with Instant-RTK™ outperforms all other receivers in its class!

ZX-Solutions

The Z-Xtreme survey system from Thales Navigation provides a range of solutions designed for the vast array of positioning needs – from entry level static or kinematic post-processed surveys, all the way up to real-time functions such as stake out. The entry level ZX-Solutions™ system dramatically increases your productivity for control surveys and other post-processed applications. Add an optional kinematic kit to make topographic feature collection more cost effective. Use Ashtech Solutions™ software to easily process the field data, export results and generate reports. Purchase only what you need for the job at hand because ZX-Solutions is fully upgradeable.

ZX-Superstation

Eclipse the productivity of optical instrument stake out with a ZX-SuperStation™. The ZX-SuperStation is a field-to-finish GPS surveying system that combines the Z-Xtreme receiver with a powerful data collector and wireless modems for centimeter accuracy in real-time. Instant-RTK gives you the ability to initialize the centimeter solution in a fraction of the time of conventional RTK systems. Powerful data collection software gives you the ability to efficiently perform GPS surveying techniques and to interface seamlessly with optical total stations.

Z-XTREME

TECHNICAL SPECIFICATIONS

Ashtech Technology

- 12 channel all-in-view operation
- Full-wavelength carrier on L1 and L2
- Z-Tracking
- Multipath mitigation
- Dual-frequency smoothing for improved code differential
- Instant-RTK

Performance Figures[1]

Static, Rapid Static
- Horizontal: 0.005 m + 1 ppm (0.016ft+1ppm)
- Vertical: 0.010 m + 1 ppm (0.033ft + 1ppm)

Post-Processed Kinematic
- Horizontal: 0.010 m + 1 ppm (0.033ft + 1ppm)
- Vertical: 0.020 m + 1 ppm (0.065ft+1ppm)

Real-Time Code Differential Position
- <1 m (3.28 ft)

Real-Time Z Kinematic Position (Fine Mode)
- Horizontal: 0.010 m + 2 ppm (0.033ft + 2 ppm)
- Vertical: 0.020 m + 2 ppm (0.065ft + 2 ppm)
- Azimuth (arc sec): 0.4 + 2.0/baseline (km)

RTK Occupation Time
- 2 seconds (typical - sub-centimeter accuracy with longer occupation time)

Instant-RTK Initialization
- 99.9% reliability
- Typically <2 seconds with 6 or more satellites, PDOP <5, baseline length <7 km (4.35 mi), open sky and low multipath conditions

RTK Operating Range
- Recommended: 10 km (6.21 mi)
- Maximum: 40 km (24.85 mi)

Standard Features

- 16 MB PCMCIA removable memory card
- NMEA 0183 output
- Selectable update rate from 999 sec to 10 Hz
- Event marker
- Point positioning
- 1 PPS timing signal
- Session programming
- Wide array of coordinate transformations
- Removable internal battery
- 8-character alphanumeric LED display with 4-button interface
- 3 function LED display - Radio,Memory, Satellites/Power
- Multi-function audible alarm
- Quick reference card holder
- External mount capabilities
- External power input
- 4 RS-232 ports (115200 baud max, 3 external, 1 internal)
- 1-year warranty
- Free factory technical support

Standard Accessories

- Communications software
- Padded system bag and hard case
- RS-232 data cable
- Receiver operating manual
- Quick reference field card

Technical Data

Environmental

Z-Xtreme Receiver
- Meets MIL-STD 810E for wind driven rain and dust
- Operating temperature: -30° to +55°C (-22° to 131°F)
- Storage temperature: -40° to +85°C (-40° to 185°F)

Geodetic 4 Antenna
- Meets IPX7 specifications for submersion
- Operating temperature: -55 to +75°C (-40° to 149°F)
- Storage temperature: -55° to +75°C (-67° to 167°F)

Physical

Weight
- Receiver: 1.59 kg (3.50 lb)
- Antenna: 0.82 kg (1.81 lb)
- Battery: 0.43 kg (0.95 lb)

Dimensions
- 76.2 H x 196.85 W x 222.25 D mm
- (0.25 H x 0.646 W x 0.729 D ft)

Power
- 10 - 28 VDC, 6.0 W

Internal battery
- Capacity: 6000 mAh
- >9 hours (typical) @ 25°C (77°F)
- Operating temperature: -30° to +55°C (-22° to 131°F)
- Storage temperature: -40 to +60°C (-40° to + 140°F)

PC card
- ATA Type II PCMCIA memory card (16 MB standard)
- Temperature range: -40° to +85°C (-40° to 185°F)
- Data capacity: 4500 epochs per 2 MB*

** Based on one session, eight satellites' data and full measurements. This number can vary significantly depending on the conditions of the session.*

Optional Features

- Real-time kinematic (base and rover modes) for cm-accuracy
- RTCM 2.2 (Types 1, 2, 3, 9, 16, 18, 19, 20, 21, 22)
- Internal UHF or spread spectrum radio for RTK rover operations
- External UHF or spread spectrum radio for RTK base and rover operations
- Geodetic 4 antenna ground plane kit
- Kinematic antenna kit
- Aircraft antenna kit
- AC power cable
- Choke ring antenna
- Long haul backpack kit
- All-on-a-pole kit

Optional Application Software

GPS data processing
- Ashtech Solutions

Land Surveying and Construction
- TDS Survey Pro
- Carlson SurvCE
- Ashtech Survey Control II
- Ashtech GPS Fieldmate

Mining and Land Seismic
- Ashtech Mine Surveyor II
- Ashtech Seismark II

1 *Specifications assume operation follows all the procedures recommended in the product manual utilizing Instant-RTK, post processing with Ashtech Solutions or Ashtech Office Suite for Survey. High-multipath areas, high PDOP values, low satellite visibility, and periods of adverse atmospheric conditions and/or other adverse circumstances will degrade system performance. All accuracy specifications are RMS values.*

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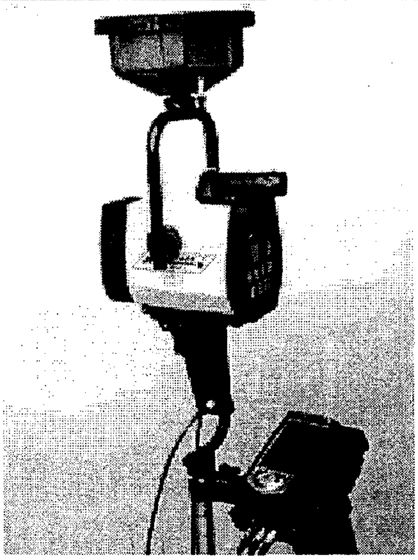
Thales Navigation follows a policy of continuous product improvement; specifications and descriptions are thus subject to change without notice. Please contact Thales Navigation for the latest product information.

THALES NAVIGATION

LASER ATLANTA

Measuring Systems for Professionals

Speed up your crew and put away roller wheels forever



The Advantage Laser solution provides everything needed to perform a wide range of in-field measurement studies and the ability to store information for in-office use:

No more wheel rolling or tape measures with Advantage systems from Laser Atlanta.

- A rugged, lightweight system that comes complete with a one year warranty on parts and labor (excludes batteries, software.)
- Head-up Display allows simultaneous viewing of target and data in real time
- Measurement of height, width, distance in feet, yards, inches, meters
- Easy to use auto-compute functions can automatically calculate heights, widths, 3D missing lines, areas and more
- Plug & play compatible with existing GPS systems, data recorders, GIS mapping and CAD software.

Advantage System

Laser	Class 1 eye-safe
Certifications	International, U.S. and European standards (IACP, CE) Listed on IECP consumer products list
Head-up display	LED aiming crosshair and 1 line x 4 character LED
Rear panel display	4 line x 20 character LCD
Light source	Laser Diode, 904nm
Measurement time	0.3 seconds
Distance range	2,000 ft (600m) 30,000 ft (9,100m) with prisms
Power source	PCMCIA SRAM Type 2 card and slot RS-232 serial port
Recharge time	Standard: 10-12 hrs Smart charger: 2hrs for 2 battery handles
Operating temperature	-22F to 140F (-30c to 60c)
Environmental	Water and dust resistant
Dimensions	w3.3 x h10.0 x d11.0 in (w8.4 x h25.4 x d28.0 cm)
Weight	With battery, 4lb. 4 oz (1.93kg)
With Inclinonmeter	
Range	+/- 50 degrees from level
Accuracy	+/- 0.4 degrees
Resolution	0.1 degrees
Repeatability	+/- 0.3 degrees
With Compass	
Range	0 to 359.9 degrees
Accuracy	+/- 1 degree RMS

Encoding Tripods (dual, vertical, horizontal)

Vertical Encoding Tripod enhancements:	
Replaces inclinometer	
Accuracy	+/- 0.08 degrees
Horizontal Encoding Tripod enhancements:	
Replaces compass, eliminating magnetic north dependencies. Will hamper GPS readings if not oriented to 0 degrees before activation.	
Range	0 to 359.95 degree
Accuracy	+/- 0.1 degree RMS from level
Dual Encoding Tripod matches Horizontal and vertical specifications above	

Resolution	0.1 degrees
Repeatability	+/- 0.3 degrees

Includes:

Carrying case
Power cord and 12v coil cord

Recommended accessories: Monopole, Smart Charger battery charging station, 8x detachable monocular

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APPENDIX E

COMPLETE BOUGER GRAVITY ANOMALY DATA LISTING

Complete Bouguer Gravity Anomaly Data Listing for 2003 Monster Gravity Survey

Station	Year of acquisition	Easting UTM Zone 7 NAD 27 (m)	Northing UTM Zone 7 NAD 27 (m)	Elevations (m) (m)	Complete* Bouguer Anomaly (mGal)
1	2003	558279.97	7190677.22	1573.97	-79.64
2	2003	558291.63	7190685.00	1563.31	-79.88
3	2003	558263.04	7190727.31	1576.12	-79.80
5	2003	558330.83	7190649.29	1563.54	-80.23
6	2003	558382.09	7190608.70	1554.03	-79.85
7	2003	558486.84	7190585.57	1504.80	-79.18
8	2003	558255.70	7190775.55	1566.75	-79.78
24	2003	559248.98	7191531.49	1727.01	-80.67
24	2003	559248.98	7191531.49	1727.01	-80.66
24	2003	559248.98	7191531.49	1727.01	-80.69
24	2003	559248.98	7191531.49	1727.01	-80.69
30	2003	558566.44	7190796.39	1405.05	-78.99
31	2003	558573.05	7190847.76	1403.32	-79.19
32	2003	558579.32	7190911.13	1399.36	-79.21
33	2003	558575.68	7190949.33	1393.44	-79.28
34	2003	558573.43	7190999.84	1396.37	-79.38
35	2003	558574.60	7191047.79	1399.19	-79.40
36	2003	558577.74	7191099.88	1399.44	-79.70
37	2003	558575.13	7191152.88	1397.50	-79.77
38	2003	558573.85	7191202.21	1399.43	-79.84
39	2003	558571.49	7191246.06	1396.05	-79.75
40	2003	558573.85	7191300.62	1393.10	-79.76
41	2003	558571.03	7191398.96	1425.32	-79.89
53	2003	558649.94	7190649.56	1445.51	-78.80
54	2003	558651.27	7190698.13	1442.67	-78.83
55	2003	558649.83	7190749.87	1434.85	-78.96
56	2003	558647.03	7190799.77	1428.53	-78.97
57	2003	558650.90	7190845.76	1424.39	-79.07
58	2003	558651.12	7190900.55	1416.66	-79.36
59	2003	558651.67	7190949.60	1416.41	-79.83
60	2003	558651.13	7190999.60	1417.67	-79.52
61	2003	558648.37	7191053.25	1422.13	-79.68
62	2003	558657.33	7191097.27	1433.30	-79.60
63	2003	558652.91	7191148.01	1437.31	-79.49
64	2003	558655.94	7191200.72	1441.63	-79.63
65	2003	558650.19	7191250.85	1437.90	-79.70
66	2003	558640.96	7191287.12	1431.83	-79.70
67	2003	558650.24	7191348.18	1450.88	-79.69
80	2003	558726.38	7190699.82	1474.16	-79.16

Station	Year of acquisition	Easting UTM Zone 7 NAD 27 (m)	Northing UTM Zone 7 NAD 27 (m)	Elevations (m) (m)	Complete* Bouguer Anomaly (mGal)
81	2003	558726.76	7190749.27	1467.47	-79.17
82	2003	558726.27	7190801.50	1458.66	-79.28
83	2003	558723.90	7190849.07	1451.58	-78.73
84	2003	558725.36	7190902.32	1448.12	-78.94
84	2003	558725.36	7190902.32	1448.12	-78.98
85	2003	558724.82	7190948.15	1447.35	-79.36
86	2003	558725.04	7191003.87	1449.30	-79.44
87	2003	558723.59	7191050.14	1448.06	-79.43
88	2003	558722.95	7191098.69	1463.71	-79.43
89	2003	558725.83	7191149.11	1480.09	-79.67
90	2003	558726.31	7191199.23	1485.16	-79.81
91	2003	558726.34	7191250.99	1484.09	-79.71
92	2003	558726.40	7191301.31	1473.91	-79.10
93	2003	558720.80	7191355.17	1481.51	-79.84
94	2003	558719.55	7191400.78	1507.64	-79.78
107	2003	558800.20	7190695.66	1502.01	-79.17
108	2003	558800.27	7190749.15	1504.50	-78.77
109	2003	558800.90	7190799.00	1500.65	-78.85
110	2003	558799.65	7190851.24	1499.79	-79.31
111	2003	558799.10	7190899.19	1497.89	-79.51
112	2003	558801.47	7190949.09	1492.90	-79.54
113	2003	558799.96	7190998.33	1489.39	-79.54
114	2003	558802.46	7191051.45	1479.46	-79.32
115	2003	558800.69	7191098.84	1497.46	-79.42
116	2003	558799.58	7191149.08	1524.20	-79.67
117	2003	558800.32	7191200.51	1534.11	-79.79
118	2003	558800.87	7191249.66	1530.90	-79.90
119	2003	558799.30	7191298.17	1512.86	-79.96
120	2003	558803.65	7191350.35	1499.80	-79.88
132	2003	558878.79	7190599.85	1512.10	-78.49
133	2003	558872.59	7190650.70	1516.70	-79.40
133	2003	558872.59	7190650.70	1516.70	-79.33
134	2003	558875.08	7190701.41	1530.29	-79.47
135	2003	558876.36	7190746.42	1531.17	-79.43
136	2003	558874.18	7190799.34	1531.20	-79.34
137	2003	558874.91	7190849.69	1536.06	-79.44
138	2003	558875.79	7190900.13	1540.50	-79.57
139	2003	558875.13	7190949.03	1535.84	-79.59
140	2003	558878.87	7190999.79	1523.75	-79.66
141	2003	558870.65	7191057.04	1501.88	-79.26
142	2003	558876.23	7191098.02	1527.18	-79.23
143	2003	558876.23	7191149.33	1559.02	-79.68
144	2003	558875.85	7191198.83	1581.83	-79.88
145	2003	558875.73	7191250.83	1572.96	-80.07
146	2003	558874.52	7191300.23	1558.83	-79.98
147	2003	558876.18	7191351.01	1543.16	-79.52
148	2003	558874.21	7191399.96	1538.16	-79.50

Station	Year of acquisition	Easting UTM Zone 7 NAD 27 (m)	Northing UTM Zone 7 NAD 27 (m)	Elevations (m) (m)	Complete* Bouguer Anomaly (mGal)
161	2003	558949.34	7190650.51	1543.70	-79.52
162	2003	558949.30	7190699.60	1555.26	-79.87
163	2003	558948.65	7190749.08	1561.28	-79.84
164	2003	558947.63	7190797.87	1565.61	-79.74
165	2003	558951.06	7190847.90	1574.13	-79.91
166	2003	558949.88	7190896.79	1573.70	-79.98
167	2003	558952.11	7190949.74	1566.83	-79.77
168	2003	558949.74	7190998.99	1549.67	-79.38
169	2003	558950.57	7191049.40	1537.15	-79.16
170	2003	558950.62	7191099.64	1563.19	-78.64
171	2003	558949.38	7191148.80	1590.90	-79.40
172	2003	558952.14	7191201.37	1622.03	-79.61
173	2003	558947.31	7191248.88	1619.09	-79.86
174	2003	558950.65	7191299.08	1606.86	-80.02
175	2003	558952.42	7191353.73	1593.03	-79.98
190	2003	559025.33	7190755.62	1591.18	-79.75
191	2003	559024.13	7190802.15	1591.57	-79.75
192	2003	559024.59	7190850.95	1599.57	-79.82
193	2003	559026.47	7190902.00	1602.45	-80.03
194	2003	559024.13	7190951.15	1596.20	-79.77
195	2003	559022.57	7190996.52	1574.96	-79.38
196	2003	559019.50	7191050.93	1576.22	-79.13
197	2003	559023.91	7191099.77	1601.26	-79.34
198	2003	559025.22	7191150.39	1627.29	-79.31
199	2003	559022.34	7191199.22	1652.06	-79.76
200	2003	559025.08	7191249.99	1673.71	-79.55
201	2003	559025.73	7191297.95	1662.95	-79.19
202	2003	559024.89	7191350.14	1648.66	-78.78
203	2003	559029.23	7191403.18	1627.01	-79.51
206	2003	559103.26	7190150.54	1598.47	-79.02
207	2003	559101.58	7190200.63	1581.14	-78.70
208	2003	559098.13	7190243.77	1570.29	-78.51
209	2003	559100.04	7190297.62	1575.35	-78.52
210	2003	559098.78	7190348.86	1590.51	-78.74
211	2003	559099.94	7190402.78	1609.39	-78.85
213	2003	559096.72	7190501.15	1637.05	-79.31
214	2003	559099.95	7190547.78	1643.29	-79.45
215	2003	559101.55	7190599.93	1640.80	-79.55
216	2003	559099.98	7190653.50	1631.49	-79.55
217	2003	559096.51	7190697.46	1626.45	-79.61
218	2003	559100.08	7190751.34	1622.12	-79.66
219	2003	559101.03	7190802.67	1624.38	-79.70
220	2003	559098.00	7190854.37	1628.21	-79.96
221	2003	559102.12	7190903.14	1631.02	-79.91
222	2003	559100.23	7190951.22	1618.72	-79.57
223	2003	559096.21	7191001.90	1603.21	-79.48
224	2003	559099.47	7191049.68	1623.97	-79.45

Station	Year of acquisition	Easting UTM Zone 7 NAD 27 (m)	Northing UTM Zone 7 NAD 27 (m)	Elevations (m) (m)	Complete* Bouguer Anomaly (mGal)
225	2003	559100.18	7191098.59	1644.56	-79.46
226	2003	559099.84	7191156.30	1670.00	-79.53
227	2003	559104.29	7191196.66	1694.96	-78.79
228	2003	559104.08	7191253.73	1719.31	-80.05
229	2003	559095.57	7191300.98	1708.24	-80.12
230	2003	559097.58	7191350.96	1689.35	-80.04
241	2003	559174.02	7190548.91	1691.27	-79.68
242	2003	559177.65	7190598.41	1691.30	-79.90
243	2003	559173.47	7190647.13	1681.26	-79.56
244	2003	559174.92	7190701.40	1671.12	-79.68
245	2003	559175.93	7190752.19	1665.58	-79.70
246	2003	559173.56	7190801.00	1665.74	-79.83
247	2003	559176.53	7190850.86	1668.02	-79.97
248	2003	559171.13	7190898.97	1660.37	-79.88
249	2003	559180.68	7190948.45	1645.12	-79.42
250	2003	559170.77	7190999.10	1642.60	-79.35
251	2003	559172.54	7191047.63	1669.21	-79.40
252	2003	559174.28	7191097.02	1692.95	-79.81
253	2003	559174.28	7191150.24	1718.07	-79.86
254	2003	559174.84	7191197.44	1734.25	-80.15
255	2003	559175.50	7191251.22	1745.77	-80.46
256	2003	559176.47	7191297.86	1738.00	-80.63
257	2003	559192.14	7191352.53	1725.57	-80.55
258	2003	559172.61	7191400.28	1700.37	-80.14
264	2003	559251.77	7190300.45	1638.03	-79.04
265	2003	559248.85	7190348.35	1664.13	-79.32
266	2003	559245.36	7190400.62	1685.62	-79.46
267	2003	559249.39	7190450.45	1708.06	-79.57
268	2003	559249.52	7190497.78	1720.62	-79.91
269	2003	559253.54	7190548.47	1732.61	-79.97
270	2003	559251.22	7190599.62	1733.85	-80.01
271	2003	559249.44	7190646.26	1727.56	-80.01
272	2003	559247.98	7190700.56	1707.49	-79.81
273	2003	559254.59	7190748.95	1711.13	-79.73
274	2003	559253.52	7190801.18	1712.92	-79.82
275	2003	559249.35	7190848.07	1709.16	-79.94
276	2003	559248.59	7190900.53	1692.27	-79.82
277	2003	559249.95	7190949.65	1671.43	-79.34
278	2003	559245.70	7191002.50	1686.22	-79.28
279	2003	559248.87	7191051.20	1714.79	-79.61
280	2003	559246.32	7191101.57	1734.90	-79.72
281	2003	559250.24	7191148.86	1758.66	-80.19
282	2003	559251.71	7191198.28	1754.81	-80.32
283	2003	559249.69	7191249.86	1749.02	-80.33
284	2003	559249.67	7191300.13	1749.25	-80.63
285	2003	559250.32	7191349.99	1748.73	-80.73
293	2003	559322.91	7190400.54	1720.19	-79.45

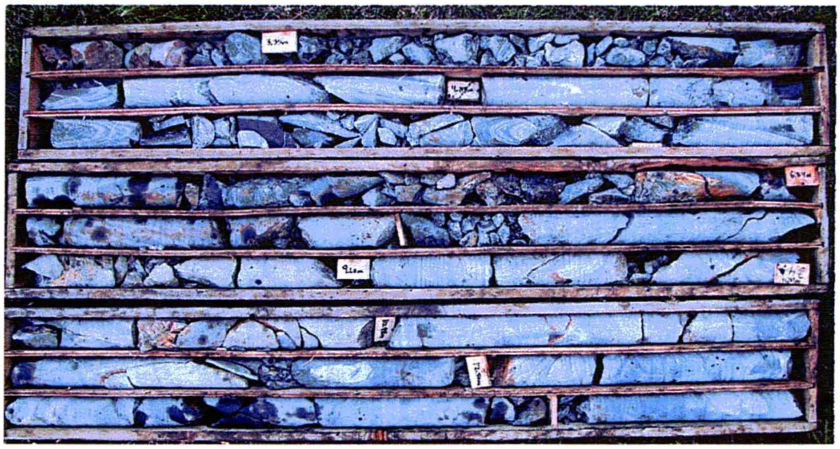
Station	Year of acquisition	Easting UTM Zone 7 NAD 27 (m)	Northing UTM Zone 7 NAD 27 (m)	Elevations (m) (m)	Complete* Bouguer Anomaly (mGal)
294	2003	559325.38	7190449.78	1738.38	-79.61
295	2003	559324.80	7190498.69	1753.51	-79.71
297	2003	559326.21	7190599.45	1773.01	-79.96
298	2003	559323.84	7190650.34	1767.54	-80.03
299	2003	559324.94	7190692.21	1758.82	-79.88
300	2003	559326.23	7190749.77	1757.36	-79.59
301	2003	559325.51	7190800.36	1755.52	-80.10
302	2003	559323.62	7190850.02	1750.68	-80.10
303	2003	559328.06	7190880.56	1745.64	-80.16
306	2003	559332.34	7191050.08	1756.51	-80.02
307	2003	559324.52	7191100.50	1769.69	-80.26
308	2003	559324.71	7191148.97	1769.95	-80.36
309	2003	559325.06	7191199.45	1767.45	-80.33
310	2003	559325.08	7191251.59	1770.08	-80.33
311	2003	559323.07	7191299.86	1768.70	-80.42
312	2003	559325.13	7191349.45	1769.08	-80.52
319	2003	559398.22	7190351.44	1703.70	-79.02
320	2003	559399.65	7190398.09	1737.13	-79.26
321	2003	559400.20	7190449.09	1763.91	-79.61
322	2003	559399.01	7190497.05	1781.43	-79.51
323	2003	559401.40	7190548.68	1800.48	-79.55
324	2003	559401.02	7190601.68	1812.34	-79.69
325	2003	559399.88	7190652.19	1815.37	-79.90
326	2003	559399.38	7190719.72	1803.96	-79.87
327	2003	559405.79	7190749.43	1807.42	-80.08
328	2003	559399.26	7190800.47	1799.58	-80.10
329	2003	559402.60	7190851.56	1797.01	-80.04
333	2003	559401.83	7191050.99	1778.91	-79.92
333	2003	559401.83	7191050.99	1778.91	-79.92
334	2003	559400.09	7191101.24	1783.18	-80.14
335	2003	559400.30	7191150.38	1789.48	-80.20
336	2003	559400.34	7191200.45	1792.54	-80.26
337	2003	559400.37	7191249.34	1795.96	-80.28
338	2003	559399.13	7191303.14	1796.60	-80.39
339	2003	559398.94	7191351.85	1797.08	-80.61
340	2003	559461.30	7190047.56	1742.02	-79.34
341	2003	559475.37	7190104.46	1730.51	-79.37
342	2003	559476.14	7190147.93	1722.37	-79.30
343	2003	559471.31	7190200.23	1717.26	-78.65
344	2003	559473.02	7190247.38	1714.02	-79.15
345	2003	559472.79	7190302.53	1729.40	-79.25
346	2003	559472.84	7190350.46	1741.21	-79.08
347	2003	559471.57	7190409.37	1753.68	-79.15
348	2003	559474.63	7190457.37	1786.39	-79.18
349	2003	559474.89	7190499.72	1810.42	-79.52
350	2003	559473.96	7190548.32	1830.28	-79.50
350	2003	559473.96	7190548.32	1830.28	-79.29

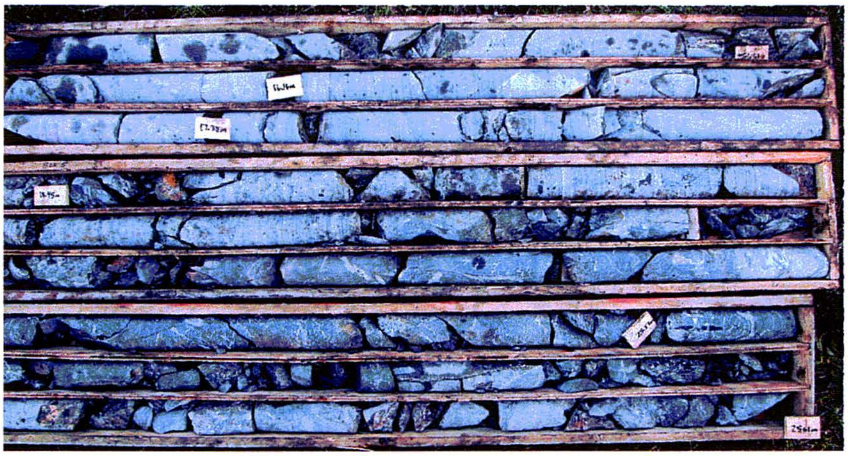
Station	Year of acquisition	Easting UTM Zone 7 NAD 27 (m)	Northing UTM Zone 7 NAD 27 (m)	Elevations (m) (m)	Complete* Bouguer Anomaly (mGal)
351	2003	559476.17	7190600.54	1845.46	-79.76
352	2003	559476.15	7190649.26	1852.46	-80.13
353	2003	559475.56	7190700.74	1852.99	-80.24
354	2003	559475.77	7190750.36	1844.19	-80.21
355	2003	559474.78	7190799.70	1836.44	-80.11
356	2003	559475.54	7190849.13	1829.72	-80.16
357	2003	559475.37	7190900.92	1820.96	-80.21
358	2003	559473.49	7190950.88	1812.49	-80.06
359	2003	559471.43	7190970.79	1808.87	-79.52
360	2003	559475.73	7191049.67	1807.12	-79.96
361	2003	559475.04	7191100.49	1812.27	-79.97
362	2003	559474.34	7191151.06	1815.86	-79.98
363	2003	559474.45	7191200.53	1821.47	-79.96
364	2003	559476.98	7191249.64	1826.57	-80.13
365	2003	559476.22	7191300.51	1829.31	-80.13
366	2003	559475.63	7191350.37	1828.26	-81.08
370	2003	559545.47	7190498.03	1834.34	-79.27
371	2003	559549.41	7190600.09	1877.31	-80.01
372	2003	559549.60	7190700.85	1883.34	-80.67
373	2003	559549.03	7190799.47	1864.32	-80.24
374	2003	559548.50	7190898.67	1853.08	-80.52
375	2003	559548.58	7190997.76	1837.96	-80.31
376	2003	559550.03	7191101.07	1842.24	-79.89
377	2003	559550.03	7191199.97	1854.70	-80.48
380	2003	559621.20	7190650.25	1914.19	-81.43
381	2003	559626.11	7190849.80	1891.21	-81.30

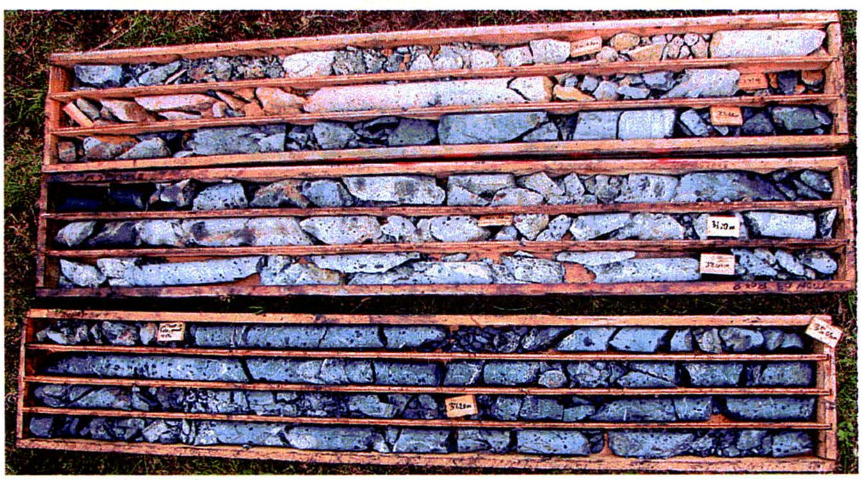
Note: * Complete Bouguer Anomaly terrain corrected from 0m to 22km from station point

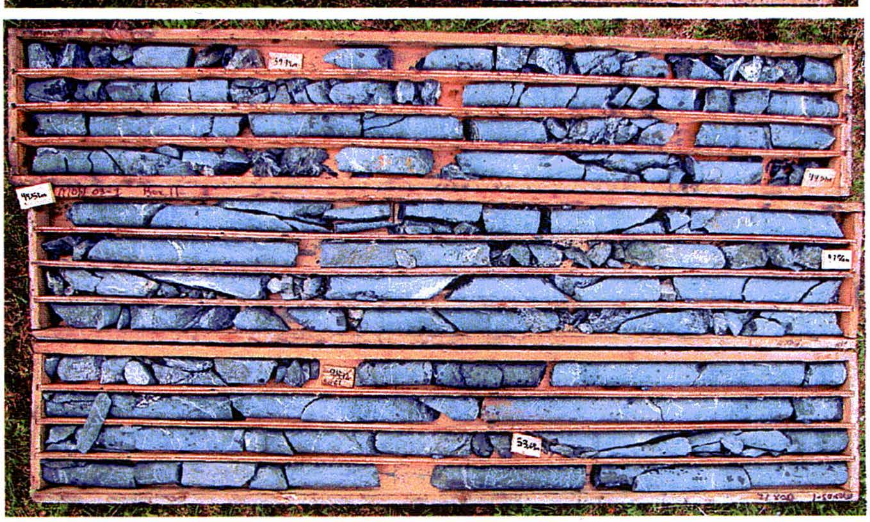
APPENDIX F

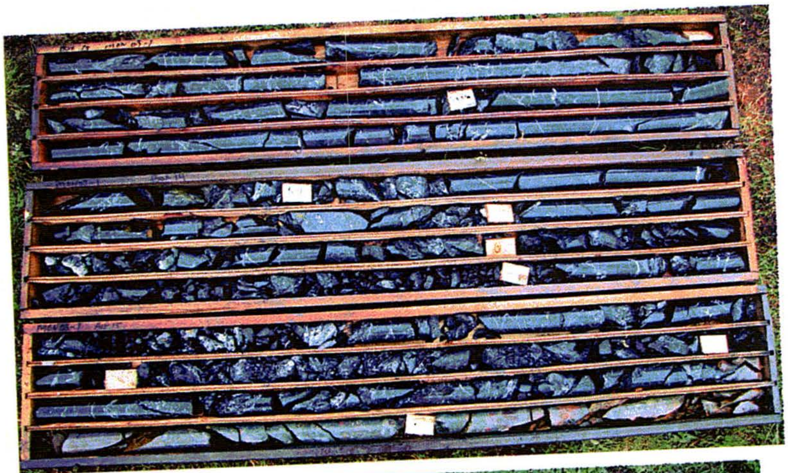
PHOTOGRAPHS OF DRILL HOLE MON03-1


3.2 to 14.48 m


14.48 to 25.61 m

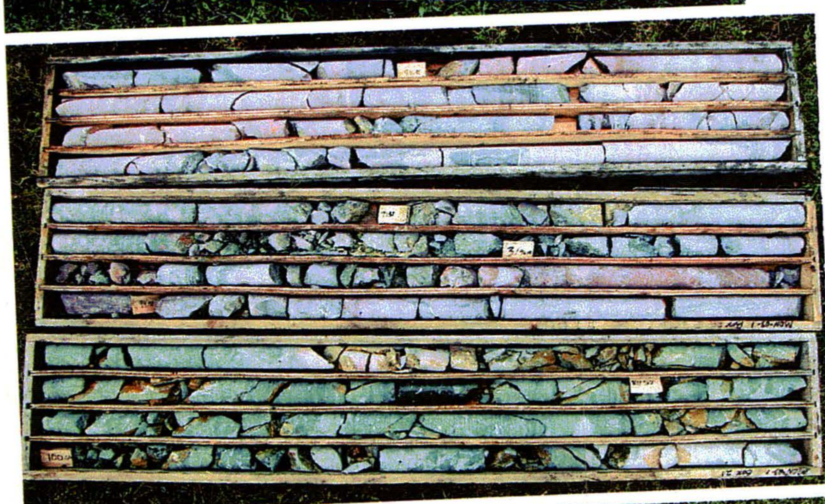

25.61 to 39.20 m


39.20 to 55.65 m

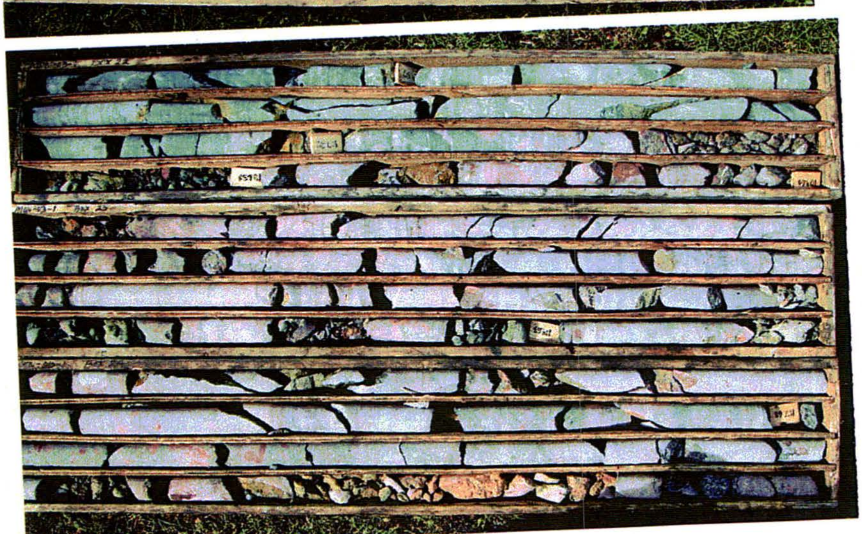


55.65 to 71.00 m

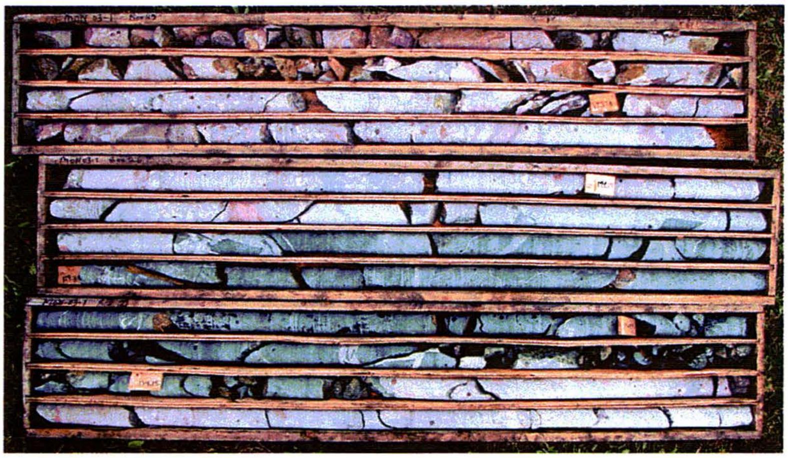
71.00 to 87.35 m



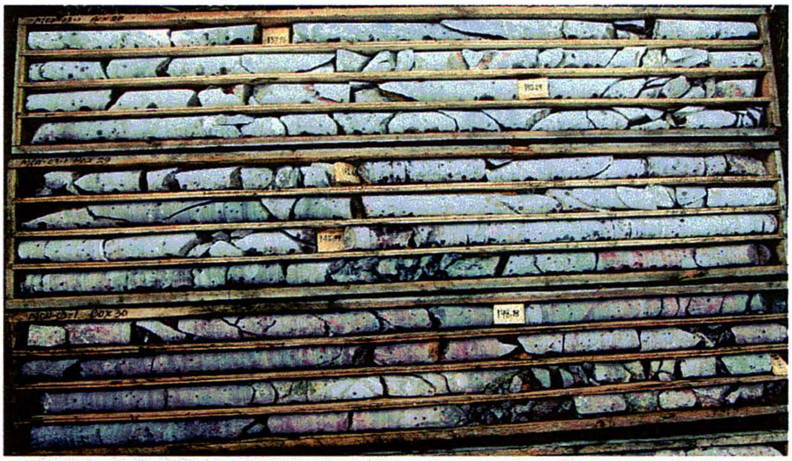
87.35 to 104.00 m



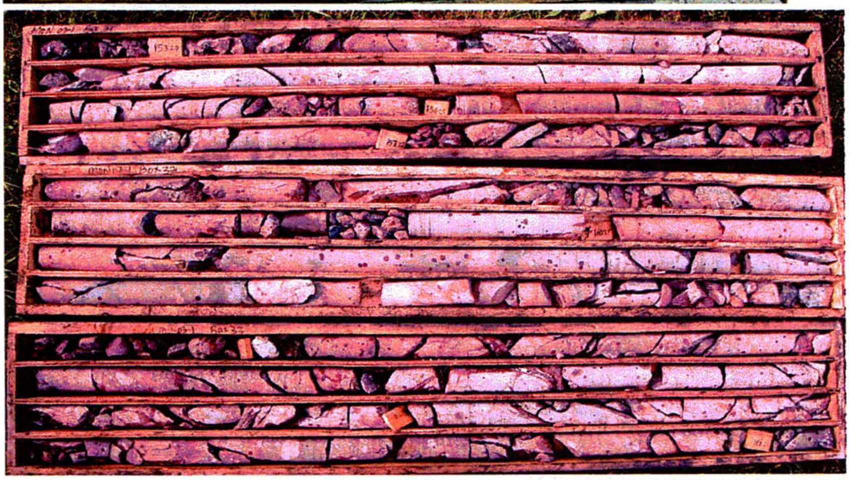
104.00 to 120.50 m



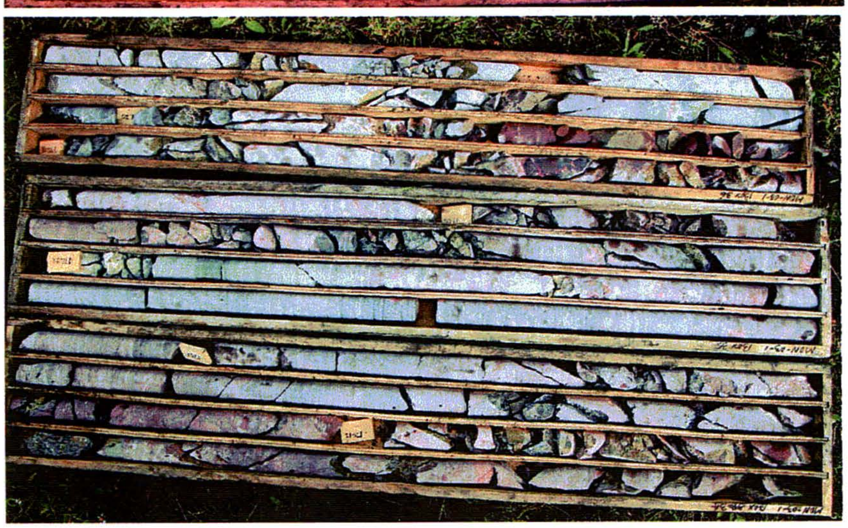
120.5 to 136.0 m



136.0 to 152.5 m



152.5 to 168.4 m



168.4 to 183.5 m

183.5 to 194.51 m

Typical Wernecke Breccia; 125 m

Hydraulic Breccia with Ankerite Cement; 138.7 m

APPENDIX G

GEOSCIENTISTS' CERTIFICATES

GEOSCIENTIST CERTIFICATE

I, Tom Setterfield of 21 Tripp Crescent, Ottawa, in the Province of Ontario, DO HEREBY CERTIFY:

1. THAT I am a Consulting Geologist and sole proprietor of TNS Consulting with an office at 21 Tripp Crescent, Ottawa, Ontario, as well as Vice President Exploration for Monster Copper Resources Inc.

2. THAT I am a graduate of Carleton University with a Bachelor of Science Honours degree in Geology and Chemistry (1980), the University of Western Ontario with a Masters of Science degree in Geology (1984), and the University of Cambridge with a Doctor of Philosophy degree in Earth Sciences (1991).

3. THAT I am a Professional Geoscientist (P.Geo) registered in good standing with the Association of Professional Geoscientists of Ontario (No. 0103).

4. THAT this report is based on property work I conducted and/or supervised between June 25 and July 12, 2003, as well as government and academic publications and assessment reports filed with the Yukon Territory.

DATED at Ottawa, Ontario, this 9th day of January, 2004.

Tom Setterfield

Tom Setterfield, PhD, P.Geo.

GEOSCIENTIST CERTIFICATE

I, Roman Tykajlo of 74 Stonebriar Drive, Ottawa, in the Province of Ontario DO HEREBY CERTIFY:

1. THAT I am a Consulting Geoscientist with GeoVector Management Inc. with an office at 10 Green Street, Suite 312, Ottawa, Ontario, K2J 3Z6.

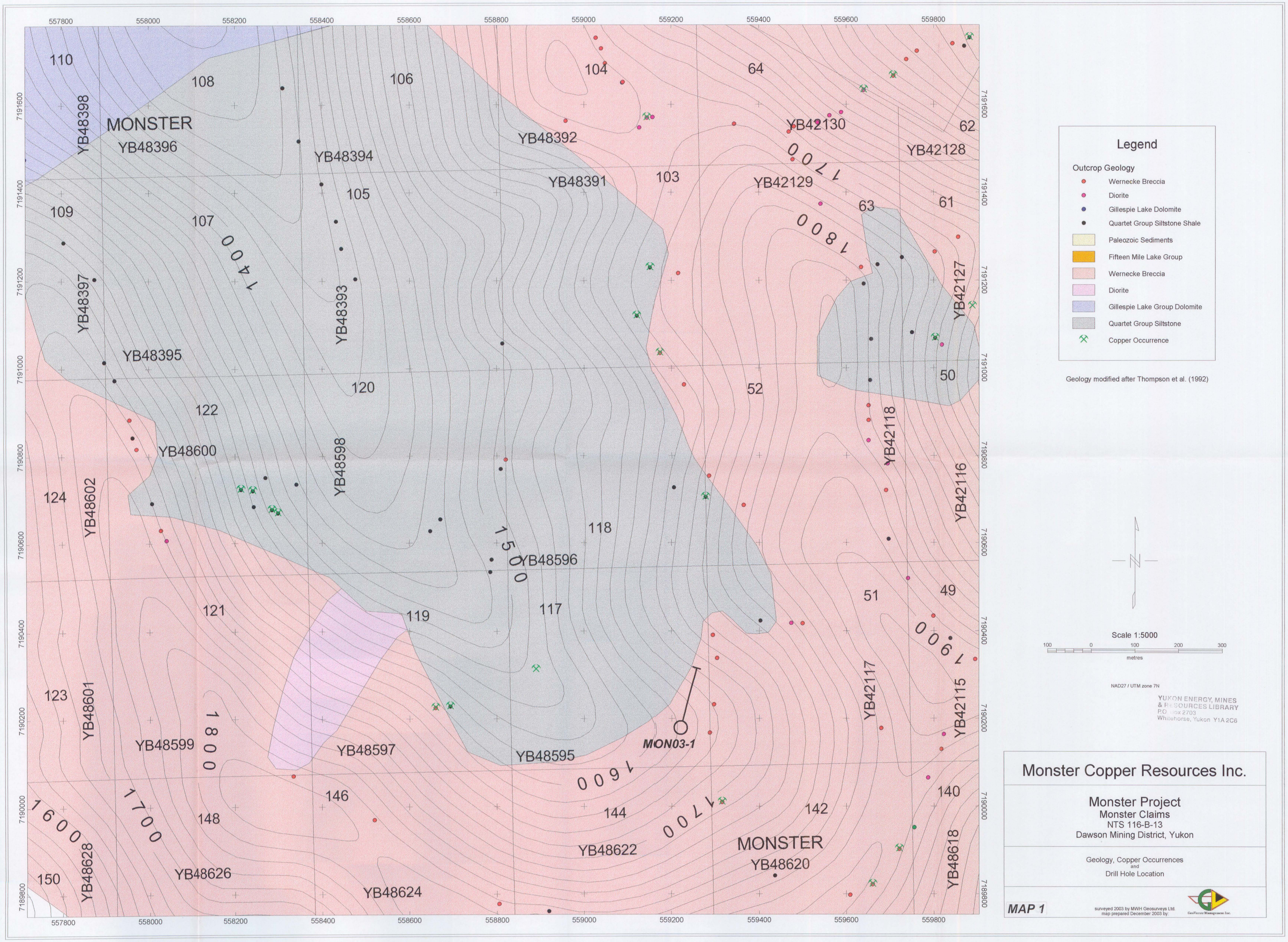
2. THAT I am a graduate of Lakehead University with a Bachelor of Science Honours degree in Geology/Physics (1978).

3. THAT I am a Professional Geoscientist (P.Geo.) registered in good standing with the Association of Professional Geoscientists of Ontario (APGO), and a Professional Geologist (P. Geol.) registered in good standing with the Association of Professional Engineers, Geologists, and Geophysicists of Alberta (APEGGA).

4. THAT this report is based on property work conducted by MWH Geo-Surveys Ltd. between June 27 and July 8, 2003, and designed by me.

DATED at Ottawa, Ontario, this 9th day of January, 2004.

Roman Tykajlo, H.B.Sc., P.Geo., P. Geol.


Legend
Outcrop Geology
Wernecke Breccia
Diorite
Gillespie Lake Dolomite
Quartet Group Siltstone Shale
Paleozoic Sediments
Fifteen Mile Lake Group
Wernecke Breccia
Diorite
Gillespie Lake Group Dolomite
Quartet Group Siltstone
Copper Occurrence
Geology modified after Thompson et al. (1992)
Scale 1:5000
metres
NAD27 / UTM zone 7N
YUKON ENERGY, MINES & RESOURCES LIBRARY
P.O. Box 2703
Whitehorse, Yukon Y1A 2C6
Monster Copper Resources Inc.
Monster Project
Monster Claims
NTS 116-B-13
Dawson Mining District, Yukon
Geology, Copper Occurrences and Drill Hole Location
MAP 1
surveyed 2003 by MWH Geosurveys Ltd.
map prepared December 2003 by:
MONSTER
YB48398
YB48396
YB48394
YB48392
YB48391
YB42130
YB42128
YB42129
YB48397
YB48393
YB48395
YB42127
YB42118
YB48600
YB48598
YB48602
YB42116
YB48596
YB48601
YB48599
YB48597
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YB48618
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1500
1600
1700
1800
557800
558000
558200
558400
558600
558800
559000
559200
559400
559600
559800
7191600
7191400
7191200
7191000
7190800
7190600
7190400
7190200
7190000
7189800

Symbol Legend

5 -80.69 — Complete Bouguer Gravity (mGal)
1253.41 — DGPS elevation (m)
Station number

Technical Note:

Bouguer Density used for data reduction was 2.75 gm/cc.

Inner terrain corrections were calculated for Hammer Zones B to D (0-170m radius from gravity station) using laser rangefinder derived elevations acquired around the gravity station. Terrain density used was 2.75 gm/cc.

Complete Bouguer Gravity Anomaly includes the inner terrain correction applied above, plus an outer terrain correction from 170m out to 22km. Terrain density used was 2.75 gm/cc. A detailed Digital Elevation Model (DEM) and a regional DEM were used for digital terrain correction (see report).

Gravity station elevations were determined using differential GPS.

Elevation contours are based on a 90m cell DEM supplied by Yukon Department of Renewable Resources Geographic Information System (RRGIS). This DEM was one of two used in the outer terrain correction calculation.

Scale 1:5000

100 0 100 200 300

metres

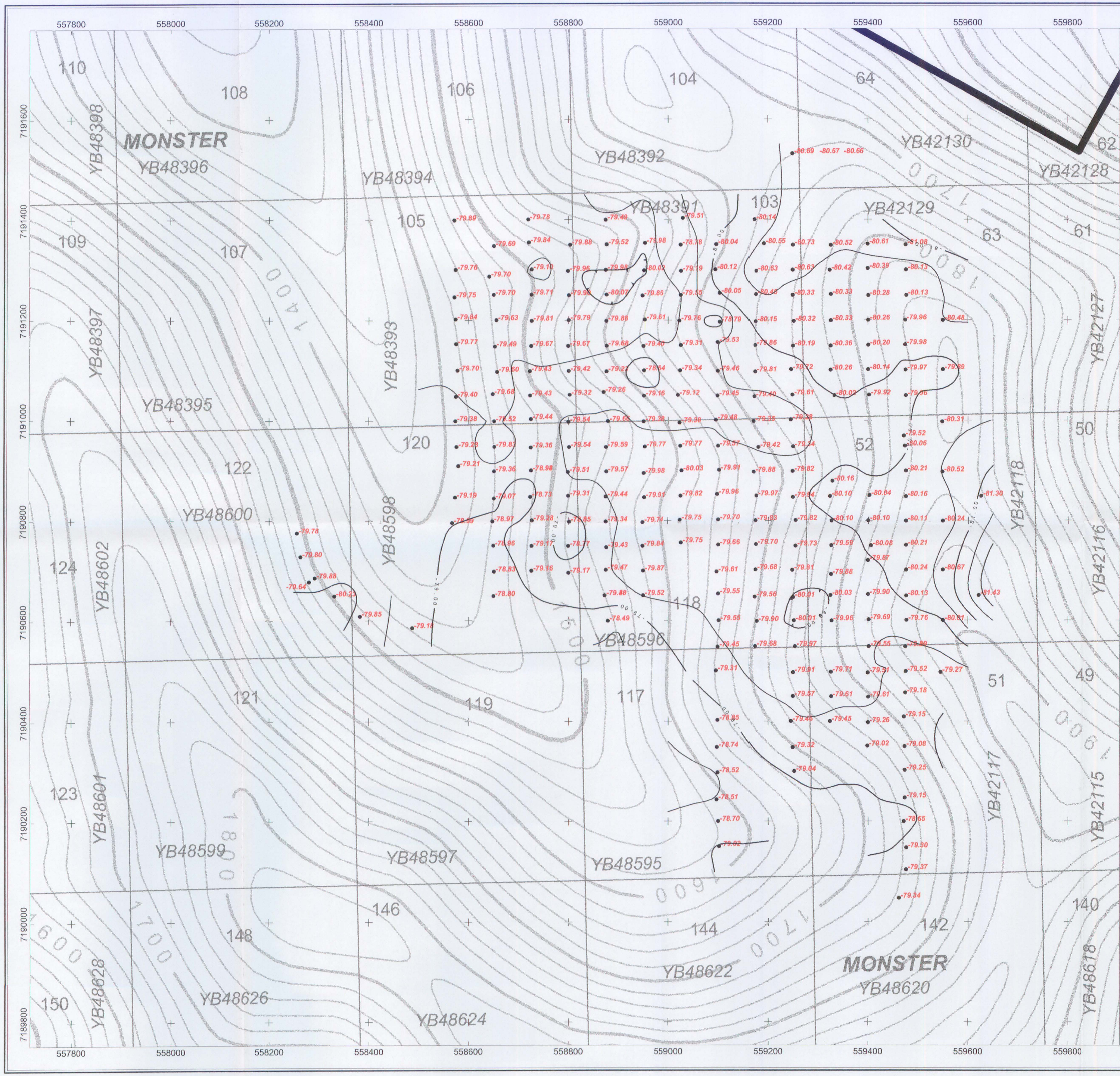
Monster Copper Resources Inc.

Monster Project
Monster Claims
NTS 116-B-13
Dawson Mining District, Yukon

Gravity Survey Station Locations and Data Postings

MAP 2

surveyed 2003 by MWH Geosurveys Ltd.
map prepared December 2003 by:



Symbol Legend

● -80.69 —— Complete Bouguer Gravity (mGal)

Contour interval = 0.5mGal

Technical Note:

Bouguer Density used for data reduction was 2.75 gm/cc.

Inner terrain corrections were calculated for Hammer Zones B to D (0-170m radius from gravity station) using laser rangefinder derived elevations acquired around the gravity station.
Terrain density used was 2.75 gm/cc.

Complete Bouguer Gravity Anomaly includes the inner terrain correction applied above, plus an outer terrain correction from 170m out to 22km. Terrain density used was 2.75 gm/cc. A detailed Digital Elevation Model (DEM) and a regional DEM were used for digital terrain correction (see report).

Gravity station elevations were determined using differential GPS.

Elevation contours are based on a 90m cell DEM supplied by Yukon Department of Renewable Resources Geographic Information System (RRGIS). This DEM was one of two used in the outer terrain correction calculation.

Scale 1:5000

100 0 100 200 300
metres

Monster Copper Resources Inc.

Monster Project
Monster Claims
NTS 116-B-13
Dawson Mining District, Yukon

Gravity Survey Station Locations
and
Complete Bouguer Gravity Contours

MAP 3

surveyed 2003 by MWH Geosurveys Ltd.
map prepared December 2003 by: