

SKEENA MINING DIVISION,

BRITISH COLUMBIA

NTS: 104 B/9

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PREPARED BY: PERRY GRUNENBERG, P. GEO.

DECEMBER, 1993

Location: 56°36' North Latitude; 130°28' West Longitude

Operator: Canamera Geological Ltd.

Owner: Tagish Resources Ltd.

Approval #: SMI-93-0100850-218

GEOLOGICAL BRANCH ASSESSMENT REPORT

SUMMARY

The 20 unit Aftom 20 claim is located on the Unuk River in northwestern British Columbia, in close proximity to the Eskay Creek Au-Ag deposit.

In the fall of 1993, Canamera Geological Ltd. completed a geophysical survey over the claim.

VLF-EM survey produced a few weak anomalies and one weak conductive trend which may reflect structure. No magnetic associations with conductivity were evident.

Magnetic survey detected a slight and gradual increase in magnetic field towards the north possibly indicating a deeply buried source as an intrusion. No other significant magnetic anomalies were evident.

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1.0 INTRODUCTION

In the fall of 1993, Canamera Geological Ltd. was contracted to complete a quick geological and geophysical assessment of the Aftom 20 claim. This report summarizes that assessment.

1.1 LOCATION AND ACCESS

The property is located in western British Columbia near the Unuk and Iskut rivers, centered at 56°36′ N, and 130°28′ W (NTS 104B/9), approximately 950 kilometers northwest of Vancouver and 80 kilometres northwest of the town of Stewart (Fig.1).

Scheduled flights from Vancouver to Smithers and Terrace are provided by Central Mountain Air and Canadian Regional airlines. A well maintained gravel airstrip is located near the town of Bob Quinn on the Stewart-Cassiar Highway (#37). Local fixed wing charters are available providing flights to this strip.

The property is most easily accessed by helicopter from the Stewart-Cassiar Highway which runs north-south roughly 25 km. east of the property. Northern Mountain Helicopters provides service from Bell II, and Vancouver Island Helicopters provides service from Bob Quinn, both situated along the highway east of the property.

Road construction is currently in progress to provide access to the Eskay Creek mine from the Stewart-Cassiar Highway near the town of Bob Quinn. When completed, this road will run down the west side of the Iskut River to Volcanoe Creek, up Volcanoe Creek past the foot of Mount Shirley to the north end of Tom Mackay Lake, then east into Eskay creek. This road should be completed by the spring of 1994.

1.2 TOPOGRAPHY, PHYSIOGRAPHY AND CLIMATE

The property is situated on the western margin of the Coast Ranges of British Columbia. Climate is moderate, with cool wet summers and mild winters. Annual precipitation averages 250 cm., much of which falls as snow between the months of October and April. Temperature extremes range from -40 to 30 degrees centigrade, with mean average monthly temperatures ranging from 12 degrees in August, to -10 degrees centigrade in December.

The area has been glaciated and elevations on the property vary from 400 metres above sea level in the Unuk River valley, to 1800 metres above sea level on Mount Shirley. The area is deeply incised by rivers and steep sided river and stream canyons are common. Tree line is at approximately 1000 metres above sea level.



Vegetation in the area is variable. Coastal Western Hemlock forests extend along the Unuk River basin up to Storie Creek, changing to predominantly Mountain Hemlock forests that extend midway up Eskay and Ketchum Creeks. Steeper and less stable slopes host slide alder, devil's club, and wild raspberry. Remaining areas of Eskay, lower Argillite and mid Tom Mackay Creeks exhibit Englemann Spruce-Subalpine Fir zone characteristics. Upper sections of Argillite and Tom Mackay Creeks and the Mackay Lakes are alpine tundra and are essentially treeless with the exception of minor stunted growth. Vegetation consists mainly of lichen, mosses, sedges and alpine flowers.

1.3 PROPERTY STATUS

The property is composed of one modified grid claim totaling 20 units (Figure 2), covering an area of five square kilometres. The claim is 100 percent owned by TAGISH RESOURCES LTD. The record number for the claim is 253157, and the claim is currently in good standing until September 17, 1994

1.4 HISTORY AND PREVIOUS EXPLORATION

The area has a long history of exploration since the discovery of mineralized gossanous bluffs along Eskay Creek, first staked in 1932 by T.S. Mackay and W.A. Prout. Exploration has concentrated on delineating high grade precious metal mineralization. Work completed by the Premier Gold Mining Company from 1935 to 1938 discovered more than 30 mineralized zones along the gossanous bluffs of Coulter and Eskay Creeks. These were numbered in sequence of discovery as zones (e.g. #20 Zone). In 1934, the 84 metre Mackay adit was driven on workings three kilometres southwest of the current 21 zone deposits.

Exploration continued through the decades, with further underground work on the Mackay adit, and development of the Emma adit closer to the 21 Zone, abundant surface trenching, and drilling of 84 diamond drill holes totaling 3,950 metres. This work involved 11 different exploration companies.

In November of 1988, Calpine Resources Inc. (now Prime Resources Ltd.) announced the discovery of high grade precious and base metal mineralization in the 21A Zone. Mineralization consisted of a combination of stockwork mineralization in rhyolite and massive sulfides at the contact of rhyolite with overlying andesite. Additional drilling resulted in the delineation of the 21A Zone and the discovery of the 21B and 21C Zones further to the north.

By the end of 1989, 205 diamond drill holes were completed on the Eskay property. Drilling has defined the 21B Zone as the principle target. This zone has recent published mining reserves of 1.08 million tons grading 65.6 g/t Au, and 2,930 g/t Ag. Substantial underground workings have been driven into this deposit, and exploration is continuing with the prospect of adding additional mining reserves.



1.5 WORK COMPLETED ON THE GROUP DURING 1993

In the fall of 1993, Canamera Geological Ltd. was contracted to complete VLF-EM and magnetometer geophysical surveys on the Aftom 20 claim. This work was carried out from a five person camp located near the claim, from September 11 to 12, 1993.

Geophysical surveying was conducted along flagged hip chain and compass lines. A total of 3.6 km. of geophysical survey was completed in this manner.

2.0 GEOLOGY

2.1 REGIONAL GEOLOGY

On a broad scale, the property sits in the middle of the Iskut-Sulphurets gold camp. This area consists of four major tectonic assemblages which are bounded by unconformities. These are the Paleozoic Stikine assemblage, the Triassic to Jurassic Bowser Group, and the Tertiary Coast Plutonic complex.

Paleozoic Stikine assemblage rocks consist of fine to coarse grained sediments with plagioclaise porphyry, felsic tuff, and basaltic lavas. These rocks crop out to the northwest of the property along the Iskut River. Triassic to Jurassic arc complex rocks consist of clastic sediments with volcaniclastic interbeds. These rocks are regionally extensive. Jurassic Bowser Group rocks cover much of the area north of the Prout Plateau and are comprised of thick sequences of thinly bedded siltstone, shale and sandstone with thin lenses of conglomerate. Coast Plutonic rocks are present in the area as a series of plutons, sills, and dikes that range in age from late Triassic to Oligocene. Stocks nearest to the property are the Melville and John Peaks diorites.

In closer proximity to the property within the upper Unuk River drainage, most of the area is underlain by rocks of the lower to middle Jurassic Hazelton Group. This group has been divided into four recognizable formations, the Unuk River formation, Betty Creek formation, Mount Dilworth formation, and the Salmon River formation.

The Unuk River formation is a thick sequence of fine grained andesitic pyroclatics and flows with tuffaceous turbidite, wacke, and conglomerate interbeds. The Betty Creek formation overlies the Unuk River formation and is a heterogeneous sequence of andesitic to dacitic tuffs and flows, interbedded with volcanic derived sedimentary rocks. Thick sequences of pillow lavas found on Mount Shirley have been correlated to the Betty Creek formation. The Betty Creek formation is overlain by the Mount Dilworth formation which consists of a sequence of felsic volcanic rocks. These are typically white weathering, or rusty where pyrite bearing, consisting of rhyolitic to dacitic ash and lapilli tuffs. This sequence of felsic volcanics appears to represent the terminal stages of volcanism in the area. This unit is important as a marker horizon for ore mineralization since it is host to many base and precious metal deposits, including the Eskay Creek deposit. The Salmon River formation is uppermost in the Hazelton Group strata, and consists of mainly turbiditic siltstones and fine sandstones with rare conglomerate, tuff, or volcanic interbeds. These rocks are gradational to the overlaying Bowser Lake Group sedimentary rocks.



3.0 GEOPHYSICS

3.1 Procedure and Instrumentation

3.1.1 Survey Parameters

- survey line separation 200 meters and 400 meters for reconnaissance lines.
- data station spacing 12.5 m.
- horizontal control survey lines were surveyed using hip chain and compass from a base line at azimuth 40 degrees.
- a total of 3.6 km. of VLF-EM data were accumulated.
- a total of 3.6 km. of magnetic data were accumulated.

3.1.2 Equipment Parameters

- EDA Omni Plus combined VLF-EM and magnetometer
- in-phase (dip angle) and quadrature (out-of-phase) measured in percent at each station
- field strength measured at each station
- transmitting stations NLK (24.8 kHz.) Seattle WA
 - NSS (21.4 kHz.) Annapolis MD
- initialization direction easterly
- earth's total magnetic field measured in gammas (nanoteslas)
- magnetic variations controlled by automatic magnetic base station recording every 30 seconds
- instrument accuracy +/- 0.1 gamma
- station repeatability better than +/- 3 gammas in low gradients

3.1.3 Equipment Specifications - see Appendix I

3.1.4 Calculations

3.1.4.1 Total Field Magnetic Survey

Total field magnetic readings were individually corrected for variations in the earth's magnetic field using magnetic base station values. The formula used for magnetic corrections was: CTFR = TFR + (DBL - BSR) (gammas) where:

CTFR = Corrected Total Field Reading

TFR = Total Field Reading

DBL = Datum Base Level

BSR = Base Station Reading

3.1.4.2 VLF-EM Survey

No calculations were carried out on VLF-EM data.

3.1.5 Presentation

- Seattle VLF-EM in-phase, out-of-phase and field strength readings are presented in profile form on Figure #5-1 at a scale of 1:5000.
- Annapolis VLF-EM in-phase, out-of-phase and field strength readings are presented in profile form on Figure #5-2 at a scale of 1:5000.
- Total field magnetic data are presented in profile form on Figure #5-3 at a scale of 1:5000.

3.2 VLF-EM SURVEY RESULTS

Although VLF-EM signal strength from Seattle was higher than from Annapolis neither data set produced a good response from conductivity. Profiles from both frequencies show a few weak low conductivity anomalies typical of surface conductivity from overburden. The large separation between reconnaissance survey lines makes it difficult to confidently predict conductivity continuation from line to line. Seattle data show a questionable conductive trend which may be indicative of a weak structural conductor. Additional survey between the present lines and geological investigations would be required to confirm a structural feature as the cause of the questionable conductor. No magnetic associations with conductivity are apparent.

3.3 MAGNETOMETER SURVEY RESULTS

Magnetic survey over the four reconnaissance lines shows a slight increase in total magnetic field towards the north and northwest. The gradual increase in magnetic field, as seen on the magnetic profiles, suggests a deeply buried source such as an intrusion which contains more magnetic minerals than the host rock. Minor short wavelength (mostly single station) magnetic highs at various locations probably represent near surface magnetic sources such as magnetic boulders or local occurrences of slightly more magnetic rock.

4.0 REFERENCES

BARTSCH, R.D., ESKAY CREEK AREA, STRATIGRAPHY UPDATE (104B/9, 10), Mineral Deposit Research Unit, the University of British Columbia, in Ministry of Energy, Mines and Petroleum Resources geological fieldwork 1001, paper 1992-1.

BARTSCH, R.D., A RHYOLITE FLOW DOME IN THE UPPER HAZELTON GROUP, ESKAY CREEK AREA (104B/9, 10), Mineral Deposit Research Unit, the University of British Columbia, in the Ministry of Energy, Mines and Petroleum Resources geological fieldwork 1992, paper 1993-1.

BRITTON, J.M., BLACKWELL, J.D., AND SCHROETER, T.G., #21 ZONE DEPOSITS, ESKAY CREEK, NORTHWESTERN BRITISH COLUMBIA, British Columbia Geological Survey Branch of the Ministry of Energy, Mines and Petroleum Resources, Exploration in British Columbia summary 1989.

CHAPMAN, J., AND RAVEN, W., GEOLOGICAL, GEOPHYSICAL, AND GEOCHEMICAL COMPILATION CONSOLIDATED POWERGEM RESOURCE CORPORATION ALBINO LAKE PROJECT (ALPHA, BETA, GAMMA, EPSILON, OMEGA, RHO, PI, DELTA PHI CLAIMS), December 15, 1989 assessment report of Orequest Consultants Limited.

DAWSON, G.L., AND HARRISON, D.J., GEOLOGICAL REPORT ON THE AFTOM 9 CLAIM, Skeena Mining Division for Waterford Resources Ltd.

HICKS, K.E. AND METCALFE, P., GEOLOGICAL REPORT ON THE AFTOM 5, 6, 7, 10, 11, 13 AND 20 CLAIMS, for Tagish Resources Ltd., Dec. 04, 1991.

HOPPER, D.H., ASSESSMENT, PROSPECTING, ROCK SAMPLING REPORT ON THE FRED 16 AND DUP 8 CLAIMS, Nov. 17, 1989.

KILLIN, KEVIN, REPORT ON A COMBINED HELICOPTER BORNE MAGNETIC ELECTROMAGNETIC AND VLF-EM SURVEY, UNUK RIVER AREA, Unuk River Area, Northeastern British Columbia, for Swift Minerals Ltd., Oct. 20, 1989.

LEWIS, P.D., STRUCTURAL GEOLOGY OF THE PROUT PLATEAU REGION, ISKUT RIVER MAP AREA, BRITISH COLUMBIA (104 B/9), Mineral Deposit Research Unit, the University of British Columbia, in the Ministry of Energy, Mines and Petroleum Resources geological fieldwork 1001, paper 1992-1.

MACDONALD, J., LEWIS, P.D., ETTLINGER, A.D., BARTSCH, R.D., MILLER, B.D. AND LOGAN, J.M., BASALTIC ROCKS OF THE MIDDLE JURASSIC SALMON RIVER FORMATION, NORTHWESTERN BRITISH COLUMBIA, Mineral Deposit Research Unit, the University of British Columbia, in the Ministry of Energy, Mines and Petroleum Resources geological fieldwork 1992, paper 1993-1. **ROTH, T.**, SURFACE GEOLOGY OF THE 21A ZONE, ESKAY CREEK, BRITISH COLUMBIA, Mineral Deposit Research Unit, the University of British Columbia, in the Ministry of Energy, Mines and Petroleum Resources geological fieldwork, 1992, paper 1993-1.

VISSER, SYD, MAGNETOMETER AND VLF-EM SURVEY ON THE FRED 16 CLAIM for Silver Princess Resources Inc., Skeena MD, BC, October, 1989.

5.0 COST STATEMENT

6.0 STATEMENT OF QUALIFICATIONS

PERRY GRUNENBERG, B.Sc., F.G.A.C., P. Geo.

ACADEMIC

1982	B. Sc. in Geol	ogy	The University of British Columbia				
1987	Fellowship		Geological Association of Canada				
1992	Membership		Association of Professional Engineers and Geoscientist of British Columbia				
PROFESSIONAL							
1989 TO PRESENT		P ANI	L GEOLOGICAL SERVICES, SMITHERS, BC				
		Contra explora	ct geologist working on mining and mining ation throughout BC and the Northwest Territories				
1984 to 1989		HUGH	ES-LANG EXPLORATIONS, VANCOUVER, BC				
		Project geophy drilling Yukon	t geologist employed to work on geological, vsical, and geochemical surveys with follow-up and trenching, in areas throughout BC and the				
1983		STRA' VANC	TO GEOLOGICAL ENGINEERING LTD. OUVER, BC				
		Project mining Washir	t geologist contracted to work in all aspects of exploration on properties in Nevada and agton, USA, and in British Columbia.				
1982		P ANI	L EXPLORATION, VANCOUVER, BC				
		Contra prospe	ct geologist involved in evaluating placer gold cts near Quesnel and Princeton, BC.				
1978 to 1981		RIO A MANA	LGOM, KENNECOTT CANADA, AND MARK AGEMENT LTD.				
$\wedge \frown$	2	Summe Colum	er student involved in exploration projects in British bia.				
U d							

CERTIFICATE

- I, Edwin Ross Rockel, Geophysicist of Surrey, British Columbia, Canada, hereby certify that:
- 1. I received a B.Sc. degree in Geophysics from the University of British Columbia in 1966.
- 2. I am a Consulting Geophysicist contracted to Canamera Geological Ltd. located in the City of Vancouver, in the Province of British Columbia.
- 3. I currently reside at 13000 54A Ave, in the City of Surrey, in the Province of British Columbia.
- 4. I have been practising my profession since graduation.
- 5. I am a Professional Geophysicist registered in the Province of Alberta.
- 6. I am a Certified Professional Geological Scientist registered in the United States of America.
- 7. I am a Professional Geoscientist registered in the Province of British Columbia.

Date: Dec 14 93 Signed:

Surrey, British Columbia

Edwin Ross Rockel B.Sc., P.Geoph., P.G.S., P.Geo.



APPENDIX I

EQUIPMENT SPECIFICATIONS

Specifications*	
Frequency Tuning Range	. 15 to 30 kHz, with bandwidth of 150 Hz; tuning range accommodates new Puerto Rico station at 28.5 kHz
Transmitting Stations Measured.	. Up to 3 stations can be automatically measured at any given grid location within frequency tuning range
Recorded VLF Magnetic Parameters	. Total field strength, total dip, vertical quadrature (or alternately, horizontal amplitude)
Standard Memory Capacity	. 800 combined VLF magnetic and VLF electric measurements as well as gradiometer and magnetometer readings
Display	. Custom designed, ruggedized liquid crystal display with built-in heater and an operating temperature range from – 40°C to + 55°C. The display contains six numeric digits, decimal point, battery status monitor, signal strength status monitor and function descriptors.
RS232C Serial I/O Interface	. 2400 baud rate, 8 data bits, 2 stop bits, no parity
Test Mode	A. Diagnostic Testing (data and programmable memory) B. Self Test (hardware)
Sensor Head	Contains 3 orthogonally mounted coils with automatic tilt compensation
Operating Environmental Range	40°C to + 55°C; 0 – 100% relative humidity; Weatherproof
Power Supply	. Non-magnetic rechargeable sealed lead-acid 18V DC battery cartridge or beit; 18V DC disposable battery beit; 12V DC external power source for base station operation only.
Weights and Dimensions Instrument Console Sensor Head VLF Electronics Module Lead Acid Battery Cartridge . Lead Acid Battery Belt Disposable Battery Belt	2.8 kg, 128 x 150 x 250 mm 2.1 kg, 130 dia, x 130 mm 1.1 kg, 40 x 150 x 250 mm 1.8 kg, 235 x 105 x 90 mm 1.8 kg, 540 x 100 x 40 mm 1.2 kg, 540 x 100 x 40 mm
*Preliminary	

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EDA Instruments Inc., 4 Thorncliffe Park Drive, Toronto, Ontario Canada M4H 1H1 Telex: 06 23222 EDA TOR, Cables: Instruments Toronti I4163 425-7800

In USA, EDA Instruments Inc., 5151 Ward Road, Wheat Ridge, Colorado U.S.A. 80033 (303) 422-9112

Printed in Canada

owner Misthis Magnicionicion

Specifications

Dynamic Range	18,000 to 110,000 gammas. Roil-over display feature suppresses first significant digit upon exceeding 100,000 gammas.
Tuning Method	Tuning value is calculated accurately utilizing a specially developed tuning algorithm
Automatic Fine Tuning	± 15% relative to ambient field strength of last stored value
Display Resolution	, 0,1 gamma
Processing Sensitivity	. ± 0.02 gamma
Statistical Error Resolution	, 0.01 gamma
Absolute Accuracy	± 1 gamma at 50,000 gammas at 23°C ± 2 gamma over total temperature range
Standard Memory Capacity	4 000 data blocks or esta of readings
Tie-Line Points	1,200 data blocks or sets of readings 100 data blocks or sets of readings 5,000 data blocks or sets of readings
Display	Custom-designed, mogedized liquid crystal display with an
	operating temperature range from -40°C to +55°C. The
	display contains six numeric digits, decimal point, battery
	status monitor, signal decay rate and signal amplitude monitor and function descriptors.
RS 232 Serial I/O Interface	2400 baud, 8 data bits, 2 stop bits, no parity
Gradient Tolerance	6,000 gammas per meter (field proven)
Test Mode	. A. Diagnostic testing (data and programmable memory) B. Self Test (hardware)
Sensor	Optimized miniature design. Magnetic cleanliness is consistent with the specified absolute accuracy.
Gradient Sensors	0.5 meter sensor separation (standard), normalized to gammas/meter. Optional 1.0 meter sensor separation available. Horizontal sensors optional.
Sensor Cable	Remains flexible in temperature range specified, includes strain-relief connector
Cycling Time (Base Station Mode)	Programmable from 5 seconds up to 60 minutes in 1 second increments
Operating Environmental Range	-40°C to +55°C; 0-100% relative humidity; weatherproof
Power Supply	Non-magnetic rechargeable sealed lead-acid battery cartridge or belt; rechargeable NiCad or Disposable battery cartridge or belt; or 12V DC power source option for base station operation.
Battery Cartridge/Belt Life	2,000 to 5,000 readings, for sealed lead acid power supply, depending upon ambient temperature and rate of readings
Weights and Dimensions	-
Instrument Console Only	. 2.8 kg, 238 x 150 x 250mm
NiCad or Alkaline Battery Cartridge	. 1.2 kg, 235 x 105 x 90mm
NiCad or Alkaline Battery Belt	1.2 kg, 540 x 100 x 40mm
Lead-Acid Battery Cartridge	, 1.8 kg, 235 x 105 x 90mm
Lead-Acid Battery Belt	, 1.8 kg, 540 x 100 x 40mm
Sensor	, 1.2 kg, 56mm diameter x 200mm
0.5 m separation - standard	. 2.1 kg, 56mm dlameter x 790mm
(1 0 m separation - optionali	2.2 kg. SEmm diamatary 4700mm
Standard System Complement	Instrument console, censor 3 meter cable aluminum
	sectional sensor staff, power supply, harness assembly, operations manual,
Base Station Option	Standard system plus 30 meter cable
Gradiometer Option	. Standard system plus 0.5 meter sensor

E D A Instruments Inc. 4 Thorncliffe Park Drive Toronto, Ontario Canada M4H 1H1 Telex: 06 23222 EDA TOR Cable: Instruments Toronto (416) 425 7800

In U.S.A. E D A Instruments Inc. 5151 Ward Road Wheat Ridge, Colorado U.S.A. 80035 (303) 422 9112

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APPENDIX II

DATA LISTING

CANAMERA GEOLOGICAL LTD. Data Listing

Area:	ESKAY CREEK, B.C.	Current File Name:	AF2DATA GPH
Grid:	AFTON 20 CLAIM	From File Name:	A2.XYZ
Date:	December, 1993		

INSTRUMENT TYPE: EDA Omni Plus VLF-EM/Magnetometer System

(Line & Station += Northings and Eastings, -= Southings and Westings)

DATA TYPE(S):

DATA DETAILS:

#2. Total Field Magnetic Values	Corrected total magnetic field
#3. VLF-EM In-Phase Values	Seattle Transmitter - facing north
#4. VLF-EM Quadrature	Seattle Transmitter - facing north
#5. VLF-EM Field Strength	Seattle Total Field Strength
#6. VLF-EM In-Phase Values	Annapolis Transmitter - facing north
#7. VLF-EM Quadrature	Annapolis Transmitter - facing north
#8. VLF-EM Field Strength	Annapolis Total Field Strength

Easting	Northing	# 1 .	# 2.	#3.	# 4 .	# 5.	# 6 .	# 7.	# 8 .
-	-	Station							
line 5800									
3000	5800	3000	57150	6.4	1.9	38.0	1.6	9.7	7.0
3012.5	5800	3012.5	57124	5.7	1.6	38.0	-0.4	9.6	7.1
3025	5800	3025	57127	7.9	2.5	37.8	-0.6	7.9	7.2
3037.5	5800	3037.5	57129	9.3	4.4	37.7	-3.0	6.7	7.3
3050	5800	3050	57134	7.3	2.8	37.1	-9.2	4.6	7.6
3062.5	5800	3062.5	57134	7.6	1.7	36.8	-6.6	4.1	7.6
3075	5800	3075	57137	5.9	1.3	36.9	-7.0	4.1	7.5
3087.5	5800	3087.5	57149	3.8	1.8	37.3	-7.0	3.4	7.6

Easting	Northing	# 1. Station	# 2.	# 3.	# 4.	# 5.	# 6.	# 7.	# 8 .
3100	5800	3100	57151	2.8	1.0	37.1	-5.5	2.6	7.5
3112.5	5800	3112.5	57148	3.0	0.8	37.4	-4.7	2.3	7.7
3125	5800	3125	57165	4.1	1.6	37.0	-4.4	2.5	7.6
3137.5	5800	3137.5	57149	5.4	3.0	36.9	-1.6	3.9	7.7
3150	5800	3150	57147	3.7	3.3	37.2	-2.5	2.5	7.8
3162.5	5800	3162.5	57150	2.0	3.0	37.4	-5.1	2.0	7.9
3175	5800	3175	57148	2.0	3.2	37.3	-2.8	2.1	8.0
3187.5	5800	3187.5	57138	2.3	3.6	37.7	-0.3	3.3	8.0
3200	5800	3200	57141	0.4	4.0	38.7	-2.2	1.4	8.0
3212.5	5800	3212.5	57140	0.3	4.3	38.6	-1.0	2.9	7.8
3225	5800	3225	57140	-5.3	1.3	39.2	-0.7	2.1	7.9
3237.5	5800	3237.5	57153	-4.9	1.3	40.8	-1.1	0.9	7.9
3250	5800	3250	57150	-3.6	1.4	40.7	1.9	2.3	8.0
3262.5	5800	3262.5	57154	-1.1	2.8	40.0	4.2	5.5	8.3
3275	5800	3275	57158	-0.7	3.1	39.7	1.3	4.4	8.7
3287.5	5800	3287.5	57155	-0.2	3.7	39.7	0.0	4.5	8.7
3300	5800	3300	57149	0.3	4.3	38.4	0.6	3.6	8.6
3312.5	5800	3312.5	57150	1.2	5.1	38.2	-0.5	2.1	9.0
3325	5800	3325	57144	1.9	5.4	39.6	-1.1	1.5	9.2
3337.5	5800	3337.5	57143	2.9	5.0	39.5	2.5	1.8	9.3
3350	5800	3350	57146	3.1	4.1	38.1	5.1	2.0	9.3
3362.5	5800	3362.5	57149	4.6	2.6	39.1	10.0	2.3	9.2
3375	5800	3375	57144	4.1	1.5	40.2	5.9	0.2	9.4
3387.5	5800	3387.5	57139	2.1	0.4	39.7	6.5	-0.4	8.9
3400	5800	3400	57147	3.6	0.0	39.2	8.0	0.6	8.6
3412.5	5800	3412.5	57147	3.0	-0.2	39.5	7.8	0.6	8.8
3425	5800	3425	57143	2.6	-0.1	39.0	7.5	1.5	8,6
3437.5	5800	3437.5	57141	1.6	-1.9	38.3	8.1	1.4	8,5
3450	5800	3450	57139	-2.5	-5.4	39.4	4.2	0.0	8.7
3462.5	5800	3462.5	57130	-2.0	-5.6	39.9	6.6	1.0	8.7

Easting	Northing	# 1. Station	# 2.	#3.	# 4 .	# 5.	# 6.	<i>#</i> 7.	# 8 .
3475	5800	3475	57130	-2.3	-6.3	40.0	7.1	3.0	8.9
3487.5	5800	3487.5	57127	-1.0	-6.1	42.0	3.0	1.2	8.8
3500	5800	3500	57121	0.4	-4.2	41.5	3.0	2.8	8.8
3512.5	5800	3512.5	57120	5.8	-1.5	41.4	0.1	0.9	8.9
3525	5800	3525	57122	6.9	-1.5	41.6	-0.7	0.2	8.7
3537.5	5800	3537.5	57115	10.3	-0.1	41.6	-0.3	0.6	8.9
3550	5800	3550	57111	13.0	1.0	41.5	-2.8	1.1	8.8
3562.5	5800	3562.5	57114	14.0	1.7	41.7	-4.4	0.3	8.8
3575	5800	3575	57107	17.0	3.7	41.6	-5.7	-0.2	8.8
3587.5	5800	3587.5	57107	18.6	4.0	41.1	-4.7	-0.4	8.8
3600	5800	3600	57100	20.2	4.7	41.0	-6.3	1.5	8.8
3612,5	5800	3612.5	57101	21.2	4.8	40.6	-5.4	2.6	8.9
3625	5800	3625	57096	20.6	2.9	39.5	-5.6	2.6	8.9
3637.5	5800	3637.5	57097	16.1	0.6	39.1	-1.3	4.6	9.0
3650	5800	3650	57096	10.0	-5.7	38.3	-6.9	5.3	8.9
3662,5	5800	3662.5	57104	12.0	-3.6	38.4	-9.5	3.4	8.8
3675	5800	3675	57097	13.3	-2.9	38.5	-10.3	4.4	8.4
3687.5	5800	3687.5	57096	14.7	-0.3	38,3	-11.0	5.4	8.3
3700	5800	3700	57096	14.5	-0.7	38.3	-10.8	5.1	8.2
3712.5	5800	3712.5	57098	19.7	1.5	37.4	-11.3	4.3	8.1
3725	5800	3725	57092	22.0	3.4	36.5	-10.6	3.8	8.1
3737.5	5800	3737.5	57089	23.6	3.6	36.2	-11.1	3.7	8.0
3750	5800	3750	57092	23.0	2.4	35.1	-9.8	3.3	7.9
3762.5	5800	3762.5	57090	20.2	0.0	35.0	-11.8	1.7	7.8
3775	5800	3775	57084	23.6	1.6	34.3	-9.1	2.2	7.8
3787.5	5800	3787.5	57083	23.0	0.2	34.5	-10.1	2.8	7.6
3800	5800	3800	57082	24.6	-0.1	34.0	-4.7	4.1	7.6
3812.5	5800	3812.5	57090	21.9	-1.0	33.7	-5.2	4.8	7.5
3825	5800	3825	57091	19.2	-0.7	33,8	-5.4	3.6	7.6
3837.5	5800	3837.5	57084	18.9	-1.0	34.4	-5.6	2.9	7.5

Easting	Northing	# 1. Station	# 2.	#3.	# 4.	# 5.	# 6.	# 7.	# 8 .
3850	5800	3850	57082	20.7	-1.0	33.5	-2.6	3.3	7.7
3862.5	5800	3862.5	57079	19.6	-1.2	33.9	-2.7	4.4	7.7
3875	5800	3875	57080	18.1	-1,3	34.3	-2.1	3.4	7.7
3887.5	5800	3887.5	57083	18.3	-1.5	34.0	-1.6	4.3	7.8
3900	5800	3900	57084	14.9	-1.8	33.9	-2.7	3.9	7.8
3912.5	5800	3912.5	57085	12.7	-1.8	34.2	-4.4	2.7	7.8
3925	5800	3925	57087	10.6	-2.1	34.0	-6.7	1.5	7.8
3937.5	5800	3937.5	57082	10.5	-1.5	33.9	-8.4	0.2	7.7
3950	5800	3950	57079	7.5	-2.9	34.3	-9.0	-1.6	7.7
3962.5	5800	3962.5	57080	5.2	-2.9	34.0	-9.2	-1.3	7.5
3975	5800	3975	57077	4.9	-2.7	34.3	-7.7	0.0	7.5
3987.5	5800	3987.5	57079	6.9	-0,8	34.4	-4.5	2.1	7.6
4000	5800	4000	57081	5.9	-1.1	35.0	-4.8	1.9	7.6
line 6000									
3000	6000	3000	57158	12.6	-3.2	34.1	-8.1	2.6	6.6
3012.5	6000	3012.5	57157	12.1	-3.0	33.5	-7.4	1.5	6.5
3025	6000	3025	57160	13,5	-2.3	33.2	-6.1	0.7	6.5
3037.5	6000	3037.5	57164	13.7	-2.3	31.9	-7.0	-0.2	6.5
3050	6000	3050	57168	13.6	-2.8	31.5	-4.7	-0.5	6.4
3062.5	6000	3062.5	57180	11.2	-8.0	30.4	-3.7	-0.1	6.5
3075	6000	3075	57183	9.5	-9.9	31.2	-1.8	-1.1	6.5
3087.5	6000	3087.5	57185	7.4	-11.0	31.8	-2.5	-1.6	6.6
3100	6000	3100	57188	7.1	-11.1	32.0	-2.2	-2.2	6.6
3112.5	6000	3112.5	57210	5.5	-10.2	33.0	-2.9	-1.5	6.8
3125	6000	3125	57195	4.9	-8.9	33.0	-3.2	-2.0	6.8
3137.5	6000	3137.5	57196	7.4	-7.0	33.3	-2.5	-2.2	6.8
3150	6000	3150	57205	5.5	-6.5	33.6	-4.4	-5.0	6.9
3162.5	6000	3162.5	57201	7.6	-5.7	34.0	-2.0	-4.7	6.7
3175	6000	3175	57199	8.1	-5.5	34.2	-1.8	-5.3	6.8
3187.5	6000	3187.5	57201	8.4	-4.0	34.5	-1.1	-5.8	6.8

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Easting	Northing	# 1. Station	# 2.	#3.	# 4 .	# 5.	# 6 .	# 7.	# 8 .
3200	6000	3200	57185	9.5	-3.4	35.0	-1.2	-6.7	6.8
3212.5	6000	3212.5	57182	11.5	-2.0	35.3	-0.7	-5.4	6.8
3225	6000	3225	57176	13.3	-0.8	35.2	-0.4	-3.9	6.7
3237.5	6000	3237.5	57177	13.8	-0.3	34.4	-1.9	-5.1	6.8
3250	6000	3250	57173	14.7	0.0	34.5	-1.0	-4.7	6.7
3262.5	6000	3262.5	57176	13.2	-0.5	34.4	-2.8	-4.6	6.8
3275	6000	3275	57164	10.6	-2.2	34.2	-3.6	-3.1	6.7
3287.5	6000	3287.5	57161	8.3	-2.6	34.4	-3.6	-3.0	6.7
3300	6000	3300	57164	6.5	-2.4	34.9	-3.8	-3.0	6.9
3312.5	6000	3312.5	57159	6.5	-2.1	34.4	-3.3	-0.5	6.7
3325	6000	3325	57157	6.1	-1.1	34.5	-2.2	0.1	6.9
3337.5	6000	3337.5	57152	4.8	-1.2	34.5	-3.9	-1.0	6.8
3350	6000	3350	57153	4.8	-0.6	34.5	-5.0	-1.0	6.8
3362.5	6000	3362.5	57145	5.1	-0.5	34.4	-4.3	-1.3	6.9
3375	6000	3375	57150	5.7	-1.2	34,5	-5.5	-1.1	6.8
3387.5	6000	3387.5	57153	0.9	-3.0	34.5	-7.0	-1.5	6.9
3400	6000	3400	57141	1.4	-3.6	36.5	-6.0	0.1	7.0
3412.5	6000	3412.5	57129	5.6	-2.8	34.9	-1.3	3.8	7.0
3425	6000	3425	57129	6.1	-3.0	35.0	0.1	2.9	7.0
3437.5	6000	3437.5	57123	1.1	-5.3	34.5	-4.8	0.5	7.1
3450	6000	3450	57119	6.9	-2.5	34.5	-3.8	1.3	7.1
3462.5	6000	3462.5	57121	5.9	-2.5	34.7	-4.1	1.1	7.0
3475	6000	3475	57123	7.1	-1.4	35.0	-3.2	1.6	6.9
3487.5	6000	3487.5	57117	8.4	-0.4	34.7	-1.0	1.5	7.0
3500	6000	3500	57110	8.2	-0.8	34.7	-0.2	2.2	7.0
3512.5	6000	3512.5	57116	11.0	1.0	35.0	-2.2	1.2	7.2
3525	6000	3525	57112	12.9	2.3	35.1	-4.4	0.5	7 .1
3537.5	6000	3537.5	57114	13.4	2.1	34.9	-3.7	1.4	7.2
3550	6000	3550	57104	11.8	2.1	35.0	-4.2	1.7	7.2
3562.5	6000	3562.5	57103	14.3	3.7	35.8	-4.7	2.5	7.3

Easting	Northing	# 1. Station	# 2.	# 3.	# 4 .	# 5.	# 6.	# 7 .	# 8 .
3575	6000	3575	57101	16.4	3.8	35.2	-6 ,1	1.3	7.4
3587.5	6000	3587.5	57097	19.4	3.8	34.5	-10.1	-0.6	7.5
3600	6000	3600	57099	19.5	3.0	34.4	-9,6	-1.0	7.5
3612.5	6000	3612.5	57096	18.4	1.6	33,9	-10.3	-0.8	7.4
3625	6000	3625	57088	21.4	1.6	34.5	-3.4	3.5	7.3
3637.5	6000	3637.5	57099	21.0	1.8	32.9	-0.5	2.6	7.3
3650	6000	3650	57095	21.4	-0.8	32.9	-0.1	2,6	7.2
3662.5	6000	3662.5	57090	18.1	-2.1	32.4	1.0	1.6	7.3
3675	6000	3675	57090	17.8	-1.7	32.1	3,3	3.5	7.5
3687.5	6000	3687.5	57086	14.5	-4.9	32,4	0.1	0.0	8.0
3700	6000	3700	57086	11.9	-6.1	32.2	-1.1	-0.8	8.0
3712.5	6000	3712.5	57088	12.1	-5.3	32.0	-0.4	1.2	7.9
3725	6000	3725	57088	12.9	-4.7	31.8	0,6	2.8	7.8
3737.5	6000	3737.5	57083	11.9	-4.6	31.5	-1.1	3.4	8.0
3750	6000	3750	57088	10.8	-4.9	32.4	-3.3	2.2	8.2
3762.5	6000	3762.5	57091	9.3	-5.8	31.8	-7,6	0,6	8.2
3775	6000	3775	57086	7.8	-7.4	31.9	-10.7	0.0	8.5
3787.5	6000	3787.5	57078	4.0	-9.8	31.7	-18.2	-1.5	8.2
3800	6000	3800	57094	7.0	-6.2	32.1	-17.3	-3.3	7.7
3812.5	6000	3812.5	57091	6.3	-4.5	32.4	-19.4	-3.1	7.7
3825	6000	3825	57090	7.2	-3,3	32.3	-19.5	-3.3	7.6
3837.5	6000	3837.5	57088	8.1	-2.3	32.6	-17.5	-2.8	7.6
3850	6000	3850	57086	8.0	-2.1	32.1	-17.2	-2.4	7.2
3862.5	6000	3862.5	57086	7.9	-1.2	32.2	-16.7	-1.3	7.2
3875	6000	3875	57082	7.3	-1.0	31.8	-17.7	-2.8	7.2
3887.5	6000	3887.5	570 7 9	8.0	-0.5	32.0	-15.0	0.9	6.8
3900	6000	3900	57079	8.2	-0.5	32.2	-13.5	1.3	7.0
3912.5	6000	3912.5	57084	9.7	0.4	32.3	-10.7	2,1	7.0
3925	6000	3925	57081	10.9	1.4	32.5	-8.8	3.4	7.0
3937.5	6000	3937.5	570 78	12.2	1.8	32.5	-7.8	3.6	7.0

Easting	Northing	# 1. Station	# 2.	#3.	# 4 .	# 5.	# 6.	# 7 .	# 8 .
3950	6000	3950	57099	11.0	1.7	32,6	-5.4	6.0	6.9
3962.5	6000	3962.5	57078	9.7	1.3	33.1	-2.9	6.1	7.1
3975	6000	3975	57081	9.3	-0.4	33.5	-0.7	7.2	7.3
3987.5	6000	3987.5	57080	7.8	-1.9	34.0	-2.6	5,5	7.6
4000	6000	4000	57080	5.6	-3.1	34.2	-5.2	4.3	7.5
line 5000									
3000	5000	3000	57132	-7.0	-7.1	34.2	-2.6	2.5	7.8
3012.5	5000	3012.5	57128	-5.3	-5.9	34.1	-3.1	2.8	7.8
3025	5000	3025	57116	-5.1	-6.0	34.1	-3.6	0.9	7.8
3037.5	5000	3037.5	57116	-2.5	-5.5	34.3	-6.5	1.5	7.7
3050	5000	3050	57113	1.1	-3.9	34.2	-7.0	0.8	7.8
3062.5	5000	3062.5	57120	0.3	-4,1	33.8	- 6.9	0.1	7.7
3075	5000	3075	57119	1.1	-3.8	33.9	-8.1	1.8	7.5
3087.5	5000	3087.5	57132	2.6	-3.0	33.9	-6,8	1.3	7.6
3100	5000	3100	57140	3.4	-2.0	33.7	-7.6	1.8	7,4
3112.5	5000	3112.5	57121	4.7	-1.9	33.5	-7.3	1.8	7.4
3125	5000	3125	57130	3.4	-1.9	33.4	-5.6	1.4	7.7
3137.5	5000	3137.5	57124	2.9	-1.6	33.0	-5.4	3.4	7.5
3150	5000	3150	57116	0.9	-2.2	33.0	-4.4	1.8	7.4
3162.5	5000	3162.5	57115	1.3	-2.9	32.7	-3.9	3.2	7.4
3175	5000	3175	57131	-0.7	-4.8	33.5	-2.1	1.3	7.6
3187.5	5000	3187.5	57122	-1.8	-4.1	33.9	-2.2	1.7	7.6
3200	5000	3200	57115	-1.1	-2.7	34.6	-3.7	4.6	7.6
3212.5	5000	3212.5	57117	-0.5	-0.5	35.3	-1.5	4.0	7.7
3225	5000	3225	57116	0.7	0.9	34.8	0.3	4.3	7.6
3237.5	5000	3237.5	57112	1.2	1.1	34.7	2.6	6.3	7.7
3250	5000	3250	57117	-1.0	-0.5	35.6	1.2	5.5	8.0
3262.5	5000	3262.5	57119	0.1	-0.1	35.7	-1.0	3.6	8.1
3275	5000	3275	57118	2.1	0.4	35.7	-0.5	6.2	7.9
3287.5	5000	3287.5	57124	3.0	0.5	35.6	-1.0	7.4	7.8

Easting	Northing	# 1. Station	# 2.	#3.	# 4 .	<i>#</i> 5.	# 6 .	# 7.	# 8.	
3300	5000	3300	57122	0.7	-0.5	35.4	-0.8	8.5	7.6	
3312.5	5000	3312.5	57123	-0.7	-1.7	35.2	-0.1	9.7	7.7	
3325	5000	3325	57118	-1.7	-1.8	35.1	-0.8	10.3	7.7	
3337.5	5000	3337.5	57121	-0.5	-2.7	35.1	-0.5	11.1	7.9	
3350	5000	3350	57120	-0.9	-2.9	35.2	-0.2	12.1	7.9	
3362.5	5000	3362,5	57119	-1.3	-3.1	35.2	-0.9	10.2	7.9	
3375	5000	3375	57124	-1.0	-2.9	35.2	-2.4	10.1	8.0	
3387.5	5000	3387.5	57121	-1.9	-2.7	35.4	-3.3	8.7	8.0	
3400	5000	3400	57122	-0.8	-2.0	35.7	-4.7	7.7	8.0	
3412.5	5000	3412.5	57123	0.3	-1.6	35.8	-4.8	8.2	7.9	
3425	5000	3425	57119	-1.3	-1.4	36.0	-5.5	8.2	8.0	
3437.5	5000	3437.5	57116	1.4	1.2	36.6	-6.5	8.2	7.8	
3450	5000	3450	57118	5.4	4.6	36.7	-6.7	7.0	8.0	
3462.5	5000	3462.5	57114	7.4	5.8	36.4	-7.1	7.4	8.1	
3475	5000	3475	57119	6.3	4.9	36.1	-8.5	5.5	8,0	
3487.5	5000	3487.5	57115	8.9	5.5	35.9	-10.0	5.0	8.0	
3500	5000	3500	57112	8.4	5.2	35.8	-9.5	4.9	7.9	
3512.5	5000	3512.5	57113	7.7	5.2	36.0	-10.5	5.3	7.8	
3525	5000	3525	57108	7.0	5.0	35.6	-10.6	5.4	7.9	
3537.5	5000	3537.5	57104	5.4	5.1	35.4	-11.5	5.2	7.8	
3550	5000	3550	57113	8.4	5.0	35.1	-8.5	5.0	8.0	
3562.5	5000	3562.5	57108	7.6	4.7	35.1	-8.8	4.5	8.1	
3575	5000	3575	57109	7.7	4.8	35.1	-9.2	3.5	8.1	
3587.5	5000	3587.5	57109	7.0	5.4	35.2	-12.0	2.4	7.8	
3600	5000	3600	57112	8.3	5.6	35.1	-12.0	2.5	7.7	
3612.5	5000	3612.5	57102	7.7	6.5	35.0	-10.6	3.0	7.8	
3625	5000	3625	57103	9.0	7.2	35.1	-12.0	4.3	8.0	
3637.5	5000	3637.5	57103	10.6	9.0	34.8	-11.7	3.7	7.9	
3650	5000	3650	57101	11.9	9.6	34.3	-9.7	4.4	7.9	
3662.5	5000	3662.5	57104	9.0	9.6	34.8	-12.4	3.7	7.9	

Easting	Northing	# 1. Station	# 2.	#3.	# 4 .	# 5.	# 6.	#7.	# 8.
3675	5000	3675	57107	8.1	8.5	33.9	-11.1	3.8	8.0
3687.5	5000	3687.5	57105	6.8	7.3	33.2	-13.9	2.1	8.1
3700	5000	3700	57101	4.9	5.3	33.1	-17.1	0.7	8.2
3712.5	5000	3712.5	57097	3.3	4.2	32,9	-17.8	-0.5	8.2
3725	5000	3725	57105	1.0	3.9	33.2	-18.3	0.3	8.0
3737.5	5000	3737.5	57096	1.8	2.8	33.3	-16.7	1.6	8.1
3750	5000	3750	57099	2.5	4.0	33.2	-16.7	2.0	8.1
3762.5	5000	3762.5	57097	0.7	2.3	32.7	-17.1	1.6	8.1
3775	5000	3775	57103	2.5	1.9	32.4	-16.0	2.1	8.0
3787.5	5000	3787.5	57095	0.2	0.7	32.8	-15.8	1.6	8.1
3800	5000	3800	57097	1.5	0,0	32.6	-15.0	1.4	8.1
3812.5	5000	3812.5	57099	2.0	-0.2	32.9	-15.4	1.4	8.2
3825	5000	3825	57097	2.4	1.3	33.1	-15.8	0.2	8.2
line 5400									
3000	5400	3000	57124	7.4	-7.2	34.8	-4.3	4.3	6.8
3012.5	5400	3012.5	57130	10.6	-4.1	34.7	-3.0	3.7	6,8
3025	5400	3025	57149	1 2 .1	-3.6	34.1	-3.4	3.5	6.8
3037.5	5400	3037.5	57153	14.3	-0.1	34.2	-3.3	2.4	6.8
3050	5400	3050	57151	14.3	0.1	33.5	-2.6	1.4	6,8
3062.5	5400	3062.5	57160	17.4	1.4	32.9	-1.9	0.9	6.8
3075	5400	3075	57160	15.8	2.0	32.5	-1.8	0.6	6.8
3087.5	5400	3087.5	57161	16.7	1.2	32.5	-2.1	0.3	6.8
3100	5400	3100	57174	15.5	-0.2	31.9	-0.5	0.8	6,8
3112.5	5400	3112.5	57173	14.4	-1.5	31.5	0.0	-0.4	6.7
3125	5400	3125	57172	13.9	-3.0	31.3	1.1	-2.3	6.7
3137.5	5400	3137.5	57192	11.3	-5.9	30.6	0.5	-4.8	6.6
3150	5400	3150	57192	13.4	-5.2	31.4	1.2	-5.6	6.7
3162.5	5400	3162.5	57199	12.0	-6.8	31.1	1.4	-4.4	6.7
3175	5400	3175	57185	9.4	-7.2	31.6	2.9	-5.1	6.7
3187.5	5400	3187.5	57180	9.7	-6.6	32.0	4.3	-4.4	6.7

Easting	Northing	# 1. Station	# 2.	# 3.	# 4.	# 5.	# 6 .	# 7 .	# 8 .
3200	5400	3200	57175	8.6	-6.7	32.1	4.9	-3.8	6.6
3212.5	5400	3212.5	57170	9.8	-6.6	31.9	8.4	-3.2	6.6
3225	5400	3225	57167	11.6	-4.8	32.1	9.3	-3.5	6.7
3237.5	5400	3237.5	57164	12.2	-5.8	31.8	8.5	-4.3	6.7
3250	5400	3250	57161	13.3	-5.3	32.0	6,6	-5.0	6.7
3262.5	5400	3262.5	57154	10.9	-8.3	31.2	8.3	-3.0	6.6
3275	5400	3275	57153	7.2	-9.4	31.2	7.3	-4.2	6.6
3287.5	5400	3287.5	57152	6.5	-9.3	32.0	5.5	-2.2	6.7
3300	5400	3300	57156	7.0	-6.2	32.3	3.8	-3.2	6.8
3312.5	5400	3312.5	57152	7.6	-2.1	32.4	1.4	-2.4	6.8
3325	5400	3325	57148	7.2	-1.6	32.3	0.0	-3.3	6.8
3337.5	5400	3337.5	57151	6.0	-2.0	32.3	-0.2	-3.4	6.8
3350	5400	3350	57146	5.3	-1.1	32.6	-0.9	-2.9	6.8
3362.5	5400	3362.5	57142	7.0	-0.8	32.4	-1.0	-1.4	6.8
3375	5400	3375	57136	5.2	-2.0	32.3	-1.8	-1.8	6.8
3387.5	5400	3387.5	57125	4.6	-2.7	33.3	-0.4	-0.2	6.8
3400	5400	3400	57129	8.0	-1.2	32.7	-0.8	1.2	6.8
3412.5	5400	3412.5	57125	9.9	-0.1	32.1	-1.2	1.0	6.8
3425	5400	3425	57118	8.7	-2.8	31.9	-0.7	1.6	6.9
3437.5	5400	3437.5	57122	8.9	-2.4	32.5	-1,1	1.5	6.9
3450	5400	3450	57125	11.4	-1.4	32.4	-0.4	1.0	6.8
3462.5	5400	3462.5	57109	11.4	-0.4	32,3	4.1	5.1	7.0
3475	5400	3475	57113	1 1 .1	0.3	32.4	1.4	4.1	7.2
3487.5	5400	3487.5	57112	11.9	0.5	32.7	-1.4	1.1	7.3
3500	5400	3500	57106	12.1	1.8	32.8	-2.7	-0.1	7.3
3512.5	5400	3512.5	57105	11.5	1.1	33.1	-3.3	0.3	7.4
3525	5400	3525	57104	10.7	2.0	32.9	-3.5	1.1	7.4
3537.5	5400	3537.5	57102	11.1	1.9	33.4	-3.7	0.8	7.4
3550	5400	3550	57103	12.6	1.7	33.4	-3.5	2,8	7.5
3562.5	5400	3562.5	57099	15.7	2.8	33.5	-9.2	1.7	7.7

Easting	Northing	# 1. Station	# 2.	#3.	# 4.	# 5.	# 6.	#7.	# 8 .
3575	5400	3575	57097	17.5	37	33.0	-12.6	0.6	76
3587.5	5400	3587 5	57097	19.9	3.1	33.0	-12.0	-0.0	7.0
3600	5400	3600	57089	21.2	3.1	32.8	-10.2	2.6	7.4
3612.5	5400	3612.5	57087	23.5	5.1	32.6	-5.2	2.0 4 7	7.5
3625	5400	3625	57089	23.3	43	32.3	-3.7	4.7	7.5
3637.5	5400	3637.5	57088	23.9	3.5	31.8	3.5	7.0	7.0
3650	5400	3650	57087	20.7	-0.5	31.4	0.1	3.5	81
3662.5	5400	3662.5	57086	18.7	-19	31.1	-0.3	2.9	8 1
3675	5400	3675	57083	18.0	-17	30.9	1.0	3.0	82
3687.5	5400	3687.5	57083	13.7	-4.5	30.7	-1.5	2.3	81
3700	5400	3700	57087	13.5	-4.7	31.3	0.1	4.8	82
3712.5	5400	3712.5	57081	15.1	-3.0	30.9	-0.6	4.8	8.2 8.2
3725	5400	3725	57083	13.7	-3.8	30.6	-5.8	1.0	83
3737.5	5400	3737.5	57081	9.6	-6.7	30.1	-12.0	-2.5	8.5 8.6
3750	5400	3750	57070	5.7	-8.7	29.7	-18.3	-3.7	8.3
3762.5	5400	3762.5	57079	7.7	-6.8	30.5	-15.6	-2.4	8.1











