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TPR  
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VOL 1

DATA PROCESSING REPORT  
SURVEY:- BASS BASIN  
T 14P  
CUE MINERALS N.L.

COMPANY ADDRESS:- 17, QUEENSBRIDGE STR.,  
S. MELBOURNE.

BY

GEOPHYSICAL SERVICE INTERNATIONAL  
9 BYFIELD STREET,  
NORTH RYDE. N.S.W. 2113

PARTY 6860  
C. WILKINS  
DATE: SEPTEMBER, 1982

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## SECTION I.

### INTRODUCTION

A seismic reflection survey was conducted by the M/V Lady Vilma in the Bass Basin off the South coast of Victoria, Australia (see Plate I) between 20th April and 8th May.

The survey covered 85 KM using the following shooting parameters:-

- Streamer configuration - 3200m cable with 96 groups equally spaced.
- Group length - 33.3m (20 hydrophones at 1.67 m)
- Shot interval - 33.3m (48 fold)
- Record length - 5 secs
- Sample period - 2 ms
- Cable depth - 13 m average
- Filter settings - High cut and slope 128hz @ 72db/oct  
- Low cut and slope 8 hz @ 18db/oct
- Navigation - Maxiran by O.N.I.  
Geonav by GSI
- Airguns - 4075 cu.in. operating at 2000 p.s.i.  
(-51.2ms delay)
- Recording - DFS V, 9track, 96tr, 127 chn1, SEG B
- Shotpoints - Annotated at source position

Processing was carried out in G.S.I.'s Sydney office on an IBM computer.



## SECTION II

### EXPERIMENTAL WORK

Field data was received in May 1982. No tests were conducted on lines in this permit area. Instead parameters chosen from the tests conducted on Line BB82A-4 in the neighbouring block T 18P were applied. The tests performed on this line are listed below for reference.

#### PREPROCESSING TESTS:

- True Amplitude Recovery Test on 2 field records with 5 recovery rates of Alpha - 3,4,5,6,7db/sec with t2 at 3.5 secs.
- F-K noise analysis on one field record:-
  - a) TAR only applied 6.0db/sec, T2 3.5secs.
  - b) TAR + Vef with +ve cut of 7ms/trace -ve cut of 4ms/trace.
  - c) " " 9 4
  - d) " " 11 4
  - e) " " 13 4
  - f) " " 15 4
- F-K noise analysis on one field record  
 Tar + pre deconvolution ramp as below
 

Offset(m)	419	449	1979	3179
Start time(ms)	0	350	1650	2450
- A velocity analysis was run to determine the stacking velocity for the following tests.



The central function was supplied by the client as

Velocity(m/sec)	Time(secs)
1500	0
1500	100
2050	700
2300	1600
4300	5000

- Deconvolution pre stack test Sp 310-410  
Comparison of stacked sections produced with the following:-
  - a) Designature (V4) standard marine wavelet.
  - b) Whitening Deconvolution 2 filters 236 ms operators
  - c) Gapped Deconvolution 2 filters 216 ms op + 24 ms gap.
  - d) Gapped Deconvolution 2 filters 176 ms op + 64 ms gap.
  
- Cable Configuration test - Stacked sections were produced using the following trace configurations:-
  - a) 48 trace 48 fold using 2:1 mix (no VEF)
  - b) 48 trace 48 fold using alternate traces + VEF (+11,-4ms/tr)  
Here the Vef is performed on the 96 traces for maximum effect before decimating to 48 traces.
  - c) 96 trace 48 fold + VEF (+11,-4ms/tr)
 Designature was used on all these versions
  
- Demult Test comparing stacked data with and without its application.



POST PROCESSING TESTS

- Post Stack Deconvolution comparison over 100 Depthpoints between
  - a) No deconvolution
  - b) Gapped deconvolution 2 filters, length 216 ms + 24ms gap
  - c) Gapped deconvolution 2 filters, length 208 ms + 32ms gap
  - d) Gapped deconvolution 2 filters, length 180 ms + 60ms gap
  - e) Gapped deconvolution 1 filters, length 216 ms + 24ms gap
  - f) Gapped deconvolution 3 filters, length 216 ms + 24ms gap
- Filter Analyses - SP 310-410

Passband (hz)	Passband (hz)
	30-60
out-out	35-70
10 -60	40-80
0 -10	45-90
10 -20	50-100
15 -30	55-110
20 -40	60-120
25 -50	20-60

- Scaling test with 3 sets of parameters SP 310-410
  - a) 200 ms gates      start time 200ms
  - b) 500 ms gates      "
  - c) 1000 ms gates    "
  - d) 1500 ms gates    "
  - e) 2000 ms gates    "
  - f) 4700 ms gates    "



SECTION III

PRODUCTION PROCESSING

RESAMPLE Minimum phase resample 2 to 4 ms.

TAR Inelastic attenuation parameter alpha = 7 db/sec  
(exponential factor)  
T2 (cut off time for alpha) = 5.0 secs.

STATIC - 51.2 ms airgun delay  
+ 13 ms shot and streamer static correction.

PDR

Offset(m)	496	529	1896	3495
Ramp length(ms)	0	500	1900	3000

DSG V4 Standard Marine Wavelet

NTG A near trace gather section was produced at this stage as an internal QC and also to assist in the velocity interpretation stage.

VELSCANS 5 Depthpoint Velocity Analyses to determine the stacking function (1 per 3.0km) using the following parameters:-

Stack ramp - Offset(m)	400	467	1670	3479
No.Traces	2	3	21	48
Start Time	0	500	1800	3400
Filter Passband(hz)	10-60			
Time (Secs)	0-5.0			

Central Function for velocity fan

Velocity(m/s)	1480	2000	2500	3700	4800
Time (secs)	80	400	1700	2500	5000



Scan Gates	Time(sec)	Smash(dps)	+/-dip(ms/tr)
	0-400	3	3
	400-800	3	4
	800-1200	5	6
	1200-1800	5	8
	1800-2500	5	8
	2500-3500	5	8
	3500-5000	5	8

NMO Normal Moveout application using stacking functions derived from velscans above

RAMP First break suppression application  
Ramp on

<u>Time (secs.)</u>	<u>Trace</u>	<u>Offset (metres)</u>
0	2	427
0.5	3	495
2.4	26	2029
3.5	48	3495

TVD Deconvolution Post Stack - gapped, non-whitening

Start time of the first gate = 200 msec

Maximum time of the last gate = 4900 msec

Number of gates with 25% overlap = 2

Operator = 208 ms

+32 ms gap



-VF Time Variant Filtering  
All lines were filtered with the following passband

<u>Time(secs)</u>	<u>Passband(hz)</u>
0.0	15-65
0.8	15-60
1.5	12-50
2.2	10-45
3.0	10-40
5.0	10-35

TVS Time Variant Scaling  
The lines were scaled with 2 x 600, 2 x 1500 ms gates,  
50% overlap, start time 300ms

DISPLAY Horiz. Scale 24 trace / inch (1:101590)  
Vert. Scale 5.0 in/ sec  
Mode WTVAR 10% Bias

TAPES Field tapes and raw stack tapes were shipped  
Geomagnetics Sydney.  
All paper data from field operations was shipped to  
PETRECON in Hobart, Tasmania, during September 1982.

Respectfully submitted,

Cherry Wilkins  
Processing Party Chief



## APPENDIX A

### TRUE AMPLITUDE RECOVERY (TAR)

The TAR process is applied to digital field records to produce output records on which relative amplitudes of reflections on each trace are approximately true and traces evenly modulated. This consists of removing the gain imposed on the field records by the DFS V binary Gain control system and correcting for inelastic attenuation and spherical divergence losses.

### VELOCITY FILTERING (VEF)

Velocity filtering is a multichannel process. Multichannel filtering is a two-dimensional frequency-wavenumber filtering operation that can be used to discriminate against specified velocities on pre-stacked data or against specified dips on stacked data.

Velocity filtering processes transform the data from the space time (X-T) domain to the frequency-wavenumber (F-K, where K = reciprocal of wavelength) domain where the filter is applied. After filter application the process transforms back to the X-T domain for further conventional process applications.

The apparent velocity of noise must be adequately separated from the primary signal for the process to be effective. Examples of noise alignment that can be removed are hard bottom refraction, mud roll and cable jerk. These types of noise alignments have a velocity slower than primary signal or have a dip opposite from the primary.

A window of primary dip zones to keep is specified and dips outside this window are rejected.



A linear event in the X-T domain (implying constant velocity), appears as a linear event in the F-K domain where lines of constant velocity pass through the origin. Thus, a multitude of noise events, with the same velocity, at various times on the input record join on the F-K plane into a single event. In general seismic reflections (signal) have higher apparent velocities than noise propagating horizontally in a direct path from source to receiver; therefore, recorded signal appears in a different region of the F-K plane from the noise.

This provides the basis for signal-to-noise enhancement used in velocity filtering. The process is analogous to muting in X-T.

Aliasing both in the frequency and wavenumber axes can be predicted from the time sampling period and the spatial sampling (or group interval) of the input data. Spatial sampling determines, to a large extent, the effectiveness of the process. Velocity filtering attenuates some portions of aliased events. However, when aliased noise overlays signal, velocity filtering loses its discriminating power.

#### DESIGNATURE (DESIG 4\*)

Designature is a generic name for processes which attempt to replace an arbitrary source wavelet convolved with the reflection sequence with a shorter wavelet of improved resolving capability.

DESIG 4 is the particular designature process in the current VELFILT program and provides an alternative to conventional pre-CDP stack deconvolution (TVD). DESIG 4 is a multichannel process, like VELFILT that can use the entire record to estimate the wavelet, whereas TVD is a single channel process that only uses a portion of a trace to design an operator. While TVD is time and offset-variant DESIG 4 is not time-variant.



DESIG 4 can better account for the source and receiver ghosts found in marine data than TVD can.

Once the signal-to-noise ratio of the primary events is improved by velocity filtering, designature is applied in the common source point domain. Designature estimates the source wavelet from the seismic traces and attempts to collapse it to a zero phase pulse.

The source domain is chosen since all traces originate from the same source.

#### PREDECONVOLUTION RAMP (PDR)

PDR is the process whereby first arrival unwanted noise at the front end of seismic records is removed. This is applied prior to deconvolution design.

#### TIME VARIANT DECONVOLUTION (TVD)

The purpose of TVD is to take reverberating series of wavelets and reduce them to the time domain spike and this implies normalising the frequency spectrum. At the same time TVD is desirable to collapse and stabilise wavelet shapes from broad or variable input wavelets.

TVD is accomplished by the application of one or more filters designed from individual data trace autocorrelation functions.

Gapped TVD is the process of deconvolution without total spectral whitening. This is opposed to Spike TVD which gives total spectral whitening. This means the frequency spectrum in Gapped deconvolution will show that the high frequency noise area is not amplified.

\* Trademark of Texas Instrument Inc.



#### VELOCITY ANALYSIS- VELSCAN

As part of any velocity analysis routine, static corrections to compensate for shot and cable depth, and multiplexor delays are applied.

GSI's VELSCAN Velocity Module is a discrete Velocity Analysis mode making use of advanced picking logic to generate events as functions of time, amplitude, moveout and dip. The event picking proceeds in the following manner:

- . NMO corrections corresponding to a series of moveout functions are applied to a set of depth point traces. For each moveout function, the NMO-corrected traces are stacked. The resulting traces consist of amplitudes as functions of time and moveout.
- . Identical operations are applied to adjacent depth points, adding the dimension of space.
- . Dip is applied and for each value of dip, the traces are stacked across depth points. The result is a set of amplitudes as functions of time, moveout and dip.
- . An event is located by searching for an amplitude extremum in the time, moveout and dip domains. An extremum may be either a maximum or minimum; that is, both peaks and troughs are picked. The event attributes of time, amplitude, moveout and dip are assigned to the centre depth point.

#### NORMAL MOVEOUT CORRECTIONS (NMO)

Reflection arrival times at the surface, from a horizontal reflecting interface, increase with offset from seismic source in a predictable manner known as the normal moveout effect. NMO at a given location is a function of offset, depth to the reflector and the velocity of the medium between the reflector and the surface.

NMO corrections remove the NMO increase in reflection times with offset (or spread geometry) and reduce all reflection times to the value they would have if source and receiver were coincident.



NMO corrections involve some stretching of the data. This is greatest at early record times but decreases with increasing record time. In order to avoid gross distortion at early record time ramps are applied to zero out the early part of the traces where NMO is excessive and to phase in the NMO corrections gradually.

#### COMMON DEPTH POINT STACK (CDP)

The common depth-point stack is the summation of all the traces of a common depth point into one stacked output trace for each depth point. This summation is performed after the application of NMO and static corrections to each of the individual traces. If these corrections are appropriate then trace signals will reinforce whilst random noise will fail to reinforce. The improvement in signal-to-noise (S/N) ratio of a stacked trace compared to the input traces is theoretically equal to the square root of N, where N is the number of traces summed together. Thus, if the fold of stack is 48 fold, then the improvement is approximately 7.

In addition to improving the S/N ratio, stacking can also attenuate or suppress undesired reflection events such as multiple reflections. This is because an appropriately applied NMO correction will only partially correct multiple reflections so that they will not reinforce when summed but will suffer destructive interference to some degree.

In practice, the early live portion of the NMO output traces have more distortion than is acceptable. For this and possibly other reasons, a ramp function is applied to the input traces before summation. Each trace may have up to three ramps applied to it to accept or reject portions of the input trace as desired. Quite commonly short offset traces are rejected at depth to improve multiple attenuation.



To accommodate the varying summation, or fold, implicit in this, ramping a recovery scaler is applied to normalise the energy output level to that of the full fold stack.

#### TIME VARIANT FILTERING (TVF)

Filtering is commonly applied in a time variant manner to take account of the higher frequency content of the shallow seismic signal and the lower frequency content at depth when rejecting unwanted frequencies, or noise.

By appropriate filter design, unwanted frequencies may be attenuated, or removed, the most common application is the band-pass filter which discriminates against the high and low frequency spectrum of the input trace where no significant signal energy is present.

#### TIME VARIANT SCALING (TVS)

Time Variant Scaling (TVS) produces amplitude equalisation in a time variant manner down the seismic trace as well as from trace to trace. Several time gates with variable overlap can be used to compute time variant scalers for each gate to raise all gates to the same energy level.

Scalers computed for each gate are applied at the gate centre, with linear interpolation between gate centres.

Gate amplitudes are measured for a set of continuous gates on each trace and scalers are computed for each gate to make the amplitude constant or proportional to the amplitudes. The scalers are applied in a continuously time-varying manner.

APPENDIX B : TAPE INVENTORY

<u>VSN NUMBER</u>	<u>DATA TYPE</u>	<u>LINE NUMBER</u>	<u>SHOTPOINT RANGE</u>	<u>DEPTHPOINT RANGE</u>
500162	STKTRS	BC82A-1	1 - 359	1001 - 1812
500162	STKTRS	BC82A-2	1 - 657	1001 - 2408
500162	STKTRS	BC82A-3	1 - 362	1001 - 1818
500162	STKTRS	BC82A-5	1 - 375	1001 - 1844
500162	STKTRS	BC82A-7	1 - 796	1001 - 2686

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PROSPECT: BSOG                      LENGTH IN SECONDS: 5.0    SAMPLE RATE: 4 MSEC

LINE NUMBER	SHOTPOINT RANGE	DEPTHPOINT RANGE	DATA TYPE	VSN NUMBER
BC82A-1	1 - 359	1001 - 1812	STKTRS	500162
BC82A-2	1 - 657	1001 - 2408	STKTRS	500162
BC82A-3	1 - 362	1001 - 1818	STKTRS	500162
BC82A-5	1 - 375	1001 - 1844	STKTRS	500162
BC82A-7	1 - 796	1001 - 2686	STKTRS	500162

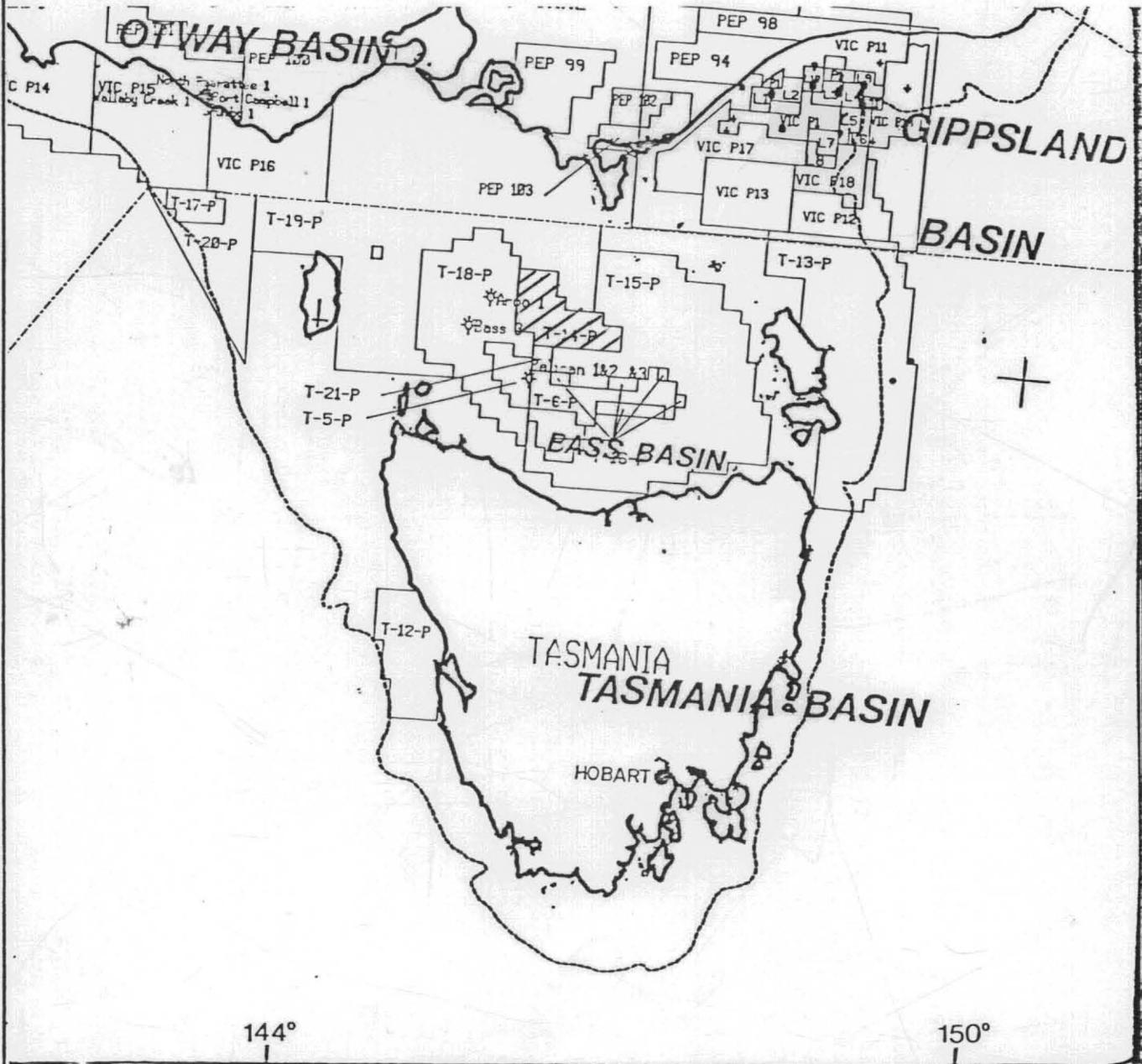
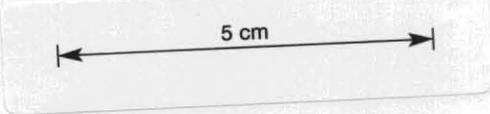
B-2

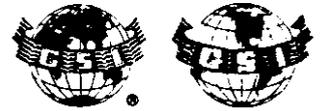


LOCATION MAP

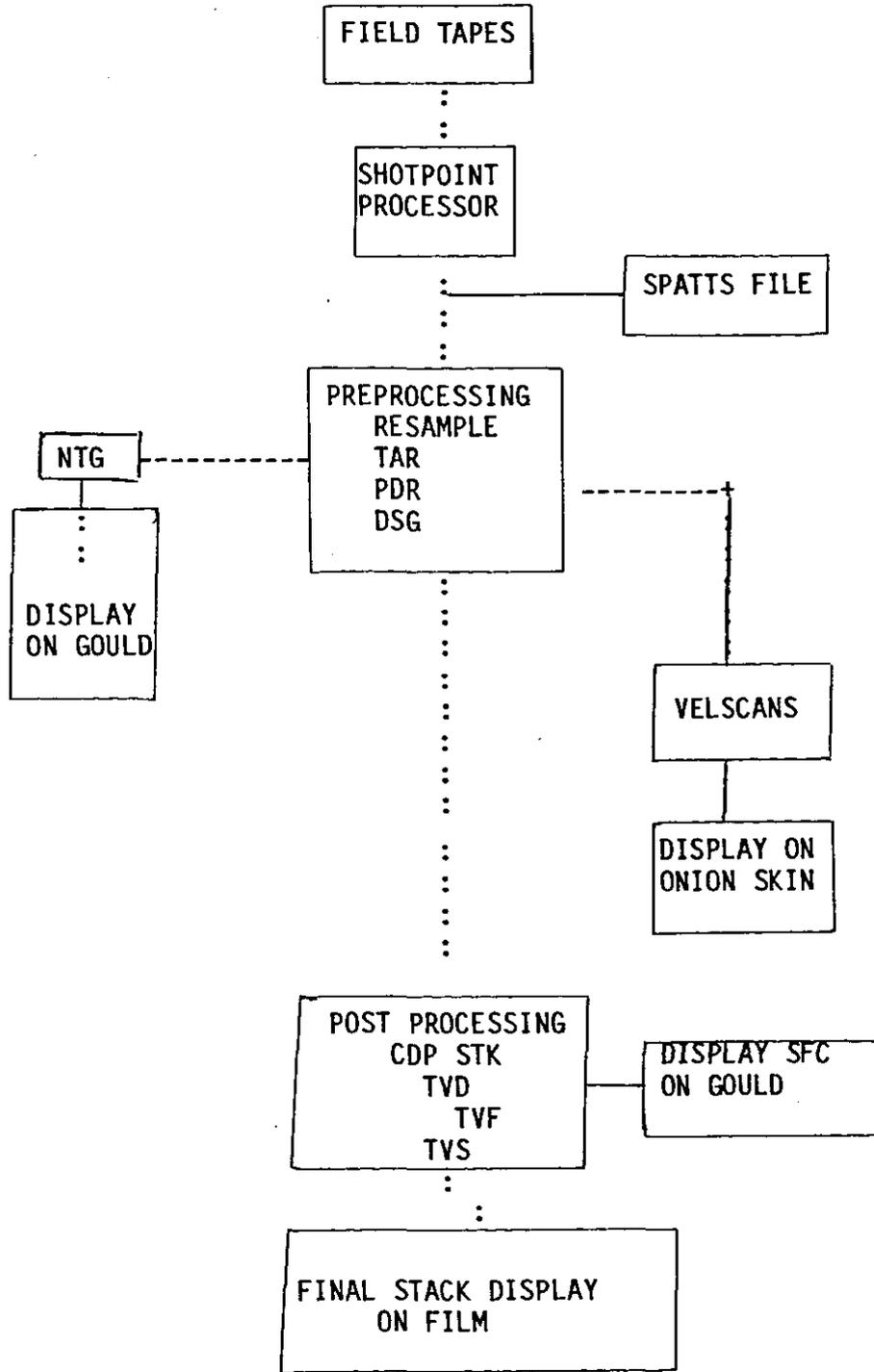
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1ST MAY 1982





PROCESSING FLOW DIAGRAM - BC82





OPERATIONS REPORT  
MARINE SEISMIC SURVEY  
VIC. P16/T14/18P

for

BASS STRAIT OIL & GAS  
17/23 QUEENSBRIDGE STREET  
MELBOURNE. VIC. 3000

by

GEOPHYSICAL SERVICE INCORPORATED  
P.O. BOX 106  
NORTH RYDE. N.S.W. 2113

PARTY 2993: M/V "LADY VILMA"  
RECORDING DATES: 31 MARCH, 1982 - 3 MAY, 1982.

T/14P PART

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2 A, B, C.	SEG B FORMAT
3 A, B, C, D, E.	DFS V RECORDING FORMAT
4	STREAMER CONFIGURATION
5 A, B, C.	AIRGUN ARRAY AND PERFORMANCE
6	OFFSET DETERMINATION
7	ANTENNA POSITIONS
8	FATHOMETER SCALE



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## SECTION I

### INTRODUCTION

A Marine Seismic Survey was conducted by Geophysical Service Incorporated using the M/V "Lady Vilma" in the Vic. P16/T14/18P area offshore Victoria for Bass Strait Oil and Gas between 31 March, 1982 and 3 May, 1982.

The survey consisted of 548.665 kilometres of 48 fold reflection coverage utilising a 3200 metre streamer under continuous tow in conjunction with a Pneumatic Acoustic Energy Source (Airguns). Operations were generally conducted 24 hours a day.

A total of 548.665 kilometres of both magnetic and gravity data was also recorded.

Recordings were made using one set of DFS V instruments with two 10 inch tape transports. Records were made on 12.7mm magnetic tape in 9 track, 1600 B.P.I. SEG B digital format (See Section II - Instruments).

The ship's location was determined by Maxiran (See Section II - Survey).



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## SECTION I

A. SURVEY VESSEL - M/V "Lady Vilma

Flag : Australian

Homeport : Sydney

Trade : Foreign Going

Owners : Australian Offshore Services

Call Sign : VLVA

Length : 57.9 metres L.O.A.

Breadth : 13.2 metres

Depth : 4.87 metres

Draft : 4.20 metres

Official Number : 355301

Gross Tonnage : 1272.18

Net Tonnage : 738.9

Main Engines : 4 x 1095 BHP (8 cyc. Diahatsu Diesels)

Electrical Power : 2 x 200 KW, 415V, 50HZ,  
3 Phase (Cat. D343 Main Drives)



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## SECTION I

B. KEY PERSONNEL

Party Managers	:	A. Welfare K. Webber
Vessel Controller	:	M. Otter
Instrument Engineers	:	A. Cairns S. Muller K. Jeffery
System Operators	:	D. Liddle T. Drew S. Miller S. Joyce M. Wilson D. Mason S. Gilbertson R. Jones D. Johnson S. Recoskie
Survey Operators	:	T. Hennessey C. Thiemann
Compressor Engineers	:	A. Cattle T. Hughes
Airgun Mechanics	:	R. Barnes K. Billington G. Stokes J. Vickery D. Trundle P. McCabe P. Gusterson F. Campbell
Masters	:	D. Rowett F. Ewell
Boat Manager	:	I. Taylor
Boat Administrator	:	C. Orr



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## SECTION II

A. INSTRUMENTS

One Texas Instruments DFS V system consisting of two analog modules, a controller module and two 10 inch tape transports were used for this survey. Recordings were made in SEG B format (See Plates 2 A, B, C.) at 1600 B.P.I.

Prior to the beginning of the survey, on 10 March, 1982, a full calibration and set of instrument performance tests as recommended by Texas Instruments were performed by onboard G.S.I. personnel. These tests, recorded on both magnetic tape and paper camera records, were couriered to Perth for immediate analysis. The instrument tests included dynamic range determination, equivalent input noise, gain accuracy, harmonic distortion, crossfeed and skew. All tests met with Texas Instrument standards.

The DFS V instruments were calibrated for 96 channel, 2 m/second sampling rate with a 128 HZ @ 72 db/octave High Cut Filter and a 8 HZ @ 18 db/octave Low Cut Filter.

Instrument tests were performed each day and the results examined in analog form onboard. These tests consisted of dynamic range determination, amplifier noise, automatic gain control, pulse test and skew checks.

Tapes recorded on each transport were frequently replayed on the other transport as a confirmation of readability.

All data was record on  $\frac{1}{2}$  inch Scotch brand magnetic tape. No problems were encountered resulting from



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## SECTION II

### A. INSTRUMENTS

bad tapes.

No problems were encountered with the DFS V instruments with constant monitoring of daily test to ensure true calibration. A high performance capability was maintained at all times.



## SECTION II

A. INSTRUMENTS - Instrument Details

Recording System	:	DFS V, Serial Number 705
Tape Format	:	SEG B, Phase Encoded, 1600 B.P.I.
Tape Speed	:	79.38 ips
No. Bytes/Data Scan	:	264
No. Words/Header (+ 16 from the Extender Header)	:	114 + 16
Channels (on tape)	:	96 Seismic + 4 Auxiliary Timing Word - Aux. Ch. 1 T/B Lengthened - Aux. Ch. 2 Waterbreak - Aux. Ch. 3
Gain Control Mode	:	I.F.P.
Sample Period	:	2 m/seconds
Record Length	:	6 seconds
Recording Delay	:	0 seconds
Gain Constants	:	24 db
Final Gain	:	114 db
Dynamic Range	:	84 db (Referred to input noise)
Filters - High Cut	:	128 HZ @ 72 db/octave
Low Cut	:	8 HZ @ 18 db/octave



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## SECTION II

B. ANCILLARY EQUIPMENT

## SERVO PROFILER

Manufacturer : E.P.C. Labs.

Model : 3210 S

Serial Number : 355

Source : Trace Number 92

Record Length : 4 seconds

Gain Mode (DFS V) : P.G.C.

Filters : Production Filters



## SECTION II

B. ANCILLARY EQUIPMENT

## FATHOMETER

Manufacturer : Simrad

Model : EA

Conversion Frequency : 1478 m/sec

Transducer Position in  
Relation to Navigation  
Antenna : 4 metres forward

Instrument Correction  
for Draft : 4.5 metres

Calibrated : July, 1981  
Port of Fremantle

The Fathometer data was collected on both analog chart  
and CMS navigation tape.



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## SECTION II

B. ANCILLARY EQUIPMENT

## CAMERA

Manufacturer : S.I.E.

Model : 10 C

Number of Channels : 64

Polarity : G.S.I. Normal, Positive  
Pressure Downbreak



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## SECTION II

### C. STREAMER

A G.S.I. manufactured 3187.8 metre (centre of group 96 to centre of group 1) streamer was utilised during this prospect. This streamer consisted of 48, 50 metre 'live' sections interspaced with 49, 16.6 metre 'extender' sections, all sections were connected together by quick coupling plugs. These groups were then connected at the instrument room patch panels to form 96, 33.3 metre 'live' groups. Each 'live' group contained 20 acceleration cancelling hydrophones connected in parallel.

Generally there were 6 nylon stretch sections located between group 96 and the vessel. These were used to attenuate the ship's generated noise. There were also 2 stretch sections connected between group 1 and the tailbuoy, these were used to attenuate tailbuoy 'jerk' noise. These stretch sections were connected to the tailbuoy by 250 metres of nylon rope.

Six depth transducers were positioned along the streamer at regular intervals. They were calibrated to the required streamer depth of 38 feet as the streamer was deployed.

Each transducer section contains a single hydrophone which is used as a waterbreak detector. Waterbreak returns from detector number six located between group 96 and the front end stretch, and waterbreak detector number five, located between groups 80 and 81 were recorded on both magnetic tape and camera records. The time measurement of the return was also recorded on the CMS tape and printer logs and was used to



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## SECTION II

### C. STREAMER

calculate the streamer offset.

The streamer offset was also determined by the CMS streamer offset sensor. This sensor fired a single airgun located near the centre of the array between DFS records. The CMS measured the arrival time of this shot at waterbreaks five and six and used this time to calculate the streamer offset.

The streamer offset would change during the line by +/- several metres as a result of the varying sea states and currents which caused slight variations in the stretch length of the stretch sections. The offset used during this survey varied between a maximum of 360 metres to a minimum of 325 metres.

The streamer depth control was maintained by proper ballasting and the use of remote control 'Cole' depth controllers. During the survey the streamer was controlled to an operating depth of 38 feet.

Tailbuoy bearings were checked and logged at regular intervals during each line.



## SECTION II

D. ENERGY SOURCE

G.S.I. airguns fitted with Pnu-con (Pneumatic Conservation) chambers were used as the energy source during this survey. The airgun unit consists of an upper air chamber and a lower air chamber, connected by an air passage through a movable shuttle. Another air passage links the upper chamber with the underside of the upper flange of the shuttle and this air passage is controlled by a solenoid valve. Air, at a pressure of 2000 P.S.I. (13.8 MPa) enters the upper chamber through its inlet forcing the shuttle closed. The shuttle is held firmly closed because the area of its upper flange is greater than the area of its lower flange. The main volume of air passes through the channel in the shuttle into the lower chamber. To fire the airgun, a command from the airgun control unit activates the solenoid and retracts a plunger, this permits air to pass through a port hole to the underside of the lower shuttle. This neutralises the downward pressure on the shuttle leaving only the upward pressure in the lower flange from the lower air chamber to the exhaust ports. The rapid expulsion of air creates the bubble and resultant pulse.

The Pnu-con chambers save a good deal of the air in the chamber instead of releasing it all, as did standard airguns. The Pnu-con chamber was developed after a mathematical model revealed that the airgun produces maximum acoustic output long before all its air escapes. The Pnu-con gun drops from 2000 P.S.I. to about 1000 P.S.I. when fired instead of dropping all the way to 200 P.S.I. as do standard guns.



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## SECTION II

### D. ENERGY SOURCE

The energy source used by the M/V "Lady Vilma" was a tuned airgun array of 4075 cubic inches total capacity. The array was designed for deep penetration and good resolution. This array has a broadband frequency output that extends below the normal low frequency band for seismic energy sources.

Attached, plates 5A, 5B and 5C are the diagrams showing airgun utilisation, spacing and displays of the amplitude and energy spectra of the 4000 cubic inch Pnu-con gun array.

The array includes three low pressure open ended air lines each side of the array so that the depth of the array could be monitored by means of static air pressure at all times. The array was ballasted with the use of plastic buoys to ride at 21 feet, +/- 3 feet.

TIGER, the Texas Instruments automatic airgun controller, monitored the firing of each airgun in the array. Individual gun firing times were continuously controlled to give phasing within +/- one millisecond for maximum pulse amplitude and front to back ratio.

The TIGER also performed a quality control function, by indicating with individual gun L.E.D. displays, the status of a gun if it was not operating correctly, either self fire or no fire. The airgun performance was logged on both the CMS navigation tape and printer log. The TIGER operates in conjunction with the CMS II system.



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SECTION II

D. ENERGY SOURCE

The airguns were maintained by G.S.I. personnel on line changes, so that throughout the survey the airgun array was up to specifications.



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SECTION II

D. ENERGY SOURCE

4000 CUBIC INCH AIRGUN ARRAY

Operating Volume	:	4075 cubic inches
Total Spare Volume	:	770 cubic inches
Operating Pressure	:	1800-2000 P.S.I.
Operating Depth	:	21 feet, +/- 3 feet
Timing Control	:	TIGER
Firing Delay	:	51.2 m/seconds
Compressors	:	5 Chicago Pneumatic PB-44-300B 2 Sullair Screw Type
Setback (distance from Argo Antenna to Centre of Array)	:	61.45 metres
Distance from Stern to Centre of Array	:	29.27 metres



## SECTION II

E. SURVEY

The prime navigation system used during the survey was Maxiran, a precise range to range system owned and operated by Offshore Navigation Australia (O.N.A.).

The Maxiran equipment was calibrated onshore before the start of the prospect. The accuracy of the survey net was verified at sea by baseline crossings and three way fixes.

The Maxiran mobile monitor was interfaced to G.S.I.'s Configurable Marine System II (CMS II). The CMS system consisted of a Texas Instruments 980B computer, two Texas Instruments 990 computers, a system co-ordinator, Tiger airgun controller, satellite receiver, two Houston trackplotters (one each in the instrument room and the bridge) and two digi-data, 800 B.P.I.  $\frac{1}{2}$  inch tape transports.

The CMS II function was survey control and navigation data recording. Shotpoint positioning was done in the 'distance' mode with the CMS II triggering the DFS V instruments and also the Tiger airgun controller unit to fire the airguns at every 33.3 metres of travel along the preplotted survey lines. Occasional changes to 'time' mode were made when the real time shotpoint became displaced with respect to the pre-plotted shotpoint.

The CMS II satellite navigation system was utilised as an onboard Q.C. check of the Maxiran positioning. This satellite data was recorded on the CMS navigation tape.



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SECTION II

E. SURVEY

Navigation control was good throughout the prospect. Fixes were derived from ranges generated by the Maxiran system. Velocities were computed by the onboard CMS (Sonar) system.

O.N.A. will submit a separate navigation report.



## SECTION II

E. SURVEY - Survey Details

Primary System	:	Maxiran
Type	:	Range to Range
Survey Company	:	O.N.A.
Operating Frequency	:	429 MHz
Ship's Antenna Height	:	23.62 metres (STB)
(above sea level)		25.12 metres (PORT)
Antenna Location from Stern	:	29 metres

BASE STATION LOCATIONS

Mt. Chapple Base 1	Elev. 550
	Lat. 038 39 49.92S
	Long. 143 27 01.07E
Liptrap Base 2	Elev. 170
	Lat. 038 51 05.51S
	Long. 145 57 54.92E
Mary Base 3	Elev. 131
	Lat. 039 58 30.06S
	Long. 143 55 24.48E
Mt. Cameron West Base 4	Elev. 168
	Lat. 040 51 55.95S
	Long. 144 42 28.75E



## SECTION II

F. GRAVITY

The La Coste & Romberg air sea gravimeter is essentially a spring gravimeter. Changes in dial readings (analog gravity counter readings) are caused by changes in the elongation of the gravimeter spring induced by variations in acceleration from point to point. The differences in analog gravity are converted to units of acceleration (milligals) by multiplying the dial units change by a calibration constant. The calibration constant is determined by the manufacturer by reading the gravimeter on 'bases' where the absolute value of gravity has been previously determined (by falling body measurements, by observations of pendulum periods or by differences in readings from previously calibrated gravimeters) and dividing the known difference in milligals by the observed difference in dial units to obtain a calibration factor (milligals/dial unit).

The deduction of gravity at sea is made by making a measurement at a known location (the dock for instance), subtracting this reading from the reading at sea, multiplying the difference by the calibration factor to convert it to milligals and adding the difference in milligals algebraically to the known dock value.

A 'K check' and still gravity readings were taken before the survey commenced while the vessel was alongside the main wharf at Stoney Point. Base gravity readings were also taken at this time using an independent gravity meter.



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## SECTION II

### F. GRAVITY

All gravity was recorded on CMS tape at 10 second intervals and on analog strip chart recorders. Two analog strip chart recorders were utilised, one recording the acceleration forces (both along and across track) and the other recording gravity (green), spring tension (orange), cross coupling (red) and average beam position (black).

Gravity and spring tension readings along with the appropriate time (GMT) and shotpoint were logged on the stripcharts and CMS operator's logs at frequent intervals.



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## SECTION II

F. GRAVITY

## GRAVIMETER

Manufacturer : La Coste & Romberg

Serial Number : S-48

Sample Period (onto tape): 10 seconds

Analog Time Marks : 1 minute intervals

Analog Shotpoint Marks : 10 shotpoints



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## SECTION II

G. MAGNETICS

G.S.I. uses Proton Precession Magnetometers to make total force measurements at sea. Electrons spinning around an atomic nucleus have properties of circular electric current and each electron acts as a tiny magnet. The spin axis of the electrons around the nucleus is oriented by the ambient earth's field. If earth's ambient field is over-ridden by a strong, artificial field transverse to it, the axis will be deflected towards the artificial field. When the artificial field is removed, the electrons will precess back towards earth's ambient field. The precession frequency is  $f = F/2$  where  $F$  is earth's field and 2 is the Gyro-Magnetic ratio. The source of Protons is normally kerosene or JP-4 Jet fuel, each having a high concentration of hydrogen nuclei (Protons). The Gyro-Magnetic ratio of hydrogen is 23.4875 y/HZ.

Data was sampled every 6 seconds by the Magnetometer and recorded onto CMS tape every 10 seconds.

No analog strip chart was available for this survey but readings were logged at frequent intervals on the CMS operator's logs showing shotpoint, time (GMT) and Magnetometer reading during each line.



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## SECTION II

G. MAGNETICS

## MAGNETOMETER

Manufacturer : Varian

Model Number : V4970

Tuner Serial Number : 909670

Distance from Stern to  
Sensor : 270 metres



## SECTION III

A. OPERATIONS DISCUSSION

This survey was conducted in three shooting periods, 31 March - 2 April, 20 April - 23 April and 2 May - 3 May, 1982. The breaks in production were due to either periods of bad weather or a continuation of another client's survey work in the same area.

Typical seasonal weather conditions for the Bass Strait area were experienced. Rough sea conditions caused 86 hours of weather downtime during the survey.



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## SECTION III

B. PROSPECT DETAILS

<u>DATE</u>	<u>LINE</u>	<u>CHARGEABLE</u> <u>SP</u>	<u>CHARGEABLE</u> <u>KMS</u>	<u>COMMENTS</u>
31 Mar	OMQ82-08	0495	16.500	Complete
1 Apr	OMQ82-04	0691	23.033	Complete
	OMQ82-02	0810	27.000	Complete
	OMQ82-15	0585	19.500	Complete
	OMQ82-13	0556	18.533	Complete
	OMQ82-11	0570	19.000	Complete
	OMQ82-09	0534	17.800	Complete
	OMQ82-07	0880	29.333	Complete
2 Apr	OMQ82-05	0716	23.867	Complete
	OMQ82-03	0540	18.000	Complete
	OMQ82-01	0391	13.033	Complete
END PART OF P16				
20 Apr	BB82A-05	0303	10.100	Complete
	BB82A-03	0261	08.700	Incomplete
21 Apr	BB82A-01	0285	09.500	Complete
	BB82A-03A	0101	03.367	Complete
	BB82A-02	0708	23.600	Complete
	BB82A-07	0361	12.033	Complete
22 Apr	BB82A-09	0220	07.333	Complete
	BB82A-11	0315	10.500	Complete
	BB82A-13	0330	11.000	Complete
	BB82A-15	0366	12.200	Complete
	BB82A-04	0665	22.167	Complete
	BB82A-06	0426	14.200	Complete
END OF 18P				
23 Apr	BC82A-05	0375	12.500	Complete
	BC82A-03	0362	12.067	Complete
	BC82A-01	0359	11.967	Complete
	BC82A-02	0657	21.900	Complete
	BC82A-07	0796	26.533	Complete
END OF T14				



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## SECTION III

B. PROSPECT DETAILS

<u>DATE</u>	<u>LINE</u>	<u>CHARGEABLE</u> <u>SP</u>	<u>CHARGEABLE</u> <u>KMS</u>	<u>COMMENTS</u>
2 May	OMQ82-14	0781	26.033	Complete
	OMQ82-16	0360	12.000	Complete
	OMQ82-12	0585	19.500	Complete
3 May	OMQ82-10	0550	18.333	Complete
	OMQ82-06	0526	17.533	Complete

END OF P16



## SECTION III

C. STATISTICS

First Recording Day : 31 March, 1982

Last Recording Day : 3 May, 1982

Number of Kilometres : 548.665

Number of Lines : 33

Number of Shotpoints : 16460

Total Number of Tapes  
Used : 282

Seismic Data Shipped To : G.S.I. Sydney

Navigation Data Shipped  
To : G.S.I. Dallas



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SECTION III

D. PERMITTING

The Marine Operations Centre, Canberra was advised as to the ship's location throughout the survey to enable the necessary navigation warnings to be issued.



## SECTION III

E. FIELD TAPE LOG INVENTORY

DATE	TAPE NO.	LINE NO.	SHOTPOINTS
31 MAR 82	637240	OMQ82-08	001-063
	637241		064-128
	637242		129-193
	637243		194-258
	637244		259-323
	637245		324-389
	637246		390-454
	637247		455-495
1 APR	637248	OMQ82-04	001-063
	637249		064-128
	637250		129-193
	637251		194-258
	637252		259-323
	637253		324-388
	637254		389-453
	637255		454-518
	637256		519-583
	637257		584-649
	637258	650-691	
	637259	OMQ82-02	001-063
	637260		064-128
	637261		129-193
	637262		194-258
	637263		259-324
	637264		325-389
	637265		390-454
	637266		455-519
	637267		520-584
637268	555-649		
637269	650-714		



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1 APR	637270	OMQ82-02	715-779
	637271		780-810
	637272	OMQ82-15	001-063
	637273		064-128
	637274		129-193
	637275		194-258
	637276		259-323
	637277		324-388
	637278		389-453
	637279		454-519
	637280		520-584
	637281		585-585
	637282	OMQ82-13	001-063
	637283		064-128
	637284		129-193
	637285		194-258
	637286		259-323
	637287		325-388
	637288		389-455
	637289		456-520
	637290		521-550
	637291	OMQ82-11	001-064
	637292		065-130
	637293		131-196
	637294		197-262
	637295		263-328
	637296		329-394
	637297		395-459
	637298		460-524
	637299		525-570



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1 APR	637300	OMQ82-09	001-063
	637301		064-129
	637302		130-195
	637303		196-261
	637304		262-327
	637305		328-393
	637306		394-459
	637307		460-525
	637308	EOL	526-534
	637309	OMQ82-07	001-064
	637310		065-130
	637311		131-196
	637312		194-262
	637313		263-328
	637314		329-394
	637315		395-411
	637316		412-477
	637317		478-543
	637318		544-609
	637319		610-675
	637320		676-741
	637321		742-806
	637322		807-871
	637323	EOL	872-880
2 APR	637324	OMQ82-05	001-064
	637325		065-129
	637326		130-194
	637327		195-259
	637328		260-324
	637329		325-390



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2 APRIL	637330	OMQ82-05	391-456
	637331		457-522
	637332		523-588
	637333		589-654
	637334		655-716
	637335	OMQ82-03	001-064
	637336		065-129
	637337		130-194
	637338		195-259
	637339		260-324
	637340		325-390
	637341		391-455
	637342		456-520
	637343		521-540
	637344	OMQ82-01	001-064
	637345		065-129
	637346		130-194
	637347		195-259
	637348		260-324
	637349		325-390
	637350		391-391



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DATE	TAPE NO.	LINE NO.	SHOTPOINTS		
20 APR 82	646575	BB82A-5	001-063		
	646576		064-127		
	646577		128-193		
	646578		194-259		
	646579		260-303		
	646580		BB82A-3	001-063	
646581	064-129				
21 APR	646582	BB82A-1	130-195		
	646583		196-261		
	646584		NO RECORD		
	646585		271-335		
	646586		336-361		
	646587		BB82A-1	001-063	
	646588			064-129	
	646589			130-195	
	646590			196-260	
	646591		BB82A-3A	261-285	
	646592			202-265	
	646593			266-331	
	646594		BB82A-2	332-362	
	646595			001-	
	646596			BB82A-2	68-134
	646597				135-200
646598	201-266				
646599	267-331				
646600	332-396				
646601					



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21 APR	646602	BB82A-2	317-461
	646603		462-526
	646604		527-592
	646605	BB82A-2	593-658
	646606		659-708
	646607		DO NOT PROCESS
	646608		
	646609		
	646610		
	646611		
	646612		
22 APR	646613	BB82A-7B	001-063
	646614		064-129
	646615		130-195
	646616		196-261
	646617		262-327
	646618		328-361
	646619	BB82A-9	001-063
	646620		064-128
	646621		129-194
	646622		195-220
	646623	BB82A-11	001-063
	646624		064-129
	646625		130-195
	646626		196-261
	646627		262-315
	646628	BB82A-13	001-063
	646629		064-129
	646630		130-195
	646631		196-261
	646632		262-327
	646633		328-330
	646534	BB82A-15	001-064



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22 APR	646635	BB82A-15	065-130
	646636		131-196
	646637		197-263
	646638		263-328
	646639		329-366
	646640	BB82A-4	001-064
	646641		065-130
	646642		131-196
	646643		197-262
	646644		263-328
	646645		329-394
	646646		395-460
	646647		461-512
	646648		513-579
	646649		580-645
	646650		647-665
	646651	BB82A-6	001-064
	646652		065-130
	646653		131-196
	646654		197-262
	646655		263-328
	646656		329-394
	646657		395-426
23 APR	646658	BB82A-5	001-063
	646659		064-129
	646660		130-195
	646661		196-261
	646662		262-327
	646663		328-375
	646664	BB82A-3	001-063



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23 APRIL	646665	BC82A-3	064-129
	646666		130-195
	646667		196-261
	646668		262-327
	646669		328-362
	646670	BC82A-1	001-063
	646671		064-129
	646672		130-195
	646673		196-261
	646674		262-327
	646675		328-359
	646676	BC82A-2	001-063
	646677		064-129
	646678		NO RECORDS
	646679		133-198
	646680		199-264
	646681		265-330
	646682		331-395
	646683		396-460
	646684		461-525
	646685		526-591
	646686		592-657
	646687	BC82A-7	001-065
	646688		066-131
	646689		132-190
	646690		191-256
	646691		257-322
	646692		323-388
	646693		389-454
	646694		455-520
	646695		521-586
	646696		587-652
	646697		563-718
	646698		719-770
	646699		771-796



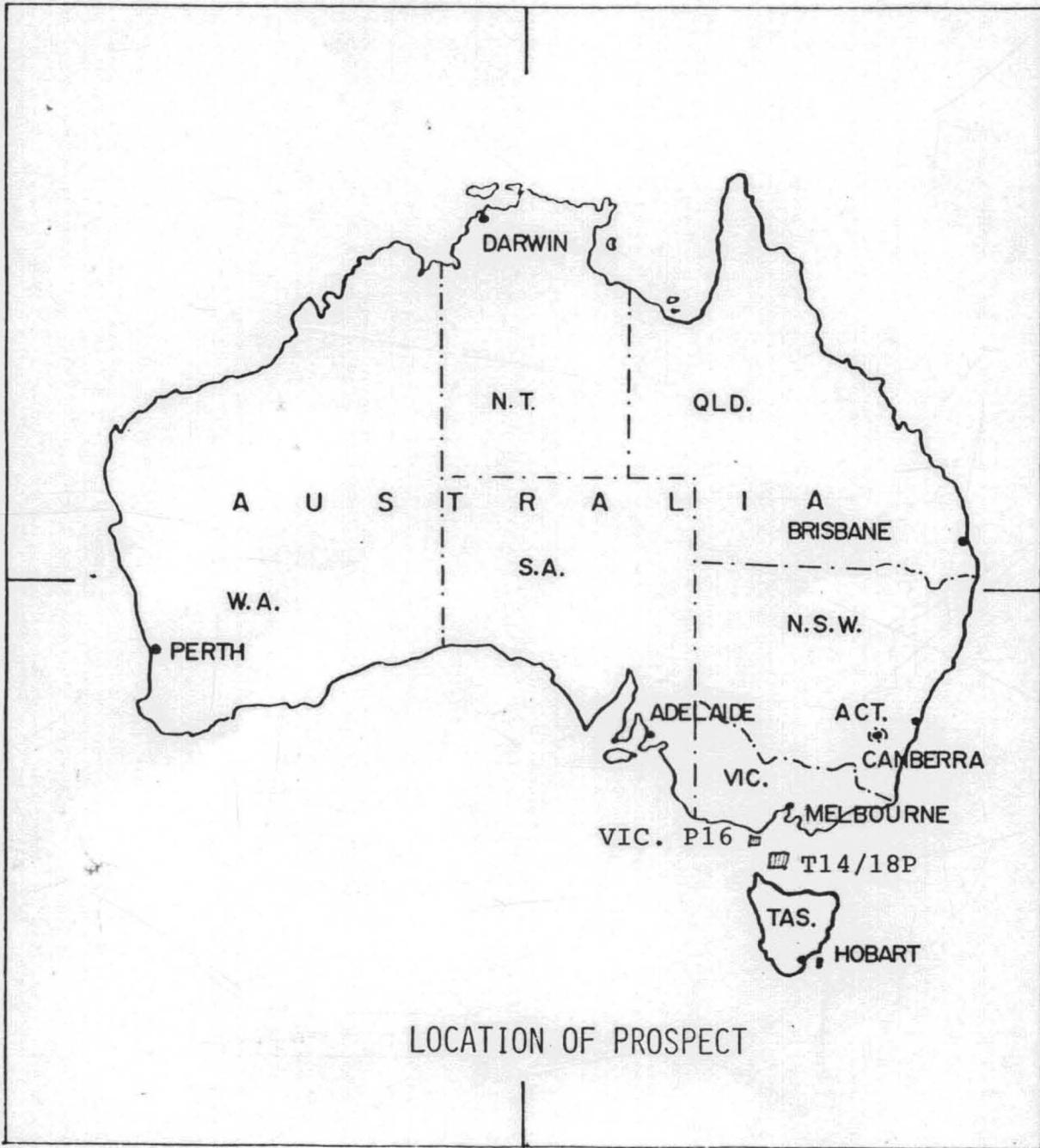
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2 MAY	646988	OMQ82-14	001-062
	646989		066-131
	646990		132-197
	646991		198-263
	646992		264-329
	646993		330-395
	646994		396-461
	646995		462-527
	646996		528-593
	646997		594-659
	646998		660-725
	646999		726-781
	647000	OMQ82-16	001-064
	647001		065-130
	647002		131-196
	647003		197-262
	647004		263-323
	647005		324-360
	647006	OMQ82-12	001-064
	647007		065-130
	647008		131-196
	647009		197-261
	647010		262-326
	647011		327-391
	647012		392-456
	647013		457-521
	647014		522-582
	647015		583-585
3 MAY	647016	OMQ82-10	001-063
	647017		064-129

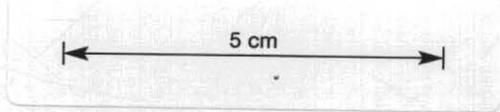


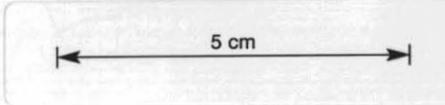
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3 MAY	647018	OMQ82-10	130-195
	647019		196-261
	647020		262-327
	647021		328-393
	647022		394-459
	647023		460-525
	647024		526-550
	647025	OMQ82-6	001-063
	647026		064-129
	647027		130-195
	647028		196-261
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	647030		328-393
	647031		394-459
	647032		460-325
	647033		526-526

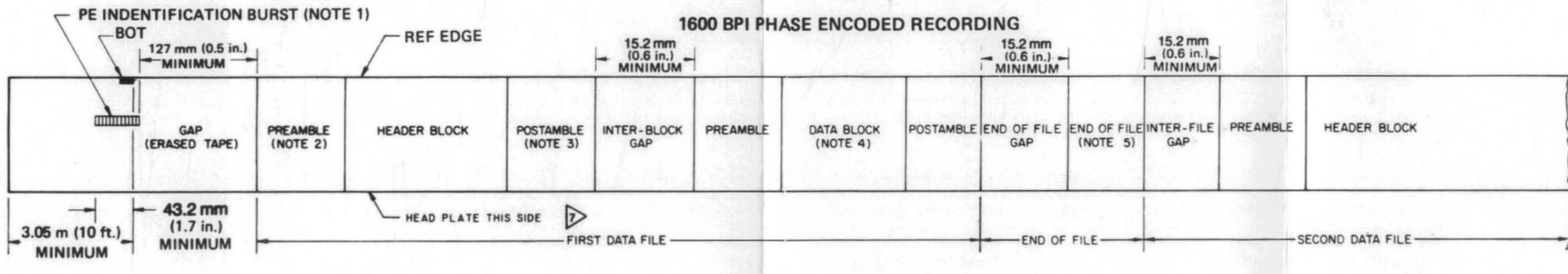


LOCATION OF PROSPECT

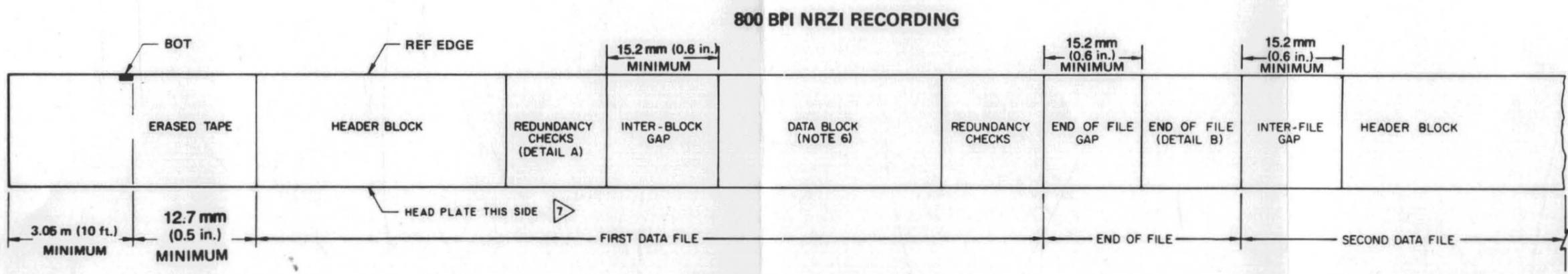




138062



TAPE MOTION (TAPE VIEWED OXIDE DOWN)



**A. NRZI REDUNDANCY CHECKS**

P	X		X		X					
0	X		X		X					
1	X		X		X					
2	X		X		X					
3	X		X		X					GAP
4	X		X		X					
5	X		X		X					
6	X		X		X					
7	X		X		X					

Labels: BIT NUMBER, LAST BYTE OF BLOCK. X INDICATES BINARY VARIABLE AND MAY BE ONE OR ZERO, DEPENDING UPON DATA, CRC, LRC.

**B. NRZI END OF FILE**

	0						0	
	0						0	
	0						0	
	0						0	
GAP	1						1	GAP
	0						0	
	0						0	
	1						1	
	1						1	

**C.**

P			4		
0			7		
1			6		
2			5		
3			3		
4			9		
5			1		
6			8		
7			2		

Labels: BIT NO., TRACK NO.

**NOTES**

- 1 - PE identification burst consists of 1600 flux reversals per inch in track P, all other tracks dc erased.
- 2 - Preamble consists of forty characters with 0-bits in all tracks followed by one character with 1-bits in all tracks. (Includes the parity track.)
- 3 - Postamble consists of one character with 1-bits in all tracks followed by forty characters with 0-bits in all tracks. (Includes the parity track.)
- 4 - Synchronous recording, inter-block gap is extended until timebreak is received. Data is stored in a buffer memory while the preamble is being written. First start of scan is written immediately after the preamble.

- 5 - PE end of file consists of 80 flux reversals at 3200 FCI in bits P, 0, 2, 5, 6, and 7. Bits 1, 3, and 4 are dc-erased.
  - 6 - Synchronous data recording: inter-block gap is erased until timebreak. First start of scan is then written.
- Order and location of tracks on tape, direction of magnetization and all other applicable specifications in accordance with IBM file S360-19, form A22-6862-4. The track number for each bit is shown in detail C. Track numbers are the same for 800 BPI NRZI and 1600 BPI PE. Tracks are numbered consecutively with track 1 the maximum distance from the head plate and track 9 adjacent to the head plate. See C below.

**LEGEND**

**F<sub>1</sub>-F<sub>4</sub>** File number - 4 BCD digits  
**Y<sub>1</sub>-Y<sub>4</sub>** Format Code - 4 BCD digits 0200 for SEG-B (with no header extension)  
**K<sub>1</sub>-K<sub>12</sub>** General constants entered from panel switches - 12 BCD digits  
**B<sub>1</sub>-B<sub>3</sub>** Bytes per multiplexer scan in data block - 3 BCD digits. Bytes per scan = 2.5 x no. of channels +14  
**M<sub>1</sub>-M<sub>6</sub>** Instrument serial number - 6 BCD digits.  
**R<sub>1</sub>,R<sub>2</sub>** Record length in multiples of 1.024 seconds. 00 if manual stop is selected.  
**J** Amplifier gain control mode -1001 is recorded to designate floating point gain control system.  
**LC<sub>1</sub>,LC<sub>2</sub>** Low-cut filter frequency (Hz) - 2 BCD digits. 00 (out), 03, 05, 08, 12, 18, or 27.  
 NOTE: 03 is actually 3.56Hz.  
 05 is actually 5.33Hz.  
**LS** Low-cut filter slope in multiples of 6 dB/octave - 1 BCD digit. Normally 3, (18dB octave) for DFS-V.  
**S<sub>1</sub>,S<sub>2</sub>** Notch (rejection) filter frequency - 2 BCD digits. 00 (out) 50, or 60 (for 60 or 16 2/3).  
**A** Alias filter frequency:  
 1 - 256Hz      4 - 64Hz  
 2 - 128Hz     8 - 32Hz  
**D** Channel identification code:  

BIT	TYPE		
0	1	2	CHANNEL
0	0	0	Unused channel
1	0	0	Waterbreak channel
0	1	0	Timebreak channel
0	0	1	Seis channel
0	1	1	Uphold channel
1	0	1	Time counter
1	1	1	Other

**Z** Record type:  
 8 - normal shot 4 } Not used  
 2 - test record 1 }  
**W<sub>N</sub>** Ones recorded for normal field timebreak recording. Zeros record if system operated from internal timebreak.

**T<sub>1</sub>-T<sub>14</sub>** 14 bit binary timing word  
 T<sub>14</sub> - 1 millisecond  
 T<sub>1</sub> - 8,192 seconds  
**Q<sub>N</sub>** Digitized output of A/D converter  
 Q<sub>s</sub> - sign (note 4)  
 Q<sub>1</sub> - 4096 millivolts  
 Q<sub>14</sub> - 0.50 millivolt  
**G<sub>N</sub>** Binary gain code for channel N. Least significant bit (6dB) is always 0 for quaternary coded IFP gain.  
**P** Vertical (byte) parity. Bit P is one if bits 0 - 7 of the same byte contains an even number of ones.  
**CH** Number of channels. Bit 6 of the four sync group bytes, indicates number of seismic data channels.  

BYTE	1	2	3	4
24 CH	0	0	0	0
36 CH	0	1	0	0
48 CH	0	0	0	1
Other	1	1	1	1

 See B, bytes per scan.  
 No. of data channels =  

$$\frac{\text{Bytes per scan}-14}{2.5}$$

Format conforms to the SEG standard specific values shown, such as filter settings, etc, are those of the DFS-V.

**I** Sample interval recorded according to the following table:  

BIT	SAMPLE INTERVAL			
4	5	6	7	INTERVAL
0	0	0	1	1 millisecond
0	0	1	0	2 milliseconds
0	1	0	0	4 milliseconds
1	0	0	0	8 milliseconds
1	0	0	1	0.5 milliseconds
1	0	1	0	1 millisecond
1	1	0	0	2 milliseconds

 All zeros for other sample intervals

**GC** Gain constant (fixed gain) recorded as a 4 - bit binary code. The most significant bit has a gain value of 2<sup>3</sup> (48dB); the least significant bit has a gain value of 2<sup>1</sup> (6dB). The least significant bit is recorded as a zero for the DFS-V.

**GW** Gain word recorded as a 4-bit binary code. 0000 is recorded when operating in floating point gain control. When operating in manual gain control, the most significant bit has a gain value of 2 (48dB) and the least significant bit has a gain value of 2<sup>1</sup> (6dB). The least significant bit is recorded as a zero for the DFS-V.

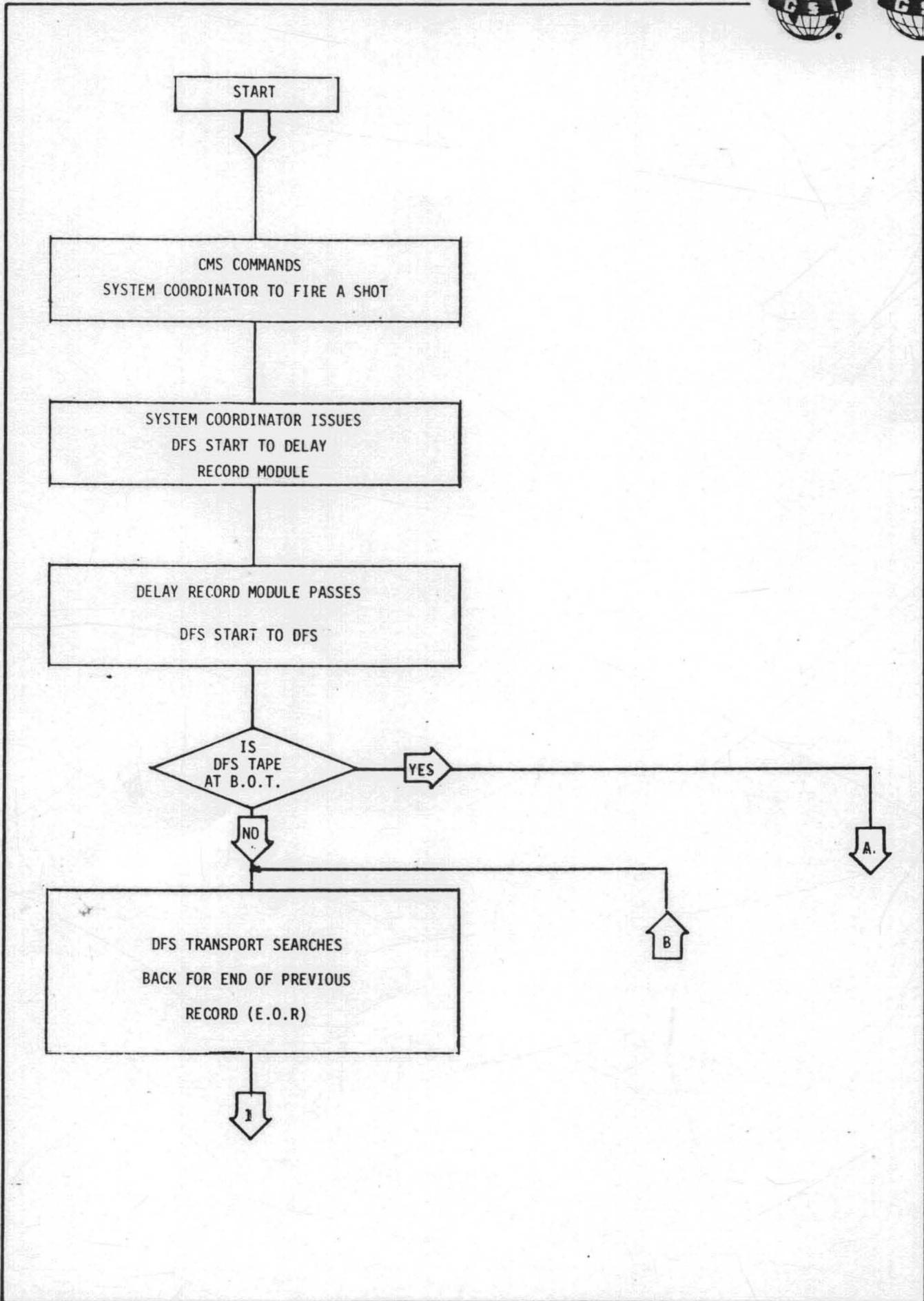
**NOTES**

- Auxiliary channel identification code assignments are as follows unless otherwise specified:  
 AUX 1 will always be the timing counter.  

28 or 60	Number of seis channels
	Channels other than 28 or 60
AUX 2 unused •	AUX 2 uphold
AUX 3 unused •	AUX 3 timebreak
AUX 4 uphold	AUX 4 unused
AUX 5 timebreak	AUX 5 unused

  - These AUX channels are not available for data and will always be recorded as zero in the data record.
- Additional externally supplied digital data may be recorded in the header block following byte 36+2n.
- Negative values are recorded in 1's complement code (standard) or 2's complement (optional).

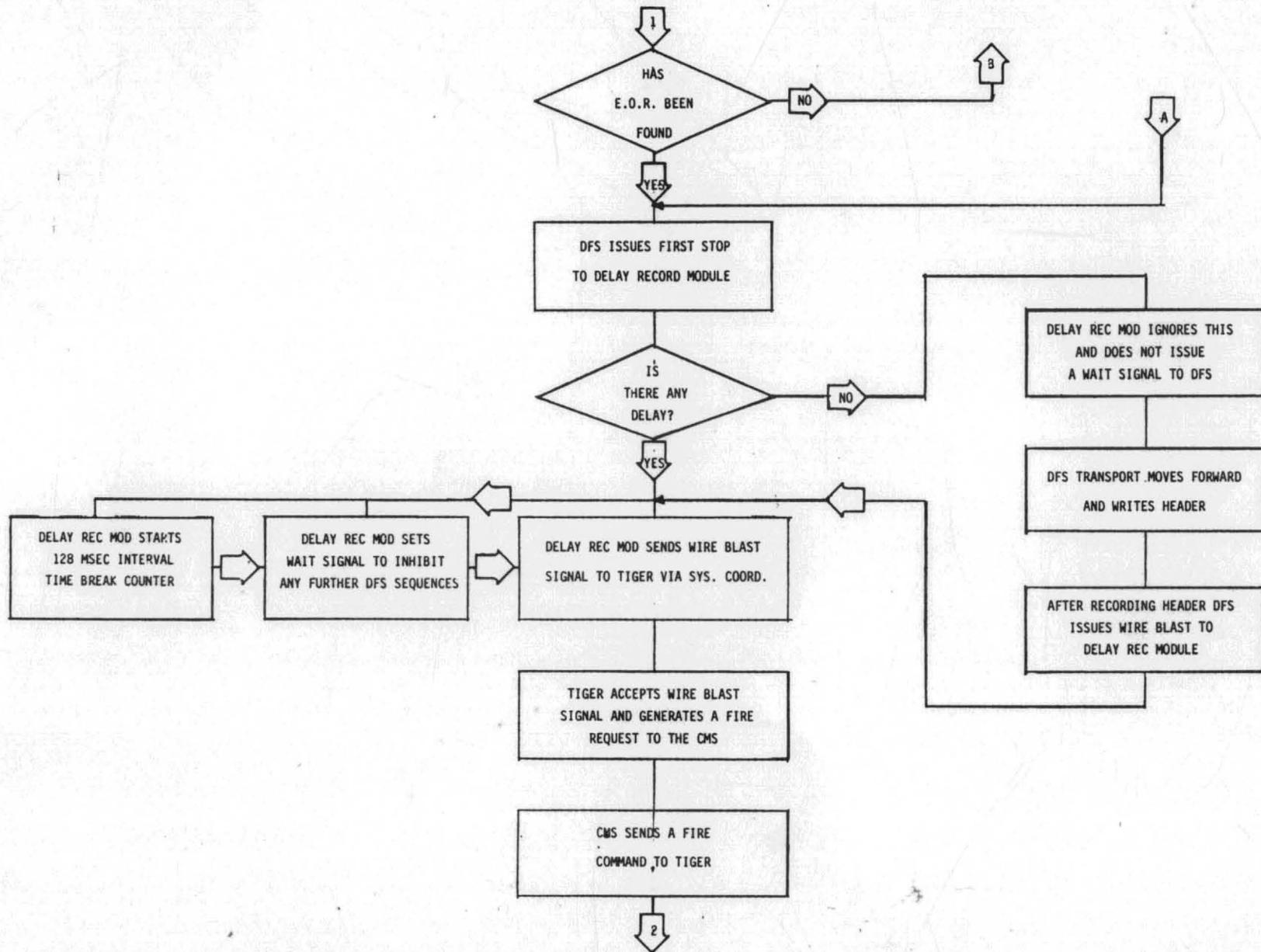






138066

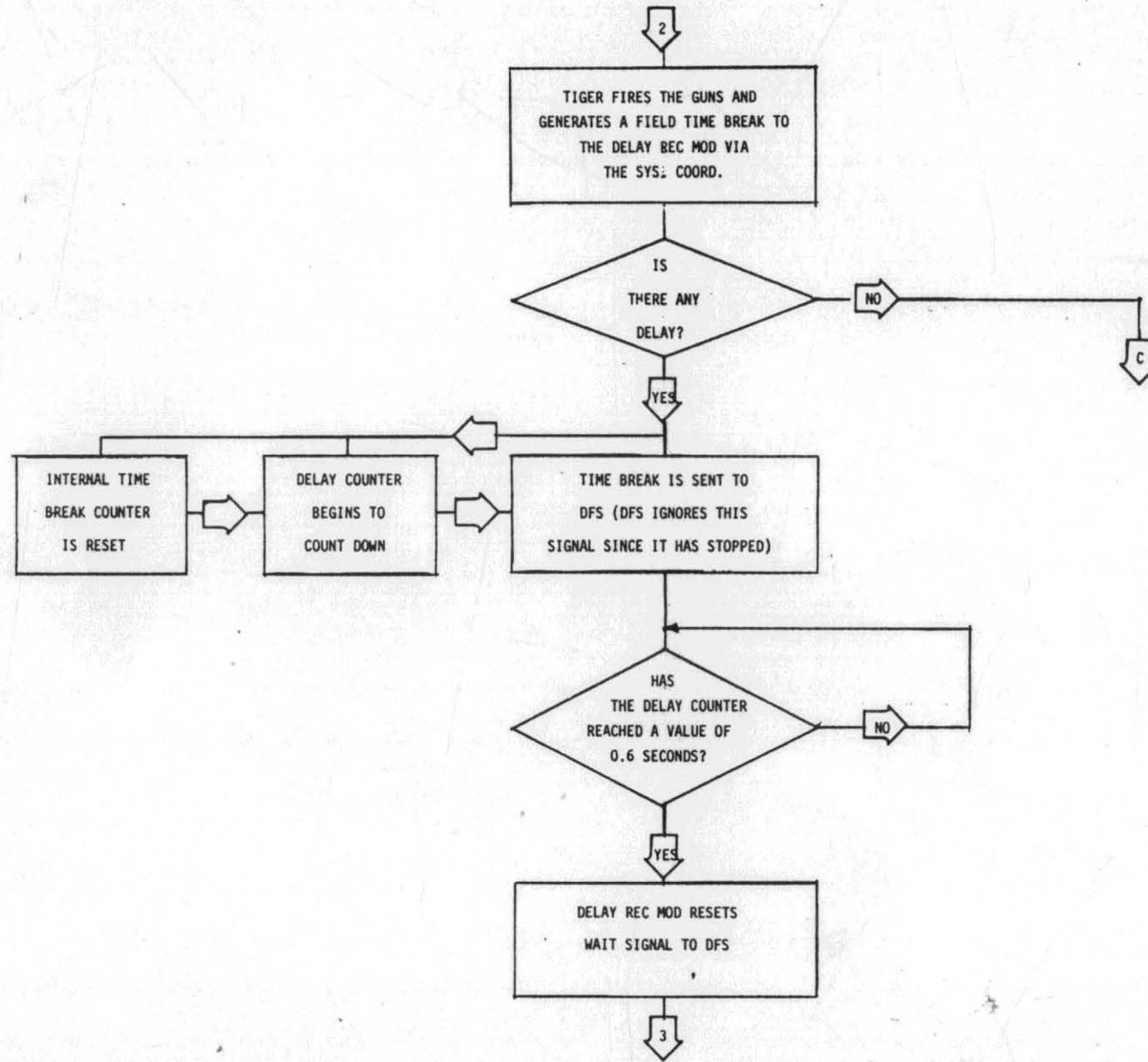
PLATE 3B

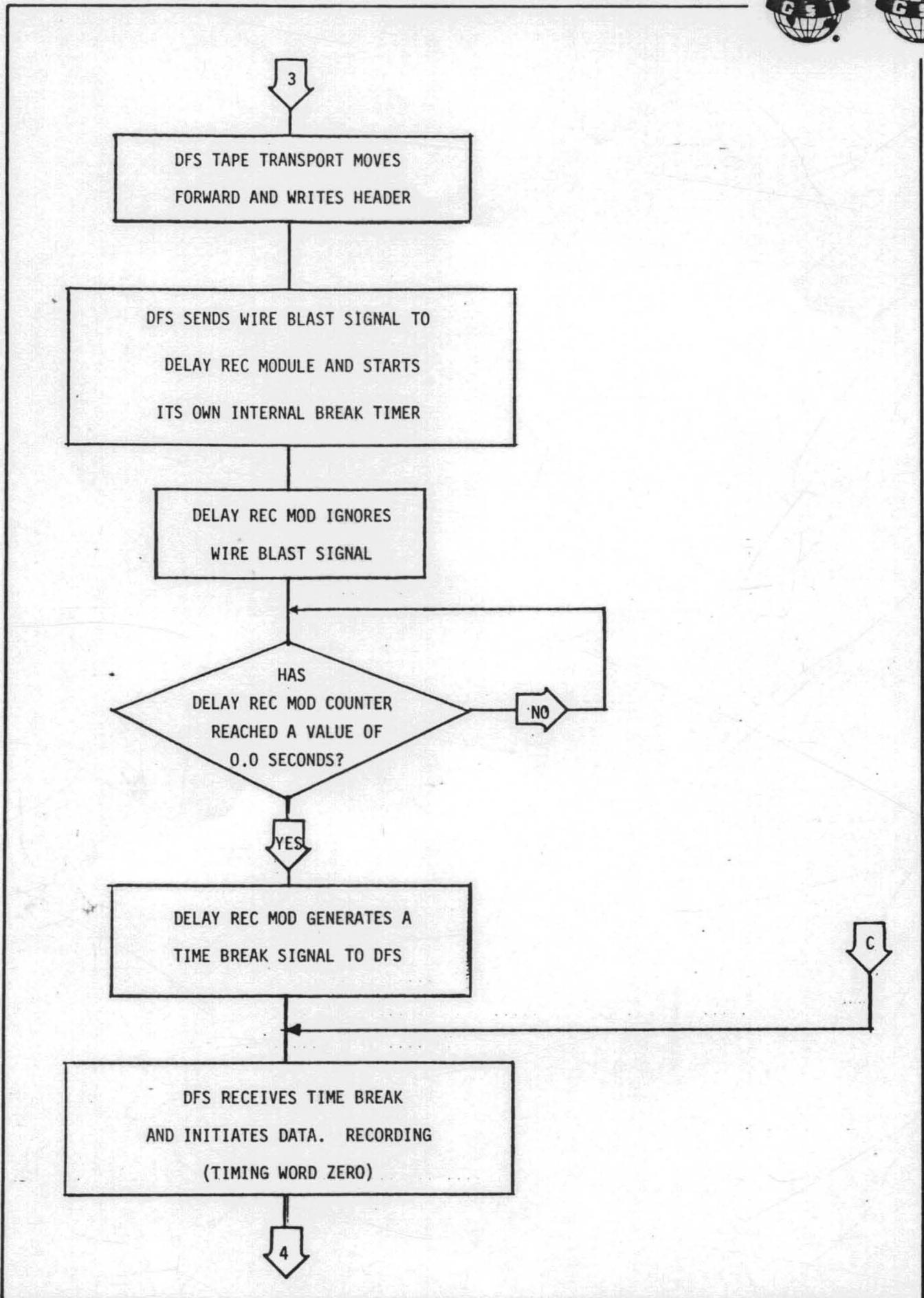


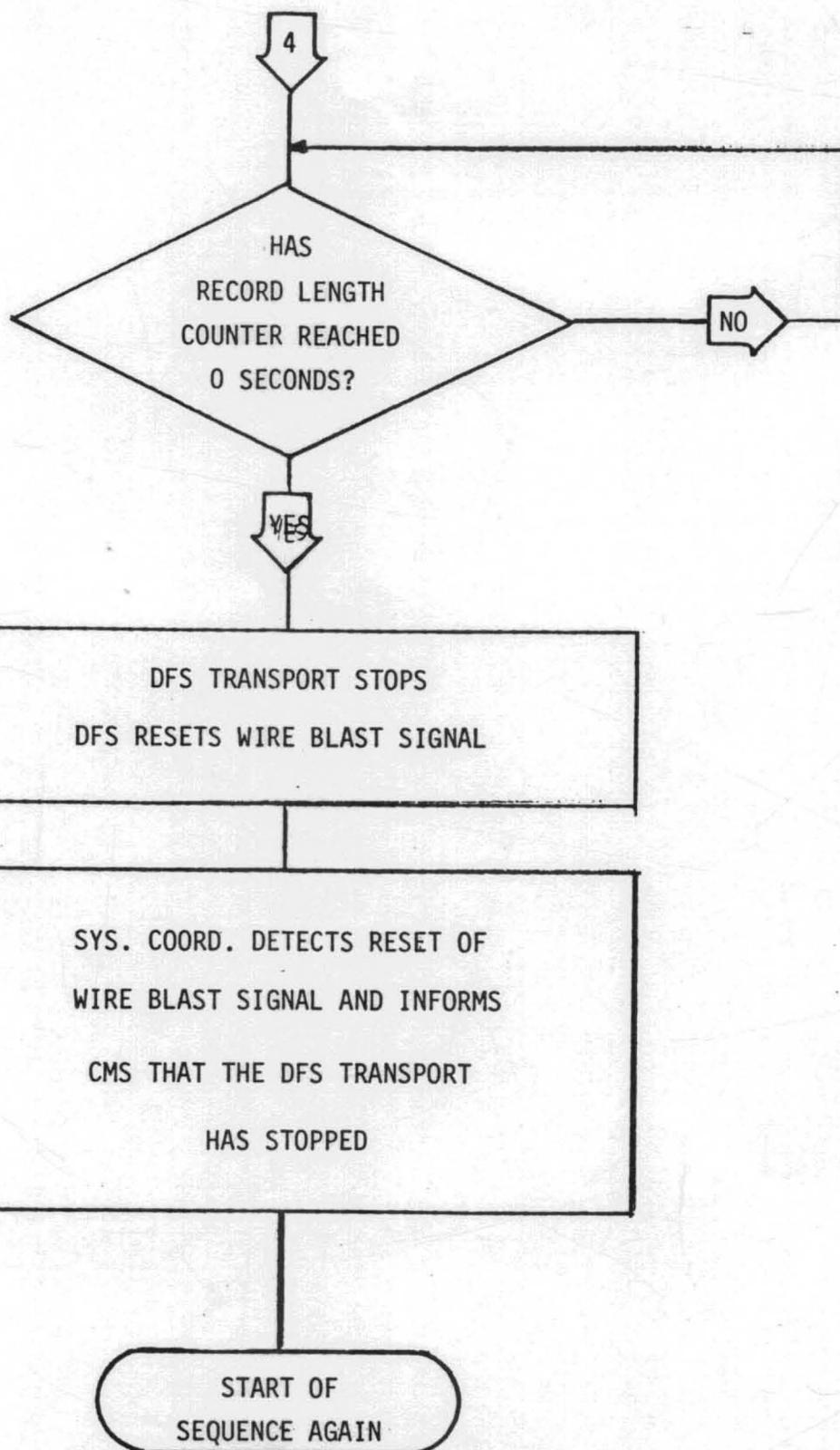


138067

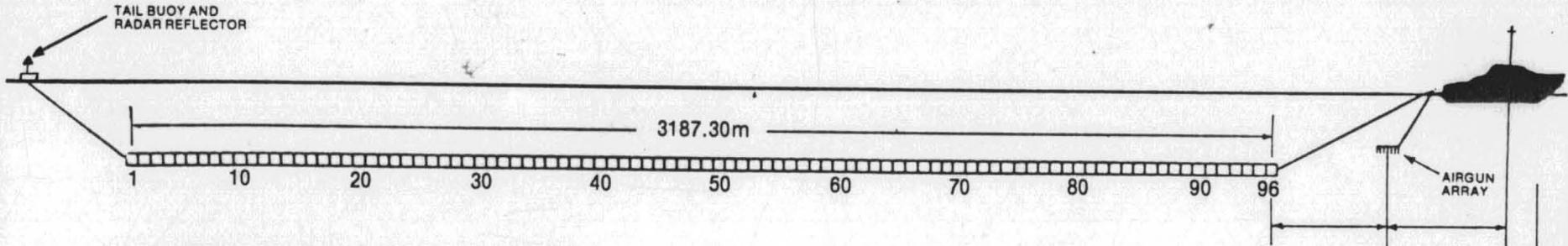
PLATE 3C







081-708



WATER BREAKS FROM IN FRONT SEIS GROUPS	96	81				
RECORDED IN DIGITAL CHANNELS	AUX 1	AUX 1				
DISPLAYED ON SEISMOGRAPH TRACES	61/61					

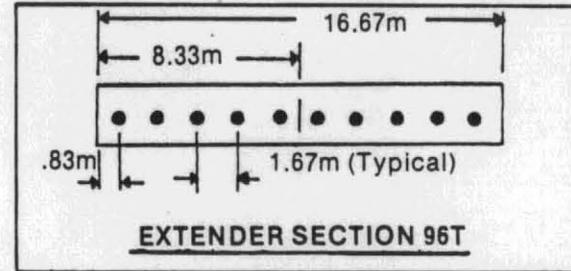
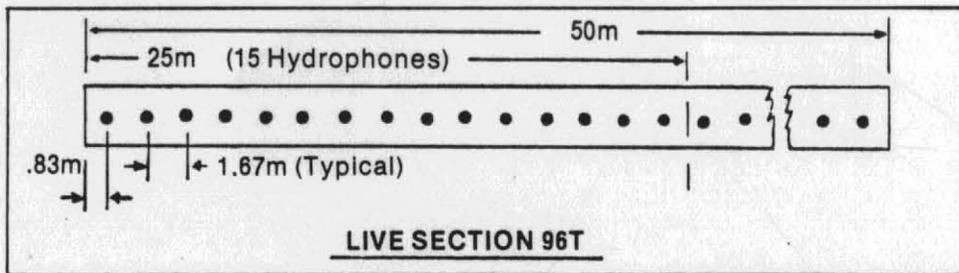
DEPTH TRANSDUCER NUMBERS	6	5	4	3	2	1
AT/NEAR SEIS GROUP NUMBERS	FE/96	82/81	62/61	42/41	22/21	3/2

DEPTH CONTROLLER AT SEIS GROUP NUMBERS						
--	--	--	--	--	--	--

Located on all Depth Transducers

NYLON STRETCH	6 Front End
PIG SECTIONS	None

6 TRANSDUCER SECTIONS 4M LONG



**MARINE CABLE DIAGRAM**  
 3200 METRES  
 (OFFEND SPREAD — 96 GROUPS)  
 G.S.I. PARTY: 2993  
 SHIP: M/V "LADY VILMA"  
 CLIENT: BASS STRAIT OIL & GAS  
 AREA: VIC. P16/T14/18P  
 DATE: 31 MARCH — 3 MAY, 1982

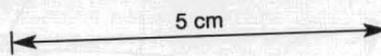


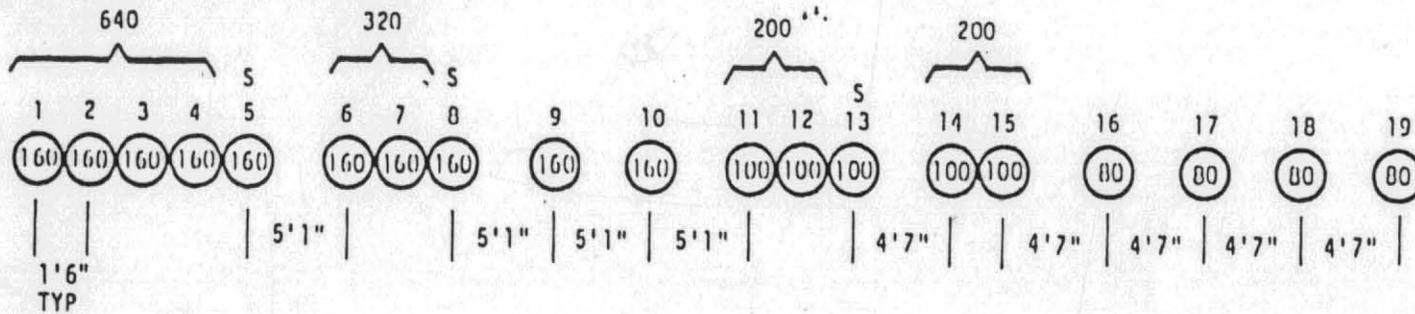
PLATE 4

138070

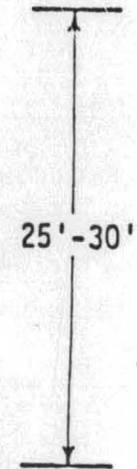
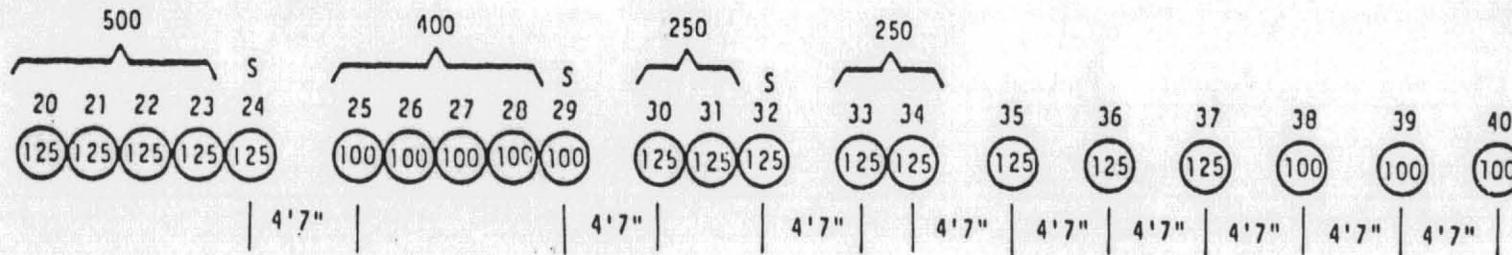


# 4000-CUBIC-INCH AIR GUN ARRAY

## STARBOARD STRING ( 56'9", 19 GUNS )



## PORT STRING ( 57'9", 21 GUNS )



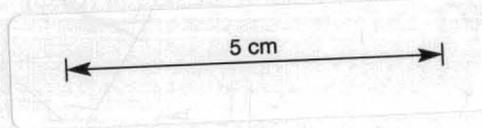
### NOTES:

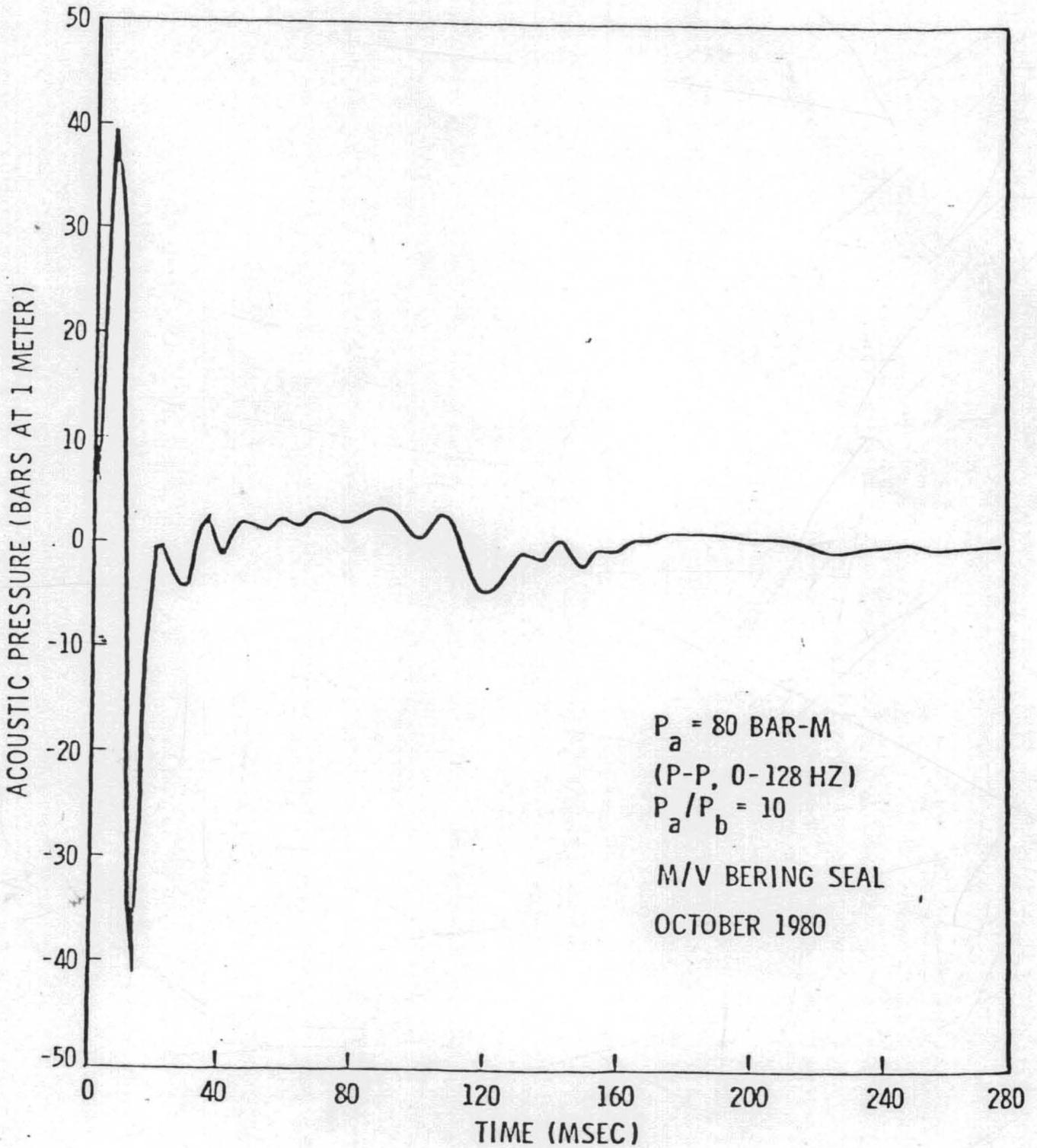
1. GUN SIZE IN CUBIC INCHES
2. GUN SPACING IN FEET AND INCHES; CENTERLINE-TO-CENTERLINE SPACING OF ALL COALESCED GUNS IS 1'6"
3. SPARE GUNS DENOTED BY "S"
4. GUNS 1-10 ARE MOD III PC, GUNS 11-40 ARE MOD. II PC
5. MEASURED AVERAGE PERFORMANCE:  
 $P_a = 80 \text{ BAR-M. (P-P, 0-125 HZ)}$   
 $P_a/P_b = 10$

### ARRAY COMPOSITION

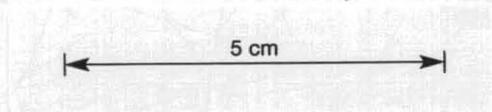
1 X 640	2 X 160
1 X 500	2 X 125
1 X 400	2 X 100
1 X 320	770 SPARE
2 X 250	
2 X 200	
2 X 160	
3 X 125	
3 X 100	
4 X 00	

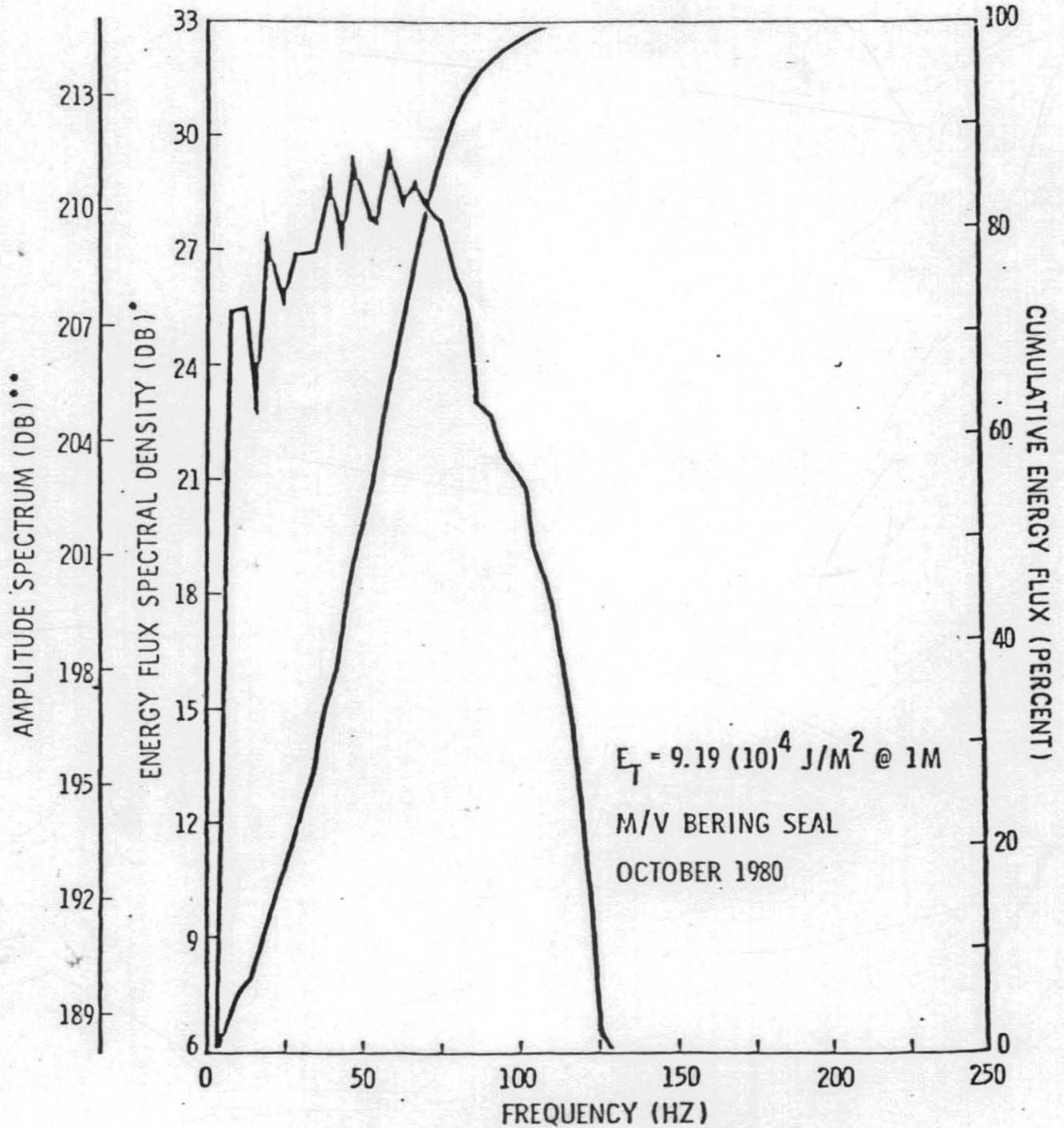
4075 ACTIVE





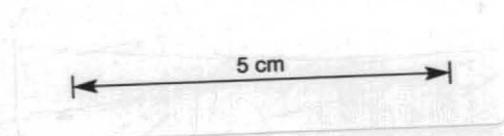
Farfield Signature of 4000 PNU-CON Array





- \* DB REFERRED TO 1 JOULE/M\*\* 2/HZ AT 1 METER
- \*\* DB REFERRED TO 1 MICROPASCAL/HZ AT 1 METER

Amplitude and Energy Spectra of 4000 PNU-CON Array





## PLATE 6

OFFSET DETERMINATION (SEE NOTE)PHYSICAL MEASUREMENT

1. Length of stretch sections with  
9% stretch factor  
(4 x 50) x 9% : 218 metres  
(measured from stern)
2. Total Length of Transducer Section  
in front of Group No. 96 : 4 metres
3. One Half of Group No. 96  
(25 metre groups) : 12.5 metres
4. Distance from Stern to Centre of  
Array : 26.5 metres
5. Offset (1+ 2+ 3) - 4 = 234.5  
- 26.5 : 208.0 metres

TIME MEASUREMENT

(From Camera Records)

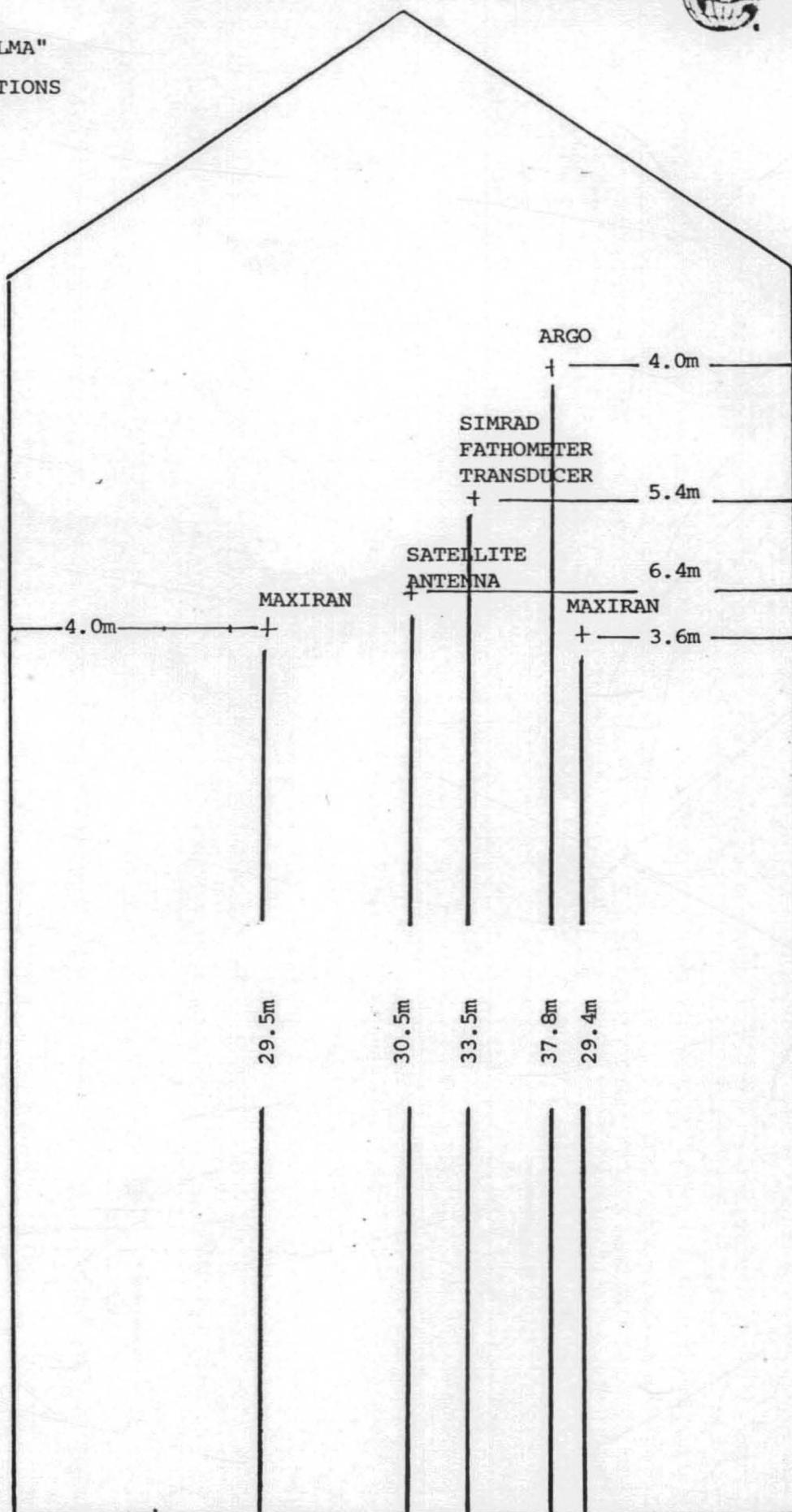
1. Measured time from timing word  
zero to shot arrival on  
transducer number six waterbreak  
geophone : 180 sec.
2. Tiger Time Delay : 51.2 m seconds
3. Speed of Sound in Water  
(CMS Value) : 1500 metre/second.
4. Calculate (1-2) x 3 : 193.2 metres
5. Distance from Gun fired to centre  
of array : 0 metres
6. Distance from Transducer Number  
Six waterbreak geophone to centre  
of group Number 96  
(25 metre groups) : 14.8 metres
7. Offset = 4 - 5 + 6 = 193.2 - 0  
+ 14.8 : 208 metres

NOTE: This example is unrelated to production covered by this report and is intended only to show the components of the offset measurements.

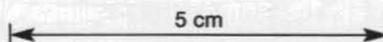


M/V "LADY VILMA"  
ANTENNA POSITIONS

SHIP'S LENGTH: 57.9 METRES  
BEAM: 12.8 METRES

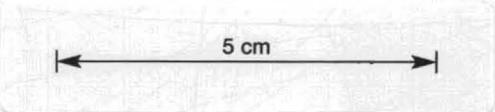
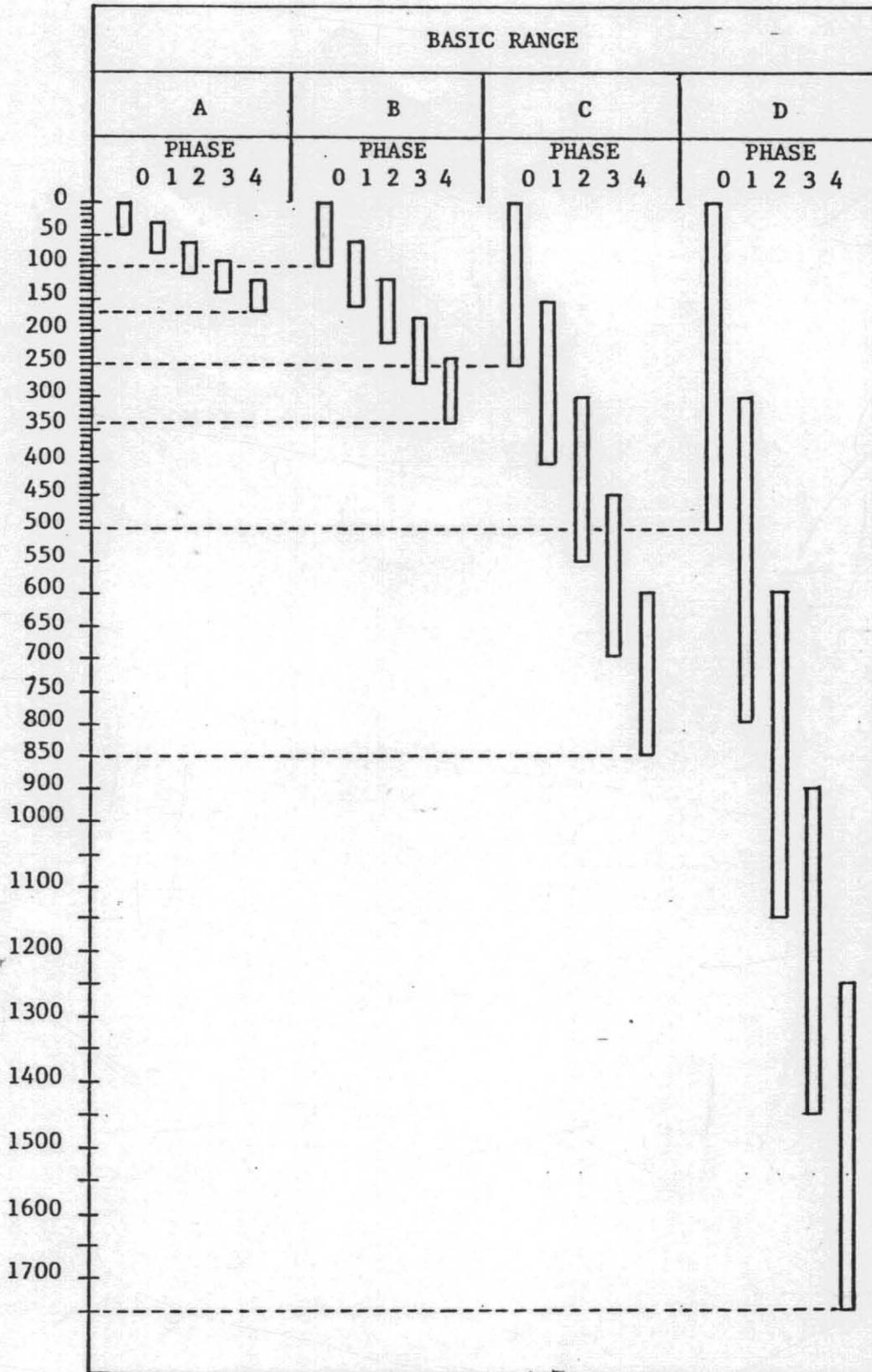


STERN





SIMRAD MODEL EA FATHOMETER SCALE



138077

FINAL REPORT  
OFFSHORE NAVIGATION (AUSTRALIA) PTY. LTD.  
PROJECT 1392

FOR  
GEOPHYSICAL SERVICE INTERNATIONAL  
BASS STRAIT OIL & GAS

VICTORIA & TASMANIA, AUSTRALIA  
MARCH - MAY 1982

OTWAY BASIN SURVEY  
BASS STRAIT T18P SURVEY



OFFSHORE NAVIGATION,  
(AUSTRALIA) PTY. LTD.

138078

FINAL REPORT  
OFFSHORE NAVIGATION (AUSTRALIA) PTY. LTD.  
PROJECT 1392

GEOPHYSICAL SERVICE INTERNATIONAL  
PARTY 2993

FOR  
BASS STRAIT OIL & GAS

VICTORIA, AUSTRALIA  
OTWAY BASIN SURVEY  
BASS STRAIT T18P SURVEY

MARCH - MAY 1982

OFFSHORE NAVIGATION  
(AUSTRALIA) PTY. LTD.

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Field Operations Recap .....	2
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Basic Control .....	16
Personnel .....	17
Distribution .....	17
Base Station Descriptions and Plats .....	18
Area of Operations Plat .....	35
APPENDIX A - Daily Operations Logs	
APPENDIX B - The Maxiran Radiopositioning System	

## FIGURES for Appendix B

1. Typical Maxiran System
2. System with Two Beacons
3. Uncertainty with Two Beacons
4. System with Three Beacons
5. Uncertainty with Three Beacons

## I. INTRODUCTION

Offshore Navigation (Australia) Pty. Ltd. (ONA), under contract to Geophysical Service International (GSI), provided a Maxiran Radiopositioning System to a marine seismic survey that was conducted off the coast of Australia, in the Bass Strait. The survey was located between Victoria, on the Australian mainland and Tasmania. The survey was conducted for Bass Strait Oil & Gas (B.S.O.G.). A portion of the survey was conducted in Otway Basin, and this operation was designated as the Otway Basin Prospect. The remaining operation was conducted in Bass Strait, and was designated as the Bass Strait T18P Prospect. The survey extended up to approximately 80 miles offshore. The operation was designated by ONA as Project 1392.

The ONA base of operation for this survey was established at Lakes Entrance, Victoria on 6 March 1982. The base of operation was moved to Melbourne, Victoria on 1 April 1982.

## II. FIELD OPERATIONS RECAP

ONA personnel and the Maxiran system was in the operational area prior to the commencement of this survey for a survey being conducted by GSI for another principal. The Maxiran base station equipment was installed, manned and operational for that other survey. The Maxiran mobile equipment had been installed on board the recording vessel, M/V LADY VILMA.

Geophysical operations for the other principal were discontinued at 1217 hours 29 March 1982. The M/V LADY VILMA proceeded to Westernport Bay, Stony Point Pier to pick up supplies and drop data. The vessel departed Westernport Bay at 1610 hours 30 March, and proceeded to the B.S.O.G. Otway Basin Prospect area. Geophysical operations in this area began at 2240 hours 31 March. The survey was terminated at 1400 hours 6 April 1982 due to swell noise on the seismic cable exceeding the specified level.

The M/V LADY VILMA arrived in the Bass Strait T 18 P Prospect at 2100 hours 20 April 1982. Geophysical operations

## II. FIELD OPERATIONS RECAP (continued)

in this area began at 2121 hours 20 April, and were discontinued at 2130 hours 24 April 1982.

The M/V LADY VILMA returned to the Otway Basin Prospect on 2 May 1982. Geophysical operations in this prospect resumed at 1416 hours 2 May, and were completed at 0908 hours 3 May 1982. See Appendix A of this report for details of operations.

The Maxiran system was secured on completion of this survey. The Maxiran base stations were dismantled by 4 May 1982. The M/V LADY VILMA arrived at Stony Point, Westernport Bay at 2245 hours 3 May. The Maxiran electronics were removed from this vessel on 4 May. The Maxiran towers, cabling, etc. remained installed on board. The Maxiran system was packaged on 5 May, and shipped to the ONA office in Perth, W.A., via surface freight, on 6 May 1982.

All ONA personnel assigned to this operation were released by GSI on 6 May 1982.

### III. GENERAL INFORMATION

A. Maxiran frequencies used were:

Mobile Transmitter	429 MHz
Base Transmitter	429 MHz

B. Satisfactory radiotelephone communications between all Maxiran installations were maintained on the frequencies of 4637.5 and 7840.0 (SSB) kilocycles.

C. The Maxiran field data accumulated during this survey was turned over to Mr. S. Mueller, the GSI representative, on 3 May 1982.

D. Four Maxiran base station installations were provided by ONA for this survey.

E. Four Maxiran base station sites were occupied during this operation. They were:

STATION LIPTRAP

STATION MARY (ST 462)

STATION MT. CAMERON WEST

STATION MT. CHAPPLE

III. GENERAL INFORMATION (continued)

- F. The maximum range observed by the Maxiran system during this survey was 280 kilometers.
- G. The Maxiran mobile equipment was checked daily for a proper delay setting of 9221 meters, a setting determined by the Maxiran calibration conducted on 8 March 1982.

#### IV. MAXIRAN CALIBRATION

The Maxiran system was calibrated on 8 March 1982. For this calibration, the Maxiran mobile equipment was installed at Station Seacombe, and the Maxiran base station equipment was installed at Station Blackwarri. The Maxiran system was checked over a computed Stations Seacombe/Blackwarri baseline of 77.592 kilometers.

The following pages consist of the field report of this calibration.

PAGE No 1

# OFFSHORE NAVIGATION, INC.

138086

7

## MAXIRAN CALIBRATION REPORT

DATE: 8-3-82

MOBILE STATION				BASE STATION			
LOCATION: SEACOMBE				LOCATION: BLACKWARRI			
OPERATOR: TAYLOR, D				OPERATOR: HENNESSY, A.			
UNIT	MODEL	SERIAL No.		UNIT	MODEL	SERIAL No.	
MONITOR	NMM 01	026		BEACON	NTL 02	014	CODE 2
IN ERROGATOR	NTM 02	009		CONTROL BOX	NEL 01	136	
AMPLIFIER	NTU 01	014		AMPLIFIER	RTU 01	015	
AMPLIFIER P/S	014NPU 01	014		AMPLIFIER P/S	015NPU 01	015	
PREAMP	173SAU 12	173		PREAMP	176SAU 12	176	
TYPE	LENGTH TYPE	COAX	LENGTH	TYPE	LENGTH TYPE	COAX	LENGTH
SEE OVER	SEE OVER	SEE OVER	SEE OVER	SEE OVER	SEE OVER	SEE OVER	SEE OVER
TYPE	HEIGHT TYPE	ANTENNA	HEIGHT	TYPE	HEIGHT TYPE	ANTENNA	HEIGHT
QUAD LPL'S	QUAD LPL'S	40'	40'	QUAD LPL'S	QUAD LPL'S	40'	40'
INPUT VOLTAGE		115V		INPUT VOLTAGE		115V	
TX. FREQUENCY		429MHZ		TX. FREQUENCY		429MHZ	
RX. FREQUENCY		429MHZ		RX. FREQUENCY		429MHZ	
RX. GAIN SETTING		MIN		RX. GAIN SETTING		MIN	
WEATHER CONDITIONS		OVERCAST, COLD, RAIN.		WEATHER CONDITIONS		OVERCAST, COLD, RAIN	

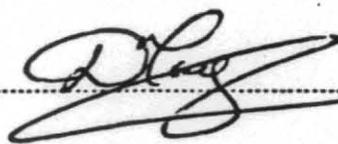
OBSERVED RANGE IN CALIBRATE: 86.813 KM

COMPUTED SLANT RANGE: 77.592 KM

MOBILE ZERO SETTING IS: 9.221 KM

OBSERVED RANGE IN OPERATE: 77.591 KM TIME: 1355 hrs.

SIGNED: \_\_\_\_\_



### NOTES REGARDING CALIBRATION PROCEDURES:

- All equipment will be allowed to warm up for at least 30 minutes prior to calibrating.
- All readings entered hereon will be final readings for the item in question, not preliminary or intermediate readings.
- Each report will be complete in itself. Do not refer to other reports for information.
- Use the reverse side of this report for any additional comments deemed necessary or advisable for completeness and clarity.

SEACOMBE

BLACKWARRI

MOBILE STATION	BASE STATION
<p>NAMES:</p> <p>1. J. TAYLOR</p> <p>LAT: 38-07-59.4736S</p> <p>2. LON: 147-27-51.5482E</p> <p>E 540692.379 METERS</p> <p>3. N 5779290.938 METERS</p> <p>ELEV 27.98 METERS</p>	<p>NAMES:</p> <p>1. A. HENNESSY</p> <p>LAT: 38-24-15.07S</p> <p>2. LON 146-38-49.24E</p> <p>E. 469179 METERS</p> <p>3. N. 5749264 METERS</p> <p>ELEV 640 METERS</p>

UTM AUST NAT SPHEROID 1966 ZONE 55 CM 147°E  
 AGO.

COMMENTS:

MOBILE

BASE

TX  
 8' STACKING  
 BALUN  
 12'  
 7' ANDREWS  
 BALUN  
 LINEAR

RX  
 8'  
 BALUN  
 1'  
 PREAMP  
 82'  
 BALUN  
 8'  
 DC BLOCK  
 3' RG58

TX  
 8' STACKING  
 BALUN  
 8'  
 74' ANDREWS  
 LINEAR  
 8'

RX  
 8'  
 BALUN  
 PREAMP  
 82'  
 DC BLOCK  
 3' RG58

Page No 2

# OFFSHORE NAVIGATION, INC.

138088

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## MAXIRAN CALIBRATION REPORT

DATE: 8-3-82

MOBILE STATION				BASE STATION			
LOCATION: SEACOMBE				LOCATION: BLACKWARRI			
OPERATOR: D. TAYLOR				OPERATOR: A. HENNESSY			
UNIT	MODEL	SERIAL No.		UNIT	MODEL	SERIAL No.	
MONITOR	NMM-01	026		BEACON	NTL-02	033	CODE 4
INTERROGATOR	NTM-02	009		CONTROL BOX	NCL-01	136	
AMPLIFIER	NTU-01	014		AMPLIFIER	NTU-01	015	
AMPLIFIER P/S	14NPU-01	AMPLIFIER	014	AMPLIFIER P/S	14NPU-01	015	
PREAMP	173SAU-12	PREAMP	173	PREAMP	176SAU-12	176	
TYPE	LENGTH	TYPE	LENGTH	TYPE	LENGTH	TYPE	LENGTH
COAX		COAX		COAX		COAX	
SEE BACK of PAGE				SEE BACK of PAGE			
TYPE	HEIGHT	TYPE	HEIGHT	TYPE	HEIGHT	TYPE	HEIGHT
ANTENNA		ANTENNA		ANTENNA		ANTENNA	
QUAD LPL'S	40'	QUAD LPL'S	40'	QUAD LPL'S	40'	QUAD LPL'S	40'
INPUT VOLTAGE		115V		INPUT VOLTAGE		115V	
TX. FREQUENCY		429 Mhz		TX. FREQUENCY		429 Mhz	
RX. FREQUENCY		429 Mhz		RX. FREQUENCY		429 Mhz	
RX. GAIN SETTING		MIN		RX. GAIN SETTING		MIN	
WEATHER CONDITIONS				OVERCAST, COLD, RAIN			
WEATHER CONDITIONS				OVERCAST, COLD, RAIN			

OBSERVED RANGE IN CALIBRATE: 86.813 KM  
 COMPUTED SLANT RANGE: 77.592 KM  
 MOBILE ZERO SETTING IS: 9.221 KM  
 OBSERVED RANGE IN OPERATE: 77.592 KM TIME: 1410hrs.

adjusted 8m down.

SIGNED: \_\_\_\_\_



### NOTES REGARDING CALIBRATION PROCEDURES:

1. All equipment will be allowed to warm up for at least 30 minutes prior to calibrating.
2. All readings entered hereon will be final readings for the item in question, not preliminary or intermediate readings.
3. Each report will be complete in itself. Do not refer to other reports for information.
4. Use the reverse side of this report for any additional comments deemed necessary or advisable for completeness and clarity.

MAXIRAN CALIBRATION REPORT

DATE: 8-3-82

MOBILE STATION			BASE STATION		
LOCATION:	SEACOMBE		LOCATION:	BLACKWARRI	
OPERATOR:	D. TAYLOR		OPERATOR:	A. HENNESSY	
UNIT	MODEL	SERIAL No.	UNIT	MODEL	SERIAL No.
MONITOR	NMM-01	026	BEACON	NTL-02	024 CODE 1
INTERROGATOR	NTM-02	009	CONTROL BOX	NCL-01	136
AMPLIFIER	NTU-01	014	AMPLIFIER	NTU-01	015
AMPLIFIER P/S	NPU-01	014	AMPLIFIER P/S	NPU-01	015
PREAMP	SAU-12	173E	PREAMP	SAU-12	176
COAX	TYPE	LENGTH	COAX	TYPE	LENGTH
	SEE BACK of PAGE No. 1			SEE BACK of PAGE No. 1	
ANTENNA	TYPE	HEIGHT	ANTENNA	TYPE	HEIGHT
	QUAD LPL'S 40'			QUAD LPL'S 40'	
INPUT VOLTAGE		115V	INPUT VOLTAGE		115V
TX. FREQUENCY		429 MHz	TX. FREQUENCY		429 MHz
RX. FREQUENCY		429 MHz	RX. FREQUENCY		429 MHz
TX. GAIN SETTING		MIN	RX. GAIN SETTING		MIN
WEATHER CONDITIONS		OVERCAST, COLD, RAIN	WEATHER CONDITIONS		OVERCAST, COLD, RAIN.

OBSERVED RANGE IN CALIBRATE: 86.813 ..... KM  
 COMPUTED SLANT RANGE: 77.592 ..... KM  
 MOBILE ZERO SETTING IS: 9.221 ..... KM  
 OBSERVED RANGE IN OPERATE: 77.591 ..... KM TIME: 1430h.

SIGNED: 

NOTES REGARDING CALIBRATION PROCEDURES:

1. All equipment will be allowed to warm up for at least 30 minutes prior to calibrating.
2. All readings entered hereon will be final readings for the item in question, not preliminary or intermediate readings.
3. Each report will be complete in itself. Do not refer to other reports for information.
4. Use the reverse side of this report for any additional comments deemed necessary or advisable for completeness and clarity.

Page No 4

# OFFSHORE NAVIGATION, INC.

138090

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## MAXIRAN CALIBRATION REPORT

DATE: 8-3-82

MOBILE STATION			BASE STATION		
LOCATION:	SEACOMBE		LOCATION:	BLACK WARRI	
OPERATOR:	D. TAYLOR		OPERATOR:	A. HENNESSY	
UNIT	MODEL	SERIAL No.	UNIT	MODEL	SERIAL No.
MONITOR	NMM-01	026	BEACON	NTL-02	028 CODE 4
INTERROGATOR	NTM-02	009	CONTROL BOX	NCL-01	136
AMPLIFIER	NTU-01	014	AMPLIFIER	NTU-01	015
AMPLIFIER P/S	NPU-01	014	AMPLIFIER P/S	NPU-01	015
PREAMP	SAU-12	173	PREAMP	SAU-12	176
COAX	TYPE	LENGTH	COAX	TYPE	LENGTH
	SEE BACK of Page No 1			SEE BACK of Page No 1	
ANTENNA	TYPE	HEIGHT	ANTENNA	TYPE	HEIGHT
	QUAD LPL'S 40'			QUAD LPL'S 40'	
INPUT VOLTAGE		115V	INPUT VOLTAGE		115V
TX. FREQUENCY		429 MHz	TX. FREQUENCY		429 MHz
RX. FREQUENCY		429 MHz	RX. FREQUENCY		429 MHz
TX. GAIN SETTING		MIN	RX. GAIN SETTING		MIN
WEATHER CONDITIONS		OVERCAST, COLD, RAIN.	WEATHER CONDITIONS		OVERCAST, COLD, RAIN

OBSERVED RANGE IN CALIBRATE: ..... 86.813 ..... KM  
 COMPUTED SLANT RANGE: ..... 77.592 ..... KM  
 MOBILE ZERO SETTING IS: ..... 9.221 ..... KM  
 OBSERVED RANGE IN OPERATE: ..... 77.591 ..... KM    TIME: 1440 hrs.

adjusted 2m down.

SIGNED: 

### NOTES REGARDING CALIBRATION PROCEDURES:

1. All equipment will be allowed to warm up for at least 30 minutes prior to calibrating.
2. All readings entered hereon will be final readings for the item in question, not preliminary or intermediate readings.
3. Each report will be complete in itself. Do not refer to other reports for information.
4. Use the reverse side of this report for any additional comments deemed necessary or advisable for completeness and clarity.

Page Nos

# OFFSHORE NAVIGATION, INC.

138091.

12

## MAXIRAN CALIBRATION REPORT

DATE: 8-3-82

MOBILE STATION			BASE STATION		
LOCATION: SEACOMBE			LOCATION: BLACKWARRI		
OPERATOR: TAYLOR, D.			OPERATOR: HENNESSY, A		
UNIT	MODEL	SERIAL No.	UNIT	MODEL	SERIAL No.
MONITOR	NMM-01	026	BEACON	NTL-02	029 CODE 2
INTERROGATOR	NTM-02	009	CONTROL BOX	NCL-01	136
AMPLIFIER	NTU-01	014	AMPLIFIER	NTU-01	015
AMPLIFIER P/S	NPU-01	014	AMPLIFIER P/S	NPU-01	015
PREAMP	SAU-12	173	PREAMP	SAU-12	176
COAX	TYPE	LENGTH	COAX	TYPE	LENGTH
	SEE BACK of PAGE No 1			SEE BACK of PAGE No 1	
ANTENNA	TYPE	HEIGHT	ANTENNA	TYPE	HEIGHT
	QUAD LPLS	40'		QUAD LPLS	40'
INPUT VOLTAGE		115V	INPUT VOLTAGE		115V
TX. FREQUENCY		429 Mhz	TX. FREQUENCY		429 Mhz
RX. FREQUENCY		429 Mhz	RX. FREQUENCY		429 Mhz
RX. GAIN SETTING		MIN	RX. GAIN SETTING		MIN
WEATHER CONDITIONS		OVERCAST, COLD RAIN	WEATHER CONDITIONS		OVERCAST, COLD RAIN.

OBSERVED RANGE IN CALIBRATE: ..... 86.813 ..... KM  
 COMPUTED SLANT RANGE: ..... 77.592 ..... KM  
 MOBILE ZERO SETTING IS: ..... 9221 ..... KM  
 OBSERVED RANGE IN OPERATE: ..... 77.592 ..... KM TIME: 1455 hrs

Adjusted 6M up.

SIGNED: .....



### NOTES REGARDING CALIBRATION PROCEDURES:

1. All equipment will be allowed to warm up for at least 30 minutes prior to calibrating.
2. All readings entered hereon will be final readings for the item in question, not preliminary or intermediate readings.
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Page No. 6.

# OFFSHORE NAVIGATION, INC.

138092

13

## MAXIRAN CALIBRATION REPORT

DATE: 8-3-82

MOBILE STATION			BASE STATION		
LOCATION:	SEACOMBE		LOCATION:	BLACWARRI	
OPERATOR:	D. TAYLOR		OPERATOR:	A. HENNESSY	
UNIT	MODEL	SERIAL No.	UNIT	MODEL	SERIAL No.
MONITOR	NMM-01	026	BEACON	NPL-02	026 CODE
INTERROGATOR	NTM-02	009	CONTROL BOX	NCL-01	136
AMPLIFIER	NTU-01	014	AMPLIFIER	NTU-01	015
AMPLIFIER P/S	NPU-01	014	AMPLIFIER P/S	NPU-01	015
PREAMP	SAU-12	173	PREAMP	SAU-12	176
COAX	TYPE	LENGTH	COAX	TYPE	LENGTH
	SEE BACK of PAGE No 1			SEE BACK of PAGE No 1	
ANTENNA	TYPE	HEIGHT	ANTENNA	TYPE	HEIGHT
	QUAD LPL'S	40'		QUAD LPL'S	40'
INPUT VOLTAGE	115V		INPUT VOLTAGE	115V	
TX. FREQUENCY	429 MHz		TX. FREQUENCY	429 MHz	
RX. FREQUENCY	429 MHz		RX. FREQUENCY	429 MHz	
RX. GAIN SETTING	MIN		RX. GAIN SETTING	MIN	
WEATHER CONDITIONS	OVERCAST, COLD, RAIN		WEATHER CONDITIONS	OVERCAST, COLD, RAIN.	

OBSERVED RANGE IN CALIBRATE: ..... 86.813 ..... KM  
 COMPUTED SLANT RANGE: ..... 77.592 ..... KM  
 MOBILE ZERO SETTING IS: ..... 9.221 ..... KM  
 OBSERVED RANGE IN OPERATE: ..... 77.591 ..... KM TIME: 1520 hrs.

adjusted 4m down

SIGNED: 

### NOTES REGARDING CALIBRATION PROCEDURES:

1. All equipment will be allowed to warm up for at least 30 minutes prior to calibrating.
2. All readings entered hereon will be final readings for the item in question, not preliminary or intermediate readings.
3. Each report will be complete in itself. Do not refer to other reports for information.
4. Use the reverse side of this report for any additional comments deemed necessary or advisable for completeness and clarity.

Page No. 7

# OFFSHORE NAVIGATION, INC.

138093

14

## MAXIRAN CALIBRATION REPORT

DATE: 8-3-82

MOBILE STATION			BASE STATION		
LOCATION:	SEACOMBE		LOCATION:	BLACKWARRI	
OPERATOR:	D. TAYLOR		OPERATOR:	HENNESSY, A.	
UNIT	MODEL	SERIAL No.	UNIT	MODEL	SERIAL No.
MONITOR	NMM-01	026	BEACON	NTL-02	030 CODE 5
INTERROGATOR	NTM-02	009	CONTROL BOX	NCL-01	136
AMPLIFIER	NTU-01	014	AMPLIFIER	NTU-01	015
AMPLIFIER P/S	NPU-01	014	AMPLIFIER P/S	NPU-01	015
PREAMP	SAU-12	173	PREAMP	SAU-12	176
COAX	TYPE	LENGTH	COAX	TYPE	LENGTH
	SEE BACK of Page No 1			SEE BACK of Page No 1	
ANTENNA	TYPE	HEIGHT	ANTENNA	TYPE	HEIGHT
	QUAD LPL'S 40'			QUAD LPL'S 40'	
INPUT VOLTAGE	115V		INPUT VOLTAGE	115V	
TX. FREQUENCY	429 Mhz		TX. FREQUENCY	429 Mhz	
RX. FREQUENCY	429 Mhz		RX. FREQUENCY	429 Mhz	
TX. GAIN SETTING	MIN		RX. GAIN SETTING	MIN	
WEATHER CONDITIONS	OVERCAST COLD RAIN		WEATHER CONDITIONS	OVERCAST, COLD RAIN.	

OBSERVED RANGE IN CALIBRATE: ..... 86.813 ..... KM  
 COMPUTED SLANT RANGE: ..... 77.592 ..... KM  
 MOBILE ZERO SETTING IS: ..... 9221 ..... KM  
 OBSERVED RANGE IN OPERATE: ..... 77.592 ..... KM      TIME: 1530 hrs.

SIGNED: 

### NOTES REGARDING CALIBRATION PROCEDURES:

1. All equipment will be allowed to warm up for at least 30 minutes prior to calibrating.
2. All readings entered hereon will be final readings for the item in question, not preliminary or intermediate readings.
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4. Use the reverse side of this report for any additional comments deemed necessary or advisable for completeness and clarity.

## V. MAPPING

Maxiran preplots of the survey were generated on board the M/V LADY VILMA by GSI personnel. The interval between shotpoint locations was constant at 33.33 meters.

No final mapping was accomplished by ONA on this survey. The Maxiran field data accumulated during this survey was turned over to Mr. S. Mueller, the GSI representative, on 3 May 1982.

## VI. BASIC CONTROL

The source of the coordinates listed below are indicated on the individual descriptions of the four Maxiran base stations occupied during this survey period, and have been made part of this report.

Universal Transverse Mercator Projection  
 Australian National Spheroid  
 Zone 55  
 Central Meridian 147° East  
 AUSTRALIAN GEODETIC DATUM

### STATION LIPTRAP:

Latitude	38°51'05".51 S	N = 5,699,175 meters
Longitude	145°57'54".92 E	E = 410,211 meters
Elevation	170 meters	

### STATION MARY (ST 462):

Latitude	39°58'30".06 S	N = 5,570,466 meters
Longitude	143°55'24".48 E	E = 237,239 meters
Elevation	131 meters	

### STATION MT. CAMERON WEST:

Latitude	40°51'55".95 S	N = 5,473,625 meters
Longitude	144°42'28".75 E	E = 306,839 meters
Elevation	168 meters	

### STATION MT. CHAPPLE:

Latitude	38°39'49".92 S	N = 5,714,527 meters
Longitude	143°27'01".07 E	E = 191,131 meters
Elevation	548 meters	

VII. PERSONNEL

NAME	POSITION
Heaverlo, D.	Party Chief
Russell, D.	Party Chief
Hennessy, A.	Mobile Operator
Thiemann, C.	Mobile Operator
Hassett, B.	Base Operator
Lehmann, J.	Base Operator
Owens, R.	Base Operator
Ramos, E.	Base Operator

VIII. DISTRIBUTION

Geophysical Service International  
25 Barrack Street  
Perth, W.A. 6000  
AUSTRALIA

Attention: Mr. Ian Taylor

Four copies

Offshore Navigation, Inc.  
Post Office Box 23504  
Harahan, LA 70183  
U.S.A.

Two copies

Offshore Navigation, Inc.  
Post Office Box 291  
Cloverdale, W.A. 6105  
AUSTRALIA

One copy

128207

BASE STATION DESCRIPTION AND PLATES

18

**STATION:** LIPTRAP

**LOCATED:** Station Liptrap is located approximately 15 miles from the township of Tarwin Lower, Victoria, Australia, and 5 miles north of the Cape Liptrap Lighthouse. The station site is 170 meters above sea level, and surrounded on three sides by the sea. The land around the base station is undulating sand hills, covered by low mallee scrub with areas of secondary growth consisting of ferns and prickly bush. Also, some livestock grazing areas are within a mile radius of the site.

The station is located within a triangle of dirt roads, the northern side being the apex leading to the township of Tarwin Lower. The two southern apexes lead to beaches, one at Cape Liptrap, and the other at Walker Ville. The immediate area at the trig marker is covered by scrub 1 to 2 feet high, growing on white and yellow sand. The trig marker is approximately 200 feet east of the dirt road. The area, for approximately 200 feet around the marker, is reasonably flat.

This station is accessible by any type of vehicle.

**MARKER:** The original marker, placed in 1863, was about 3/4 mile south-southwest from the present marker, but could not be recovered. A second marker, about 1 mile north-northeast of the present marker, was placed in 1920. The beacon on this marker disappeared during the 1950's.

The present marker consists of a 3-foot square slab of concrete, that is flush with ground level. A brass plaque, inscribed "AUST. TRIANGULATION STN., SURVEY CORPS.", is imbedded in the concrete. A 15-foot steel quadripod, with 2-foot vanes on top, has been constructed over the marker. The quadripod and vanes are painted black.

There are no prominent features in the immediate vicinity of the marker that could be used as

**STATION:** LIPTRAP (continued)

reference, with the exception of the roads.  
(See Sketch.)

**GENERAL:** Local labor, food, fuel, oil, and drinking water can be obtained from the towns of Fish Creek (15 miles) or Tarwin Lowers (14 miles). If the operator has no transportation, the local Lands Department will be only too willing to get water and/or supplies for the operator.

Permission to occupy the site should be obtained from the Victorian Crown Lands and Surveys. Permission can be obtained from Mr. Ken McMahon, P.O. Box 349, Traralgon 3844, Victoria. Telephone (051) 745244. No rental fee is charged. However, conditions of occupancy are on a "LEFT AS FOUND" basis.

Rain and wind, mainly from the west and east, will be the main discomfort experienced on this station. It would be advisable to double-tie the tents down. The station should never be left unmanned, due to the heavy tourist traffic in the area.

A minimum tower height of 40 feet is required to clear surrounding obstructions. Clear vista is from 120° to 290°. Six-foot steel star stakes are used to secure the tower.

**ELEVATION:** 170 meters

**SKETCH:** See next page.

Coordinates of the station markers were obtained from a Department of Crown Lands and Survey, Victoria summary sheet.

UTM PROJECTION, AUSTRALIAN NATIONAL SPHEROID  
ZONE 55, C.M. 147° EAST - - A.G.D.

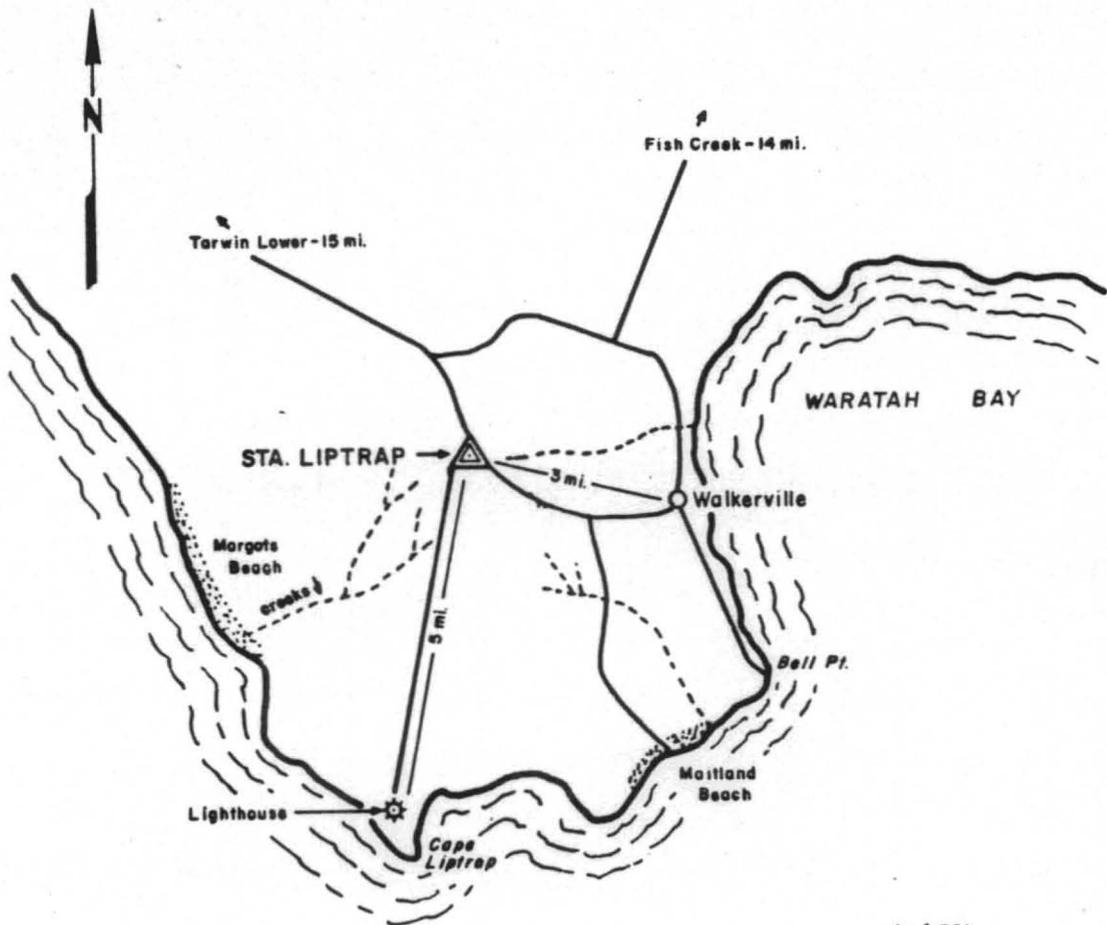
Lat. 38°51'05"51 S N = 5,699,175 meters  
Long. 145°57'54"92 E E = 410,211 meters

STA. LIPTRAP ————— AUSTRALIA

LAT. 38°51'05".51 S  
 LONG. 145°57'54".92 E  
 ELEV. 170 meters

N 5,699,175 meters  
 E 410,211 meters

UTM PROJECTION, AUST. NATIONAL SPHEROID  
 ZONE 55 C.M. 147° E  
 AUSTRALIAN GEODETIC DATUM

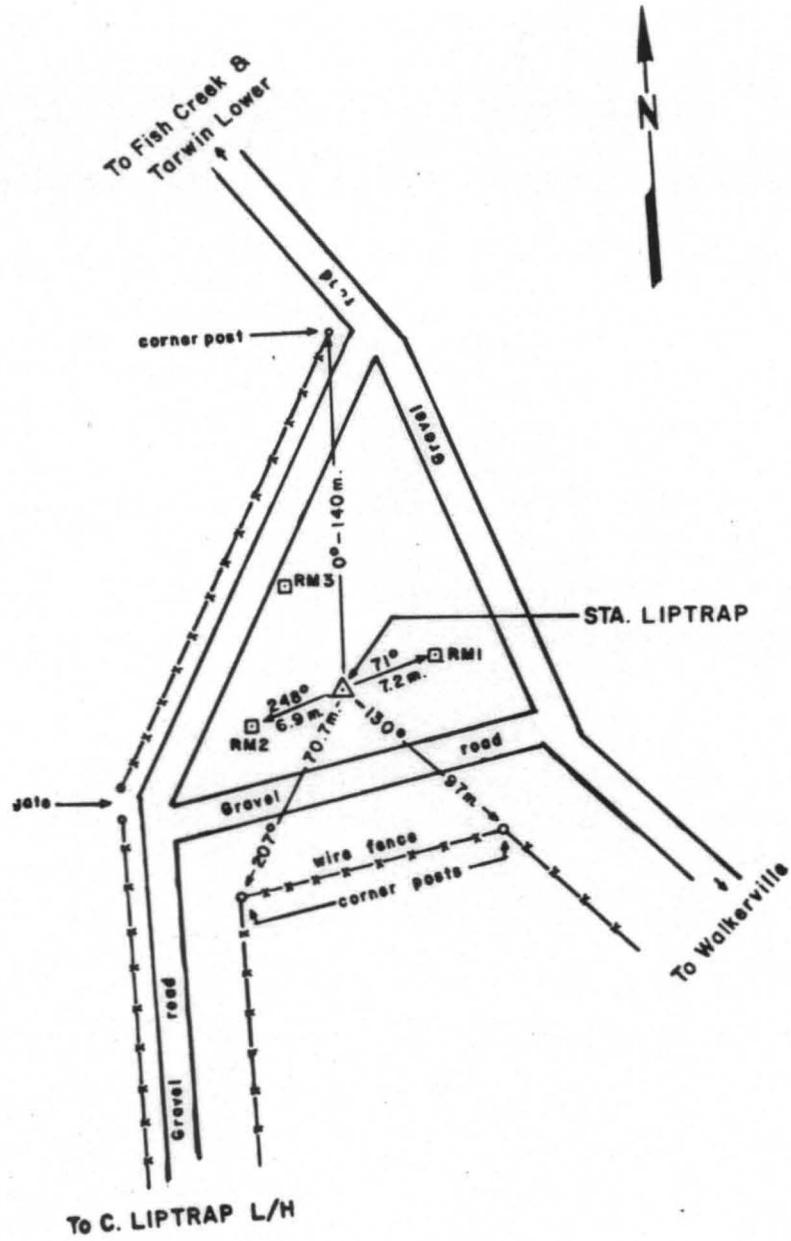


2/81/1201

OFFSHORE NAVIGATION  
 (AUSTRALIA) PTY. LTD.

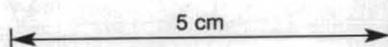
STA. LIPTRAP ————— AUSTRALIA

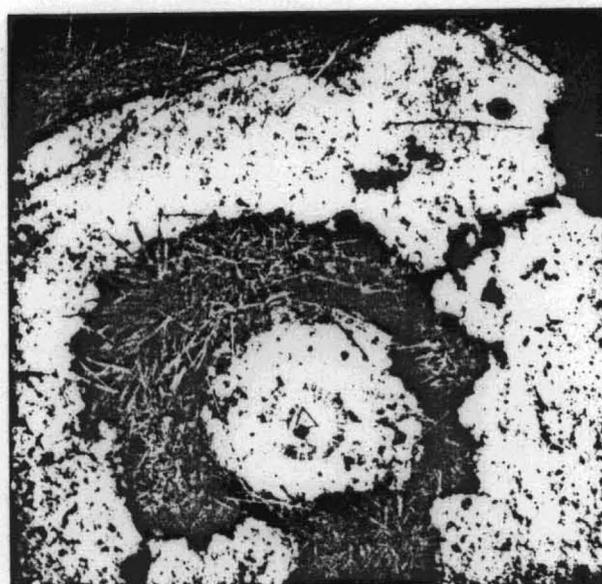
STATION DETAILS



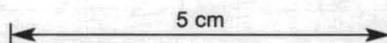
2/81/1201

OFFSHORE NAVIGATION  
(AUSTRALIA) PTY. LTD.





STATION LIPTRAP  
MARKER



**STATION:** MARY (ST 462)

**LOCATED:** Station Mary (ST 462) is located on Mary Hill, a sand dune covered with marram grass in an area of undulating sand dunes, approximately 8 to 9 kilometers southeast of the town of Currie, on the southwest coast of King Island, Tasmania, Australia. It consists of a steep prominent peak, with a lower peak to the north. A wind direction/velocity recording station is located on the lower peak. A 30-foot guyed wooden pole structure, with a cat walk near its top, is located at this recording station and is easily seen from a distance. A small aluminum shed is located to the east of the pole.

The trig station cannot be easily seen from a distance, as the vanes have collapsed from the top of the pole.

An area of swamp and scrub, known as the "Dead Sea", is located to the northeast, and at the base of the Mary Hill. Mount Stanley, with a 250-foot communications tower, can be easily seen 12 to 13 kilometers northeast of the station. The eastern side of Mary Hill is quite steep, and falls away into a "punch bowl".

**ACCESS:** From the township of Currie, travel southeast for 4.5 kilometers along the grassy road (bitumen) to a "Y" junction. Turn right at this junction onto an old grassy road (bitumen), and travel for 19 kilometers to a second "Y" junction. Keep to the right at this junction, and proceed along an old grassy road (gravel) for about 1.9 kilometers, stopping at a weldmesh gate located alongside cattle yards on the right. Go through this gate, and follow a wheel track for 1.1 kilometers to the top of Mary Hill, and the station marker. Access is by a circulating sand track located between the "Dead Sea" and "punch bowl". The site can be driven to easily, and an adequate turn-around is located on the summit of the hill. However, a four-wheel drive vehicle would be required to

STATION: MARY (ST 462) (continued)

reach this station during the winter months. Vehicles can be obtained through Mr. R. Robertson at the Boomerang Motel, telephone 62-1288.

MARKER: The station marker consists of a 2-inch square galvanized pipe driven into the ground, with 12 feet of the pipe protruding above ground level. The square vanes that were once secured to the top of this pipe have fallen down onto a 3-foot high rock cairn which supports the base of the pipe. No inscriptions are detectable. The black paint on the marker is eroded.

Due to the shape and steepness of the hill, it is necessary to offset the tower 5 feet, at a bearing of 270°, from the marker.

GENERAL: The town of Currie has the only shopping center on King Island. Food supplies can be obtained in this shopping center. Fuel supplies can be obtained from the Shell Depot on Hickmott Street, or B.P. Depot on Meech Street in Currie. Water and camping supplies can be arranged through the Boomerang Motel. Workshop facilities are available on request from Howell's Service Station, located at the corner of Meech and George Streets, in Currie. Supplies not available on the island can be flown in by Ansett Cargo via Tullermarine, or Australian Air Charter via Moorabin (Depot K.J. at K.I. Co-op.) Labor is in short supply during good weather, as most available labor is working on fishing boats. Mr. P. Robertson, at the Boomerang Motel, can assist in obtaining labor.

Extreme weather conditions can be experienced on King Island. Violent rain squalls, with wind velocity of up to 70 knots, seem to come from the southwest.

As most roads on the island are not signposted, it is suggested that a Broadbents map, No. 340, be purchased to assist in locating roads, etc.

STATION: MARY (ST 462) (continued)

A 40-foot Maxiran tower was erected at this site, the minimum height required to clear surrounding obstructions. Clear vista is 360°. Star stakes were used to secure the tower.

The station site property is owned by a Mr. McClasson. Permission to occupy the site was obtained from Mr. R. Payne. Mr. Payne can be contacted in Currie, telephone number 004-631188. No rent was paid for the use of this land.

ELEVATION: 131 meters

SKETCH: See next page.

Coordinates of the station marker were obtained from a Lands Department, Tasmania, Division of National Mapping summary sheet.

UTM PROJECTION, AUSTRALIAN NATIONAL SPHEROID  
ZONE 55, C.M. 147° EAST - - A.G.D.

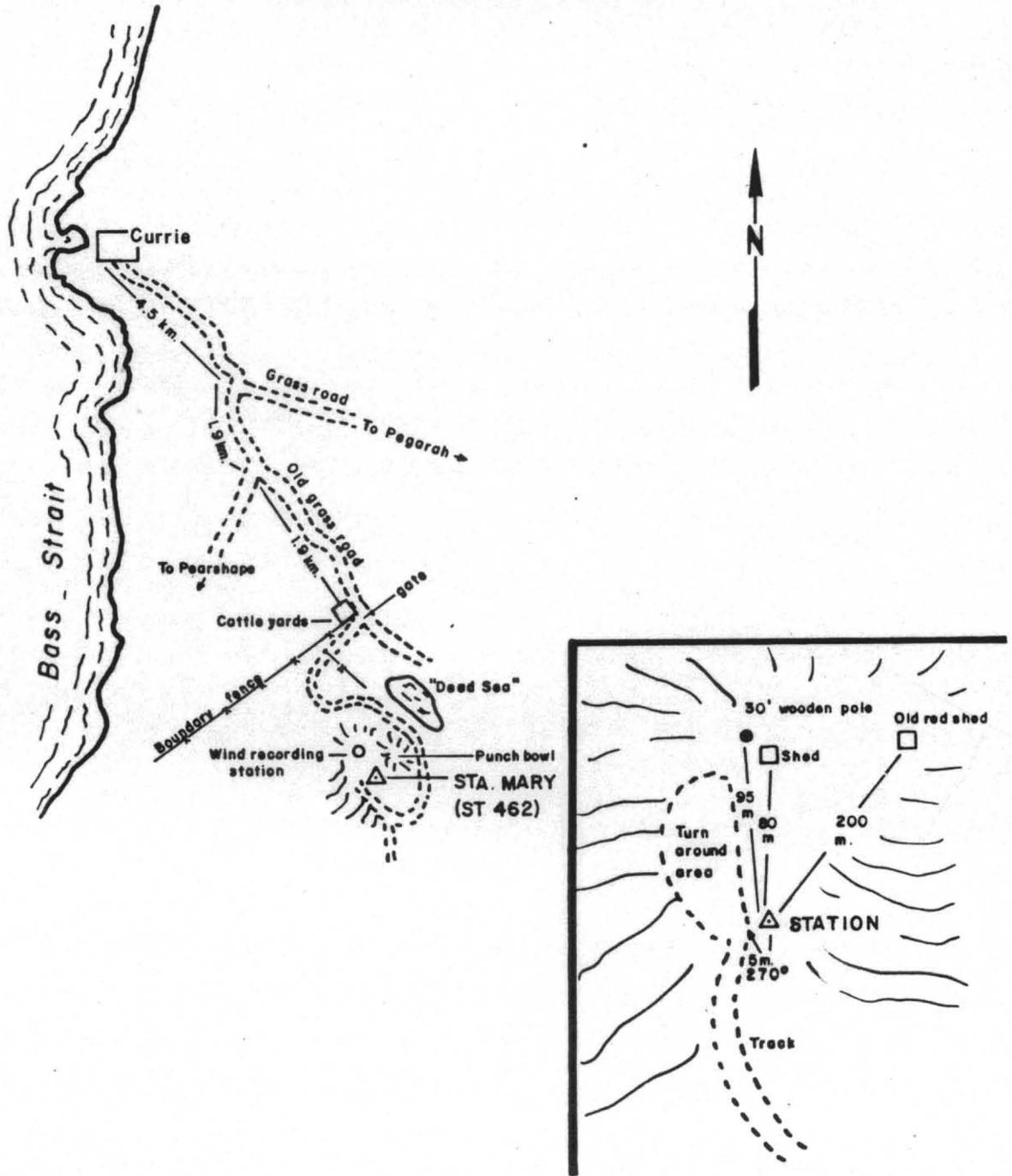
Lat. 39°58'30"06 S N = 5,570,466 meters  
Long. 143°55'24"48 E E = 237,239 meters

STA. MARY (ST 462) ————— AUSTRALIA

LAT. 39° 58' 30".06 S  
 LONG. 143° 55' 24".48 E  
 ELEV. 131 meters

N 5,570,466 meters  
 E 237,239 meters

UTM PROJECTION, AUST. NATIONAL SPHEROID  
 ZONE 55 C.M. 147° E  
 AUSTRALIAN GEODETIC DATUM



**STATION:** MT. CAMERON WEST

**LOCATED:** Station Mt. Cameron West is located near the township of Marrawah, Tasmania, Australia. The station site is located on the summit of a hill, in an area of swamp and sand. The summit of the hill is devoid of any plant life, except for short and high grass, and some shrub. Ann Bay, and a beach bordering the water, is visible from the station. The terrain between the station and beach is hilly, and covered with high grass and scrub. Domestic cattle wander around this area.

**ACCESS:** From the township of Smithton, travel west for 35 kilometers to the Redpa turnoff. Travel 2 kilometers to a "T" junction, and turn left. Turn right onto a gravel road, 8 kilometers past the "T" junction. Cross a cattle grid at 11.3 kilometers. Continue on this gravel and sand track, and turn hard left at 16.2 kilometers, onto a track leading to a gate in a fence. Go through this gate and follow the track. At 19.5 kilometers, you will be at the base of the hill leading to the station.

The track to the top of the hill is steep, and should be attempted only in a four-wheel drive vehicle. Be VERY careful driving on this track. In the morning and evening, the hill is covered in a heavy dew, making the track very slippery. It is best to wait until the sun has dried the track and hill before attempting the climb. Go up this track in low-low 2nd gear, and come down the hill in low-low 1st gear. During periods of rains, this station site is not accessible by vehicle. A helicopter would have to be utilized to set the station.

**MARKER:** The station marker consists of a brass mushroom, inscribed "ST 556", embedded in the center of a 12-inch square concrete block.

Four star stake bars, set in the concrete blocks, and protruding about 1 inch above ground level, are used as references.

STATION: MT. CAMERON WEST (continued)

GENERAL: Labor, fuel, oil, drinking water, and a limited food supply can be obtained in Marrawah. Mail and phone service can be obtained in Marrawah. Food and camping supplies should be obtained in Smithton, where a better selection is available. Rental cars and drivers can be obtained in Wynard from Transline, which is also the Shell Service Station. The company's address is 13 Bass Highway East, Wynyard, Tasmania 7325; telephone 422240. Vehicles can also be booked through Transline at Green Road, Dandenong, Victoria; telephone 7922900.

Strong winds, rain and cold weather are frequent at the station site. Star stakes for tents should be driven in deeply and firmly. Snakes and scorpions are predominate at this station during warm weather.

A 20-foot tower was erected at this station, the minimum tower height required to clear surrounding obstructions. Clear vista is from 150° to 060°. Star stakes, driven in firmly, were used to secure the tower.

The station property is owned by the Van Dieman Land Company. Permission to occupy the station was obtained from the owner of the company. The company's telephone number is listed in the local telephone book.

ELEVATION: 168 meters

SKETCH: See next page.

Coordinates of the station marker were obtained from a Lands Department, Tasmania, Division of National Mapping summary sheet.

UTM PROJECTION, AUSTRALIAN NATIONAL SPHEROID  
ZONE 55, C.M. 147° EAST - - A.G.D.

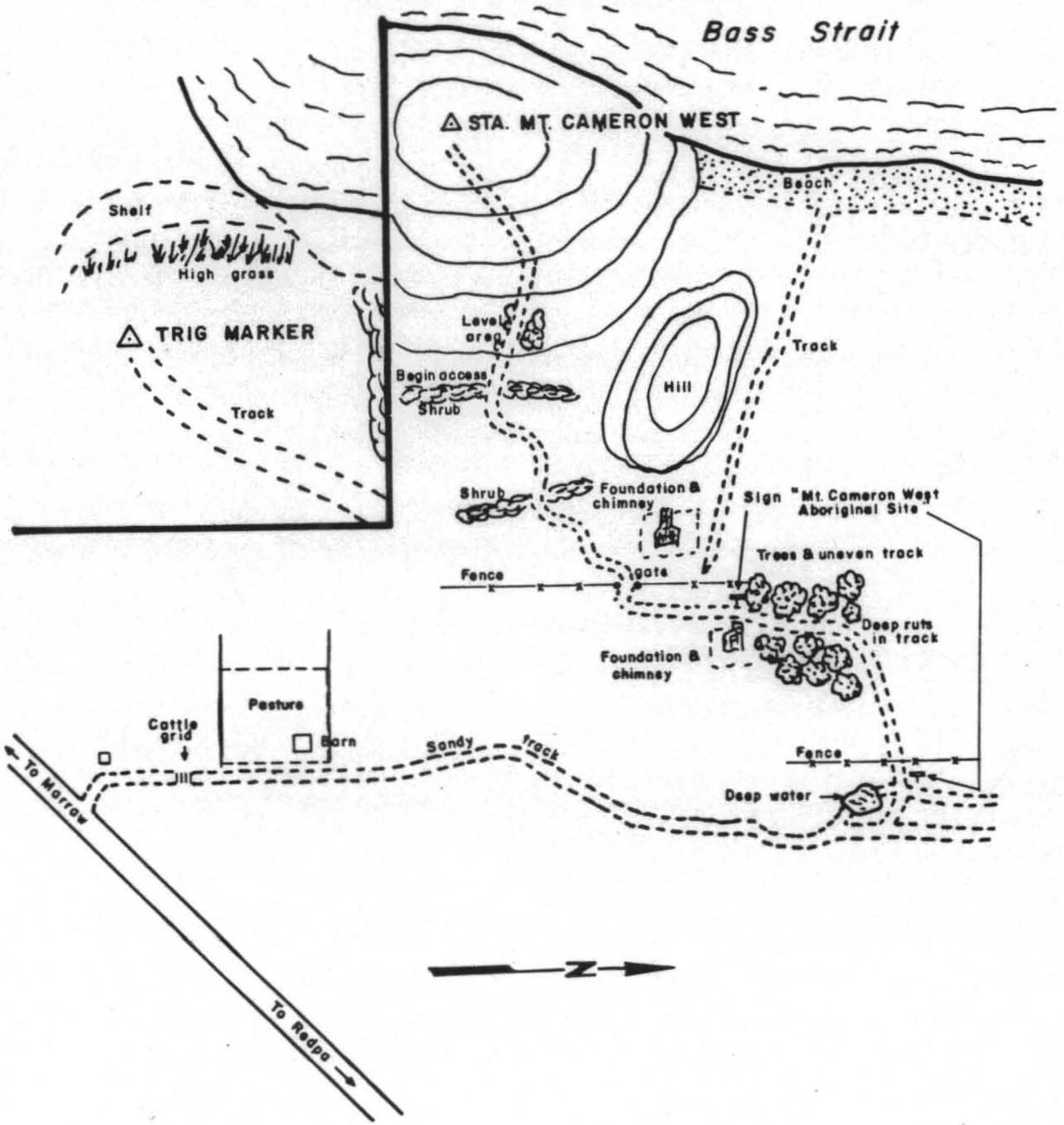
Lat. 40°51'55".95 S N = 5,473,625 meters  
Long. 144°42'28".75 E E = 306,839 meters

# STA. MT. CAMERON WEST — AUSTRALIA

LAT. 40° 51' 55" 95 S  
 LONG. 144° 42' 28" 75 E  
 ELEV. 168 meters

N 5,473,625 meters  
 E 306,839 meters

UTM PROJECTION, AUST. NATIONAL SPHEROID  
 ZONE 55 C.M. 147° E  
 AUSTRALIAN GEODETIC DATUM



5/82/1392

5 cm

OFFSHORE NAVIGATION  
 (AUSTRALIA) PTY. LTD.

**STATION:** MT. CHAPPLE

**LOCATED:** Station Mt. Chapple is located in the Otway Ranges, approximately mid-way between the village of Ferguson and the small town of Lavers Hill, on the south coast of Victoria, Australia. There is approximately 15 kilometers of land path between the station and the closest point of the coastline bordering Bass Strait, located south of the site.

The station site is on the verge between the paved roadway and the boundary fence of the property of Mrs. Flower (refer to photo). The general surrounding area is undulating farmland, falling away gradually to the coast, from southeast to southwest of the station.

**ACCESS:** From Melbourne, take the Princes Highway (Highway 1) through Geelong (the highway is of a freeway condition from Melbourne to Geelong) to Colac, a distance of approximately 148 kilometers. Proceed into the town of Colac through the center of town, passing school traffic lights, continuing through the first intersection of traffic lights encountered. Pass the park on the right and go up a slight hill to a road junction (cross roads). At this intersection, there is the Austrar Hotel on the right, and the Bank of New South Wales on the right. The Commonwealth Bank will be on the opposite corner. There is a sign on the left, indicating 47 kilometers to Beech Forest, and 26 kilometers to Cellibrand. A hospital pointer is located underneath this sign. Turn left at this sign, and follow this winding (narrow in parts) sealed road for 41 kilometers, passing through Gellibrand River, to the end of the road at a "T" junction at the small village of Ferguson. A large galvanized iron shed is located on the right at this junction. Turn right, and follow this sealed road for 8 kilometers to the station site, located on the left hand side of the road. Approximately 300 meters before reaching the station, there is a road to the left. A finger-board opposite the road reads "Wait Awhile Rd".

STATION: MT. CHAPPLE (continued)

Just short of the station, a white red-roofed house, with a number of pine trees (the old Wyelangta Post Office) will be seen. Just past the station site is a galvanized-roofed house (the Flower resident) almost surrounded by tall pine trees. The two houses described above are only approximately 100 meters apart.

A two-wheel drive vehicle is sufficient to reach this site year-round.

MARKER: The station marker consists of a standard survey plaque, inscribed "AUSTRALIAN SURVEY CORPS", set in a 100mm diameter concrete base. The base is covered by thick grass. Two 25mm diameter galvanized pipes, .75 meter apart and .60 meter high, are driven into the ground on the approximate east and west sides of the cement base. A steel quadripod, with a "ball" top .80 meter in diameter, is located over the trig marker. The quadripod is painted black, and has an overall height of approximately 4.2 meters. The station marker is located approximately 5 meters from the sealed road.

There are numerous reference markers in the area consisting of houses, trees, fences, etc., but the marker itself is unmistakable.

GENERAL: Food, fuel, oil, and most camping equipment, can be obtained in Colac. Fuel, oil, and supplementary food supplies are also available in the small town of Lavers Hill, approximately 7 kilometers from the station. Water is available from Mrs. Flower's residence, next to the station site, but should be kept to a minimum usage.

Labor could be difficult to obtain in the local area. During the station occupation of March and April 1982, no effort was made to obtain local labor. However, it is suggested that any

STATION: MT. CHAPPLE (continued)

required labor be obtained from Melbourne or Colac.

A 60-foot tower was erected at this site, the minimum height required to clear surrounding obstructions. Clear vista is from 120° to 260°. (NOTE: There is land path in all directions outside of the above bearings. A careful study of a topographical map of the area would be required to determine if this site would be suitable for operations to be conducted at other bearings.) Star stakes were used to secure the tower.

The station site is on property owned by the Victorian County Roads Board. The Shire Clerk, Otway Shire Council should be contacted before attempting to occupy the station. No rent was paid for the use of the site.

ELEVATION: 548 meters

SKETCH: See next page.

Coordinates of the station markers were obtained from a Department of Crown Lands and Survey, Victoria summary sheet.

UTM PROJECTION, AUSTRALIAN NATIONAL SPHEROID  
ZONE 55, C.M. 147° EAST - - A.G.D.

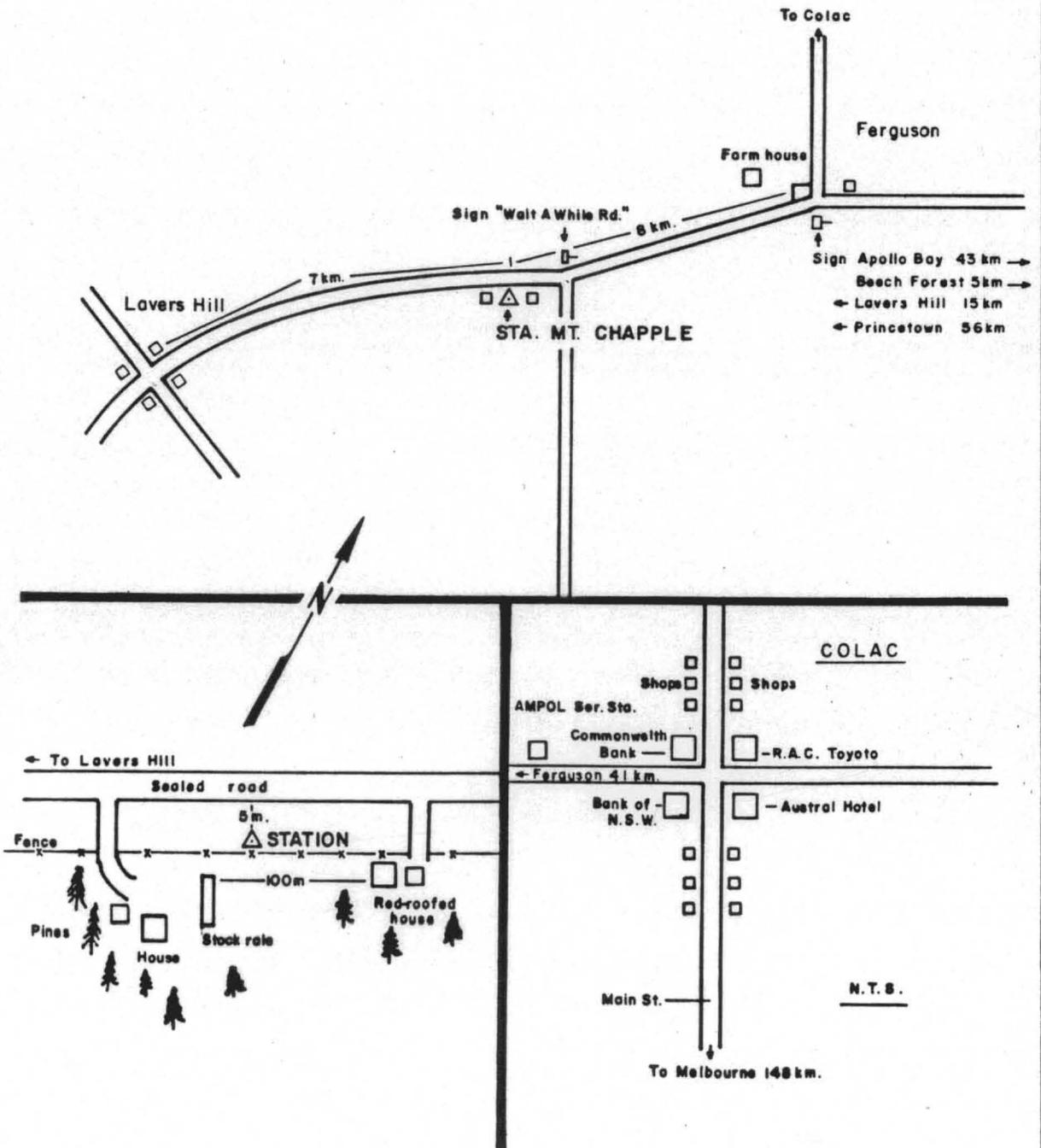
Lat.	38°39'49"92 S	N = 5,714,527 meters
Long.	143°27'01"07 E	E = 191,131 meters

# STA. MT. CHAPPLE — AUSTRALIA

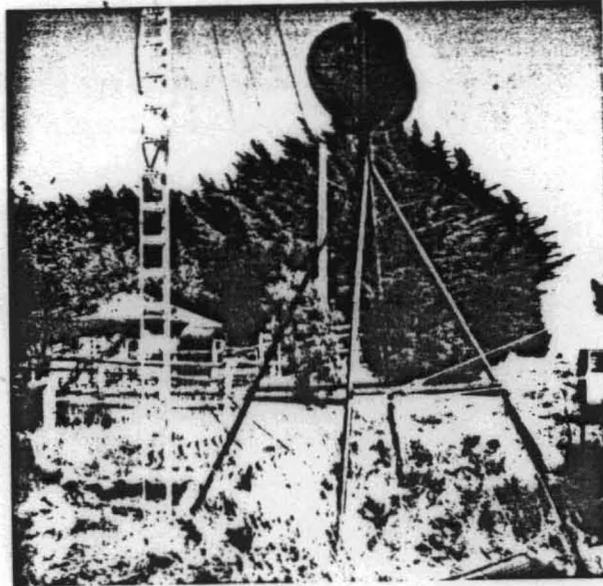
LAT. 38°39'49".92 S  
 LONG. 143°27'01".07 E  
 ELEV. 548 meters

N 5,714,527 meters  
 E 191,131 meters

UTM PROJECTION, AUST. NATIONAL SPHEROID  
 ZONE 55 C.M. 147° E  
 AUSTRALIAN GEODETIC DATUM



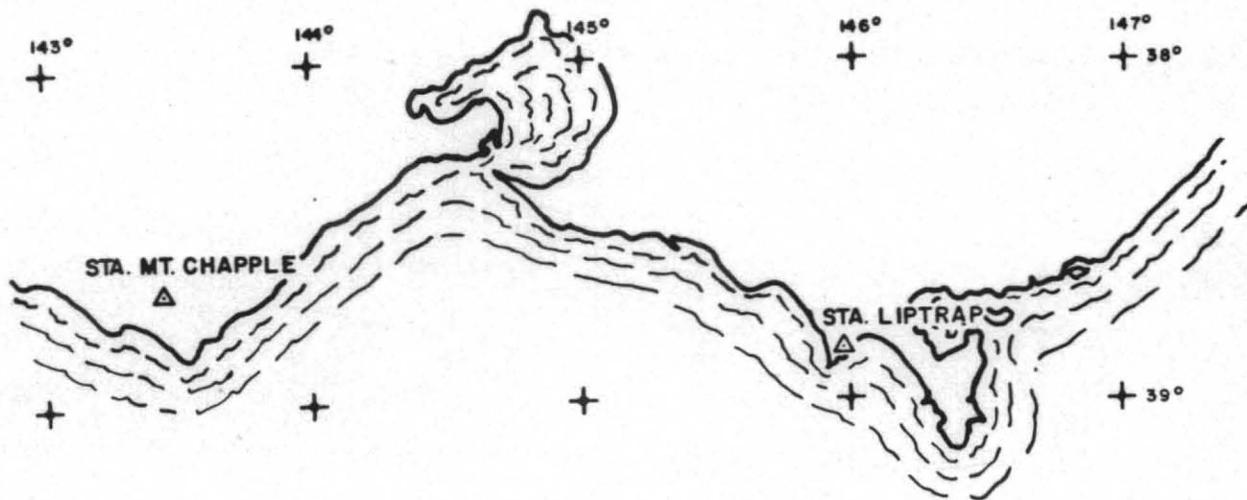
138113



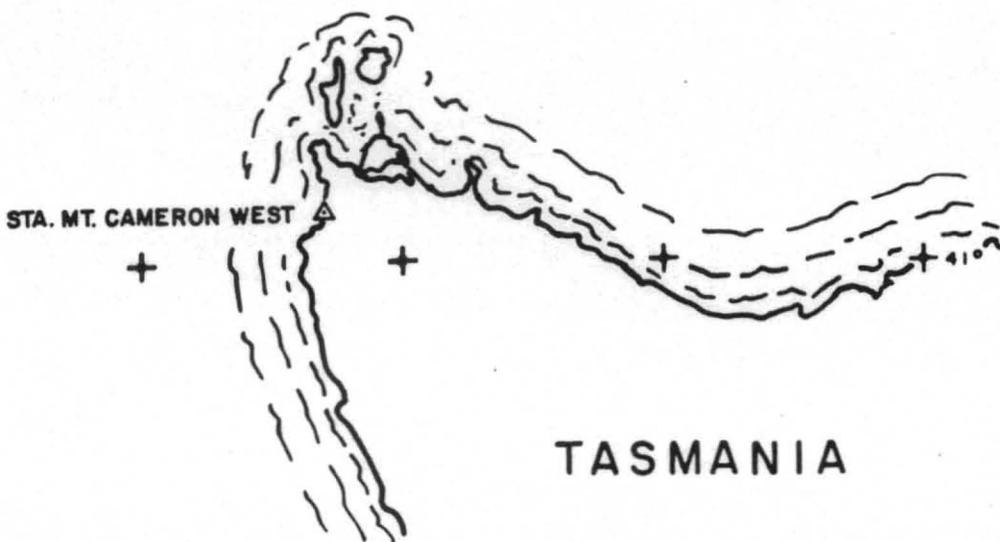
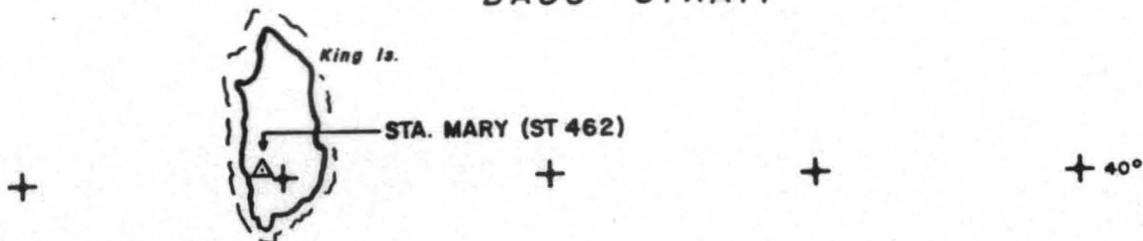
STATION MT. CHAPPLE  
TRIG MARKER

# AREA OF OPERATIONS

## VICTORIA



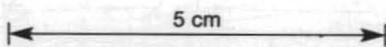
## BASS STRAIT



5/82/1392

## TASMANIA

OFFSHORE NAVIGATION  
(AUSTRALIA) PTY. LTD.



APPENDIX A  
DAILY OPERATIONS LOGS

**OFFSHORE NAVIGATION INC.  
MAXIRAN DAILY OPERATIONS LOG**

138116

Project Number 1392 Date 31 MARCH 1982 Boat M.V. LADY VILMA Client Party Number 2998  
 Physical Company G.S.I. Oil Company B.S.O.G. Radio Frequency 7840 KHZ  
 Country AUSTRALIA Area/Prospect OTWAY BASIN Stepback ..... Shot Point Interval 33 1/2 METERS

Mobile Station	FREQUENCY	INTERROGATOR	MONITOR	AMPLIFIER	ANTENNA SYSTEM
	429 MHz	009	011	014-014	DUPLEX L.P.L.

BASE STATIONS						
Position	Operator	Frequency	Beacon	Amplifier	Code	Delay
LADE LIPTRAP	B. HASSETT	429 MHz	024	013	1	9221
ST CHAPPE	CAPT. RAMOS	"	028	007	4	9221
"MARY" KING IS.	J. LEAHMAN	"	130	056	2	9221
ST CAMERON-W	R. OWENS	"	030	010	3	9221

OPERATING TIME			
Time On	Time Off	Requested By	System Used For
000	2400	K. WEBBER	STANDING BY - LAYING CABLE PRIME NAV - SEISMIC SURVEY

O/T Requested By ..... Total System - Hours Operation for Client 24 HOURS

LOST TIME			
From	To	Hours Lost	Reason(s)
000			

Brief of Operations Log & Remarks .....  
 0000 - 2100 LAYING, BALLASTING CABLE  
 2111 - 2230 HEADING FOR LINE# 0QM-82-8.  
 2240 - 2400 LINE# 0MQ82-8 DIR 217° FSP#001 TO LSP#495 COMPLETE  
 USING STATION "LIPTRAP", "CHAPPE", "MARY"  
 SURVEY FIXES, CHAPPE 034-036 MARY 129-470 LIPTRAP 235-211 = 3m/RMS  
 " 045-042 " 124-746 " 242-127 = 2m/RMS.

Mobile Operators C. THIEMANN Party Chief D. HEAVERLD.  
T. HENNESSY

**OFFSHORE NAVIGATION INC.  
MAXIRAN DAILY OPERATIONS LOG**

138117

Project Number **1392** Date **1<sup>st</sup> April 1992** Boat **M.V. LADY VILMA** Client Party Number **2993**  
 Physical Company **C.S.T** Oil Company **B.S.O.G.** Radio Frequency **7840 KHZ**  
 Country **AUSTRALIA** Area/Prospect **OTWAY BASIN** Stepback \_\_\_\_\_ Shot Point Interval **33 1/2 MTRS**

Mobile Station	FREQUENCY	INTERROGATOR	MONITOR	AMPLIFIER	ANTENNA SYSTEM
	<b>429MHZ</b>	<b>009.</b>	<b>011</b>	<b>014-014</b>	<b>DUPLEX LPL</b>

BASE STATIONS						
Position	Operator	Frequency	Beacon	Amplifier	Code	Delay
<b>CAPE LIPTAP</b>	<b>B. HASSETT</b>	<b>429MHZ</b>	<b>024</b>	<b>013</b>	<b>1</b>	<b>9221</b>
<b>H CHAPPLE</b>	<b>CAPT. RAMOS</b>	<b>"</b>	<b>028</b>	<b>007</b>	<b>4</b>	<b>9221</b>
<b>MARY-KING IS.</b>	<b>J. LEAHMAN</b>	<b>"</b>	<b>130</b>	<b>056</b>	<b>2</b>	<b>9221</b>
<b>H CAMERON W.</b>	<b>R. OWENS</b>	<b>"</b>	<b>030</b>	<b>010</b>	<b>3</b>	<b>9221</b>

OPERATING TIME			
Time On	Time Off	Requested By	System Used For
<b>0000</b>	<b>2400</b>	<b>K. WEBBER.</b>	<b>PRIME NAV. - SEISMIC SURVEY.</b>

O/T Requested By \_\_\_\_\_ Total System - Hours Operation for Client **24 HOURS.**

LOST TIME			
From	To	Hours Lost	Reason(s)

**Brief Operations Log & Remarks**

0000-0145: **LINE CHANGE**

0213-0417 **LINE# 0M082-4 DIR 216° FSP#0001 TO LSP#0691 COMPLETE**

0520-0753 **LINE# " -2 DIR 037° FSP#0001 TO LSP#0810 COMPLETE**

0955-1136 **LINE# " -15 DIR 124° FSP#0001 TO LSP#0585 COMPLETE**

1255-1435 **LINE# " -13 DIR 302° FSP#0001 TO LSP#0556 COMPLETE**

1553-1737 **LINE# " -11 DIR 123° FSP#0001 TO LSP#0570 COMPLETE**

1839-2005 **LINE# " -9 DIR 302° FSP#0001 TO LSP#0534 COMPLETE**

2112-2338 **LINE# " -7 DIR 124° FSP#0001 TO LSP#0880 COMPLETE**

-2400 **LINE CHANGE - HEADING FOR LINE 0M082-5.**

**NOTE: MT CAMERON WEST. IN RADIO + MAXIRAN STANDBY.**

Mobile Operators **C. THIEHMANN** Party Chief **D. HEAVERLO.**  
**T. HENNESSY**

**OFFSHORE NAVIGATION INC.  
MAXIRAN DAILY OPERATIONS LOG**

138118

Project Number **1392** Date **2<sup>nd</sup> April 1982** Boat **M.V. Lady Victoria** Client Party Number **2993**  
 Geophysical Company **G.S.I.** Oil Company **B.S.O.G.** Radio Frequency **7840 KHZ**  
 Country **Australia** Area/Prospect **OTWAY BASIN** Stepback \_\_\_\_\_ Shot Point Interval **33 1/2 METERS**

Mobile Station	FREQUENCY	INTERROGATOR	MONITOR	AMPLIFIER	ANTENNA SYSTEM
	429MHz	009	011	014-014	DUPLEX L.P.L.

BASE STATIONS							
Position	Operator	Frequency	Beacon	Amplifier	Code	Delay	
WPE. LIPTRAP	B. HASSETT	429MHz	024	013	1	9221	
WPE. CHAPPLE	CAPT. RAMOS	"	028	007	4	9221	
WPE. KING IS.	J. LEAHMAN	"	130	056	2	9221	
WPE. CAMERON W.	R. OWENS	"	030	010	3	9221	

OPERATING TIME			
Time On	Time Off	Requested By	System Used For
2000	2400	K. WEBBER	PRIME NAV. - SEISMIC SURVEY.

O/T Requested By \_\_\_\_\_ Total System - Hours Operation for Client **24 HOURS.**

LOST TIME			
From	To	Hours Lost	Reason(s)

Chief Operations Log & Remarks

2034-0242 OMQ82-5. DIR 304° FSP#001. TO LSP#0716 COMPLETE

0355-0529. " -3. DIR 126° FSP#001. TO LSP#0540 COMPLETE

" -3. LOST SIGNALS - SAT/SONAR SP#0046 TO SP#0101.

0650-0803 " -1. DIR 312° FSP#001. TO LSP#0391 COMPLETE

0912 ATTEMPTED LINE OMQ82-6 TERMINATED - SWELL NOISE

1220 ATTEMPTED LINE " -6 " SWELL NOISE

1445-2254 ATTEMPTED LINE " 14 BOTH DIRECTIONS SWELL NOISE

-2400 ATTEMPTING LINE " 14 DIR 038° TERM. SWELL NOISE

Mobile Operators **C. THIEMANN** Party Chief **D. HEAVERLO.**  
**T. HENNESSY**

**OFFSHORE NAVIGATION INC.  
MAXIRAN DAILY OPERATIONS LOG**

138119

Project Number 1392 Date 3<sup>RD</sup> APRIL 1982 Boat M.V. LADY VILMA Client Party Number 2998  
 Physical Company G.S.I. Oil Company B.S.O.G. Radio Frequency 7840 kHz  
 Country AUSTRALIA Area/Prospect OTWAY BASIN Stepback \_\_\_\_\_ Shot Point Interval 33 1/2 mtrs.

Mobile Station	FREQUENCY	INTERROGATOR	MONITOR	AMPLIFIER	ANTENNA SYSTEM
	<u>429 MHz</u>	<u>009</u>	<u>011</u>	<u>014-014</u>	<u>DUPLEX L.P.L.</u>

**BASE STATIONS**

Position	Operator	Frequency	Beacon	Amplifier	Code	Delay
<u>CAPE LIPTRAP</u>	<u>B. HASSETT</u>	<u>429 MHz</u>	<u>024</u>	<u>013</u>	<u>1</u>	<u>9221</u>
<u>MAI CHAPPLE</u>	<u>CAPT RAMOS</u>	<u>"</u>	<u>028</u>	<u>007</u>	<u>4</u>	<u>9221</u>
<u>KIRBY-KING Is</u>	<u>J. LEAHMAN</u>	<u>"</u>	<u>130</u>	<u>056</u>	<u>2</u>	<u>9221</u>
<u>MAI CAMERON-W.R.</u>	<u>R. OWENS</u>	<u>"</u>	<u>030</u>	<u>010</u>	<u>3</u>	<u>9221</u>

**OPERATING TIME**

Time On	Time Off	Requested By	System Used For
<u>000</u>	<u>2400</u>	<u>K. WEBBER</u>	<u>PRIME NAV - SEISMIC SURVEY</u>
D/T Requested By _____			Total System - Hours Operation for Client <u>24 HOURS</u>

**LOST TIME**

From	To	Hours Lost	Reason(s)

**Brief Operations Log & Remarks**

0000 - 0340 ATTEMPTING LINE# 00082-14 DIR 038° TERMINATED ON RUN IN - TOO MUCH NOISE ON CABLE.

0340 - 2400 ATTEMPTING LINES IN VARIOUS DIRECTIONS, ALL TERMINATED ON RUN IN DUE TO SWELL NOISE

Mobile Operators C. THIEMANN Party Chief D. HEAVERLO.  
T. HENNESSY

OFFSHORE NAVIGATION INC.  
MAXIRAN DAILY OPERATIONS LOG

138120

Project Number 1392 Date 4 APRIL 1982 Boat M.V. LADY VILMA Client Party Number 2993  
 Physical Company G.S.I. Oil Company B.S.O.G. Radio Frequency 7840 KHZ  
 Country AUSTRALIA Area/Prospect OTWAY BASIN Stepback \_\_\_\_\_ Shot Point Interval 33 1/2 METRS

Mobile Station	FREQUENCY	INTERROGATOR	MONITOR	AMPLIFIER	ANTENNA SYSTEM
	429MHz	009	011	014-014	DUPLEX L.P.L

BASE STATIONS						
Position	Operator	Frequency	Beacon	Amplifier	Code	Delay
CAPE LIPTRAP	B. HASSETT	429MHz	024	013	1	9221
CHAPPLE	CAPT. RAMOS	"	028	007	4	9221
MARY-KING IS.	J. LEHMAN	"	130	056	2	9221
CAMERON W.	R. OWENS	"	030	010	3	9221

OPERATING TIME			
Time On	Time Off	Requested By	System Used For
000	2400	K. WEBBER.	PRIME NAVIGATIONAL AID

O/T Requested By \_\_\_\_\_ Total System - Hours Operation for Client 24 HOURS.

LOST TIME			
From	To	Hours Lost	Reason(s)

File of Operations Log & Remarks  
 0000 - 0520 : ATTEMPTING LINE# OMQ82-14 BOTH DIRECTIONS  
 038° - 218° SWELL NOISE ON CABLE IS OVER  
 THE SPECIFIED LIMIT.  
 0520 - 1500 WORKING ON CABLE (FIXED OPEN TRACES).  
 1700 - 2400 ATTEMPTED LINE# OMQ82-14 AGAIN, WITH SAME RESULTS.

Mobile Operators C. THIEMANN Party Chief D. HEAVERLO  
T. HENNESSY.

**OFFSHORE NAVIGATION INC.  
MAXIRAN DAILY OPERATIONS LOG**

138121

Project Number 1392 Date 5 April 1982 Boat M.V. LADY VILMA  
 Geophysical Company G.S.I Oil Company B.S.O.G.  
 Country AUSTRALIA Area/Prospect OTWAY BASIN Stepback  
 Client Party Number 2993  
 Radio Frequency 7840 KHZ.  
 Shot Point Interval 33 1/2 MTRS.

Mobile Station	FREQUENCY	INTERROGATOR	MONITOR	AMPLIFIER	ANTENNA SYSTEM
	429 MHz	009	011	014 - 014	DUPEX LPL

BASE STATIONS						
Position	Operator	Frequency	Beacon	Amplifier	Code	Delay
LAPE. LIPTRAP	B. HASSETT.	429 MHz	024	013	1	9221
ML CHAPPLE	CAPT. RAMOS	"	028	007	4	9221
MLY. KING IS.	J. LEAHMAN	"	130	056	2	9221
ML. CAMERON-W.	R. OWENS.	"	030	010	3	9221

OPERATING TIME			
Time On	Time Off	Requested By	System Used For
0000-	2400	K. WEBBER.	PRIME NAV Aid -

O/T Requested By \_\_\_\_\_ Total System - Hours Operation for Client **24 HOURS.**

LOST TIME			
From	To	Hours Lost	Reason(s)

Chief Operations Log & Remarks  
 0000-1500 CIRCLING, DUE TO WEATHER. THE SWELL NOISE ON CABLE, IS OUTSIDE THE SPECIFIED LEVEL.  
 1500-2400 WORKING ON CABLE - MAXIRAN STANDBY.

Mobile Operators **C. THIMMANN**  
**T. HENNESSY**  
 Party Chief **D. LEAVERLO.**

OFFSHORE NAVIGATION INC.  
MAXIRAN DAILY OPERATIONS LOG

138122

Project Number 1392 Date 6 APRIL 1982 Boat M.V. LADY VILMA Client Party Number 2993  
 Geophysical Company G.S.I. Oil Company B.S.O.G. Radio Frequency 7840 KHZ  
 Country AUSTRALIA Area/Prospect OTWAY BASIN Stepback Shot Point Interval 3 1/2 MTRS

Mobile Station	FREQUENCY	INTERROGATOR	MONITOR	AMPLIFIER	ANTENNA SYSTEM
	429 MHz	009.	011	014-014	DUPLEX L.P.L

BASE STATIONS						
Position	Operator	Frequency	Beacon	Amplifier	Code	Delay
CAPE WITTRAP	B. HASSETT	429 MHz	024	013	1	9221
M. CHAPPE	CAPT. RAMOS	"	028	007	4	9221
MARY-KING Is.	J. LEAMAN	"	130	056	2	9221
M. CAMERON	R. OWENS	"	030	010	3	9221

OPERATING TIME			
Time On	Time Off	Requested By	System Used For
0000	1400	K. WEBBER.	PRIME NAV AID
Total Requested By			Total System - Hours Operation for Client 14 HOURS

LOST TIME			
From	To	Hours Lost	Reason(s)

Brief Operations Log & Remarks  
 0000-1030 WORKING ON CABLE  
 1030-1345 HEADING FOR LINE# 01082-14 DIR 218°  
 TERMINATED. SWELL NOISE ON CABLE EXCEEDING SPECIFIED LEVEL.  
 TERMINATED B.S.O.G. PROSPECT. 1400.

Mobile Operators C. THIEMANN  
 T. HENNESSY  
 Party Chief D. HEAVERLO

**OFFSHORE NAVIGATION INC.  
MAXIRAN DAILY OPERATIONS LOG**

138123

Project Number 1392 Date 20 APRIL 1982 Boat M.V. LADY VILMA Client Party Number 2993  
 Geographical Company G.S.I. Oil Company PETRACON-B.S.O.G. Radio Frequency 7840 KHZ  
 Country AUSTRALIA Area/Prospect BASS STRAIT T.18.P. Stepback Shot Point Interval 33 1/2 MTRS

Mobile Station	FREQUENCY	INTERROGATOR	MONITOR	AMPLIFIER	ANTENNA SYSTEM
	429MHZ	009	011	014 - 014	DUPLEX LPC

BASE STATIONS						
Position	Operator	Frequency	Beacon	Amplifier	Code	Delay
Cape LIPTAIP	B. HASSETT	429MHZ	024	013	1	9221
M. CHAPPLE	CAA. RAMOS	"	028	007	4	9221
Mary King Is.	J. LEAHMAN	"	130	056	2	9221
M. CAMERON-W.	R. OWENS	"	030	010	5	9221

OPERATING TIME			
Time On	Time Off	Requested By	System Used For
0100	2400	A. WELFARE	PRIME NAVIGATIONAL AID SEISMIC SURVEY.
J/T Requested By		Total System - Hours Operation for Client	
		23 HOURS.	

LOST TIME			
From	To	Hours Lost	Reason(s)

**Brief Operations Log & Remarks**

0100 - HEADING FOR BASS STRAIT OIL + GAS PROSPECT. T18P.  
 1309 - CROSSED MT CAMERON W. MARY BASELINE - COMP = 119.210 km  
 MAXIRAN RANGE = 119.246 km  
 BASELINE READS + 36 METRES  
 2100 - ARRIVED PROSPECT.  
 2121 - 2214 LINE# BB 82A-5 DIR 059° FSP# 0001 TO LSP# 0303 COMPLETE  
 2335 - 2400 LINE# BB 82A-3 DIR 234° FSP# 0001 TO MSP# 0141 CONTINUING

Mobile operators C. THIEMANN  
 T. HENNESSY Party Chief D. RUSSELL  
 Form N-1A SEE INSTRUCTIONS ON REVERSE

OFFSHORE NAVIGATION INC.  
MAXIRAN DAILY OPERATIONS LOG

138124

Project Number 1392 Date 21 APRIL 1982 Boat M.V. LADY VILMA Client Party Number 2993  
 Geophysical Company G.S.I. Oil Company BSOG - PETRACON Radio Frequency 7840 KHZ  
 Country AUSTRALIA Area/Prospect BASS STRAIT TTP Stepback Shot Point Interval 33 1/2 MTRS

Mobile Station	FREQUENCY	INTERROGATOR	MONITOR	AMPLIFIER	ANTENNA SYSTEM
	429 MHz	009	011	014-014	DUPLEX LPL

BASE STATIONS

Position	Operator	Frequency	Beacon	Amplifier	Code	Delay
CAPE LITTRAP	B. HASSETT	429 MHz	024	013	1	9221
Mt CHAPPE	CAPT. RAMOS	"	028	007	4	9221
MARY-KING Is.	J. LEAHMAN	"	130	056	2	9221
Mt CAMERON-W.	R. OWENS	"	030	010	5	9221.

OPERATING TIME

Time On	Time Off	Requested By	System Used For
0000	2400	A. WELFARE.	PRIME NAVIGATIONAL Aid SEISMIC SURVEY
O/T Requested By		Total System - Hours Operation for Client 24 Hours	

LOST TIME

From	To	Hours Lost	Reason(s)

Brief Operations Log & Remarks

0000 - 0036 LINE# BB82A-3 Dir 234° FSP#0141 TO SP#0361 TERM - BAD NAV.  
 0155 - 0242 LINE# " -1 Dir 049° FSP#0001 TO LSP#0285 COMPLETE  
 0400 - 0428 LINE# " -3A Dir 234° FSP#0202 TO LSP#0362 COMPLETE  
 0700 - 0852 LINE# " -2 Dir 310° FSP#0001 TO LSP#0708 COMPLETE  
 1028 - 1119 LINE# " -7 Dir 058° FSP#0001 TO SP#0285 TERM - BAD NAV.  
 1130 - 1845 WORKING ON CABLE.  
 2043 - LINE# BB82A-7A Dir 238° FSP# TERM C.M.S IDLE.  
 2050 - 2400 C.M.S MALFUNCTION

Mobile Operators C. THIEMANN  
 T. HENNESSY Party Chief D. RUSSELL

**OFFSHORE NAVIGATION INC.  
MAXIRAN DAILY OPERATIONS LOG**

138125

Project Number 1392 Date 22 APRIL 1982 Boat M.V. LADY VILMA. Client Party Number 2993  
 Geophysical Company G.S.I. Oil Company B.S.O.G. Radio Frequency 7840 KHZ  
 Country AUSTRALIA Area/Prospect BASS STRAIT-T18P Stepback \_\_\_\_\_ Shot Point Interval 33 1/2 MTAS

Mobile Station	FREQUENCY	INTERROGATOR	MONITOR	AMPLIFIER	ANTENNA SYSTEM
	429 MHz	009-006*	011	014-014	DUPLEX LPL

BASE STATIONS						
Position	Operator	Frequency	Beacon	Amplifier	Code	Delay
CAPE LIPTRAP	B. HASSETT	429 MHz	024	013	1	9221
Mt CHAPPLE CAP.	RAMOS	"	028	007	4	9221
MARY. KING IS.	J. LEAHMAN	"	130	056	2	9221
Mt CAMERON-W.	R. OWENS	"	030	010	5	9221

OPERATING TIME			
Time On	Time Off	Requested By	System Used For
0000	2400	AL. WELFARE	PRIME NAVIGATIONAL AID SEISMIC SURVEY.

O/T Requested By \_\_\_\_\_ Total System - Hours Operation for Client 24 HOURS.

LOST TIME			
From	To	Hours Lost	Reason(s)

Brief Operations Log & Remarks 0000-0230 C.M.S. MALFUNCTION  
0332-0439 LINE# 8882A-7B Dir 237° FSP#0001 TO LSP#0361 COMPLETE  
0625-0704 LINE# " -9 Dir 049° FSP#0001 TO LSP#0220 COMPLETE  
0830-0925 LINE# " -11 Dir 225° FSP#0001 TO LSP#0315 COMPLETE  
\* CHANGED BEACONS 009 TO 006 3WAY FIXES SAME  
WITH BOTH i.e. BETWEEN 3.85M  
1048-1152 LINE# 8882A -13 Dir 049° FSP#0001 TO LSP#0330 COMPLETE  
1319-1424 LINE# " -15 Dir 243° FSP#0001 TO LSP#0366 COMPLETE  
1619-1909 LINE# " -4 Dir 131° FSP#0001 TO LSP#0665 COMPLETE  
1939-2053 LINE# " -6 Dir 313° FSP#0001 TO LSP#0426 COMPLETE  
2100-2400 HEADING FOR B.S.O.G. - T14P AREA

P.T.O.

Mobile Operators C. THIEMANN Party Chief D. RUSSELL  
T. HENNESSY

## Operations Log &amp; Remarks (con'd.)

BASELINE CALL LITMAP 1<sup>st</sup> H CAMERON W. COMP = 245.14% Km.  
 14.000 + 111.047 MEASURED = 248.182 Km.  
 15.000 + 111.150 MEASURED = 240.151 Km.

BASELINE READING 33 mi LONG.

THERE IS NO PNEPLOTS WITH CAMERON W. RANGE.  
 WHEN NAVIGATING WITH CAMERON + MARY THE PNEPLOTED RANGE  
 FOR LITMAP IS OUT CONSISTANTLY 30-40 MILES.  
 WHEN NAVIGATING MARY + LITMAP THE RANGE IS CONSISTANT WITH  
 PNEPLOTED LINE

NOTE PREVIOUS BASELINE CAMERON W. + MARY 36 mi LONG.

## INSTRUCTIONS

- This form is to be filled out completely for each day that the crew, or any member thereof, is in a work status.
- It is intended to provide a concise but complete log of one day's activity on an operating radiopositioning crew. Completeness is more important than brevity.  
 If more space is needed in order to make a complete report, use supplemental sheets.
  - In addition to providing an operational log, it also provides information required for billing purposes, particularly as it lists operating days, lost time, overtime, etc.
  - It has been specifically modified from previous forms to provide (under Operating Time) for a notation as to what the system is being used for during a specific period. This is particularly important (1) in case of overtime operations; (2) when the system is being used for other than the client's normal, day to day, operations; and (3) when the system is kept on the air but no production is being realized.
- Under "Operating Time", the name of the client's representative requesting that the system be turned on or off or requesting overtime (O/T) operations should be noted. Notations such as "Client" or "Client Rep." are not sufficient.
- Mobile operators should ascertain from their Party Chief if overtime charges are applicable on a particular operation (Party Chiefs are normally furnished with a copy of the applicable contract). If overtime is applicable to the operation, it should not be incurred without the client representative being fully aware of it and specifically authorizing it. In brief, if the system is not required, it should be turned off. If the client will not permit its being turned off to eliminate unnecessary overtime, that should be noted on this form, including all pertinent particulars.
  - The client, or his representative, always has the final decision as to whether the system should be turned on or off.

OFFSHORE NAVIGATION INC.  
MAXIRAN DAILY OPERATIONS LOG

138127

Project Number 1392 Date 23 APRIL 1982 Boat M.V. LADY VILMA  
 Physical Company G.S.I. Oil Company B.S.O.G. Client Party Number 2993  
 Country AUSTRALIA Area/Prospect BASS STRAIT T14P Stepback Radio Frequency 7840 KHZ  
 Shot Point Interval 33 1/2 MTRS

Mobile Station	FREQUENCY	INTERROGATOR	MONITOR	AMPLIFIER	ANTENNA SYSTEM
	429 MHz	006	011	014.	DUPLEX LPL

Position	Operator	Frequency	Beacon	BASE STATIONS		DELAY	
				Control Box	Amplifier	Code	
CAPE LIPTRAP	B. HASSETT	429 MHz	024	9221	013	1	
H CHAPPLE	CAPT. RAMDS	"	028	9221	007	4	
MARY KING IS.	J. LEAHMAN	"	130	9221	056	2	
H CAMERON-W.	R. OWENS	"	030	9221	010	5	

OPERATING TIME			
Time On	Time Off	Requested By	System Used For
0000	2400	A. WELFARE	PRIME NAVIGATIONAL Aid SEISMIC SURVEY.

O/T Requested By \_\_\_\_\_ Total System - Hours Operation for Client 24 HOURS.

LOST TIME			
From	To	Hours Lost	Reason(s)

Brief Operations Log & Remarks HEADING FOR T14P AREA FROM T18P.  
 0221-0336 LINE# BC82A-5 DIR 056° FSP#0001 TO LSP#0375 Comp.  
 0527-0630 LINE# " -3 DIR 237° FSP#0001 TO LSP#0362 Comp.  
 0740-0844 LINE# " -1 DIR 057° FSP#0001 TO LSP#0359 Comp.  
 \*0924-1219 LINE# " -2 DIR 312° FSP#0001 TO LSP#0657 Comp.  
 1326-1741 LINE# " -7 DIR 030° FSP#0001 TO LSP#0796 Comp.  
 \* COMPLETED LINE#2 ON SAT./SONAR FROM SP# 500.

1800-2400 HEADING FOR B.S.O.G PROSPECT - P16.  
 CROSSING BASELINE ON THE WAY TO P16 - T17P.

P.T.O

Mobile Operators C. THIERMANN  
 T. HENNESSY. Party Chief D. RUSSELL

Operations Log &amp; Remarks (con'd.)

CAMERON W	+	LIPTRAP BASELINE	COMPUTED = 248.149
154.339	+	083.848 + 38ms	MEASURED = 248.187
155.340	+	082.845 + 36ms	MEASURED = 248.185
146.346	+	081.846 + 43ms	MEASURED = 248.192

SIGNALS JUMPING  $\pm$  20 METRES  
 INTERROGATOR # 006.

#### INSTRUCTIONS

1. This form is to be filled out completely for each day that the crew, or any member thereof, is in a work status.

2. It is intended to provide a concise but complete log of one day's activity on an operating radiopositioning crew. Completeness is more important than brevity.

3. If more space is needed in order to make a complete report, use supplemental sheets.

In addition to providing an operational log, it also provides information required for billing purposes, particularly as it lists operating days, lost time, overtime, etc.

It has been specifically modified from previous forms to provide (under Operating Time) for a notation as to what the system is being used for during a specific period. This is particularly important (1) in case of overtime operations; (2) when the system is being used for other than the client's normal, day to day, operations; and (3) when the system is kept on the air but no production is being realized.

Under "Operating Time", the name of the client's representative requesting that the system be turned on or off or requesting overtime (O/T) operations should be noted. Notations such as "Client" or "Client Rep." are not sufficient.

Mobile operators should ascertain from their Party Chief if overtime charges are applicable on a particular operation (Party Chiefs are normally furnished with a copy of the applicable contract). If overtime is applicable to the operation, it should not be incurred without the client representative being fully aware of it and specifically authorizing it. In brief, if the system is not required, it should be turned off. If the client will not permit its being turned off to eliminate unnecessary overtime, that should be noted on this form, including all pertinent particulars.

8. The client, or his representative, always has the final decision as to whether the system should be turned on or off.

OFFSHORE NAVIGATION INC.  
MAXIRAN DAILY OPERATIONS LOG

138129

Project Number 1392 Date 24 APRIL 1982 Boat M.V. LADY VILMA Client Party Number 2993  
 Geophysical Company G.S.I. Oil Company B.S.O.G. Radio Frequency 7840 KHZ  
 Country AUSTRALIA Area/Prospect BASS STRAIT P16 Stepback Shot Point Interval 3 1/2 MTRS

Mobile Station	FREQUENCY	INTERROGATOR	MONITOR	AMPLIFIER	ANTENNA SYSTEM
	429 MHz	006 - 009	011	014	DUPLEX LPL

BASE STATIONS				DELAY		
Position	Operator	Frequency	Beacon	Control Box	Amplifier	Code
PEE LIPTRAP	B. HASSETT	429 MHz	024	9221	013	1
MT CHAPPLE	CAPT. RAMOS	"	028	9221	007	4
MARY KING IS.	J. LEAHMAN	"	130	9221	056	2
M11 CAMERON-W	R. OWENS	"	030	9221	010	5

OPERATING TIME			
Time On	Time Off	Requested By	System Used For
0000	2130	A. WELFARE	PRIME NAVIGATIONAL AID

O/T Requested By \_\_\_\_\_ Total System - Hours Operation for Client 2 1/2 HOURS

LOST TIME			
From	To	Hours Lost	Reason(s)

Brief Operations Log & Remarks  
 1000-0410 CROSSING BASELINES ON WAY TO PROSPECT P16.  
 MARY + LIPTRAP BASELINE COMPUTED = 215.586  
 +2.0m. LONG { WITH INTERROGATOR # 006 MEASURED = 215.604 }  
 " " " " " = 215.605 }  
 " " " " " 215.584 }  
 -2m. SHORT { WITH INTERROGATOR # 009 " 215.584 }  
 " " " " " 215.584 }  
 (MARY + MT CHAPPLE BASELINE COMPUTED = 151.177)  
 +9m. LONG { 053.492 + 097.694 MEASURED = 151.186 }  
 WITH INTERROGATOR # 006  
 2124 TEAM RUN IN TO LINE # 0M982-16. EXCESSIVE SWELL NOISE  
 HEADING FOR B.M.R. PROSPECT.

Mobile Operators C. THIEMANN  
 T. HENNESSY Party Chief D. RUSSELL

OFFSHORE NAVIGATION INC.  
MAXIRAN DAILY OPERATIONS LOG

138130

Project Number 1392 Date 2 MAY 1982 Boat MV. LADY VILMA  
Geophysical Company G.S.T Oil Company B.S.O.G. Client Party Number 2993  
Country Australia Area/Prospect OTWAY BASIN Stepback Radio Frequency 7840 KHZ  
Shot Point Interval 33 1/2 MTRS

Mobile Station	FREQUENCY	INTERROGATOR	MONITOR	AMPLIFIER	ANTENNA SYSTEM
	429 MHz	006	011	014	DUPLEX LPL

BASE STATIONS						
Position	Operator	Frequency	Beacon	<del>Control Box</del> DELAY	Amplifier	Code
CAPE LIPTRAD	B. HASSETT.	429 MHz	024	9221	013	1
MT CHAPPLE	CAPT. RAMOS	"	028	9221	007	4
LADY-KING Is	J. LEAHMAN	"	130	9221	056	2

OPERATING TIME			
Time On	Time Off	Requested By	System Used For
1000	2400	A. WELFARE	PRIME NAVIGATION AID - SEISMIC SURVEY

O/T Requested By \_\_\_\_\_ Total System - Hours Operation for Client 14 Hours.

LOST TIME			
From	To	Hours Lost	Reason(s)

Brief Operations Log & Remarks  
 1000 HEADING FOR OTWAY BASIN - "P16" LINE# OMQ82-14.  
 1416-1651 LINE# OMQ82-14 DIR 218° FSP# 0001 TO LSP# 0781  
 1825-1929 LINE# OMQ82-16 DIR 088° FSP# 0001 TO LSP# 0360  
 2111-2255 LINE# OMQ82-12 DIR 217° FSP# 0001 TO LSP# 0585  
 2340-2400 SHIPS POWER FAILED - HEADING FOR LINE# OMQ82-10.

Mobile Operators C. THIEMANN  
 T. HENNESSY Party Chief D. RUSSELL

OFFSHORE NAVIGATION INC.  
MAXIRAN DAILY OPERATIONS LOG

138131

Project Number 1392 Date 3<sup>RD</sup> MAY 1982 Boat M.V. LADY VILMA Client Party Number 2993  
 Geophysical Company G.S.I. Oil Company B.S.O.G. Radio Frequency 7840 KHZ  
 Country AUSTRALIA Area/Prospect OTWAY BASIN P16 Stepback Shot Point Interval 33 1/2 MTR

Mobile Station	FREQUENCY	INTERROGATOR	MONITOR	AMPLIFIER	ANTENNA SYSTEM
	429 MHz	006	011	014	DUPLEX LPL

BASE STATIONS				DELAY		
Position	Operator	Frequency	Beacon	Control Box	Amplifier	Code
CAPE LIPTRAP	B. HASSETT.	429 MHz	024	9221	013	1
MH CHAPPLE	CAP. RAMOS.	"	028	9221	007	4
MARY KING Is.	J. LEAHMAN	"	130	9221	056	2

OPERATING TIME			
Time On	Time Off	Requested By	System Used For
0000	1330	A. WELFARE	PRIME NAVIGATION AID - SEISMIC SURVEY.
O/T Requested By		Total System - Hours Operation for Client 13 1/2 Hours	

LOST TIME			
From	To	Hours Lost	Reason(s)

Brief Operations Log & Remarks  
 0000-0200 HEADING FOR LINE# OM082-10  
 0225 TERMINATED LINE# 10- GYRO OUT AFTER POWER FAILED.  
 0434-0613 LINE# OM082-10 DIR 037° FSP#000 TO LSP#0550 COMPLETE.  
 0736-0908 LINE# OM082-6 DIR 217° FSP#0001 TO LSP#0526 COMPLETE.  
 B.S.O.G OTWAY BASIN P16 PROSPECT COMPLETED.  
 1015-1215 PULLING CABLE - CABLE ON BOARD.  
 -1330 MAXIRAN SECURED.  
 2245 ARRIVED STONY Pt. WESTERNPORT BAY.

Mobile Operators C. THEMANN  
 T. HENNESSY  
 Party Chief D. RUSSELL

APPENDIX B  
THE MAXIRAN RADIOPOSITIONING SYSTEM

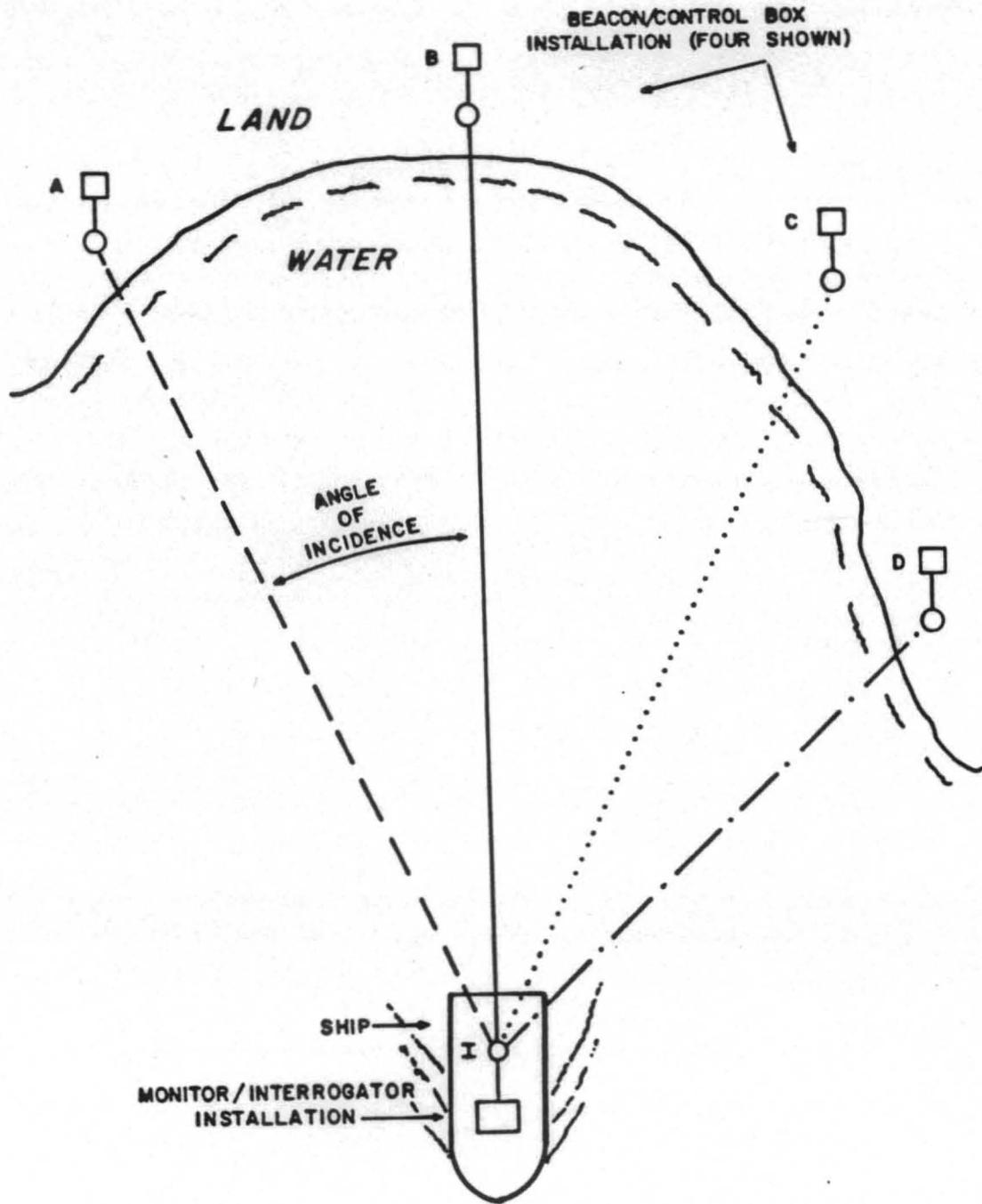
## I. THE MAXIRAN RADIOPOSITIONING SYSTEM

The Maxiran Radiopositioning System is a precision electronic ranging system, capable of both manual and automatic tracking of range. It is especially useful for measuring distances across bodies of water.

The use of the Maxiran requires three or more electronic installations. For the purposes of this discussion, one of these installations is assumed to be aboard a ship (see Figure 1). This installation consists of the Maxiran Monitor and Interrogator. The other installations are located onshore. Each of these installations consist of a Maxiran Beacon and a Control Box. There are two or more of the Beacon Control Box installations situated at appropriate locations onshore.

In operation, the Monitor/Interrogator installation transmits a radio signal (containing a Beacon-Select code which addresses a selected Beacon) which is picked up by all of the Beacon/Control Box installations. Each Beacon decodes the received signal and decides whether the Beacon-Select code transmitted corresponds to that Beacon. If the Beacon-Select code is correct for a

FIGURE-1. TYPICAL MAXIRAN SYSTEM



I. THE MAXIRAN RADIOPOSITIONING SYSTEM (continued)

Beacon, it responds by transmitting a radio signal reply. The Monitor measures the amount of time elapsed between the Interrogator's transmission and the received reply sent by the Beacon. Since, for all practical purposes, radio signals travel at a known speed, the time elapsed between transmission and response is a measure of the distance the radio signal travelled. The elapsed time is converted by the Monitor into distance and then displayed. Knowing the location of the land stations and the current distance from the ship to each of them, the position of the ship can be readily calculated.

For the purposes of this discussion, let us first assume that only two Beacons are being utilized. They are the Beacons marked "A" and "B" in Figure 1. Since the distance from Beacon "A" to the Interrogator (call it distance  $A_1$ ), and the distance from Beacon "B" to the Interrogator (call it distance  $B_1$ ) are now known (these distances are the distances displayed on the Monitor front panel), we can use some geometry to calculate the position of the ship with reference to Beacons "A" and "B".

I. THE MAXIRAN RADIOPOSITIONING SYSTEM (continued)

As illustrated in Figure 2, the distances of A1 and B1 define two intersecting circles, one with a radius of length A1 centered about Beacon "A", the other with radius of length B1 centered about Beacon "B". The two circles intersect at two points (marked I and I' in Figure 2). Obviously, the ship can only be located at one of the points. Since point I' happens to be located on land, we can safely assume that the ship is located at Point I.

There is always some uncertainty associated with the exact measurements of the Beacons. This is illustrated in Figure 3. Figure 3 illustrates an enlarged view of the intersection of the circles shown in Figure 2. If the tolerance of the measurements of Beacon "B" is plus-or-minus 5 meters, then the two solid lines in Figure 3 are 10 meters apart. The tolerance of the measurements of Beacon "A" should be the same as that of Beacon "B", but this is not always the case due to differences in geographical location. Under the above conditions, we only know that the ship is located somewhere in the shaded area of Figure 3.

FIGURE-2. SYSTEM WITH TWO BEACONS

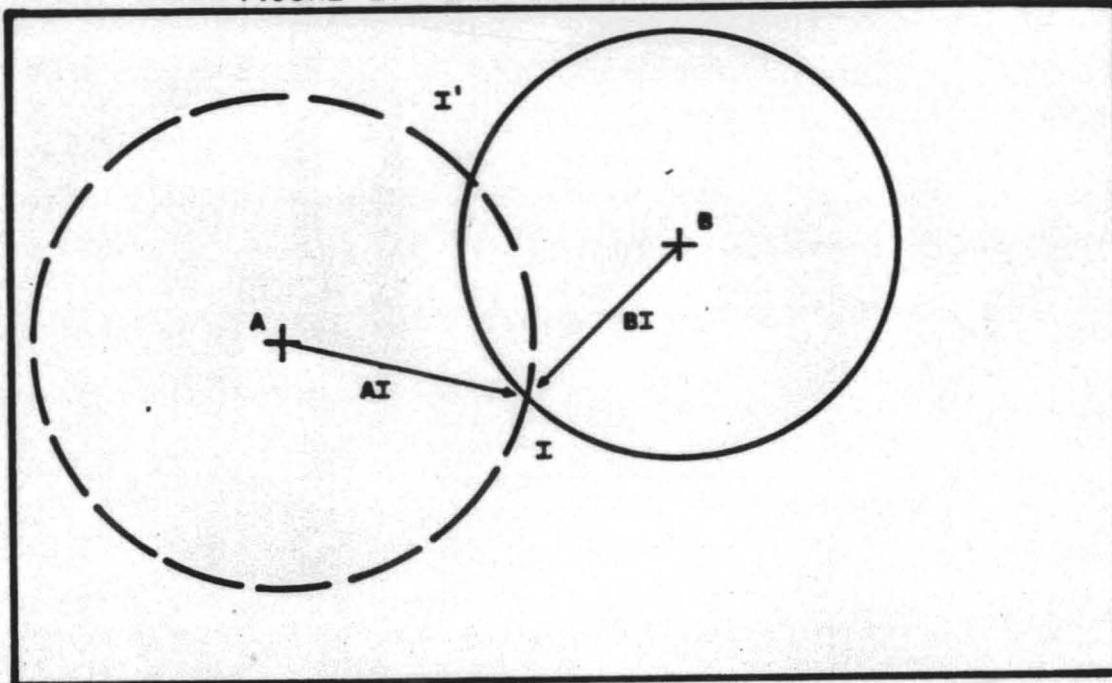
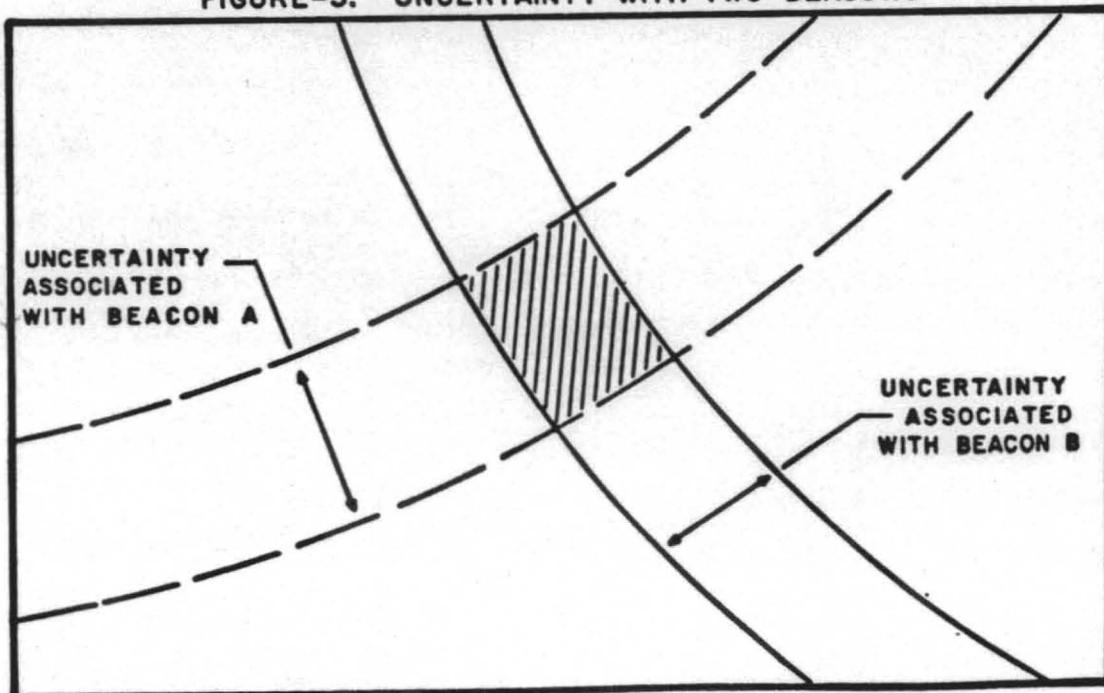


FIGURE-3. UNCERTAINTY WITH TWO BEACONS



I. THE MAXIRAN RADIOPOSITIONING SYSTEM (continued)

For the purposes of the following discussion, it is assumed that there are now three Beacons utilized. Now three circles are defined, instead of the two from the discussion above. The third distance, from Beacon "C" to the Interrogator (call it distance C1), defines a circle of radius length C1 centered about Beacon "C". The new situation is illustrated in Figure 4. Notice that with the three circles, there is only one location where all three circles can intersect. This eliminates the ambiguity associated with using only two Beacons. Now there is no 'I' to worry about. An additional advantage of using three Beacons is illustrated in Figure 5. Now the area of uncertainty has been reduced even though the tolerance of Beacon "C"'s measurement isn't any better than that of the other Beacons.

As the ship moves along, one or more of the Beacons may become unusable for various reasons; out of range, too small or too great an operating angle, etc. If additional Beacons are situated on shore, they may be interrogated, as desired, to greatly expand the range and usability of the system.

FIGURE-4. SYSTEM WITH THREE BEACONS

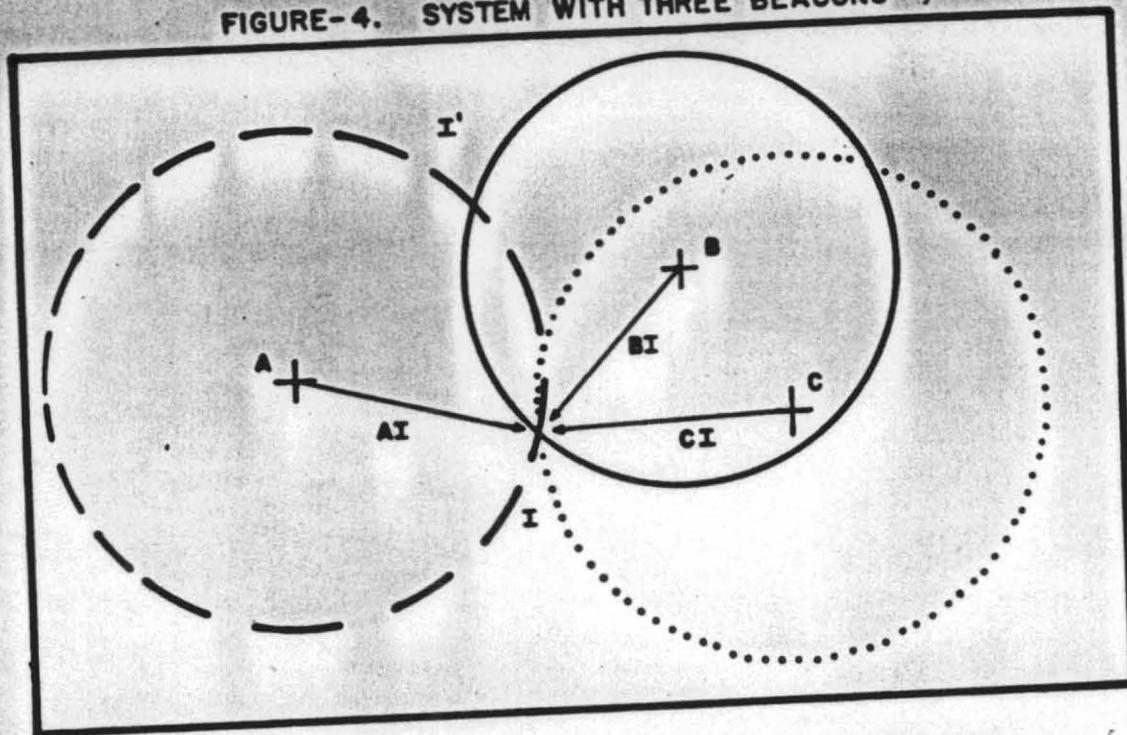
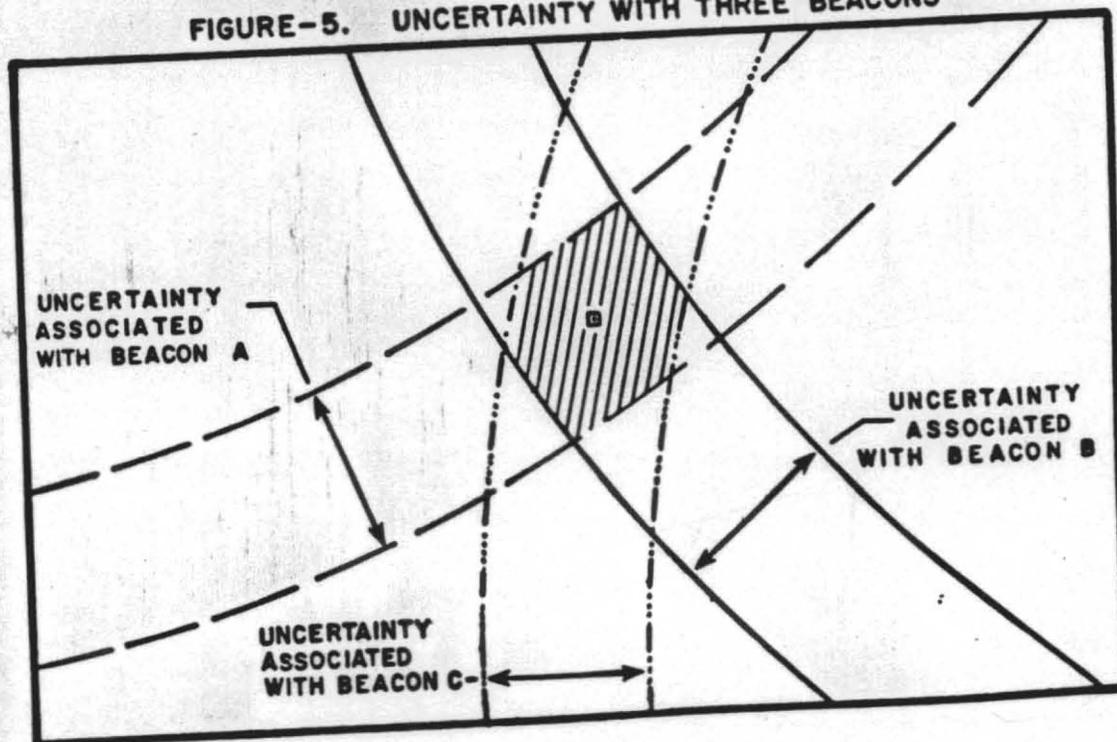


FIGURE-5. UNCERTAINTY WITH THREE BEACONS



I. THE MAXIRAN RADIOPOSITIONING SYSTEM (continued)

As many as three different Beacons may be selected at one time by the proper setting of the Monitor's Beacon-Select switches.

138141

TPR  
OR-139  
Vol 4

T114P PART 18

BASS STRAIT OIL & GAS (HOLDINGS) N.L.  
BC82 A SEISMIC SURVEY  
T14P  
SHOT POINT LOCATIONS.

TPR  
OR-139  
VOL 4

RECORDING MEDIUM : DATA IS RECORDED ON A 9 TRACK, HALF INCH MAGNETIC TAPE AT DENSITY 600 BPI

GROSS FORMAT: RECORDS ARE RECORDED IN THE FIXED BLOCKED FORMAT (FB). THE LOGICAL RECORD LENGTH IS 80 BYTES (LRECL = 80). THE BLOCK LENGTH IS 800 BYTES (BLKSIZE = 800). THE DATA IS NOT LABELED (LABEL=(1,NL))

DATA ORGANISATION: THE DATASET IS STARTED BY FOUR HEADER RECORDS, FORMATTED 10A8, CONTAINING:

1. NAME OF SURVEY, AREA LICENCE BLOCK NUMBER
2. CLIENT, CONTRACTOR, MONTH, YEAR
3. SOURCE, POSITIONING SYSTEM, OFFSET, INDICATION OF 24 HR. OPERATION
4. SPHEROID, PROJECTION, CENTRAL MERIDIAN OR STANDARD PARALLELS

EACH SHOTPOINT IS REPRESENTED BY AN EBCDIC CODED RECORD IN THE DATASET. THE FORMAT AND CONTENT OF EACH RECORD IS AS FOLLOWS:

COLUMNS	FORM	CONTENTS
1-16	4A4	LINE NAME - LEFT JUSTIFIED
17-24	2A4	SHOTPOINT NAME - RIGHT JUSTIFIED
25-34	I3,I2,F4.1,A1	LATITUDE - DEGREES, MINUTES, SECONDS WITH N OR S
35-44	I3,I2,F4.1,A1	LONGITUDE - DEGREES, MINUTES, SECONDS WITH E OR W
45-52	I8	MAP GRID EASTING
53-60	I8	MAP GRID NORTHING
61-65	I5	WATER DEPTH - IF AVAILABLE
66-68	I3	JULIAN DAY
69-74	3I2	TIME - HOURS, MINUTES, SECONDS
75-80	6A1	BLANK

TOTAL OF 2549 TAPE RECORDS READ IN

2549 RECORDS WRITTEN ON OUTPUT TAPE

138143

AREA: BASS STRAIT

CLIENT: BSOG

POSITION: ENERGY SOURCE

SPH: AUSTRALIAN

CONTRACTOR: G.S.I.

OFFSET: 60.7M

PROJ: UTMS, CM: 147EAST, UNITS: METRES, SCALEFACTOR: 0.9996

138144

LINE NAME	SHOTPOINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-5	1	39 50 59.7 S	145 43 40.8 E	391183	5588111	79	112	162141
BC82A-5	2	39 50 59.1 S	145 43 41.9 E	391209	5588131	79	112	162152
BC82A-5	3	39 50 58.4 S	145 43 43.1 E	391236	5588152	79	112	1622 3
BC82A-5	4	39 50 57.8 S	145 43 44.2 E	391262	5588172	79	112	162214
BC82A-5	5	39 50 57.1 S	145 43 45.3 E	391288	5588192	79	112	162226
BC82A-5	6	39 50 56.5 S	145 43 46.4 E	391314	5588212	79	112	162237
BC82A-5	7	39 50 55.9 S	145 43 47.5 E	391341	5588232	79	112	162248
BC82A-5	8	39 50 55.2 S	145 43 48.6 E	391367	5588252	79	112	162259
BC82A-5	9	39 50 54.6 S	145 43 49.7 E	391393	5588272	79	112	162310
BC82A-5	10	39 50 53.9 S	145 43 50.8 E	391419	5588292	79	112	162321
BC82A-5	11	39 50 53.3 S	145 43 51.9 E	391445	5588312	79	112	162332
BC82A-5	12	39 50 52.7 S	145 43 53.0 E	391471	5588332	79	112	162343
BC82A-5	13	39 50 52.0 S	145 43 54.2 E	391497	5588352	79	112	162354
BC82A-5	14	39 50 51.4 S	145 43 55.3 E	391523	5588372	79	112	1624 6
BC82A-5	15	39 50 50.8 S	145 43 56.4 E	391549	5588392	79	112	162418
BC82A-5	16	39 50 50.1 S	145 43 57.5 E	391576	5588412	79	112	162429
BC82A-5	17	39 50 49.5 S	145 43 58.6 E	391602	5588431	79	112	162439
BC82A-5	18	39 50 48.9 S	145 43 59.7 E	391628	5588451	79	112	162450
BC82A-5	19	39 50 48.2 S	145 44 00.9 E	391655	5588471	79	112	1625 2
BC82A-5	20	39 50 47.6 S	145 44 02.0 E	391681	5588491	79	112	162514
BC82A-5	21	39 50 47.0 S	145 44 03.1 E	391708	5588510	79	112	162525
BC82A-5	22	39 50 46.4 S	145 44 04.3 E	391735	5588530	79	112	162537
BC82A-5	23	39 50 45.8 S	145 44 05.4 E	391761	5588549	79	112	162548
BC82A-5	24	39 50 45.1 S	145 44 06.5 E	391788	5588569	79	112	162559
BC82A-5	25	39 50 44.5 S	145 44 07.7 E	391815	5588588	79	112	162611
BC82A-5	26	39 50 43.9 S	145 44 08.8 E	391842	5588608	79	112	162623
BC82A-5	27	39 50 43.3 S	145 44 10.0 E	391869	5588627	79	112	162634
BC82A-5	28	39 50 42.7 S	145 44 11.1 E	391896	5588646	79	112	162645
BC82A-5	29	39 50 42.0 S	145 44 12.3 E	391924	5588666	79	112	162657
BC82A-5	30	39 50 41.4 S	145 44 13.5 E	391951	5588685	79	112	1627 8
BC82A-5	31	39 50 40.8 S	145 44 14.6 E	391979	5588704	79	112	162719
BC82A-5	32	39 50 40.2 S	145 44 15.8 E	392006	5588723	79	112	162731
BC82A-5	33	39 50 39.6 S	145 44 17.0 E	392034	5588742	79	112	162742
BC82A-5	34	39 50 39.0 S	145 44 18.2 E	392062	5588761	79	112	162753
BC82A-5	35	39 50 38.4 S	145 44 19.3 E	392089	5588780	79	112	1628 4
BC82A-5	36	39 50 37.8 S	145 44 20.5 E	392117	5588799	79	112	162815
BC82A-5	37	39 50 37.2 S	145 44 21.7 E	392145	5588818	79	112	162826
BC82A-5	38	39 50 36.6 S	145 44 22.8 E	392172	5588837	80	112	162838
BC82A-5	39	39 50 36.0 S	145 44 24.0 E	392200	5588856	79	112	162849
BC82A-5	40	39 50 35.4 S	145 44 25.2 E	392228	5588874	79	112	1629 1
BC82A-5	41	39 50 34.8 S	145 44 26.4 E	392256	5588893	79	112	162912
BC82A-5	42	39 50 34.2 S	145 44 27.6 E	392283	5588912	79	112	162924
BC82A-5	43	39 50 33.6 S	145 44 28.7 E	392311	5588931	79	112	162935
BC82A-5	44	39 50 33.0 S	145 44 29.9 E	392339	5588950	79	112	162946
BC82A-5	45	39 50 32.4 S	145 44 31.1 E	392367	5588969	79	112	162957
BC82A-5	46	39 50 31.8 S	145 44 32.3 E	392394	5588988	79	112	1630 9
BC82A-5	47	39 50 31.2 S	145 44 33.5 E	392422	5589007	79	112	163020
BC82A-5	48	39 50 30.6 S	145 44 34.6 E	392450	5589026	79	112	163031
BC82A-5	49	39 50 30.0 S	145 44 35.8 E	392477	5589045	79	112	163042
BC82A-5	50	39 50 29.4 S	145 44 37.0 E	392505	5589064	79	112	163053
BC82A-5	51	39 50 28.8 S	145 44 38.1 E	392532	5589083	79	112	1631 5
BC82A-5	52	39 50 28.2 S	145 44 39.3 E	392559	5589102	79	112	163116
BC82A-5	53	39 50 27.6 S	145 44 40.5 E	392587	5589122	79	112	163127
BC82A-5	54	39 50 27.0 S	145 44 41.6 E	392614	5589141	79	112	163138

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LINE NAME	SHOT POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-5	55	39 50 26.4 S	145 44 42.8 E	392641	5589160	79	112	163150
BC82A-5	56	39 50 25.7 S	145 44 43.9 E	392668	5589180	79	112	1632 0
BC82A-5	57	39 50 25.1 S	145 44 45.1 E	392695	5589199	79	112	163212
BC82A-5	58	39 50 24.5 S	145 44 46.2 E	392721	5589219	79	112	163223
BC82A-5	59	39 50 23.9 S	145 44 47.3 E	392748	5589238	79	112	163234
BC82A-5	60	39 50 23.2 S	145 44 48.5 E	392775	5589258	79	112	163245
BC82A-5	61	39 50 22.6 S	145 44 49.6 E	392801	5589278	79	112	163257
BC82A-5	62	39 50 22.0 S	145 44 50.7 E	392828	5589297	79	112	1633 8
BC82A-5	63	39 50 21.4 S	145 44 51.8 E	392854	5589317	79	112	163320
BC82A-5	64	39 50 20.7 S	145 44 53.0 E	392881	5589337	79	112	163331
BC82A-5	65	39 50 20.1 S	145 44 54.1 E	392907	5589357	79	112	163342
BC82A-5	66	39 50 19.5 S	145 44 55.2 E	392934	5589377	79	112	163353
BC82A-5	67	39 50 18.8 S	145 44 56.3 E	392960	5589397	79	112	1634 4
BC82A-5	68	39 50 18.2 S	145 44 57.4 E	392986	5589417	79	112	163415
BC82A-5	69	39 50 17.5 S	145 44 58.5 E	393012	5589437	79	112	163427
BC82A-5	70	39 50 16.9 S	145 44 59.7 E	393039	5589457	79	112	163437
BC82A-5	71	39 50 16.2 S	145 45 00.8 E	393065	5589478	79	112	163449
BC82A-5	72	39 50 15.6 S	145 45 01.9 E	393091	5589498	79	112	163459
BC82A-5	73	39 50 15.0 S	145 45 03.0 E	393117	5589518	79	112	163511
BC82A-5	74	39 50 14.3 S	145 45 04.1 E	393143	5589538	79	112	163523
BC82A-5	75	39 50 13.7 S	145 45 05.2 E	393170	5589559	79	112	163533
BC82A-5	76	39 50 13.0 S	145 45 06.4 E	393196	5589579	79	112	163545
BC82A-5	77	39 50 12.4 S	145 45 07.5 E	393222	5589599	79	112	163556
BC82A-5	78	39 50 11.7 S	145 45 08.6 E	393249	5589619	79	112	1636 8
BC82A-5	79	39 50 11.1 S	145 45 09.7 E	393275	5589639	80	112	163620
BC82A-5	80	39 50 10.5 S	145 45 10.9 E	393302	5589659	79	112	163630
BC82A-5	81	39 50 09.8 S	145 45 12.0 E	393328	5589680	80	112	163641
BC82A-5	82	39 50 09.2 S	145 45 13.1 E	393355	5589700	79	112	163652
BC82A-5	83	39 50 08.5 S	145 45 14.3 E	393382	5589720	79	112	1637 4
BC82A-5	84	39 50 07.9 S	145 45 15.4 E	393408	5589740	79	112	163715
BC82A-5	85	39 50 07.3 S	145 45 16.5 E	393435	5589759	79	112	163726
BC82A-5	86	39 50 06.7 S	145 45 17.7 E	393462	5589779	79	112	163737
BC82A-5	87	39 50 06.0 S	145 45 18.8 E	393489	5589799	79	112	163748
BC82A-5	88	39 50 05.4 S	145 45 20.0 E	393516	5589819	79	112	1638 0
BC82A-5	89	39 50 04.7 S	145 45 21.1 E	393543	5589839	79	112	163812
BC82A-5	90	39 50 04.1 S	145 45 22.2 E	393570	5589858	79	112	163823
BC82A-5	91	39 50 03.5 S	145 45 23.4 E	393598	5589878	79	112	163834
BC82A-5	92	39 50 02.9 S	145 45 24.6 E	393625	5589898	79	112	163846
BC82A-5	93	39 50 02.3 S	145 45 25.7 E	393652	5589917	79	112	163856
BC82A-5	94	39 50 01.6 S	145 45 26.9 E	393680	5589937	79	112	1639 7
BC82A-5	95	39 50 01.0 S	145 45 28.1 E	393707	5589956	79	112	163919
BC82A-5	96	39 50 00.4 S	145 45 29.3 E	393735	5589976	79	112	163930
BC82A-5	97	39 49 59.8 S	145 45 30.4 E	393762	5589995	79	112	163941
BC82A-5	98	39 49 59.1 S	145 45 31.6 E	393790	5590015	80	112	163953
BC82A-5	99	39 49 58.5 S	145 45 32.7 E	393817	5590034	79	112	1640 3
BC82A-5	100	39 49 57.9 S	145 45 33.9 E	393845	5590053	79	112	164015
BC82A-5	101	39 49 57.3 S	145 45 35.1 E	393873	5590073	79	112	164026
BC82A-5	102	39 49 56.7 S	145 45 36.3 E	393900	5590092	79	112	164038
BC82A-5	103	39 49 56.1 S	145 45 37.5 E	393928	5590111	79	112	164049
BC82A-5	104	39 49 55.5 S	145 45 38.6 E	393955	5590130	79	112	164059
BC82A-5	105	39 49 54.9 S	145 45 39.8 E	393983	5590150	80	112	164111
BC82A-5	106	39 49 54.3 S	145 45 40.9 E	394010	5590169	79	112	164123
BC82A-5	107	39 49 53.6 S	145 45 42.1 E	394038	5590188	79	112	164134
BC82A-5	108	39 49 53.0 S	145 45 43.3 E	394065	5590208	79	112	164145

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LINE NAME	SHOT POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-5	109	39 49 52.4 S	145 45 44.5 E	394093	5590227	79	112	164156
BC82A-5	110	39 49 51.8 S	145 45 45.6 E	394120	5590246	79	112	1642 8
BC82A-5	111	39 49 51.2 S	145 45 46.8 E	394147	5590265	79	112	164220
BC82A-5	112	39 49 50.6 S	145 45 47.9 E	394175	5590285	79	112	164230
BC82A-5	113	39 49 50.0 S	145 45 49.1 E	394202	5590304	79	112	164241
BC82A-5	114	39 49 49.3 S	145 45 50.2 E	394229	5590324	79	112	164253
BC82A-5	115	39 49 48.7 S	145 45 51.4 E	394256	5590343	79	112	1643 4
BC82A-5	116	39 49 48.1 S	145 45 52.5 E	394283	5590362	79	112	164314
BC82A-5	117	39 49 47.5 S	145 45 53.7 E	394310	5590382	79	112	164326
BC82A-5	118	39 49 46.9 S	145 45 54.8 E	394337	5590401	79	112	164337
BC82A-5	119	39 49 46.2 S	145 45 56.0 E	394364	5590421	79	112	164349
BC82A-5	120	39 49 45.6 S	145 45 57.1 E	394390	5590440	79	112	1644 0
BC82A-5	121	39 49 45.0 S	145 45 58.2 E	394417	5590460	79	112	164410
BC82A-5	122	39 49 44.4 S	145 45 59.4 E	394444	5590479	79	112	164422
BC82A-5	123	39 49 43.8 S	145 46 00.5 E	394470	5590499	79	112	164432
BC82A-5	124	39 49 43.2 S	145 46 01.6 E	394497	5590518	79	112	164443
BC82A-5	125	39 49 42.5 S	145 46 02.7 E	394523	5590538	79	112	164455
BC82A-5	126	39 49 41.9 S	145 46 03.9 E	394550	5590558	79	112	1645 7
BC82A-5	127	39 49 41.3 S	145 46 05.0 E	394576	5590577	79	112	164518
BC82A-5	128	39 49 40.6 S	145 46 06.1 E	394603	5590597	79	112	164529
BC82A-5	129	39 49 40.0 S	145 46 07.2 E	394629	5590617	79	112	164540
BC82A-5	130	39 49 39.4 S	145 46 08.3 E	394655	5590636	79	112	164551
BC82A-5	131	39 49 38.8 S	145 46 09.5 E	394682	5590656	79	112	1646 2
BC82A-5	132	39 49 38.1 S	145 46 10.6 E	394708	5590676	79	112	164614
BC82A-5	133	39 49 37.5 S	145 46 11.7 E	394735	5590696	79	112	164625
BC82A-5	134	39 49 36.9 S	145 46 12.8 E	394761	5590715	79	112	164637
BC82A-5	135	39 49 36.2 S	145 46 13.9 E	394787	5590735	79	112	164648
BC82A-5	136	39 49 35.6 S	145 46 15.1 E	394814	5590755	79	112	164659
BC82A-5	137	39 49 35.0 S	145 46 16.2 E	394840	5590775	79	112	1647 9
BC82A-5	138	39 49 34.3 S	145 46 17.3 E	394867	5590795	79	112	164721
BC82A-5	139	39 49 33.7 S	145 46 18.5 E	394893	5590814	79	112	164731
BC82A-5	140	39 49 33.1 S	145 46 19.6 E	394920	5590834	79	112	164743
BC82A-5	141	39 49 32.5 S	145 46 20.7 E	394946	5590854	79	112	164754
BC82A-5	142	39 49 31.8 S	145 46 21.9 E	394973	5590874	79	112	1648 5
BC82A-5	143	39 49 31.2 S	145 46 23.0 E	395000	5590894	79	112	164816
BC82A-5	144	39 49 30.5 S	145 46 24.1 E	395026	5590914	79	112	164827
BC82A-5	145	39 49 29.9 S	145 46 25.2 E	395053	5590934	79	112	164838
BC82A-5	146	39 49 29.3 S	145 46 26.4 E	395080	5590954	79	112	164849
BC82A-5	147	39 49 28.6 S	145 46 27.5 E	395107	5590974	79	112	1649 0
BC82A-5	148	39 49 28.0 S	145 46 28.7 E	395134	5590994	79	112	164911
BC82A-5	149	39 49 27.4 S	145 46 29.8 E	395161	5591014	79	112	164921
BC82A-5	150	39 49 26.7 S	145 46 31.0 E	395188	5591034	79	112	164933
BC82A-5	151	39 49 26.1 S	145 46 32.1 E	395215	5591054	79	112	164944
BC82A-5	152	39 49 25.5 S	145 46 33.3 E	395242	5591074	79	112	164955
BC82A-5	153	39 49 24.8 S	145 46 34.4 E	395269	5591094	79	112	1650 6
BC82A-5	154	39 49 24.2 S	145 46 35.6 E	395296	5591114	79	112	165017
BC82A-5	155	39 49 23.5 S	145 46 36.8 E	395324	5591134	79	112	165028
BC82A-5	156	39 49 22.9 S	145 46 37.9 E	395351	5591154	79	112	165039
BC82A-5	157	39 49 22.3 S	145 46 39.1 E	395378	5591174	79	112	165050
BC82A-5	158	39 49 21.6 S	145 46 40.2 E	395405	5591194	79	112	1651 1
BC82A-5	159	39 49 21.0 S	145 46 41.4 E	395432	5591214	79	112	165113
BC82A-5	160	39 49 20.4 S	145 46 42.5 E	395460	5591234	79	112	165124
BC82A-5	161	39 49 19.7 S	145 46 43.7 E	395487	5591254	79	112	165135
BC82A-5	162	39 49 19.1 S	145 46 44.8 E	395514	5591275	79	112	165146

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LINE NAME	SHO. POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-5	163	39 49 18.4 S	145 46 46.0 E	395541	5591295	79	112	165157
BC82A-5	164	39 49 17.8 S	145 46 47.1 E	395568	5591315	79	112	1652 9
BC82A-5	165	39 49 17.1 S	145 46 48.3 E	395596	5591335	79	112	165220
BC82A-5	166	39 49 16.5 S	145 46 49.5 E	395623	5591356	79	112	165231
BC82A-5	167	39 49 15.8 S	145 46 50.6 E	395650	5591376	79	112	165242
BC82A-5	168	39 49 15.2 S	145 46 51.8 E	395677	5591396	79	112	165253
BC82A-5	169	39 49 14.6 S	145 46 52.9 E	395704	5591416	79	112	1653 5
BC82A-5	170	39 49 13.9 S	145 46 54.1 E	395731	5591437	79	112	165316
BC82A-5	171	39 49 13.3 S	145 46 55.2 E	395758	5591457	79	112	165327
BC82A-5	172	39 49 12.6 S	145 46 56.3 E	395785	5591477	79	112	165337
BC82A-5	173	39 49 12.0 S	145 46 57.5 E	395811	5591497	79	112	165349
BC82A-5	174	39 49 11.4 S	145 46 58.6 E	395838	5591517	79	112	1654 0
BC82A-5	175	39 49 10.7 S	145 46 59.7 E	395865	5591537	79	112	165411
BC82A-5	176	39 49 10.1 S	145 47 00.9 E	395892	5591557	79	112	165422
BC82A-5	177	39 49 09.4 S	145 47 02.0 E	395918	5591577	79	112	165433
BC82A-5	178	39 49 08.8 S	145 47 03.1 E	395945	5591597	79	112	165444
BC82A-5	179	39 49 08.2 S	145 47 04.3 E	395972	5591617	79	112	165455
BC82A-5	180	39 49 07.5 S	145 47 05.4 E	395998	5591637	79	112	1655 6
BC82A-5	181	39 49 06.9 S	145 47 06.5 E	396025	5591657	79	112	165517
BC82A-5	182	39 49 06.3 S	145 47 07.7 E	396052	5591677	79	112	165528
BC82A-5	183	39 49 05.7 S	145 47 08.8 E	396078	5591696	80	112	165539
BC82A-5	184	39 49 05.0 S	145 47 09.9 E	396105	5591716	79	112	165550
BC82A-5	185	39 49 04.4 S	145 47 11.0 E	396131	5591735	79	112	1656 1
BC82A-5	186	39 49 03.8 S	145 47 12.2 E	396158	5591755	79	112	165612
BC82A-5	187	39 49 03.2 S	145 47 13.3 E	396184	5591774	79	112	165623
BC82A-5	188	39 49 02.5 S	145 47 14.4 E	396211	5591794	79	112	165635
BC82A-5	189	39 49 01.9 S	145 47 15.5 E	396237	5591813	79	112	165645
BC82A-5	190	39 49 01.3 S	145 47 16.7 E	396264	5591832	79	112	165656
BC82A-5	191	39 49 00.7 S	145 47 17.8 E	396290	5591851	79	112	1657 6
BC82A-5	192	39 49 00.1 S	145 47 18.9 E	396317	5591870	79	112	165717
BC82A-5	193	39 48 59.5 S	145 47 20.0 E	396343	5591889	79	112	165730
BC82A-5	194	39 48 58.9 S	145 47 21.2 E	396370	5591908	79	112	165741
BC82A-5	195	39 48 58.3 S	145 47 22.3 E	396397	5591927	79	112	165751
BC82A-5	196	39 48 57.7 S	145 47 23.5 E	396424	5591946	78	112	1658 2
BC82A-5	197	39 48 57.1 S	145 47 24.6 E	396450	5591964	79	112	165813
BC82A-5	198	39 48 56.5 S	145 47 25.7 E	396477	5591983	79	112	165823
BC82A-5	199	39 48 55.9 S	145 47 26.9 E	396504	5592002	79	112	165834
BC82A-5	200	39 48 55.3 S	145 47 28.0 E	396531	5592020	79	112	165845
BC82A-5	201	39 48 54.7 S	145 47 29.2 E	396558	5592039	79	112	165856
BC82A-5	202	39 48 54.1 S	145 47 30.3 E	396585	5592058	79	112	1659 6
BC82A-5	203	39 48 53.6 S	145 47 31.5 E	396612	5592076	79	112	165917
BC82A-5	204	39 48 53.0 S	145 47 32.6 E	396639	5592094	79	112	165927
BC82A-5	205	39 48 52.4 S	145 47 33.8 E	396666	5592113	79	112	165937
BC82A-5	206	39 48 51.8 S	145 47 34.9 E	396693	5592132	79	112	165948
BC82A-5	207	39 48 51.2 S	145 47 36.0 E	396720	5592150	79	112	165959
BC82A-5	208	39 48 50.6 S	145 47 37.2 E	396747	5592169	79	112	17 010
BC82A-5	209	39 48 50.0 S	145 47 38.3 E	396774	5592187	79	112	17 021
BC82A-5	210	39 48 49.4 S	145 47 39.5 E	396801	5592206	79	112	17 033
BC82A-5	211	39 48 48.8 S	145 47 40.6 E	396828	5592225	79	112	17 043
BC82A-5	212	39 48 48.3 S	145 47 41.8 E	396855	5592243	79	112	17 055
BC82A-5	213	39 48 47.7 S	145 47 43.0 E	396883	5592262	79	112	17 1 7
BC82A-5	214	39 48 47.0 S	145 47 44.1 E	396910	5592281	79	112	17 118
BC82A-5	215	39 48 46.4 S	145 47 45.3 E	396937	5592300	79	112	17 128
BC82A-5	216	39 48 45.8 S	145 47 46.4 E	396964	5592319	79	112	17 139

LINE NAME	SHO. POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-5	217	39 48 45.2 S	145 47 47.6 E	396991	5592338	79	112	17 150
BC82A-5	218	39 48 44.6 S	145 47 48.7 E	397019	5592357	79	112	17 2 1
BC82A-5	219	39 48 44.0 S	145 47 49.9 E	397046	5592377	79	112	17 212
BC82A-5	220	39 48 43.4 S	145 47 51.0 E	397073	5592396	79	112	17 223
BC82A-5	221	39 48 42.8 S	145 47 52.2 E	397100	5592416	80	112	17 234
BC82A-5	222	39 48 42.1 S	145 47 53.3 E	397127	5592435	79	112	17 244
BC82A-5	223	39 48 41.5 S	145 47 54.5 E	397154	5592455	79	112	17 254
BC82A-5	224	39 48 40.9 S	145 47 55.6 E	397181	5592475	80	112	17 3 6
BC82A-5	225	39 48 40.2 S	145 47 56.8 E	397208	5592495	79	112	17 317
BC82A-5	226	39 48 39.6 S	145 47 57.9 E	397235	5592515	79	112	17 328
BC82A-5	227	39 48 39.0 S	145 47 59.1 E	397262	5592535	80	112	17 339
BC82A-5	228	39 48 38.3 S	145 48 00.2 E	397289	5592555	79	112	17 351
BC82A-5	229	39 48 37.7 S	145 48 01.4 E	397316	5592575	79	112	17 4 1
BC82A-5	230	39 48 37.0 S	145 48 02.5 E	397343	5592596	79	112	17 413
BC82A-5	231	39 48 36.4 S	145 48 03.6 E	397370	5592616	79	112	17 425
BC82A-5	232	39 48 35.7 S	145 48 04.7 E	397396	5592636	79	112	17 436
BC82A-5	233	39 48 35.1 S	145 48 05.9 E	397423	5592657	79	112	17 448
BC82A-5	234	39 48 34.4 S	145 48 07.0 E	397450	5592677	79	112	17 459
BC82A-5	235	39 48 33.8 S	145 48 08.2 E	397477	5592697	79	112	17 5 9
BC82A-5	236	39 48 33.1 S	145 48 09.3 E	397503	5592718	79	112	17 521
BC82A-5	237	39 48 32.5 S	145 48 10.4 E	397530	5592739	79	112	17 533
BC82A-5	238	39 48 31.8 S	145 48 11.5 E	397556	5592760	79	112	17 544
BC82A-5	239	39 48 31.2 S	145 48 12.7 E	397583	5592780	79	112	17 555
BC82A-5	240	39 48 30.5 S	145 48 13.8 E	397610	5592801	79	112	17 6 7
BC82A-5	241	39 48 29.8 S	145 48 14.9 E	397636	5592822	79	112	17 618
BC82A-5	242	39 48 29.2 S	145 48 16.1 E	397663	5592842	80	112	17 629
BC82A-5	243	39 48 28.5 S	145 48 17.2 E	397689	5592863	79	112	17 641
BC82A-5	244	39 48 27.8 S	145 48 18.3 E	397716	5592884	79	112	17 651
BC82A-5	245	39 48 27.2 S	145 48 19.4 E	397742	5592904	80	112	17 7 2
BC82A-5	246	39 48 26.5 S	145 48 20.6 E	397769	5592925	79	112	17 713
BC82A-5	247	39 48 25.9 S	145 48 21.7 E	397796	5592945	79	112	17 724
BC82A-5	248	39 48 25.3 S	145 48 22.8 E	397822	5592965	79	112	17 735
BC82A-5	249	39 48 24.6 S	145 48 24.0 E	397849	5592986	79	112	17 745
BC82A-5	250	39 48 24.0 S	145 48 25.1 E	397875	5593006	79	112	17 757
BC82A-5	251	39 48 23.3 S	145 48 26.2 E	397902	5593026	79	112	17 8 8
BC82A-5	252	39 48 22.7 S	145 48 27.4 E	397929	5593046	80	112	17 818
BC82A-5	253	39 48 22.0 S	145 48 28.5 E	397955	5593066	79	112	17 831
BC82A-5	254	39 48 21.4 S	145 48 29.6 E	397982	5593086	79	112	17 842
BC82A-5	255	39 48 20.8 S	145 48 30.8 E	398009	5593106	80	112	17 853
BC82A-5	256	39 48 20.1 S	145 48 31.9 E	398036	5593126	79	112	17 9 3
BC82A-5	257	39 48 19.5 S	145 48 33.0 E	398062	5593145	79	112	17 914
BC82A-5	258	39 48 18.9 S	145 48 34.2 E	398089	5593165	80	112	17 925
BC82A-5	259	39 48 18.3 S	145 48 35.3 E	398116	5593184	79	112	17 937
BC82A-5	260	39 48 17.6 S	145 48 36.5 E	398143	5593204	79	112	17 948
BC82A-5	261	39 48 17.0 S	145 48 37.6 E	398170	5593223	79	112	17 959
BC82A-5	262	39 48 16.4 S	145 48 38.8 E	398197	5593242	79	112	171010
BC82A-5	263	39 48 15.8 S	145 48 39.9 E	398224	5593261	79	112	171021
BC82A-5	264	39 48 15.2 S	145 48 41.1 E	398251	5593280	79	112	171032
BC82A-5	265	39 48 14.6 S	145 48 42.2 E	398279	5593299	79	112	171044
BC82A-5	266	39 48 14.0 S	145 48 43.4 E	398306	5593318	79	112	171054
BC82A-5	267	39 48 13.4 S	145 48 44.5 E	398333	5593337	79	112	1711 5
BC82A-5	268	39 48 12.8 S	145 48 45.7 E	398360	5593356	79	112	171116
BC82A-5	269	39 48 12.2 S	145 48 46.9 E	398388	5593375	79	112	171127
BC82A-5	270	39 48 11.6 S	145 48 48.0 E	398415	5593394	79	112	171137

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LINE NAME	SHG. POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-5	271	39 48 11.0 S	145 48 49.2 E	398442	5593413	79	112	171147
BC82A-5	272	39 48 10.4 S	145 48 50.4 E	398470	5593432	79	112	171158
BC82A-5	273	39 48 09.8 S	145 48 51.5 E	398497	5593451	79	112	171210
BC82A-5	274	39 48 09.2 S	145 48 52.6 E	398524	5593470	79	112	171221
BC82A-5	275	39 48 08.6 S	145 48 53.8 E	398552	5593489	79	112	171232
BC82A-5	276	39 48 08.0 S	145 48 55.0 E	398579	5593508	79	112	171243
BC82A-5	277	39 48 07.4 S	145 48 56.2 E	398607	5593526	79	112	171253
BC82A-5	278	39 48 06.8 S	145 48 57.3 E	398634	5593545	80	112	1713 4
BC82A-5	279	39 48 06.2 S	145 48 58.5 E	398661	5593564	79	112	171315
BC82A-5	280	39 48 05.6 S	145 48 59.6 E	398689	5593583	79	112	171327
BC82A-5	281	39 48 05.0 S	145 49 00.8 E	398716	5593602	79	112	171337
BC82A-5	282	39 48 04.4 S	145 49 02.0 E	398744	5593621	79	112	171348
BC82A-5	283	39 48 03.8 S	145 49 03.1 E	398771	5593640	79	112	171359
BC82A-5	284	39 48 03.1 S	145 49 04.3 E	398798	5593660	79	112	171410
BC82A-5	285	39 48 02.5 S	145 49 05.5 E	398826	5593679	79	112	171420
BC82A-5	286	39 48 01.9 S	145 49 06.6 E	398853	5593698	79	112	171431
BC82A-5	287	39 48 01.3 S	145 49 07.8 E	398881	5593718	79	112	171442
BC82A-5	288	39 48 00.7 S	145 49 08.9 E	398908	5593737	79	112	171453
BC82A-5	289	39 48 00.1 S	145 49 10.1 E	398935	5593757	79	112	1715 4
BC82A-5	290	39 47 59.5 S	145 49 11.3 E	398963	5593776	79	112	171515
BC82A-5	291	39 47 58.8 S	145 49 12.4 E	398990	5593796	79	112	171527
BC82A-5	292	39 47 58.2 S	145 49 13.6 E	399017	5593815	79	112	171538
BC82A-5	293	39 47 57.6 S	145 49 14.7 E	399044	5593835	79	112	171548
BC82A-5	294	39 47 56.9 S	145 49 15.9 E	399072	5593855	79	112	171559
BC82A-5	295	39 47 56.3 S	145 49 17.0 E	399099	5593874	79	112	1716 9
BC82A-5	296	39 47 55.7 S	145 49 18.2 E	399126	5593894	79	112	171622
BC82A-5	297	39 47 55.1 S	145 49 19.3 E	399153	5593914	79	112	171633
BC82A-5	298	39 47 54.5 S	145 49 20.5 E	399181	5593933	79	112	171645
BC82A-5	299	39 47 53.8 S	145 49 21.7 E	399208	5593953	79	112	171655
BC82A-5	300	39 47 53.2 S	145 49 22.8 E	399235	5593973	79	112	1717 7
BC82A-5	301	39 47 52.5 S	145 49 24.0 E	399262	5593993	79	112	171717
BC82A-5	302	39 47 51.9 S	145 49 25.1 E	399289	5594013	79	112	171728
BC82A-5	303	39 47 51.3 S	145 49 26.3 E	399317	5594032	79	112	171740
BC82A-5	304	39 47 50.7 S	145 49 27.4 E	399344	5594052	79	112	171751
BC82A-5	305	39 47 50.0 S	145 49 28.6 E	399371	5594072	79	112	1718 2
BC82A-5	306	39 47 49.4 S	145 49 29.7 E	399398	5594092	79	112	171813
BC82A-5	307	39 47 48.8 S	145 49 30.9 E	399425	5594112	79	112	171823
BC82A-5	308	39 47 48.1 S	145 49 32.0 E	399452	5594132	79	112	171836
BC82A-5	309	39 47 47.5 S	145 49 33.2 E	399479	5594151	79	112	171847
BC82A-5	310	39 47 46.9 S	145 49 34.3 E	399506	5594171	79	112	171857
BC82A-5	311	39 47 46.2 S	145 49 35.5 E	399533	5594191	80	112	1719 8
BC82A-5	312	39 47 45.6 S	145 49 36.6 E	399560	5594211	79	112	171918
BC82A-5	313	39 47 45.0 S	145 49 37.8 E	399587	5594231	80	112	171928
BC82A-5	314	39 47 44.4 S	145 49 38.9 E	399614	5594250	80	112	171939
BC82A-5	315	39 47 43.7 S	145 49 40.0 E	399641	5594270	79	112	171950
BC82A-5	316	39 47 43.1 S	145 49 41.2 E	399668	5594290	79	112	1720 2
BC82A-5	317	39 47 42.4 S	145 49 42.3 E	399695	5594310	79	112	172012
BC82A-5	318	39 47 41.8 S	145 49 43.4 E	399721	5594330	79	112	172022
BC82A-5	319	39 47 41.2 S	145 49 44.6 E	399748	5594349	79	112	172034
BC82A-5	320	39 47 40.6 S	145 49 45.7 E	399775	5594369	79	112	172044
BC82A-5	321	39 47 39.9 S	145 49 46.9 E	399802	5594389	79	112	172054
BC82A-5	322	39 47 39.3 S	145 49 48.0 E	399828	5594409	79	112	1721 5
BC82A-5	323	39 47 38.7 S	145 49 49.1 E	399855	5594428	79	112	172116
BC82A-5	324	39 47 38.1 S	145 49 50.3 E	399882	5594448	79	112	172127

LINE NAME	SHOT POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-5	325	39 47 37.4 S	145 49 51.4 E	399908	5594468	80	112	172138
BC82A-5	326	39 47 36.8 S	145 49 52.5 E	399935	5594488	79	112	172149
BC82A-5	327	39 47 36.1 S	145 49 53.6 E	399961	5594508	79	112	172159
BC82A-5	328	39 47 35.5 S	145 49 54.8 E	399988	5594528	79	112	172211
BC82A-5	329	39 47 34.9 S	145 49 55.9 E	400014	5594548	79	112	172222
BC82A-5	330	39 47 34.2 S	145 49 57.0 E	400041	5594568	79	112	172233
BC82A-5	331	39 47 33.6 S	145 49 58.1 E	400067	5594588	79	112	172244
BC82A-5	332	39 47 33.0 S	145 49 59.2 E	400093	5594608	79	112	172254
BC82A-5	333	39 47 32.3 S	145 50 00.4 E	400120	5594628	79	112	1723 5
BC82A-5	334	39 47 31.7 S	145 50 01.5 E	400146	5594648	79	112	172316
BC82A-5	335	39 47 31.0 S	145 50 02.6 E	400172	5594668	79	112	172327
BC82A-5	336	39 47 30.4 S	145 50 03.7 E	400198	5594688	79	112	172339
BC82A-5	337	39 47 29.8 S	145 50 04.8 E	400224	5594708	79	112	172349
BC82A-5	338	39 47 29.1 S	145 50 05.9 E	400251	5594728	79	112	172359
BC82A-5	339	39 47 28.5 S	145 50 07.0 E	400277	5594749	79	112	1724 9
BC82A-5	340	39 47 27.8 S	145 50 08.2 E	400303	5594769	79	112	172419
BC82A-5	341	39 47 27.2 S	145 50 09.3 E	400329	5594789	79	112	172431
BC82A-5	342	39 47 26.5 S	145 50 10.4 E	400355	5594809	79	112	172442
BC82A-5	343	39 47 25.9 S	145 50 11.5 E	400382	5594830	79	112	172453
BC82A-5	344	39 47 25.2 S	145 50 12.6 E	400408	5594850	79	112	1725 4
BC82A-5	345	39 47 24.6 S	145 50 13.7 E	400434	5594870	79	112	172514
BC82A-5	346	39 47 23.9 S	145 50 14.9 E	400461	5594891	79	112	172525
BC82A-5	347	39 47 23.3 S	145 50 16.0 E	400487	5594911	79	112	172535
BC82A-5	348	39 47 22.7 S	145 50 17.1 E	400513	5594931	79	112	172545
BC82A-5	349	39 47 22.0 S	145 50 18.2 E	400540	5594952	79	112	172557
BC82A-5	350	39 47 21.3 S	145 50 19.3 E	400566	5594972	79	112	1726 8
BC82A-5	351	39 47 20.7 S	145 50 20.5 E	400593	5594992	79	112	172619
BC82A-5	352	39 47 20.0 S	145 50 21.6 E	400619	5595013	79	112	172630
BC82A-5	353	39 47 19.4 S	145 50 22.7 E	400646	5595033	79	112	172640
BC82A-5	354	39 47 18.8 S	145 50 23.8 E	400672	5595053	79	112	172652
BC82A-5	355	39 47 18.1 S	145 50 25.0 E	400699	5595073	79	112	1727 3
BC82A-5	356	39 47 17.5 S	145 50 26.1 E	400726	5595093	80	112	172714
BC82A-5	357	39 47 16.9 S	145 50 27.3 E	400753	5595113	79	112	172725
BC82A-5	358	39 47 16.2 S	145 50 28.4 E	400780	5595133	79	112	172736
BC82A-5	359	39 47 15.6 S	145 50 29.6 E	400808	5595153	79	112	172747
BC82A-5	360	39 47 15.0 S	145 50 30.7 E	400835	5595172	79	112	172759
BC82A-5	361	39 47 14.3 S	145 50 31.9 E	400862	5595192	80	112	172810
BC82A-5	362	39 47 13.7 S	145 50 33.1 E	400890	5595212	79	112	172821
BC82A-5	363	39 47 13.1 S	145 50 34.2 E	400917	5595231	79	112	172831
BC82A-5	364	39 47 12.5 S	145 50 35.4 E	400945	5595251	79	112	172842
BC82A-5	365	39 47 11.9 S	145 50 36.5 E	400972	5595270	79	112	172852
BC82A-5	366	39 47 11.2 S	145 50 37.7 E	401000	5595290	80	112	1729 3
BC82A-5	367	39 47 10.6 S	145 50 38.9 E	401028	5595309	79	112	172913
BC82A-5	368	39 47 10.0 S	145 50 40.1 E	401056	5595328	79	112	172923
BC82A-5	369	39 47 09.4 S	145 50 41.3 E	401084	5595347	79	112	172935
BC82A-5	370	39 47 08.8 S	145 50 42.5 E	401112	5595366	79	112	172945
BC82A-5	371	39 47 08.2 S	145 50 43.7 E	401140	5595385	79	112	172955
BC82A-5	372	39 47 07.6 S	145 50 44.9 E	401168	5595404	79	112	1730 7
BC82A-5	373	39 47 07.0 S	145 50 46.0 E	401196	5595422	79	112	173018
BC82A-5	374	39 47 06.4 S	145 50 47.2 E	401224	5595441	79	112	173028
BC82A-5	375	39 47 05.8 S	145 50 48.4 E	401252	5595460	79	112	173039

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LINE NAME	SHOT POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-3	1	39 51 40.4 S	145 53 03.9 E	404581	5587036	80	112	1927 7
BC82A-3	2	39 51 41.0 S	145 53 02.8 E	404554	5587017	79	112	192718
BC82A-3	3	39 51 41.5 S	145 53 01.6 E	404526	5586999	79	112	192729
BC82A-3	4	39 51 42.1 S	145 53 00.5 E	404499	5586981	80	112	192739
BC82A-3	5	39 51 42.7 S	145 52 59.3 E	404472	5586963	80	112	192750
BC82A-3	6	39 51 43.3 S	145 52 58.2 E	404445	5586944	80	112	1928 0
BC82A-3	7	39 51 43.9 S	145 52 57.0 E	404418	5586926	79	112	192810
BC82A-3	8	39 51 44.4 S	145 52 55.9 E	404391	5586908	79	112	192820
BC82A-3	9	39 51 45.0 S	145 52 54.7 E	404364	5586889	80	112	192830
BC82A-3	10	39 51 45.7 S	145 52 53.6 E	404337	5586870	79	112	192841
BC82A-3	11	39 51 46.2 S	145 52 52.4 E	404310	5586852	79	112	192851
BC82A-3	12	39 51 46.8 S	145 52 51.3 E	404283	5586833	79	112	1929 2
BC82A-3	13	39 51 47.4 S	145 52 50.1 E	404256	5586815	80	112	192912
BC82A-3	14	39 51 48.0 S	145 52 49.0 E	404229	5586796	79	112	192923
BC82A-3	15	39 51 48.6 S	145 52 47.9 E	404202	5586778	79	112	192933
BC82A-3	16	39 51 49.2 S	145 52 46.7 E	404175	5586760	79	112	192943
BC82A-3	17	39 51 49.8 S	145 52 45.5 E	404147	5586741	79	112	192953
BC82A-3	18	39 51 50.3 S	145 52 44.4 E	404120	5586723	79	112	1930 4
BC82A-3	19	39 51 50.9 S	145 52 43.2 E	404092	5586705	80	112	193014
BC82A-3	20	39 51 51.5 S	145 52 42.0 E	404065	5586687	79	112	193025
BC82A-3	21	39 51 52.1 S	145 52 40.9 E	404038	5586668	80	112	193038
BC82A-3	22	39 51 52.7 S	145 52 39.7 E	404010	5586650	80	112	193048
BC82A-3	23	39 51 53.2 S	145 52 38.6 E	403983	5586632	79	112	193058
BC82A-3	24	39 51 53.8 S	145 52 37.4 E	403955	5586613	79	112	1931 9
BC82A-3	25	39 51 54.4 S	145 52 36.2 E	403928	5586595	80	112	193119
BC82A-3	26	39 51 55.0 S	145 52 35.0 E	403900	5586577	79	112	193129
BC82A-3	27	39 51 55.5 S	145 52 33.9 E	403873	5586559	79	112	193139
BC82A-3	28	39 51 56.2 S	145 52 32.7 E	403845	5586540	0	112	193150
BC82A-3	29	39 51 56.7 S	145 52 31.6 E	403818	5586522	0	112	1932 1
BC82A-3	30	39 51 57.3 S	145 52 30.4 E	403790	5586504	0	112	193211
BC82A-3	31	39 51 57.9 S	145 52 29.2 E	403763	5586486	80	112	193222
BC82A-3	32	39 51 58.4 S	145 52 28.0 E	403735	5586468	79	112	193232
BC82A-3	33	39 51 59.0 S	145 52 26.9 E	403708	5586450	79	112	193242
BC82A-3	34	39 51 59.6 S	145 52 25.7 E	403680	5586432	79	112	193253
BC82A-3	35	39 52 00.2 S	145 52 24.5 E	403652	5586414	79	112	1933 3
BC82A-3	36	39 52 00.7 S	145 52 23.4 E	403625	5586396	80	112	193313
BC82A-3	37	39 52 01.3 S	145 52 22.2 E	403597	5586378	79	112	193323
BC82A-3	38	39 52 01.9 S	145 52 21.0 E	403570	5586360	79	112	193334
BC82A-3	39	39 52 02.4 S	145 52 19.8 E	403542	5586342	79	112	193346
BC82A-3	40	39 52 03.1 S	145 52 18.7 E	403515	5586323	79	112	193356
BC82A-3	41	39 52 03.6 S	145 52 17.5 E	403487	5586305	79	112	1934 7
BC82A-3	42	39 52 04.2 S	145 52 16.4 E	403460	5586287	79	112	193417
BC82A-3	43	39 52 04.8 S	145 52 15.2 E	403432	5586269	79	112	193427
BC82A-3	44	39 52 05.3 S	145 52 14.0 E	403405	5586251	48	112	193438
BC82A-3	45	39 52 05.9 S	145 52 12.8 E	403377	5586233	80	112	193450
BC82A-3	46	39 52 06.5 S	145 52 11.7 E	403350	5586214	79	112	1935 2
BC82A-3	47	39 52 07.1 S	145 52 10.5 E	403322	5586196	79	112	193512
BC82A-3	48	39 52 07.7 S	145 52 09.4 E	403295	5586178	0	112	193522
BC82A-3	49	39 52 08.2 S	145 52 08.2 E	403268	5586160	0	112	193532
BC82A-3	50	39 52 08.8 S	145 52 07.0 E	403240	5586141	0	112	193542
BC82A-3	51	39 52 09.4 S	145 52 05.9 E	403213	5586123	79	112	193552
BC82A-3	52	39 52 10.0 S	145 52 04.7 E	403186	5586105	79	112	1936 2
BC82A-3	53	39 52 10.6 S	145 52 03.6 E	403158	5586086	80	112	193612
BC82A-3	54	39 52 11.2 S	145 52 02.4 E	403131	5586068	80	112	193622

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LINE NAME	SHOT POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-3	55	39 52 11.8 S	145 52 01.3 E	403104	5586049	79	112	193632
BC82A-3	56	39 52 12.3 S	145 52 00.1 E	403076	5586031	80	112	193644
BC82A-3	57	39 52 12.9 S	145 51 58.9 E	403049	5586012	79	112	193654
BC82A-3	58	39 52 13.5 S	145 51 57.8 E	403022	5585994	79	112	1937 4
BC82A-3	59	39 52 14.1 S	145 51 56.6 E	402995	5585975	79	112	193715
BC82A-3	60	39 52 14.7 S	145 51 55.4 E	402967	5585957	79	112	193725
BC82A-3	61	39 52 15.3 S	145 51 54.3 E	402940	5585938	79	112	193736
BC82A-3	62	39 52 15.9 S	145 51 53.2 E	402913	5585920	79	112	193747
BC82A-3	63	39 52 16.5 S	145 51 52.0 E	402885	5585901	80	112	193757
BC82A-3	64	39 52 17.1 S	145 51 50.8 E	402858	5585883	79	112	1938 7
BC82A-3	65	39 52 17.7 S	145 51 49.7 E	402831	5585864	79	112	193818
BC82A-3	66	39 52 18.3 S	145 51 48.5 E	402803	5585845	78	112	193829
BC82A-3	67	39 52 18.8 S	145 51 47.3 E	402776	5585827	79	112	193839
BC82A-3	68	39 52 19.4 S	145 51 46.1 E	402748	5585808	0	112	193850
BC82A-3	69	39 52 20.0 S	145 51 45.0 E	402721	5585790	0	112	1939 1
BC82A-3	70	39 52 20.6 S	145 51 43.8 E	402693	5585771	0	112	193911
BC82A-3	71	39 52 21.2 S	145 51 42.7 E	402666	5585753	80	112	193922
BC82A-3	72	39 52 21.8 S	145 51 41.5 E	402638	5585734	79	112	193932
BC82A-3	73	39 52 22.4 S	145 51 40.3 E	402611	5585716	79	112	193942
BC82A-3	74	39 52 23.0 S	145 51 39.1 E	402583	5585697	79	112	193953
BC82A-3	75	39 52 23.5 S	145 51 38.0 E	402555	5585679	79	112	1940 5
BC82A-3	76	39 52 24.1 S	145 51 36.8 E	402528	5585661	79	112	194016
BC82A-3	77	39 52 24.7 S	145 51 35.6 E	402500	5585642	80	112	194026
BC82A-3	78	39 52 25.3 S	145 51 34.4 E	402472	5585624	80	112	194036
BC82A-3	79	39 52 25.9 S	145 51 33.2 E	402444	5585606	80	112	194046
BC82A-3	80	39 52 26.4 S	145 51 32.1 E	402417	5585588	79	112	194057
BC82A-3	81	39 52 27.0 S	145 51 30.9 E	402389	5585569	79	112	1941 7
BC82A-3	82	39 52 27.6 S	145 51 29.7 E	402361	5585551	79	112	194119
BC82A-3	83	39 52 28.2 S	145 51 28.5 E	402333	5585533	79	112	194129
BC82A-3	84	39 52 28.8 S	145 51 27.3 E	402305	5585515	80	112	194139
BC82A-3	85	39 52 29.3 S	145 51 26.2 E	402277	5585497	79	112	194149
BC82A-3	86	39 52 29.9 S	145 51 25.0 E	402249	5585480	79	112	1942 0
BC82A-3	87	39 52 30.4 S	145 51 23.8 E	402221	5585462	79	112	194211
BC82A-3	88	39 52 31.0 S	145 51 22.6 E	402193	5585444	79	112	194221
BC82A-3	89	39 52 31.6 S	145 51 21.4 E	402164	5585426	79	112	194231
BC82A-3	90	39 52 32.1 S	145 51 20.2 E	402136	5585409	79	112	194242
BC82A-3	91	39 52 32.7 S	145 51 19.0 E	402108	5585391	79	112	194253
BC82A-3	92	39 52 33.2 S	145 51 17.8 E	402080	5585374	79	112	1943 3
BC82A-3	93	39 52 33.8 S	145 51 16.6 E	402052	5585356	79	112	194313
BC82A-3	94	39 52 34.4 S	145 51 15.4 E	402024	5585339	79	112	194323
BC82A-3	95	39 52 34.9 S	145 51 14.2 E	401996	5585321	79	112	194333
BC82A-3	96	39 52 35.5 S	145 51 13.0 E	401968	5585304	79	112	194343
BC82A-3	97	39 52 36.0 S	145 51 11.9 E	401940	5585287	79	112	194353
BC82A-3	98	39 52 36.6 S	145 51 10.7 E	401912	5585269	79	112	1944 3
BC82A-3	99	39 52 37.1 S	145 51 09.5 E	401884	5585252	79	112	194414
BC82A-3	100	39 52 37.7 S	145 51 08.3 E	401856	5585234	79	112	194424
BC82A-3	101	39 52 38.2 S	145 51 07.1 E	401828	5585217	79	112	194434
BC82A-3	102	39 52 38.8 S	145 51 05.9 E	401800	5585200	79	112	194444
BC82A-3	103	39 52 39.3 S	145 51 04.7 E	401772	5585182	79	112	194455
BC82A-3	104	39 52 39.9 S	145 51 03.5 E	401744	5585165	79	112	1945 6
BC82A-3	105	39 52 40.4 S	145 51 02.4 E	401716	5585148	79	112	194516
BC82A-3	106	39 52 41.0 S	145 51 01.2 E	401688	5585130	79	112	194526
BC82A-3	107	39 52 41.5 S	145 51 00.0 E	401660	5585113	79	112	194537
BC82A-3	108	39 52 42.1 S	145 50 58.8 E	401633	5585095	79	112	194547

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LINE NAME	SHO. POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-3	109	39 52 42.6 S	145 50 57.6 E	401605	5585078	79	112	194557
BC82A-3	110	39 52 43.2 S	145 50 56.5 E	401577	5585060	79	112	1946 7
BC82A-3	111	39 52 43.8 S	145 50 55.3 E	401550	5585043	79	112	194619
BC82A-3	112	39 52 44.3 S	145 50 54.1 E	401522	5585025	79	112	194629
BC82A-3	113	39 52 44.9 S	145 50 53.0 E	401495	5585008	79	112	194639
BC82A-3	114	39 52 45.4 S	145 50 51.8 E	401467	5584990	79	112	194649
BC82A-3	115	39 52 46.0 S	145 50 50.6 E	401440	5584972	79	112	1947 0
BC82A-3	116	39 52 46.6 S	145 50 49.5 E	401413	5584954	79	112	194711
BC82A-3	117	39 52 47.2 S	145 50 48.3 E	401385	5584936	79	112	194721
BC82A-3	118	39 52 47.7 S	145 50 47.2 E	401358	5584918	79	112	194731
BC82A-3	119	39 52 48.3 S	145 50 46.0 E	401331	5584900	79	112	194741
BC82A-3	120	39 52 48.9 S	145 50 44.9 E	401304	5584882	79	112	194751
BC82A-3	121	39 52 49.4 S	145 50 43.7 E	401277	5584864	80	112	1948 2
BC82A-3	122	39 52 50.0 S	145 50 42.6 E	401250	5584845	79	112	194812
BC82A-3	123	39 52 50.6 S	145 50 41.4 E	401223	5584827	79	112	194823
BC82A-3	124	39 52 51.2 S	145 50 40.3 E	401196	5584808	79	112	194833
BC82A-3	125	39 52 51.8 S	145 50 39.1 E	401169	5584790	79	112	194843
BC82A-3	126	39 52 52.4 S	145 50 38.0 E	401142	5584771	79	112	194854
BC82A-3	127	39 52 53.0 S	145 50 36.8 E	401115	5584752	80	112	1949 4
BC82A-3	128	39 52 53.6 S	145 50 35.7 E	401089	5584734	79	112	194914
BC82A-3	129	39 52 54.2 S	145 50 34.6 E	401062	5584715	79	112	194924
BC82A-3	130	39 52 54.8 S	145 50 33.4 E	401035	5584696	79	112	194934
BC82A-3	131	39 52 55.4 S	145 50 32.3 E	401009	5584677	79	112	194944
BC82A-3	132	39 52 56.0 S	145 50 31.2 E	400982	5584658	79	112	194956
BC82A-3	133	39 52 56.6 S	145 50 30.0 E	400955	5584639	79	112	1950 6
BC82A-3	134	39 52 57.2 S	145 50 28.9 E	400929	5584620	79	112	195017
BC82A-3	135	39 52 57.8 S	145 50 27.8 E	400902	5584601	79	112	195027
BC82A-3	136	39 52 58.4 S	145 50 26.6 E	400875	5584582	79	112	195038
BC82A-3	137	39 52 59.0 S	145 50 25.5 E	400849	5584563	79	112	195048
BC82A-3	138	39 52 59.6 S	145 50 24.4 E	400822	5584544	79	112	195059
BC82A-3	139	39 53 00.2 S	145 50 23.2 E	400795	5584525	79	112	195110
BC82A-3	140	39 53 00.9 S	145 50 22.1 E	400769	5584505	79	112	195120
BC82A-3	141	39 53 01.5 S	145 50 21.0 E	400742	5584486	79	112	195130
BC82A-3	142	39 53 02.1 S	145 50 19.8 E	400715	5584467	80	112	195140
BC82A-3	143	39 53 02.7 S	145 50 18.7 E	400688	5584448	79	112	195150
BC82A-3	144	39 53 03.3 S	145 50 17.6 E	400662	5584429	79	112	1952 0
BC82A-3	145	39 53 03.9 S	145 50 16.5 E	400635	5584410	79	112	195210
BC82A-3	146	39 53 04.5 S	145 50 15.3 E	400608	5584391	80	112	195220
BC82A-3	147	39 53 05.1 S	145 50 14.2 E	400581	5584372	80	112	195231
BC82A-3	148	39 53 05.7 S	145 50 13.0 E	400554	5584353	80	112	195241
BC82A-3	149	39 53 06.3 S	145 50 11.9 E	400527	5584334	80	112	195251
BC82A-3	150	39 53 06.9 S	145 50 10.7 E	400500	5584315	80	112	1953 1
BC82A-3	151	39 53 07.5 S	145 50 09.6 E	400473	5584296	79	112	195311
BC82A-3	152	39 53 08.1 S	145 50 08.4 E	400446	5584277	79	112	195322
BC82A-3	153	39 53 08.7 S	145 50 07.3 E	400419	5584258	79	112	195332
BC82A-3	154	39 53 09.3 S	145 50 06.1 E	400392	5584239	79	112	195342
BC82A-3	155	39 53 09.9 S	145 50 05.0 E	400365	5584220	80	112	195352
BC82A-3	156	39 53 10.5 S	145 50 03.8 E	400337	5584201	79	112	1954 2
BC82A-3	157	39 53 11.1 S	145 50 02.6 E	400310	5584183	79	112	195413
BC82A-3	158	39 53 11.7 S	145 50 01.5 E	400283	5584164	79	112	195423
BC82A-3	159	39 53 12.3 S	145 50 00.3 E	400255	5584145	80	112	195433
BC82A-3	160	39 53 12.9 S	145 49 59.2 E	400228	5584126	79	112	195444
BC82A-3	161	39 53 13.5 S	145 49 58.0 E	400200	5584108	79	112	195454
BC82A-3	162	39 53 14.1 S	145 49 56.8 E	400173	5584089	79	112	1955 6

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LINE NAME	SHO. POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-3	163	39 53 14.7 S	145 49 55.6 E	400145	5584071	79	112	195516
BC82A-3	164	39 53 15.3 S	145 49 54.5 E	400118	5584052	79	112	195528
BC82A-3	165	39 53 15.9 S	145 49 53.3 E	400090	5584034	80	112	195538
BC82A-3	166	39 53 16.5 S	145 49 52.1 E	400062	5584015	79	112	195550
BC82A-3	167	39 53 17.0 S	145 49 51.0 E	400035	5583997	79	112	1956 0
BC82A-3	168	39 53 17.6 S	145 49 49.8 E	400007	5583978	79	112	195610
BC82A-3	169	39 53 18.2 S	145 49 48.6 E	399979	5583960	79	112	195620
BC82A-3	170	39 53 18.8 S	145 49 47.4 E	399951	5583941	79	112	195630
BC82A-3	171	39 53 19.4 S	145 49 46.2 E	399923	5583923	79	112	195640
BC82A-3	172	39 53 20.0 S	145 49 45.0 E	399895	5583904	79	112	195651
BC82A-3	173	39 53 20.6 S	145 49 43.8 E	399867	5583885	79	112	1957 1
BC82A-3	174	39 53 21.2 S	145 49 42.6 E	399838	5583867	79	112	195711
BC82A-3	175	39 53 21.8 S	145 49 41.4 E	399810	5583848	79	112	195721
BC82A-3	176	39 53 22.3 S	145 49 40.2 E	399782	5583830	80	112	195731
BC82A-3	177	39 53 22.9 S	145 49 39.0 E	399754	5583811	80	112	195742
BC82A-3	178	39 53 23.6 S	145 49 37.8 E	399725	5583792	79	112	195752
BC82A-3	179	39 53 24.2 S	145 49 36.6 E	399697	5583773	79	112	1958 4
BC82A-3	180	39 53 24.7 S	145 49 35.4 E	399669	5583755	79	112	195815
BC82A-3	181	39 53 25.3 S	145 49 34.2 E	399640	5583736	79	112	195826
BC82A-3	182	39 53 25.9 S	145 49 33.0 E	399612	5583717	79	112	195837
BC82A-3	183	39 53 26.5 S	145 49 31.8 E	399583	5583698	79	112	195848
BC82A-3	184	39 53 27.1 S	145 49 30.6 E	399555	5583679	79	112	195858
BC82A-3	185	39 53 27.7 S	145 49 29.4 E	399526	5583660	79	112	1959 9
BC82A-3	186	39 53 28.4 S	145 49 28.2 E	399498	5583641	79	112	195920
BC82A-3	187	39 53 29.0 S	145 49 26.9 E	399469	5583621	79	112	195931
BC82A-3	188	39 53 29.6 S	145 49 25.7 E	399441	5583602	79	112	195942
BC82A-3	189	39 53 30.2 S	145 49 24.5 E	399412	5583582	79	112	195952
BC82A-3	190	39 53 30.8 S	145 49 23.3 E	399383	5583563	79	112	20 0 3
BC82A-3	191	39 53 31.5 S	145 49 22.1 E	399355	5583543	79	112	20 014
BC82A-3	192	39 53 32.1 S	145 49 20.9 E	399326	5583524	80	112	20 025
BC82A-3	193	39 53 32.7 S	145 49 19.6 E	399297	5583504	79	112	20 036
BC82A-3	194	39 53 33.3 S	145 49 18.4 E	399269	5583485	80	112	20 046
BC82A-3	195	39 53 33.9 S	145 49 17.2 E	399240	5583465*****	112	112	20 057
BC82A-3	196	39 53 34.6 S	145 49 16.0 E	399211	5583446	79	112	20 1 8
BC82A-3	197	39 53 35.2 S	145 49 14.7 E	399182	5583426	79	112	20 119
BC82A-3	198	39 53 35.8 S	145 49 13.5 E	399153	5583407	79	112	20 130
BC82A-3	199	39 53 36.4 S	145 49 12.3 E	399125	5583387	79	112	20 140
BC82A-3	200	39 53 37.0 S	145 49 11.1 E	399096	5583368	79	112	20 151
BC82A-3	201	39 53 37.7 S	145 49 09.9 E	399067	5583348	79	112	20 2 2
BC82A-3	202	39 53 38.3 S	145 49 08.6 E	399038	5583328	79	112	20 213
BC82A-3	203	39 53 38.9 S	145 49 07.4 E	399009	5583309	79	112	20 224
BC82A-3	204	39 53 39.5 S	145 49 06.2 E	398980	5583289	79	112	20 234
BC82A-3	205	39 53 40.2 S	145 49 04.9 E	398951	5583269	79	112	20 245
BC82A-3	206	39 53 40.8 S	145 49 03.7 E	398922	5583250	79	112	20 256
BC82A-3	207	39 53 41.4 S	145 49 02.5 E	398893	5583230	79	112	20 3 7
BC82A-3	208	39 53 42.1 S	145 49 01.2 E	398864	5583210	79	112	20 318
BC82A-3	209	39 53 42.7 S	145 49 00.0 E	398835	5583190	79	112	20 328
BC82A-3	210	39 53 43.3 S	145 48 58.8 E	398806	5583171	79	112	20 339
BC82A-3	211	39 53 43.9 S	145 48 57.5 E	398777	5583152	79	112	20 350
BC82A-3	212	39 53 44.5 S	145 48 56.3 E	398748	5583133	79	112	20 4 1
BC82A-3	213	39 53 45.1 S	145 48 55.1 E	398719	5583113	79	112	20 412
BC82A-3	214	39 53 45.7 S	145 48 53.8 E	398690	5583094	80	112	20 422
BC82A-3	215	39 53 46.3 S	145 48 52.6 E	398661	5583075	79	112	20 433
BC82A-3	216	39 53 47.0 S	145 48 51.4 E	398632	5583056	79	112	20 444

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LINE NAME	SHOT POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-3	217	39 53 47.6 S	145 48 50.1 E	398603	5583037	79	112	20 455
BC82A-3	218	39 53 48.1 S	145 48 48.9 E	398574	5583019	79	112	20 5 6
BC82A-3	219	39 53 48.7 S	145 48 47.7 E	398545	5583000	79	112	20 516
BC82A-3	220	39 53 49.3 S	145 48 46.5 E	398516	5582981	79	112	20 527
BC82A-3	221	39 53 49.9 S	145 48 45.2 E	398486	5582963	80	112	20 538
BC82A-3	222	39 53 50.5 S	145 48 43.9 E	398457	5582944	80	112	20 549
BC82A-3	223	39 53 51.1 S	145 48 42.7 E	398428	5582926	79	112	20 6 0
BC82A-3	224	39 53 51.7 S	145 48 41.5 E	398399	5582907	80	112	20 610
BC82A-3	225	39 53 52.3 S	145 48 40.3 E	398370	5582889	79	112	20 621
BC82A-3	226	39 53 52.8 S	145 48 39.0 E	398340	5582871	79	112	20 632
BC82A-3	227	39 53 53.4 S	145 48 37.8 E	398311	5582853	80	112	20 643
BC82A-3	228	39 53 54.0 S	145 48 36.5 E	398282	5582835	79	112	20 654
BC82A-3	229	39 53 54.5 S	145 48 35.3 E	398253	5582817	79	112	20 7 4
BC82A-3	230	39 53 55.1 S	145 48 34.1 E	398224	5582800	80	112	20 715
BC82A-3	231	39 53 55.6 S	145 48 32.8 E	398194	5582782	79	112	20 726
BC82A-3	232	39 53 56.2 S	145 48 31.6 E	398165	5582764	79	112	20 737
BC82A-3	233	39 53 56.8 S	145 48 30.3 E	398136	5582747	79	112	20 748
BC82A-3	234	39 53 57.3 S	145 48 29.1 E	398107	5582729	79	112	20 758
BC82A-3	235	39 53 57.9 S	145 48 27.8 E	398077	5582712	79	112	20 8 9
BC82A-3	236	39 53 58.4 S	145 48 26.6 E	398048	5582694	79	112	20 820
BC82A-3	237	39 53 59.0 S	145 48 25.4 E	398019	5582677	79	112	20 831
BC82A-3	238	39 53 59.5 S	145 48 24.1 E	397990	5582659	79	112	20 842
BC82A-3	239	39 54 00.1 S	145 48 22.9 E	397961	5582642	79	112	20 852
BC82A-3	240	39 54 00.6 S	145 48 21.6 E	397931	5582625	79	112	20 9 3
BC82A-3	241	39 54 01.2 S	145 48 20.4 E	397902	5582607	79	112	20 914
BC82A-3	242	39 54 01.7 S	145 48 19.2 E	397873	5582590	79	112	20 925
BC82A-3	243	39 54 02.3 S	145 48 17.9 E	397844	5582572	79	112	20 935
BC82A-3	244	39 54 02.8 S	145 48 16.7 E	397815	5582555	79	112	20 946
BC82A-3	245	39 54 03.4 S	145 48 15.4 E	397785	5582537	79	112	20 957
BC82A-3	246	39 54 04.0 S	145 48 14.2 E	397756	5582520	79	112	2010 8
BC82A-3	247	39 54 04.5 S	145 48 13.0 E	397727	5582502	79	112	201018
BC82A-3	248	39 54 05.1 S	145 48 11.7 E	397698	5582485	0	112	201029
BC82A-3	249	39 54 05.6 S	145 48 10.5 E	397669	5582467	0	112	201040
BC82A-3	250	39 54 06.2 S	145 48 09.3 E	397640	5582449	0	112	201050
BC82A-3	251	39 54 06.8 S	145 48 08.0 E	397611	5582431	79	112	2011 1
BC82A-3	252	39 54 07.3 S	145 48 06.8 E	397582	5582413	79	112	201112
BC82A-3	253	39 54 07.9 S	145 48 05.6 E	397553	5582395	79	112	201122
BC82A-3	254	39 54 08.5 S	145 48 04.3 E	397524	5582377	79	112	201133
BC82A-3	255	39 54 09.1 S	145 48 03.2 E	397496	5582359	79	112	201144
BC82A-3	256	39 54 09.6 S	145 48 01.9 E	397467	5582341	79	112	201154
BC82A-3	257	39 54 10.2 S	145 48 00.7 E	397438	5582322	79	112	2012 5
BC82A-3	258	39 54 10.8 S	145 47 59.5 E	397410	5582304	79	112	201216
BC82A-3	259	39 54 11.4 S	145 47 58.3 E	397381	5582285	79	112	201226
BC82A-3	260	39 54 12.0 S	145 47 57.0 E	397352	5582267	79	112	201237
BC82A-3	261	39 54 12.6 S	145 47 55.9 E	397324	5582248	80	112	201248
BC82A-3	262	39 54 13.2 S	145 47 54.6 E	397295	5582229	79	112	201259
BC82A-3	263	39 54 13.8 S	145 47 53.4 E	397267	5582210	80	112	2013 9
BC82A-3	264	39 54 14.4 S	145 47 52.2 E	397239	5582191	79	112	201320
BC82A-3	265	39 54 15.0 S	145 47 51.0 E	397210	5582172	79	112	201331
BC82A-3	266	39 54 15.6 S	145 47 49.8 E	397182	5582152	79	112	201341
BC82A-3	267	39 54 16.2 S	145 47 48.6 E	397154	5582133	79	112	201352
BC82A-3	268	39 54 16.9 S	145 47 47.4 E	397126	5582113	79	112	2014 3
BC82A-3	269	39 54 17.5 S	145 47 46.2 E	397098	5582094	79	112	201413
BC82A-3	270	39 54 18.1 S	145 47 45.1 E	397070	5582074	79	112	201424

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LINE NAME	SHOT POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-3	271	39 54 18.7 S	145 47 43.9 E	397042	5582055	79	112	201435
BC82A-3	272	39 54 19.4 S	145 47 42.7 E	397014	5582035	79	112	201445
BC82A-3	273	39 54 20.0 S	145 47 41.5 E	396987	5582016	79	112	201456
BC82A-3	274	39 54 20.6 S	145 47 40.3 E	396959	5581996	79	112	2015 7
BC82A-3	275	39 54 21.2 S	145 47 39.2 E	396932	5581976	79	112	201517
BC82A-3	276	39 54 21.9 S	145 47 38.0 E	396904	5581956	79	112	201528
BC82A-3	277	39 54 22.5 S	145 47 36.9 E	396877	5581936	79	112	201539
BC82A-3	278	39 54 23.1 S	145 47 35.7 E	396849	5581916	79	112	201549
BC82A-3	279	39 54 23.8 S	145 47 34.5 E	396822	5581896	79	112	2016 0
BC82A-3	280	39 54 24.4 S	145 47 33.4 E	396795	5581876	79	112	201611
BC82A-3	281	39 54 25.1 S	145 47 32.2 E	396768	5581856	79	112	201621
BC82A-3	282	39 54 25.7 S	145 47 31.1 E	396741	5581836	79	112	201632
BC82A-3	283	39 54 26.3 S	145 47 29.9 E	396714	5581816	80	112	201642
BC82A-3	284	39 54 27.0 S	145 47 28.8 E	396687	5581796	80	112	201653
BC82A-3	285	39 54 27.6 S	145 47 27.6 E	396660	5581776	80	112	2017 3
BC82A-3	286	39 54 28.2 S	145 47 26.5 E	396633	5581756	79	112	201713
BC82A-3	287	39 54 28.9 S	145 47 25.4 E	396607	5581736	80	112	201723
BC82A-3	288	39 54 29.5 S	145 47 24.2 E	396580	5581716	79	112	201734
BC82A-3	289	39 54 30.1 S	145 47 23.1 E	396553	5581696	79	112	201744
BC82A-3	290	39 54 30.8 S	145 47 22.0 E	396527	5581676	79	112	201754
BC82A-3	291	39 54 31.4 S	145 47 20.8 E	396500	5581656	79	112	2018 4
BC82A-3	292	39 54 32.1 S	145 47 19.7 E	396474	5581636	79	112	201814
BC82A-3	293	39 54 32.7 S	145 47 18.6 E	396447	5581617	79	112	201825
BC82A-3	294	39 54 33.3 S	145 47 17.5 E	396421	5581597	80	112	201835
BC82A-3	295	39 54 33.9 S	145 47 16.3 E	396394	5581578	79	112	201845
BC82A-3	296	39 54 34.5 S	145 47 15.2 E	396368	5581559	79	112	201855
BC82A-3	297	39 54 35.1 S	145 47 14.1 E	396341	5581540	79	112	2019 5
BC82A-3	298	39 54 35.8 S	145 47 13.0 E	396315	5581520	79	112	201916
BC82A-3	299	39 54 36.4 S	145 47 11.8 E	396289	5581501	79	112	201926
BC82A-3	300	39 54 37.0 S	145 47 10.7 E	396262	5581482	80	112	201936
BC82A-3	301	39 54 37.5 S	145 47 09.6 E	396236	5581464	79	112	201946
BC82A-3	302	39 54 38.1 S	145 47 08.4 E	396209	5581445	79	112	201956
BC82A-3	303	39 54 38.7 S	145 47 07.3 E	396183	5581426	79	112	2020 6
BC82A-3	304	39 54 39.3 S	145 47 06.2 E	396156	5581408	79	112	202017
BC82A-3	305	39 54 39.9 S	145 47 05.1 E	396130	5581389	79	112	202027
BC82A-3	306	39 54 40.5 S	145 47 03.9 E	396103	5581371	79	112	202037
BC82A-3	307	39 54 41.1 S	145 47 02.8 E	396077	5581353	80	112	202047
BC82A-3	308	39 54 41.7 S	145 47 01.7 E	396050	5581334	79	112	202057
BC82A-3	309	39 54 42.2 S	145 47 00.5 E	396023	5581316	79	112	2021 8
BC82A-3	310	39 54 42.8 S	145 46 59.4 E	395997	5581298	79	112	202118
BC82A-3	311	39 54 43.3 S	145 46 58.3 E	395970	5581281	79	112	202128
BC82A-3	312	39 54 43.9 S	145 46 57.1 E	395943	5581263	79	112	202138
BC82A-3	313	39 54 44.5 S	145 46 56.0 E	395917	5581245	79	112	202148
BC82A-3	314	39 54 45.0 S	145 46 54.9 E	395890	5581228	79	112	202159
BC82A-3	315	39 54 45.6 S	145 46 53.7 E	395863	5581210	79	112	2022 9
BC82A-3	316	39 54 46.1 S	145 46 52.6 E	395836	5581193	79	112	202219
BC82A-3	317	39 54 46.7 S	145 46 51.4 E	395809	5581175	79	112	202229
BC82A-3	318	39 54 47.3 S	145 46 50.3 E	395782	5581158	79	112	202239
BC82A-3	319	39 54 47.8 S	145 46 49.2 E	395755	5581141	79	112	202249
BC82A-3	320	39 54 48.3 S	145 46 48.0 E	395728	5581124	79	112	2023 0
BC82A-3	321	39 54 48.9 S	145 46 46.9 E	395701	5581107	79	112	202310
BC82A-3	322	39 54 49.4 S	145 46 45.7 E	395673	5581090	80	112	202320
BC82A-3	323	39 54 50.0 S	145 46 44.5 E	395646	5581073	80	112	202330
BC82A-3	324	39 54 50.5 S	145 46 43.4 E	395619	5581056	79	112	202340

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LINE NAME	SHOT POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-3	325	39 54 51.0 S	145 46 42.2 E	395591	5581040	79	112	202351
BC82A-3	326	39 54 51.5 S	145 46 41.0 E	395564	5581023	79	112	2024 1
BC82A-3	327	39 54 52.0 S	145 46 39.9 E	395537	5581007	79	112	202411
BC82A-3	328	39 54 52.6 S	145 46 38.7 E	395509	5580990	79	112	202421
BC82A-3	329	39 54 53.1 S	145 46 37.6 E	395482	5580974	79	112	202431
BC82A-3	330	39 54 53.6 S	145 46 36.4 E	395454	5580957	79	112	202442
BC82A-3	331	39 54 54.1 S	145 46 35.2 E	395427	5580941	79	112	202452
BC82A-3	332	39 54 54.7 S	145 46 34.0 E	395399	5580924	78	112	2025 2
BC82A-3	333	39 54 55.2 S	145 46 32.9 E	395372	5580908	79	112	202512
BC82A-3	334	39 54 55.7 S	145 46 31.7 E	395344	5580891	79	112	202522
BC82A-3	335	39 54 56.2 S	145 46 30.5 E	395316	5580875	79	112	202532
BC82A-3	336	39 54 56.7 S	145 46 29.4 E	395289	5580859	79	112	202543
BC82A-3	337	39 54 57.3 S	145 46 28.2 E	395261	5580842	79	112	202553
BC82A-3	338	39 54 57.8 S	145 46 27.0 E	395234	5580826	79	112	2026 3
BC82A-3	339	39 54 58.3 S	145 46 25.8 E	395206	5580810	79	112	202613
BC82A-3	340	39 54 58.8 S	145 46 24.7 E	395178	5580793	79	112	202623
BC82A-3	341	39 54 59.3 S	145 46 23.5 E	395151	5580777	79	112	202634
BC82A-3	342	39 54 59.8 S	145 46 22.3 E	395123	5580761	79	112	202644
BC82A-3	343	39 55 00.3 S	145 46 21.2 E	395096	5580745	79	112	202654
BC82A-3	344	39 55 00.9 S	145 46 20.0 E	395068	5580728	78	112	2027 4
BC82A-3	345	39 55 01.4 S	145 46 18.8 E	395041	5580712	79	112	202714
BC82A-3	346	39 55 01.9 S	145 46 17.6 E	395013	5580696	79	112	202725
BC82A-3	347	39 55 02.4 S	145 46 16.5 E	394986	5580679	80	112	202735
BC82A-3	348	39 55 03.0 S	145 46 15.3 E	394958	5580662	80	112	202745
BC82A-3	349	39 55 03.5 S	145 46 14.2 E	394931	5580646	79	112	202755
BC82A-3	350	39 55 04.0 S	145 46 13.0 E	394904	5580629	79	112	2028 5
BC82A-3	351	39 55 04.6 S	145 46 11.8 E	394876	5580612	78	112	202815
BC82A-3	352	39 55 05.1 S	145 46 10.7 E	394849	5580596	79	112	202826
BC82A-3	353	39 55 05.6 S	145 46 09.5 E	394822	5580579	79	112	202836
BC82A-3	354	39 55 06.1 S	145 46 08.3 E	394794	5580562	79	112	202846
BC82A-3	355	39 55 06.7 S	145 46 07.2 E	394767	5580545	79	112	202856
BC82A-3	356	39 55 07.2 S	145 46 06.1 E	394740	5580529	79	112	2029 6
BC82A-3	357	39 55 07.7 S	145 46 04.9 E	394713	5580512	79	112	202917
BC82A-3	358	39 55 08.3 S	145 46 03.8 E	394686	5580495	79	112	202927
BC82A-3	359	39 55 08.8 S	145 46 02.6 E	394659	5580478	79	112	202937
BC82A-3	360	39 55 09.3 S	145 46 01.5 E	394632	5580461	79	112	202947
BC82A-3	361	39 55 09.9 S	145 46 00.3 E	394605	5580444	79	112	202957
BC82A-3	362	39 55 10.5 S	145 45 59.2 E	394578	5580426	79	112	2030 8

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LINE NAME	SHG. POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-1	1	39 56 23.4 S	145 48 55.6 E	398796	5578235	79	112	2140 7
BC82A-1	2	39 56 22.8 S	145 48 56.8 E	398825	5578253	79	112	214018
BC82A-1	3	39 56 22.2 S	145 48 58.0 E	398853	5578270	80	112	214028
BC82A-1	4	39 56 21.7 S	145 48 59.2 E	398882	5578288	80	112	214040
BC82A-1	5	39 56 21.1 S	145 49 00.5 E	398911	5578306	79	112	214051
BC82A-1	6	39 56 20.5 S	145 49 01.7 E	398940	5578324	80	112	2141 1
BC82A-1	7	39 56 20.0 S	145 49 02.9 E	398968	5578341	80	112	214112
BC82A-1	8	39 56 19.4 S	145 49 04.1 E	398997	5578359	80	112	214123
BC82A-1	9	39 56 18.9 S	145 49 05.3 E	399025	5578376	80	112	214133
BC82A-1	10	39 56 18.3 S	145 49 06.5 E	399053	5578394	80	112	214143
BC82A-1	11	39 56 17.8 S	145 49 07.7 E	399081	5578411	79	112	214153
BC82A-1	12	39 56 17.2 S	145 49 08.9 E	399109	5578428	80	112	2142 4
BC82A-1	13	39 56 16.7 S	145 49 10.1 E	399137	5578446	80	112	214215
BC82A-1	14	39 56 16.1 S	145 49 11.3 E	399165	5578463	79	112	214225
BC82A-1	15	39 56 15.6 S	145 49 12.5 E	399193	5578481	80	112	214236
BC82A-1	16	39 56 15.0 S	145 49 13.6 E	399221	5578499	79	112	214246
BC82A-1	17	39 56 14.4 S	145 49 14.8 E	399249	5578517	80	112	214256
BC82A-1	18	39 56 13.8 S	145 49 16.0 E	399276	5578535	80	112	2143 8
BC82A-1	19	39 56 13.3 S	145 49 17.2 E	399304	5578553	80	112	214318
BC82A-1	20	39 56 12.7 S	145 49 18.3 E	399331	5578572	80	112	214328
BC82A-1	21	39 56 12.1 S	145 49 19.5 E	399358	5578590	80	112	214338
BC82A-1	22	39 56 11.5 S	145 49 20.6 E	399385	5578609	79	112	214349
BC82A-1	23	39 56 10.9 S	145 49 21.8 E	399412	5578627	80	112	214359
BC82A-1	24	39 56 10.3 S	145 49 22.9 E	399439	5578646	80	112	214410
BC82A-1	25	39 56 09.7 S	145 49 24.1 E	399466	5578664	80	112	214420
BC82A-1	26	39 56 09.1 S	145 49 25.2 E	399493	5578684	79	112	214431
BC82A-1	27	39 56 08.5 S	145 49 26.4 E	399520	5578702	79	112	214441
BC82A-1	28	39 56 07.9 S	145 49 27.5 E	399546	5578722	80	112	214452
BC82A-1	29	39 56 07.3 S	145 49 28.6 E	399573	5578741	79	112	2145 3
BC82A-1	30	39 56 06.6 S	145 49 29.8 E	399600	5578761	80	112	214514
BC82A-1	31	39 56 06.0 S	145 49 30.9 E	399627	5578781	80	112	214525
BC82A-1	32	39 56 05.4 S	145 49 32.0 E	399653	5578801	79	112	214535
BC82A-1	33	39 56 04.7 S	145 49 33.2 E	399680	5578821	80	112	214545
BC82A-1	34	39 56 04.1 S	145 49 34.3 E	399706	5578841	80	112	214556
BC82A-1	35	39 56 03.5 S	145 49 35.4 E	399733	5578861	80	112	2146 6
BC82A-1	36	39 56 02.8 S	145 49 36.5 E	399759	5578882	80	112	214617
BC82A-1	37	39 56 02.2 S	145 49 37.6 E	399785	5578902	80	112	214628
BC82A-1	38	39 56 01.5 S	145 49 38.8 E	399812	5578922	80	112	214638
BC82A-1	39	39 56 00.8 S	145 49 39.9 E	399838	5578943	80	112	214648
BC82A-1	40	39 56 00.2 S	145 49 41.0 E	399865	5578963	79	112	214659
BC82A-1	41	39 55 59.5 S	145 49 42.1 E	399891	5578984	0	112	214710
BC82A-1	42	39 55 58.9 S	145 49 43.3 E	399918	5579004	0	112	214721
BC82A-1	43	39 55 58.2 S	145 49 44.4 E	399945	5579025	0	112	214731
BC82A-1	44	39 55 57.6 S	145 49 45.6 E	399972	5579046	0	112	214742
BC82A-1	45	39 55 56.9 S	145 49 46.7 E	399999	5579066	0	112	214753
BC82A-1	46	39 55 56.3 S	145 49 47.9 E	400026	5579087	0	112	2148 4
BC82A-1	47	39 55 55.6 S	145 49 49.0 E	400053	5579107	0	112	214815
BC82A-1	48	39 55 55.0 S	145 49 50.2 E	400080	5579128	0	112	214826
BC82A-1	49	39 55 54.3 S	145 49 51.3 E	400107	5579148	0	112	214836
BC82A-1	50	39 55 53.7 S	145 49 52.5 E	400134	5579168	0	112	214847
BC82A-1	51	39 55 53.0 S	145 49 53.7 E	400162	5579188	0	112	214858
BC82A-1	52	39 55 52.4 S	145 49 54.8 E	400189	5579208	0	112	2149 9
BC82A-1	53	39 55 51.8 S	145 49 56.0 E	400217	5579227	0	112	214920
BC82A-1	54	39 55 51.2 S	145 49 57.2 E	400244	5579247	0	112	214930

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LINE NAME	SHO. POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-1	55	39 55 50.6 S	145 49 58.3 E	400272	5579266	0	112	214941
BC82A-1	56	39 55 49.9 S	145 49 59.5 E	400300	5579286	0	112	214952
BC82A-1	57	39 55 49.3 S	145 50 00.7 E	400328	5579305	0	112	2150 3
BC82A-1	58	39 55 48.7 S	145 50 01.9 E	400356	5579325	0	112	215014
BC82A-1	59	39 55 48.1 S	145 50 03.1 E	400385	5579344	0	112	215025
BC82A-1	60	39 55 47.5 S	145 50 04.4 E	400414	5579362	0	112	215035
BC82A-1	61	39 55 46.9 S	145 50 05.6 E	400442	5579381	0	112	215046
BC82A-1	62	39 55 46.3 S	145 50 06.8 E	400471	5579399	79	112	215057
BC82A-1	63	39 55 45.8 S	145 50 08.0 E	400499	5579417	80	112	2151 8
BC82A-1	64	39 55 45.2 S	145 50 09.2 E	400527	5579435	80	112	215119
BC82A-1	65	39 55 44.6 S	145 50 10.4 E	400556	5579453	80	112	215130
BC82A-1	66	39 55 44.0 S	145 50 11.6 E	400585	5579471	79	112	215140
BC82A-1	67	39 55 43.5 S	145 50 12.9 E	400614	5579489	80	112	215151
BC82A-1	68	39 55 42.9 S	145 50 14.1 E	400642	5579507	80	112	2152 1
BC82A-1	69	39 55 42.4 S	145 50 15.3 E	400671	5579524	80	112	215213
BC82A-1	70	39 55 41.8 S	145 50 16.5 E	400700	5579542	79	112	215223
BC82A-1	71	39 55 41.2 S	145 50 17.8 E	400729	5579559	80	112	215235
BC82A-1	72	39 55 40.7 S	145 50 19.0 E	400758	5579577	80	112	215245
BC82A-1	73	39 55 40.1 S	145 50 20.2 E	400787	5579594	80	112	215256
BC82A-1	74	39 55 39.6 S	145 50 21.4 E	400815	5579611	80	112	2153 6
BC82A-1	75	39 55 39.0 S	145 50 22.6 E	400844	5579629	81	112	215318
BC82A-1	76	39 55 38.5 S	145 50 23.9 E	400873	5579646	79	112	215328
BC82A-1	77	39 55 37.9 S	145 50 25.1 E	400902	5579663	80	112	215338
BC82A-1	78	39 55 37.4 S	145 50 26.3 E	400930	5579680	80	112	215349
BC82A-1	79	39 55 36.8 S	145 50 27.5 E	400959	5579698	80	112	215359
BC82A-1	80	39 55 36.3 S	145 50 28.7 E	400988	5579715	80	112	215411
BC82A-1	81	39 55 35.8 S	145 50 29.9 E	401016	5579732	80	112	215422
BC82A-1	82	39 55 35.2 S	145 50 31.1 E	401044	5579749	80	112	215432
BC82A-1	83	39 55 34.6 S	145 50 32.3 E	401072	5579767	80	112	215443
BC82A-1	84	39 55 34.1 S	145 50 33.5 E	401100	5579784	0	112	215454
BC82A-1	85	39 55 33.5 S	145 50 34.7 E	401128	5579802	0	112	2155 5
BC82A-1	86	39 55 33.0 S	145 50 35.9 E	401156	5579819	0	112	215515
BC82A-1	87	39 55 32.4 S	145 50 37.1 E	401184	5579837	80	112	215526
BC82A-1	88	39 55 31.9 S	145 50 38.2 E	401211	5579854	80	112	215536
BC82A-1	89	39 55 31.3 S	145 50 39.4 E	401239	5579872	80	112	215547
BC82A-1	90	39 55 30.7 S	145 50 40.6 E	401266	5579890	80	112	215558
BC82A-1	91	39 55 30.2 S	145 50 41.7 E	401294	5579908	80	112	2156 8
BC82A-1	92	39 55 29.6 S	145 50 42.9 E	401321	5579926	80	112	215619
BC82A-1	93	39 55 29.0 S	145 50 44.1 E	401349	5579944	80	112	215629
BC82A-1	94	39 55 28.5 S	145 50 45.2 E	401376	5579962	79	112	215639
BC82A-1	95	39 55 27.9 S	145 50 46.4 E	401403	5579980	80	112	215649
BC82A-1	96	39 55 27.3 S	145 50 47.5 E	401430	5579999	80	112	2157 0
BC82A-1	97	39 55 26.7 S	145 50 48.7 E	401457	5580017	80	112	215710
BC82A-1	98	39 55 26.1 S	145 50 49.9 E	401485	5580035	80	112	215722
BC82A-1	99	39 55 25.5 S	145 50 51.0 E	401512	5580054	80	112	215732
BC82A-1	100	39 55 25.0 S	145 50 52.1 E	401539	5580072	80	112	215743
BC82A-1	101	39 55 24.3 S	145 50 53.3 E	401566	5580091	80	112	215753
BC82A-1	102	39 55 23.8 S	145 50 54.4 E	401593	5580109	79	112	2158 5
BC82A-1	103	39 55 23.2 S	145 50 55.6 E	401620	5580127	80	112	215815
BC82A-1	104	39 55 22.6 S	145 50 56.7 E	401647	5580146	80	112	215827
BC82A-1	105	39 55 22.0 S	145 50 57.9 E	401675	5580164	80	112	215837
BC82A-1	106	39 55 21.4 S	145 50 59.1 E	401702	5580183	80	112	215848
BC82A-1	107	39 55 20.8 S	145 51 00.2 E	401729	5580201	80	112	215859
BC82A-1	108	39 55 20.2 S	145 51 01.4 E	401756	5580220	80	112	2159 9

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LINE NAME	SHOT POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-1	109	39 55 19.7 S	145 51 02.6 E	401784	5580238	80	112	215920
BC82A-1	110	39 55 19.1 S	145 51 03.7 E	401811	5580256	80	112	215930
BC82A-1	111	39 55 18.5 S	145 51 04.9 E	401839	5580275	80	112	215941
BC82A-1	112	39 55 17.9 S	145 51 06.0 E	401866	5580293	80	112	215951
BC82A-1	113	39 55 17.4 S	145 51 07.2 E	401894	5580311	0	112	22 0 2
BC82A-1	114	39 55 16.7 S	145 51 08.4 E	401922	5580330	0	112	22 013
BC82A-1	115	39 55 16.2 S	145 51 09.6 E	401949	5580348	0	112	22 023
BC82A-1	116	39 55 15.6 S	145 51 10.8 E	401977	5580366	0	112	22 034
BC82A-1	117	39 55 15.0 S	145 51 11.9 E	402005	5580384	0	112	22 045
BC82A-1	118	39 55 14.5 S	145 51 13.1 E	402033	5580402	80	112	22 056
BC82A-1	119	39 55 13.9 S	145 51 14.3 E	402061	5580420	80	112	22 1 6
BC82A-1	120	39 55 13.3 S	145 51 15.5 E	402089	5580438	80	112	22 116
BC82A-1	121	39 55 12.7 S	145 51 16.7 E	402117	5580456	80	112	22 127
BC82A-1	122	39 55 12.2 S	145 51 17.9 E	402145	5580474	79	112	22 138
BC82A-1	123	39 55 11.6 S	145 51 19.1 E	402174	5580491	80	112	22 149
BC82A-1	124	39 55 11.1 S	145 51 20.3 E	402202	5580509	80	112	22 2 0
BC82A-1	125	39 55 10.5 S	145 51 21.5 E	402230	5580527	80	112	22 212
BC82A-1	126	39 55 09.9 S	145 51 22.7 E	402259	5580545	80	112	22 222
BC82A-1	127	39 55 09.3 S	145 51 23.9 E	402287	5580563	80	112	22 234
BC82A-1	128	39 55 08.8 S	145 51 25.1 E	402315	5580581	80	112	22 245
BC82A-1	129	39 55 08.2 S	145 51 26.3 E	402344	5580599	80	112	22 256
BC82A-1	130	39 55 07.6 S	145 51 27.5 E	402372	5580617	79	112	22 3 6
BC82A-1	131	39 55 07.1 S	145 51 28.7 E	402400	5580635	80	112	22 317
BC82A-1	132	39 55 06.5 S	145 51 29.9 E	402428	5580653	80	112	22 329
BC82A-1	133	39 55 05.9 S	145 51 31.1 E	402456	5580671	80	112	22 339
BC82A-1	134	39 55 05.3 S	145 51 32.3 E	402484	5580689	80	112	22 349
BC82A-1	135	39 55 04.8 S	145 51 33.5 E	402512	5580707	80	112	22 4 0
BC82A-1	136	39 55 04.2 S	145 51 34.7 E	402540	5580725	80	112	22 411
BC82A-1	137	39 55 03.6 S	145 51 35.8 E	402567	5580743	80	112	22 421
BC82A-1	138	39 55 03.0 S	145 51 37.0 E	402595	5580762	81	112	22 431
BC82A-1	139	39 55 02.4 S	145 51 38.2 E	402623	5580780	80	112	22 441
BC82A-1	140	39 55 01.8 S	145 51 39.3 E	402650	5580799	80	112	22 452
BC82A-1	141	39 55 01.3 S	145 51 40.5 E	402677	5580817	80	112	22 5 3
BC82A-1	142	39 55 00.7 S	145 51 41.7 E	402705	5580836	80	112	22 514
BC82A-1	143	39 55 00.1 S	145 51 42.8 E	402732	5580854	80	112	22 525
BC82A-1	144	39 54 59.5 S	145 51 44.0 E	402759	5580874	80	112	22 535
BC82A-1	145	39 54 58.8 S	145 51 45.1 E	402786	5580893	80	112	22 545
BC82A-1	146	39 54 58.2 S	145 51 46.3 E	402813	5580912	80	112	22 556
BC82A-1	147	39 54 57.6 S	145 51 47.4 E	402840	5580931	80	112	22 6 6
BC82A-1	148	39 54 57.0 S	145 51 48.5 E	402866	5580950	80	112	22 617
BC82A-1	149	39 54 56.4 S	145 51 49.7 E	402893	5580969	79	112	22 628
BC82A-1	150	39 54 55.8 S	145 51 50.8 E	402919	5580988	81	112	22 638
BC82A-1	151	39 54 55.2 S	145 51 51.9 E	402946	5581007	80	112	22 650
BC82A-1	152	39 54 54.6 S	145 51 53.0 E	402972	5581026	80	112	22 7 1
BC82A-1	153	39 54 54.0 S	145 51 54.1 E	402998	5581044	80	112	22 711
BC82A-1	154	39 54 53.4 S	145 51 55.3 E	403025	5581064	80	112	22 723
BC82A-1	155	39 54 52.8 S	145 51 56.4 E	403051	5581083	80	112	22 734
BC82A-1	156	39 54 52.2 S	145 51 57.5 E	403077	5581103	80	112	22 744
BC82A-1	157	39 54 51.6 S	145 51 58.6 E	403103	5581122	80	112	22 755
BC82A-1	158	39 54 50.9 S	145 51 59.7 E	403130	5581141	80	112	22 8 5
BC82A-1	159	39 54 50.3 S	145 52 00.8 E	403156	5581160	81	112	22 815
BC82A-1	160	39 54 49.7 S	145 52 01.9 E	403182	5581179	81	112	22 827
BC82A-1	161	39 54 49.1 S	145 52 03.0 E	403208	5581198	80	112	22 837
BC82A-1	162	39 54 48.5 S	145 52 04.2 E	403235	5581217	80	112	22 848

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LINE NAME	SHOT POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-1	163	39 54 47.9 S	145 52 05.3 E	403261	5581236	80	112	22 858
BC82A-1	164	39 54 47.3 S	145 52 06.4 E	403288	5581255	80	112	22 9 8
BC82A-1	165	39 54 46.7 S	145 52 07.6 E	403314	5581274	81	112	22 919
BC82A-1	166	39 54 46.1 S	145 52 08.7 E	403341	5581292	80	112	22 929
BC82A-1	167	39 54 45.5 S	145 52 09.8 E	403367	5581311	80	112	22 940
BC82A-1	168	39 54 45.0 S	145 52 11.0 E	403394	5581329	81	112	22 950
BC82A-1	169	39 54 44.4 S	145 52 12.1 E	403421	5581347	80	112	2210 2
BC82A-1	170	39 54 43.8 S	145 52 13.2 E	403447	5581365	80	112	221012
BC82A-1	171	39 54 43.2 S	145 52 14.3 E	403474	5581383	80	112	221023
BC82A-1	172	39 54 42.7 S	145 52 15.5 E	403501	5581401	80	112	221033
BC82A-1	173	39 54 42.1 S	145 52 16.6 E	403528	5581419	80	112	221043
BC82A-1	174	39 54 41.5 S	145 52 17.8 E	403555	5581437	80	112	221055
BC82A-1	175	39 54 40.9 S	145 52 19.0 E	403583	5581455	81	112	2211 5
BC82A-1	176	39 54 40.4 S	145 52 20.1 E	403610	5581473	80	112	221115
BC82A-1	177	39 54 39.8 S	145 52 21.3 E	403638	5581491	80	112	221125
BC82A-1	178	39 54 39.3 S	145 52 22.5 E	403665	5581508	81	112	221138
BC82A-1	179	39 54 38.7 S	145 52 23.6 E	403693	5581526	80	112	221149
BC82A-1	180	39 54 38.2 S	145 52 24.8 E	403721	5581543	80	112	2212 0
BC82A-1	181	39 54 37.6 S	145 52 26.0 E	403748	5581561	81	112	221211
BC82A-1	182	39 54 37.0 S	145 52 27.2 E	403776	5581578	80	112	221221
BC82A-1	183	39 54 36.5 S	145 52 28.4 E	403804	5581596	81	112	221231
BC82A-1	184	39 54 35.9 S	145 52 29.5 E	403832	5581613	80	112	221241
BC82A-1	185	39 54 35.4 S	145 52 30.7 E	403860	5581630	80	112	221251
BC82A-1	186	39 54 34.8 S	145 52 31.9 E	403888	5581648	80	112	2213 2
BC82A-1	187	39 54 34.3 S	145 52 33.1 E	403916	5581665	81	112	221312
BC82A-1	188	39 54 33.7 S	145 52 34.3 E	403943	5581682	80	112	221324
BC82A-1	189	39 54 33.2 S	145 52 35.4 E	403971	5581700	80	112	221335
BC82A-1	190	39 54 32.6 S	145 52 36.6 E	403999	5581717	80	112	221346
BC82A-1	191	39 54 32.1 S	145 52 37.8 E	404027	5581735	81	112	221358
BC82A-1	192	39 54 31.5 S	145 52 39.0 E	404055	5581752	80	112	2214 9
BC82A-1	193	39 54 30.9 S	145 52 40.2 E	404083	5581770	80	112	221419
BC82A-1	194	39 54 30.4 S	145 52 41.4 E	404111	5581788	81	112	221429
BC82A-1	195	39 54 29.8 S	145 52 42.5 E	404138	5581806	80	112	221439
BC82A-1	196	39 54 29.2 S	145 52 43.7 E	404166	5581824	80	112	221450
BC82A-1	197	39 54 28.6 S	145 52 44.9 E	404194	5581842	81	112	2215 1
BC82A-1	198	39 54 28.0 S	145 52 46.1 E	404221	5581861	81	112	221513
BC82A-1	199	39 54 27.5 S	145 52 47.2 E	404249	5581879	80	112	221523
BC82A-1	200	39 54 26.9 S	145 52 48.4 E	404276	5581898	80	112	221535
BC82A-1	201	39 54 26.3 S	145 52 49.5 E	404303	5581916	80	112	221545
BC82A-1	202	39 54 25.7 S	145 52 50.7 E	404331	5581935	80	112	221556
BC82A-1	203	39 54 25.1 S	145 52 51.9 E	404358	5581954	80	112	2216 7
BC82A-1	204	39 54 24.5 S	145 52 53.0 E	404385	5581972	80	112	221618
BC82A-1	205	39 54 23.9 S	145 52 54.2 E	404412	5581991	81	112	221629
BC82A-1	206	39 54 23.3 S	145 52 55.3 E	404439	5582010	80	112	221639
BC82A-1	207	39 54 22.7 S	145 52 56.5 E	404466	5582029	80	112	221650
BC82A-1	208	39 54 22.1 S	145 52 57.6 E	404493	5582048	80	112	2217 1
BC82A-1	209	39 54 21.5 S	145 52 58.7 E	404519	5582067	81	112	221711
BC82A-1	210	39 54 20.8 S	145 52 59.9 E	404546	5582087	81	112	221722
BC82A-1	211	39 54 20.2 S	145 53 01.0 E	404573	5582106	81	112	221733
BC82A-1	212	39 54 19.6 S	145 53 02.1 E	404599	5582125	81	112	221744
BC82A-1	213	39 54 19.0 S	145 53 03.3 E	404626	5582144	80	112	221754
BC82A-1	214	39 54 18.4 S	145 53 04.4 E	404653	5582163	80	112	2218 6
BC82A-1	215	39 54 17.8 S	145 53 05.5 E	404679	5582183	81	112	221816
BC82A-1	216	39 54 17.2 S	145 53 06.7 E	404706	5582202	80	112	221827

LINE NAME	SHO. POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-1	217	39 54 16.6 S	145 53 07.8 E	404732	5582221	80	112	221837
BC82A-1	218	39 54 16.0 S	145 53 08.9 E	404759	5582240	80	112	221847
BC82A-1	219	39 54 15.4 S	145 53 10.1 E	404786	5582259	80	112	221858
BC82A-1	220	39 54 14.8 S	145 53 11.2 E	404812	5582278	80	112	2219 9
BC82A-1	221	39 54 14.2 S	145 53 12.3 E	404839	5582297	80	112	221919
BC82A-1	222	39 54 13.5 S	145 53 13.5 E	404866	5582316	80	112	221930
BC82A-1	223	39 54 13.0 S	145 53 14.6 E	404893	5582334	80	112	221941
BC82A-1	224	39 54 12.4 S	145 53 15.8 E	404920	5582353	80	112	221953
BC82A-1	225	39 54 11.8 S	145 53 16.9 E	404947	5582371	81	112	2220 4
BC82A-1	226	39 54 11.2 S	145 53 18.0 E	404974	5582389	80	112	222014
BC82A-1	227	39 54 10.6 S	145 53 19.2 E	405001	5582408	80	112	222025
BC82A-1	228	39 54 10.0 S	145 53 20.3 E	405028	5582426	81	112	222035
BC82A-1	229	39 54 09.5 S	145 53 21.5 E	405055	5582444	80	112	222047
BC82A-1	230	39 54 08.9 S	145 53 22.7 E	405083	5582461	80	112	222057
BC82A-1	231	39 54 08.4 S	145 53 23.8 E	405110	5582479	80	112	2221 7
BC82A-1	232	39 54 07.8 S	145 53 25.0 E	405137	5582497	80	112	222118
BC82A-1	233	39 54 07.2 S	145 53 26.2 E	405165	5582514	81	112	222129
BC82A-1	234	39 54 06.7 S	145 53 27.3 E	405192	5582532	80	112	222140
BC82A-1	235	39 54 06.1 S	145 53 28.5 E	405220	5582549	80	112	222150
BC82A-1	236	39 54 05.6 S	145 53 29.6 E	405247	5582566	81	112	2222 1
BC82A-1	237	39 54 05.1 S	145 53 30.8 E	405275	5582583	81	112	222213
BC82A-1	238	39 54 04.5 S	145 53 32.0 E	405303	5582600	80	112	222223
BC82A-1	239	39 54 04.0 S	145 53 33.2 E	405330	5582617	80	112	222233
BC82A-1	240	39 54 03.4 S	145 53 34.3 E	405358	5582634	81	112	222244
BC82A-1	241	39 54 02.9 S	145 53 35.5 E	405386	5582651	80	112	222254
BC82A-1	242	39 54 02.4 S	145 53 36.7 E	405414	5582668	81	112	2223 4
BC82A-1	243	39 54 01.8 S	145 53 37.9 E	405442	5582684	81	112	222316
BC82A-1	244	39 54 01.3 S	145 53 39.1 E	405470	5582701	80	112	222326
BC82A-1	245	39 54 00.8 S	145 53 40.3 E	405498	5582718	81	112	222336
BC82A-1	246	39 54 00.2 S	145 53 41.5 E	405526	5582735	81	112	222348
BC82A-1	247	39 53 59.7 S	145 53 42.7 E	405554	5582751	80	112	222358
BC82A-1	248	39 53 59.2 S	145 53 43.8 E	405582	5582768	80	112	2224 9
BC82A-1	249	39 53 58.6 S	145 53 45.0 E	405610	5582785	81	112	222420
BC82A-1	250	39 53 58.1 S	145 53 46.2 E	405638	5582802	80	112	222430
BC82A-1	251	39 53 57.6 S	145 53 47.4 E	405666	5582819	80	112	222441
BC82A-1	252	39 53 57.0 S	145 53 48.6 E	405693	5582836	81	112	222452
BC82A-1	253	39 53 56.5 S	145 53 49.7 E	405721	5582853	80	112	2225 2
BC82A-1	254	39 53 55.9 S	145 53 50.9 E	405749	5582870	80	112	222512
BC82A-1	255	39 53 55.4 S	145 53 52.1 E	405776	5582888	81	112	222522
BC82A-1	256	39 53 54.8 S	145 53 53.3 E	405804	5582905	80	112	222532
BC82A-1	257	39 53 54.3 S	145 53 54.4 E	405832	5582923	80	112	222544
BC82A-1	258	39 53 53.7 S	145 53 55.6 E	405859	5582941	81	112	222554
BC82A-1	259	39 53 53.1 S	145 53 56.8 E	405887	5582958	80	112	2226 5
BC82A-1	260	39 53 52.5 S	145 53 57.9 E	405914	5582977	80	112	222617
BC82A-1	261	39 53 52.0 S	145 53 59.1 E	405942	5582995	80	112	222627
BC82A-1	262	39 53 51.4 S	145 54 00.3 E	405969	5583013	80	112	222639
BC82A-1	263	39 53 50.8 S	145 54 01.4 E	405996	5583032	80	112	222649
BC82A-1	264	39 53 50.2 S	145 54 02.6 E	406024	5583050	81	112	2227 0
BC82A-1	265	39 53 49.6 S	145 54 03.7 E	406051	5583069	81	112	222710
BC82A-1	266	39 53 49.0 S	145 54 04.9 E	406078	5583087	80	112	222721
BC82A-1	267	39 53 48.4 S	145 54 06.1 E	406106	5583107	81	112	222732
BC82A-1	268	39 53 47.8 S	145 54 07.2 E	406133	5583126	81	112	222744
BC82A-1	269	39 53 47.2 S	145 54 08.4 E	406160	5583145	81	112	222754
BC82A-1	270	39 53 46.6 S	145 54 09.6 E	406188	5583164	81	112	2228 4

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LINE NAME	SHOT POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-1	271	39 53 46.0 S	145 54 10.7 E	406215	5583183	80	112	222815
BC82A-1	272	39 53 45.4 S	145 54 11.9 E	406242	5583201	81	112	222826
BC82A-1	273	39 53 44.8 S	145 54 13.0 E	406270	5583221	80	112	222838
BC82A-1	274	39 53 44.2 S	145 54 14.2 E	406297	5583240	81	112	222849
BC82A-1	275	39 53 43.5 S	145 54 15.4 E	406325	5583260	81	112	222859
BC82A-1	276	39 53 42.9 S	145 54 16.6 E	406353	5583279	81	112	2229 9
BC82A-1	277	39 53 42.3 S	145 54 17.7 E	406380	5583298	81	112	222920
BC82A-1	278	39 53 41.7 S	145 54 18.9 E	406408	5583318	80	112	222931
BC82A-1	279	39 53 41.1 S	145 54 20.1 E	406436	5583337	81	112	222942
BC82A-1	280	39 53 40.4 S	145 54 21.3 E	406464	5583357	80	112	222952
BC82A-1	281	39 53 39.8 S	145 54 22.5 E	406492	5583376	81	112	2230 3
BC82A-1	282	39 53 39.2 S	145 54 23.7 E	406520	5583395	81	112	223014
BC82A-1	283	39 53 38.6 S	145 54 24.8 E	406548	5583415	80	112	223024
BC82A-1	284	39 53 38.0 S	145 54 26.0 E	406576	5583434	81	112	223035
BC82A-1	285	39 53 37.4 S	145 54 27.3 E	406605	5583453	81	112	223047
BC82A-1	286	39 53 36.7 S	145 54 28.5 E	406633	5583473	80	112	223058
BC82A-1	287	39 53 36.1 S	145 54 29.7 E	406662	5583492	80	112	223110
BC82A-1	288	39 53 35.5 S	145 54 30.9 E	406690	5583511	81	112	223121
BC82A-1	289	39 53 34.9 S	145 54 32.1 E	406719	5583530	81	112	223132
BC82A-1	290	39 53 34.3 S	145 54 33.3 E	406748	5583549	81	112	223143
BC82A-1	291	39 53 33.7 S	145 54 34.6 E	406777	5583568	80	112	223154
BC82A-1	292	39 53 33.1 S	145 54 35.8 E	406806	5583586	80	112	2232 6
BC82A-1	293	39 53 32.5 S	145 54 37.0 E	406835	5583605	80	112	223217
BC82A-1	294	39 53 31.9 S	145 54 38.3 E	406864	5583624	80	112	223228
BC82A-1	295	39 53 31.4 S	145 54 39.5 E	406894	5583642	80	112	223239
BC82A-1	296	39 53 30.8 S	145 54 40.8 E	406923	5583661	81	112	223250
BC82A-1	297	39 53 30.1 S	145 54 42.0 E	406952	5583680	80	112	2233 2
BC82A-1	298	39 53 29.6 S	145 54 43.3 E	406982	5583698	80	112	223313
BC82A-1	299	39 53 29.0 S	145 54 44.5 E	407011	5583717	81	112	223324
BC82A-1	300	39 53 28.4 S	145 54 45.7 E	407040	5583735	81	112	223335
BC82A-1	301	39 53 27.8 S	145 54 47.0 E	407070	5583754	81	112	223346
BC82A-1	302	39 53 27.2 S	145 54 48.2 E	407099	5583773	81	112	223357
BC82A-1	303	39 53 26.6 S	145 54 49.5 E	407128	5583791	80	112	2234 9
BC82A-1	304	39 53 26.0 S	145 54 50.7 E	407157	5583810	81	112	223420
BC82A-1	305	39 53 25.4 S	145 54 52.0 E	407187	5583828	81	112	223431
BC82A-1	306	39 53 24.8 S	145 54 53.2 E	407216	5583848	81	112	223442
BC82A-1	307	39 53 24.2 S	145 54 54.4 E	407245	5583867	80	112	223453
BC82A-1	308	39 53 23.6 S	145 54 55.7 E	407274	5583886	81	112	2235 5
BC82A-1	309	39 53 23.0 S	145 54 56.9 E	407303	5583905	81	112	223516
BC82A-1	310	39 53 22.4 S	145 54 58.1 E	407332	5583924	80	112	223527
BC82A-1	311	39 53 21.8 S	145 54 59.3 E	407361	5583943	81	112	223538
BC82A-1	312	39 53 21.2 S	145 55 00.6 E	407390	5583961	81	112	223549
BC82A-1	313	39 53 20.6 S	145 55 01.8 E	407419	5583981	81	112	2236 1
BC82A-1	314	39 53 20.0 S	145 55 03.0 E	407448	5584000	81	112	223612
BC82A-1	315	39 53 19.3 S	145 55 04.3 E	407477	5584020	81	112	223623
BC82A-1	316	39 53 18.7 S	145 55 05.5 E	407506	5584039	80	112	223634
BC82A-1	317	39 53 18.1 S	145 55 06.7 E	407534	5584059	80	112	223645
BC82A-1	318	39 53 17.5 S	145 55 07.9 E	407563	5584079	81	112	223656
BC82A-1	319	39 53 16.8 S	145 55 09.2 E	407592	5584099	81	112	2237 8
BC82A-1	320	39 53 16.2 S	145 55 10.3 E	407620	5584119	81	112	223719
BC82A-1	321	39 53 15.5 S	145 55 11.6 E	407649	5584139	80	112	223730
BC82A-1	322	39 53 14.9 S	145 55 12.8 E	407677	5584159	80	112	223741
BC82A-1	323	39 53 14.3 S	145 55 14.0 E	407706	5584179	80	112	223752
BC82A-1	324	39 53 13.6 S	145 55 15.2 E	407734	5584199	80	112	2238 4

LINE NAME	SHOT POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-1	325	39 53 13.0 S	145 55 16.4 E	407763	5584219	80	112	223815
BC82A-1	326	39 53 12.3 S	145 55 17.6 E	407791	5584240	81	112	223826
BC82A-1	327	39 53 11.7 S	145 55 18.8 E	407819	5584260	81	112	223837
BC82A-1	328	39 53 11.0 S	145 55 20.0 E	407848	5584280	80	112	223848
BC82A-1	329	39 53 10.4 S	145 55 21.3 E	407877	5584301	81	112	2239 0
BC82A-1	330	39 53 09.7 S	145 55 22.4 E	407905	5584321	81	112	223911
BC82A-1	331	39 53 09.1 S	145 55 23.7 E	407934	5584341	80	112	223922
BC82A-1	332	39 53 08.4 S	145 55 24.9 E	407962	5584362	81	112	223933
BC82A-1	333	39 53 07.8 S	145 55 26.1 E	407991	5584382	81	112	223944
BC82A-1	334	39 53 07.2 S	145 55 27.3 E	408019	5584402	80	112	223955
BC82A-1	335	39 53 06.5 S	145 55 28.5 E	408048	5584423	80	112	2240 7
BC82A-1	336	39 53 05.8 S	145 55 29.7 E	408076	5584443	81	112	224018
BC82A-1	337	39 53 05.2 S	145 55 30.9 E	408105	5584463	81	112	224029
BC82A-1	338	39 53 04.6 S	145 55 32.2 E	408135	5584483	80	112	224040
BC82A-1	339	39 53 03.9 S	145 55 33.4 E	408164	5584503	81	112	224051
BC82A-1	340	39 53 03.3 S	145 55 34.7 E	408193	5584522	80	112	2241 3
BC82A-1	341	39 53 02.7 S	145 55 35.9 E	408223	5584542	80	112	224114
BC82A-1	342	39 53 02.1 S	145 55 37.2 E	408252	5584561	81	112	224125
BC82A-1	343	39 53 01.5 S	145 55 38.4 E	408282	5584581	81	112	224136
BC82A-1	344	39 53 00.8 S	145 55 39.7 E	408311	5584600	81	112	224147
BC82A-1	345	39 53 00.2 S	145 55 40.9 E	408341	5584620	81	112	224159
BC82A-1	346	39 52 59.6 S	145 55 42.2 E	408370	5584638	81	112	224210
BC82A-1	347	39 52 59.0 S	145 55 43.4 E	408400	5584658	81	112	224221
BC82A-1	348	39 52 58.4 S	145 55 44.7 E	408429	5584676	81	112	224232
BC82A-1	349	39 52 57.8 S	145 55 46.0 E	408459	5584696	81	112	224243
BC82A-1	350	39 52 57.2 S	145 55 47.2 E	408488	5584714	81	112	224254
BC82A-1	351	39 52 56.6 S	145 55 48.5 E	408519	5584733	81	112	2243 6
BC82A-1	352	39 52 56.0 S	145 55 49.8 E	408549	5584751	81	112	224317
BC82A-1	353	39 52 55.5 S	145 55 51.0 E	408579	5584769	81	112	224328
BC82A-1	354	39 52 54.9 S	145 55 52.3 E	408609	5584787	81	112	224339
BC82A-1	355	39 52 54.3 S	145 55 53.6 E	408639	5584805	81	112	224350
BC82A-1	356	39 52 53.8 S	145 55 54.9 E	408669	5584823	81	112	2244 2
BC82A-1	357	39 52 53.2 S	145 55 56.1 E	408698	5584841	81	112	224413
BC82A-1	358	39 52 52.6 S	145 55 57.3 E	408727	5584859	81	112	224424
BC82A-1	359	39 52 52.0 S	145 55 58.5 E	408756	5584877	81	112	224435

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LINE NAME	SHO. POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-2	1	39 55 39.2 S	145 54 05.3 E	406129	5579692	74	113	02424
BC82A-2	2	39 55 38.4 S	145 54 04.3 E	406105	5579716	74	113	02436
BC82A-2	3	39 55 37.6 S	145 54 03.3 E	406081	5579740	74	113	02448
BC82A-2	4	39 55 36.8 S	145 54 02.3 E	406057	5579764	74	113	025 0
BC82A-2	5	39 55 36.0 S	145 54 01.2 E	406032	5579788	74	113	02510
BC82A-2	6	39 55 35.2 S	145 54 00.2 E	406008	5579813	74	113	02520
BC82A-2	7	39 55 34.4 S	145 53 59.2 E	405984	5579837	74	113	02531
BC82A-2	8	39 55 33.6 S	145 53 58.2 E	405960	5579862	74	113	02542
BC82A-2	9	39 55 32.8 S	145 53 57.3 E	405936	5579886	74	113	02554
BC82A-2	10	39 55 32.0 S	145 53 56.3 E	405912	5579911	74	113	026 7
BC82A-2	11	39 55 31.1 S	145 53 55.3 E	405888	5579936	74	113	02618
BC82A-2	12	39 55 30.3 S	145 53 54.3 E	405864	5579961	74	113	02629
BC82A-2	13	39 55 29.5 S	145 53 53.3 E	405840	5579985	74	113	02642
BC82A-2	14	39 55 28.7 S	145 53 52.3 E	405816	5580010	75	113	02653
BC82A-2	15	39 55 27.9 S	145 53 51.3 E	405792	5580035	74	113	027 3
BC82A-2	16	39 55 27.1 S	145 53 50.3 E	405768	5580059	74	113	02713
BC82A-2	17	39 55 26.3 S	145 53 49.3 E	405745	5580084	75	113	02723
BC82A-2	18	39 55 25.5 S	145 53 48.3 E	405721	5580109	74	113	02733
BC82A-2	19	39 55 24.6 S	145 53 47.3 E	405697	5580134	74	113	02746
BC82A-2	20	39 55 23.8 S	145 53 46.4 E	405674	5580159	74	113	02757
BC82A-2	21	39 55 23.0 S	145 53 45.4 E	405650	5580184	74	113	028 7
BC82A-2	22	39 55 22.2 S	145 53 44.4 E	405626	5580209	74	113	02818
BC82A-2	23	39 55 21.4 S	145 53 43.4 E	405603	5580234	74	113	02828
BC82A-2	24	39 55 20.5 S	145 53 42.5 E	405580	5580259	74	113	02843
BC82A-2	25	39 55 19.7 S	145 53 41.5 E	405556	5580284	75	113	02853
BC82A-2	26	39 55 18.9 S	145 53 40.5 E	405533	5580309	74	113	029 3
BC82A-2	27	39 55 18.1 S	145 53 39.5 E	405509	5580334	74	113	02914
BC82A-2	28	39 55 17.3 S	145 53 38.5 E	405486	5580359	74	113	02926
BC82A-2	29	39 55 16.4 S	145 53 37.6 E	405463	5580384	74	113	02938
BC82A-2	30	39 55 15.6 S	145 53 36.6 E	405440	5580409	75	113	02948
BC82A-2	31	39 55 14.8 S	145 53 35.7 E	405417	5580434	74	113	02958
BC82A-2	32	39 55 14.0 S	145 53 34.7 E	405394	5580459	74	113	03010
BC82A-2	33	39 55 13.2 S	145 53 33.8 E	405371	5580484	74	113	03022
BC82A-2	34	39 55 12.3 S	145 53 32.8 E	405348	5580509	74	113	03033
BC82A-2	35	39 55 11.5 S	145 53 31.9 E	405325	5580534	74	113	03043
BC82A-2	36	39 55 10.7 S	145 53 30.9 E	405302	5580559	75	113	03053
BC82A-2	37	39 55 09.9 S	145 53 29.9 E	405279	5580584	74	113	031 3
BC82A-2	38	39 55 09.1 S	145 53 29.0 E	405256	5580609	75	113	03113
BC82A-2	39	39 55 08.2 S	145 53 28.0 E	405233	5580634	75	113	03124
BC82A-2	40	39 55 07.4 S	145 53 27.1 E	405211	5580659	74	113	03134
BC82A-2	41	39 55 06.6 S	145 53 26.2 E	405188	5580684	74	113	03144
BC82A-2	42	39 55 05.8 S	145 53 25.2 E	405165	5580709	74	113	03154
BC82A-2	43	39 55 05.0 S	145 53 24.3 E	405143	5580734	74	113	032 4
BC82A-2	44	39 55 04.1 S	145 53 23.3 E	405120	5580759	75	113	03215
BC82A-2	45	39 55 03.3 S	145 53 22.4 E	405098	5580784	75	113	03225
BC82A-2	46	39 55 02.5 S	145 53 21.5 E	405075	5580809	74	113	03235
BC82A-2	47	39 55 01.7 S	145 53 20.6 E	405053	5580833	74	113	03245
BC82A-2	48	39 55 00.9 S	145 53 19.6 E	405031	5580858	75	113	03255
BC82A-2	49	39 55 00.1 S	145 53 18.7 E	405008	5580883	74	113	033 5
BC82A-2	50	39 54 59.3 S	145 53 17.8 E	404986	5580908	74	113	03316
BC82A-2	51	39 54 58.4 S	145 53 16.9 E	404964	5580933	75	113	03326
BC82A-2	52	39 54 57.7 S	145 53 15.9 E	404942	5580957	75	113	03336
BC82A-2	53	39 54 56.8 S	145 53 15.0 E	404919	5580982	74	113	03346
BC82A-2	54	39 54 56.0 S	145 53 14.1 E	404897	5581007	74	113	03356

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LINE NAME	SHOT POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-2	55	39 54 55.2 S	145 53 13.2 E	404875	5581032	74	113	034 7
BC82A-2	56	39 54 54.4 S	145 53 12.2 E	404853	5581056	74	113	03417
BC82A-2	57	39 54 53.6 S	145 53 11.3 E	404831	5581081	74	113	03427
BC82A-2	58	39 54 52.8 S	145 53 10.4 E	404809	5581105	74	113	03437
BC82A-2	59	39 54 52.0 S	145 53 09.5 E	404787	5581130	74	113	03447
BC82A-2	60	39 54 51.2 S	145 53 08.6 E	404765	5581154	74	113	03458
BC82A-2	61	39 54 50.4 S	145 53 07.7 E	404743	5581179	74	113	035 8
BC82A-2	62	39 54 49.6 S	145 53 06.8 E	404722	5581203	74	113	03518
BC82A-2	63	39 54 48.8 S	145 53 05.9 E	404700	5581228	74	113	03528
BC82A-2	64	39 54 48.0 S	145 53 05.0 E	404678	5581252	74	113	03538
BC82A-2	65	39 54 47.2 S	145 53 04.1 E	404656	5581277	81	113	03548
BC82A-2	66	39 54 46.4 S	145 53 03.2 E	404634	5581300	81	113	03559
BC82A-2	67	39 54 45.6 S	145 53 02.3 E	404613	5581325	81	113	036 9
BC82A-2	68	39 54 44.8 S	145 53 01.4 E	404591	5581349	81	113	03619
BC82A-2	69	39 54 44.0 S	145 53 00.5 E	404569	5581374	81	113	03629
BC82A-2	70	39 54 43.2 S	145 52 59.5 E	404547	5581398	82	113	03639
BC82A-2	71	39 54 42.4 S	145 52 58.7 E	404526	5581422	81	113	03650
BC82A-2	72	39 54 41.6 S	145 52 57.8 E	404504	5581446	81	113	037 0
BC82A-2	73	39 54 40.8 S	145 52 56.8 E	404482	5581470	81	113	03710
BC82A-2	74	39 54 40.0 S	145 52 56.0 E	404461	5581494	81	113	03720
BC82A-2	75	39 54 39.3 S	145 52 55.1 E	404439	5581518	81	113	03730
BC82A-2	76	39 54 38.5 S	145 52 54.1 E	404417	5581542	81	113	03741
BC82A-2	77	39 54 37.7 S	145 52 53.3 E	404396	5581566	81	113	03751
BC82A-2	78	39 54 36.9 S	145 52 52.4 E	404374	5581590	81	113	038 1
BC82A-2	79	39 54 36.1 S	145 52 51.4 E	404352	5581614	81	113	03811
BC82A-2	80	39 54 35.3 S	145 52 50.6 E	404331	5581638	80	113	03821
BC82A-2	81	39 54 34.6 S	145 52 49.7 E	404309	5581661	81	113	03831
BC82A-2	82	39 54 33.8 S	145 52 48.7 E	404287	5581685	81	113	03842
BC82A-2	83	39 54 33.0 S	145 52 47.9 E	404266	5581709	81	113	03852
BC82A-2	84	39 54 32.2 S	145 52 47.0 E	404244	5581732	81	113	039 2
BC82A-2	85	39 54 31.4 S	145 52 46.0 E	404222	5581756	81	113	03912
BC82A-2	86	39 54 30.7 S	145 52 45.2 E	404201	5581780	81	113	03922
BC82A-2	87	39 54 29.9 S	145 52 44.3 E	404179	5581803	80	113	03933
BC82A-2	88	39 54 29.1 S	145 52 43.3 E	404157	5581827	81	113	03943
BC82A-2	89	39 54 28.4 S	145 52 42.4 E	404135	5581850	81	113	03953
BC82A-2	90	39 54 27.6 S	145 52 41.6 E	404114	5581874	81	113	040 3
BC82A-2	91	39 54 26.8 S	145 52 40.6 E	404092	5581897	80	113	04013
BC82A-2	92	39 54 26.0 S	145 52 39.7 E	404070	5581921	81	113	04024
BC82A-2	93	39 54 25.3 S	145 52 38.8 E	404048	5581944	81	113	04034
BC82A-2	94	39 54 24.5 S	145 52 37.9 E	404026	5581967	82	113	04044
BC82A-2	95	39 54 23.7 S	145 52 37.0 E	404004	5581991	81	113	04054
BC82A-2	96	39 54 23.0 S	145 52 36.1 E	403982	5582014	80	113	041 4
BC82A-2	97	39 54 22.2 S	145 52 35.2 E	403960	5582038	81	113	04114
BC82A-2	98	39 54 21.4 S	145 52 34.2 E	403938	5582061	81	113	04125
BC82A-2	99	39 54 20.7 S	145 52 33.3 E	403916	5582084	81	113	04135
BC82A-2	100	39 54 19.9 S	145 52 32.4 E	403894	5582108	81	113	04145
BC82A-2	101	39 54 19.1 S	145 52 31.5 E	403872	5582131	81	113	04155
BC82A-2	102	39 54 18.4 S	145 52 30.6 E	403850	5582154	81	113	042 5
BC82A-2	103	39 54 17.6 S	145 52 29.7 E	403828	5582178	81	113	04216
BC82A-2	104	39 54 16.8 S	145 52 28.8 E	403806	5582201	81	113	04226
BC82A-2	105	39 54 16.1 S	145 52 27.8 E	403784	5582224	81	113	04236
BC82A-2	106	39 54 15.3 S	145 52 26.9 E	403761	5582248	81	113	04246
BC82A-2	107	39 54 14.6 S	145 52 26.0 E	403739	5582271	80	113	04256
BC82A-2	108	39 54 13.8 S	145 52 25.1 E	403717	5582294	80	113	043 7

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LINE NAME	SHOT POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-2	109	39 54 13.0 S	145 52 24.1 E	403694	5582318	81	113	04317
BC82A-2	110	39 54 12.3 S	145 52 23.2 E	403672	5582341	81	113	04327
BC82A-2	111	39 54 11.5 S	145 52 22.2 E	403649	5582364	80	113	04337
BC82A-2	112	39 54 10.7 S	145 52 21.3 E	403627	5582388	81	113	04347
BC82A-2	113	39 54 10.0 S	145 52 20.4 E	403604	5582411	81	113	04357
BC82A-2	114	39 54 09.2 S	145 52 19.5 E	403582	5582435	80	113	044 8
BC82A-2	115	39 54 08.4 S	145 52 18.5 E	403559	5582458	81	113	04418
BC82A-2	116	39 54 07.7 S	145 52 17.6 E	403537	5582481	81	113	04428
BC82A-2	117	39 54 06.9 S	145 52 16.6 E	403514	5582505	81	113	04438
BC82A-2	118	39 54 06.1 S	145 52 15.7 E	403491	5582528	81	113	04448
BC82A-2	119	39 54 05.3 S	145 52 14.7 E	403468	5582552	81	113	04459
BC82A-2	120	39 54 04.6 S	145 52 13.8 E	403446	5582575	81	113	045 9
BC82A-2	121	39 54 03.8 S	145 52 12.8 E	403423	5582599	81	113	04519
BC82A-2	122	39 54 03.0 S	145 52 11.9 E	403400	5582622	81	113	04529
BC82A-2	123	39 54 02.2 S	145 52 10.9 E	403377	5582646	81	113	04539
BC82A-2	124	39 54 01.5 S	145 52 10.0 E	403354	5582670	81	113	04550
BC82A-2	125	39 54 00.7 S	145 52 09.0 E	403331	5582693	81	113	046 0
BC82A-2	126	39 53 59.9 S	145 52 08.1 E	403308	5582717	81	113	04611
BC82A-2	127	39 53 59.2 S	145 52 07.1 E	403285	5582740	81	113	04622
BC82A-2	128	39 53 58.4 S	145 52 06.2 E	403262	5582764	81	113	04633
BC82A-2	129	39 53 57.6 S	145 52 05.2 E	403238	5582787	81	113	04644
BC82A-2	130	39 53 56.8 S	145 52 04.2 E	403215	5582812	81	113	04654
BC82A-2	131	39 53 56.0 S	145 52 03.2 E	403192	5582835	81	113	047 5
BC82A-2	132	39 53 55.2 S	145 52 02.3 E	403169	5582859	80	113	04716
BC82A-2	133	39 53 54.5 S	145 52 01.3 E	403145	5582882	80	113	04727
BC82A-2	134	39 53 53.7 S	145 52 00.3 E	403122	5582907	81	113	04738
BC82A-2	135	39 53 52.9 S	145 51 59.4 E	403099	5582931	81	113	04748
BC82A-2	136	39 53 52.1 S	145 51 58.4 E	403075	5582955	81	113	04759
BC82A-2	137	39 53 51.3 S	145 51 57.4 E	403052	5582979	80	113	04810
BC82A-2	138	39 53 50.5 S	145 51 56.4 E	403028	5583003	80	113	04821
BC82A-2	139	39 53 49.7 S	145 51 55.5 E	403005	5583027	81	113	04832
BC82A-2	140	39 53 48.9 S	145 51 54.5 E	402981	5583051	81	113	04842
BC82A-2	141	39 53 48.2 S	145 51 53.5 E	402958	5583075	81	113	04853
BC82A-2	142	39 53 47.4 S	145 51 52.5 E	402934	5583099	81	113	049 4
BC82A-2	143	39 53 46.6 S	145 51 51.5 E	402910	5583123	81	113	04915
BC82A-2	144	39 53 45.8 S	145 51 50.6 E	402887	5583147	81	113	04925
BC82A-2	145	39 53 45.0 S	145 51 49.6 E	402863	5583171	81	113	04936
BC82A-2	146	39 53 44.2 S	145 51 48.6 E	402839	5583195	80	113	04947
BC82A-2	147	39 53 43.4 S	145 51 47.6 E	402816	5583220	80	113	04958
BC82A-2	148	39 53 42.6 S	145 51 46.6 E	402792	5583243	81	113	050 9
BC82A-2	149	39 53 41.8 S	145 51 45.6 E	402768	5583268	81	113	05019
BC82A-2	150	39 53 41.0 S	145 51 44.7 E	402745	5583293	81	113	05030
BC82A-2	151	39 53 40.2 S	145 51 43.7 E	402721	5583317	81	113	05041
BC82A-2	152	39 53 39.4 S	145 51 42.7 E	402697	5583341	81	113	05052
BC82A-2	153	39 53 38.6 S	145 51 41.7 E	402673	5583365	80	113	051 3
BC82A-2	154	39 53 37.8 S	145 51 40.7 E	402649	5583390	80	113	05113
BC82A-2	155	39 53 37.0 S	145 51 39.7 E	402626	5583414	80	113	05124
BC82A-2	156	39 53 36.2 S	145 51 38.7 E	402602	5583439	81	113	05135
BC82A-2	157	39 53 35.4 S	145 51 37.8 E	402579	5583463	81	113	05146
BC82A-2	158	39 53 34.6 S	145 51 36.7 E	402554	5583488	80	113	05157
BC82A-2	159	39 53 33.8 S	145 51 35.7 E	402530	5583512	81	113	052 7
BC82A-2	160	39 53 33.0 S	145 51 34.7 E	402506	5583537	81	113	05218
BC82A-2	161	39 53 32.2 S	145 51 33.7 E	402482	5583562	81	113	05229
BC82A-2	162	39 53 31.3 S	145 51 32.7 E	402458	5583587	81	113	05240

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LINE NAME	SHO:POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-2	163	39 53 30.6 S	145 51 31.8 E	402435	5583611	82	113	05251
BC82A-2	164	39 53 29.7 S	145 51 30.8 E	402411	5583636	81	113	053 1
BC82A-2	165	39 53 28.9 S	145 51 29.8 E	402388	5583661	81	113	05312
BC82A-2	166	39 53 28.1 S	145 51 28.8 E	402363	5583685	81	113	05323
BC82A-2	167	39 53 27.3 S	145 51 27.8 E	402339	5583710	81	113	05334
BC82A-2	168	39 53 26.5 S	145 51 26.8 E	402315	5583735	81	113	05345
BC82A-2	169	39 53 25.7 S	145 51 25.8 E	402291	5583759	80	113	05355
BC82A-2	170	39 53 24.9 S	145 51 24.8 E	402267	5583784	81	113	054 6
BC82A-2	171	39 53 24.1 S	145 51 23.8 E	402243	5583809	81	113	05417
BC82A-2	172	39 53 23.3 S	145 51 22.8 E	402219	5583833	81	113	05428
BC82A-2	173	39 53 22.4 S	145 51 21.8 E	402195	5583858	80	113	05439
BC82A-2	174	39 53 21.6 S	145 51 20.9 E	402172	5583883	82	113	05449
BC82A-2	175	39 53 20.8 S	145 51 19.9 E	402148	5583907	82	113	055 0
BC82A-2	176	39 53 20.0 S	145 51 18.9 E	402125	5583932	81	113	05511
BC82A-2	177	39 53 19.2 S	145 51 17.9 E	402100	5583957	81	113	05522
BC82A-2	178	39 53 18.4 S	145 51 16.9 E	402076	5583982	81	113	05533
BC82A-2	179	39 53 17.6 S	145 51 15.9 E	402052	5584006	81	113	05543
BC82A-2	180	39 53 16.8 S	145 51 14.9 E	402028	5584031	81	113	05554
BC82A-2	181	39 53 15.9 S	145 51 13.9 E	402004	5584056	81	113	056 5
BC82A-2	182	39 53 15.1 S	145 51 12.9 E	401980	5584081	81	113	05616
BC82A-2	183	39 53 14.3 S	145 51 11.9 E	401957	5584105	81	113	05627
BC82A-2	184	39 53 13.5 S	145 51 10.9 E	401933	5584130	81	113	05638
BC82A-2	185	39 53 12.7 S	145 51 10.0 E	401910	5584155	81	113	05648
BC82A-2	186	39 53 11.9 S	145 51 08.9 E	401885	5584180	81	113	05659
BC82A-2	187	39 53 11.1 S	145 51 07.9 E	401861	5584204	81	113	05710
BC82A-2	188	39 53 10.3 S	145 51 07.0 E	401837	5584229	81	113	05721
BC82A-2	189	39 53 09.4 S	145 51 06.0 E	401814	5584254	81	113	05732
BC82A-2	190	39 53 08.6 S	145 51 05.0 E	401790	5584279	81	113	05743
BC82A-2	191	39 53 07.8 S	145 51 04.0 E	401766	5584303	80	113	05754
BC82A-2	192	39 53 07.0 S	145 51 03.0 E	401742	5584328	80	113	058 5
BC82A-2	193	39 53 06.2 S	145 51 02.0 E	401718	5584353	80	113	05816
BC82A-2	194	39 53 05.4 S	145 51 01.1 E	401695	5584377	81	113	05826
BC82A-2	195	39 53 04.6 S	145 51 00.1 E	401671	5584402	80	113	05837
BC82A-2	196	39 53 03.8 S	145 50 59.1 E	401648	5584426	81	113	05848
BC82A-2	197	39 53 03.0 S	145 50 58.1 E	401623	5584451	81	113	05859
BC82A-2	198	39 53 02.2 S	145 50 57.1 E	401600	5584475	80	113	05910
BC82A-2	199	39 53 01.4 S	145 50 56.1 E	401576	5584500	80	113	05921
BC82A-2	200	39 53 00.6 S	145 50 55.2 E	401553	5584524	81	113	05932
BC82A-2	201	39 52 59.8 S	145 50 54.1 E	401528	5584549	81	113	05943
BC82A-2	202	39 52 59.0 S	145 50 53.2 E	401505	5584573	81	113	05954
BC82A-2	203	39 52 58.2 S	145 50 52.2 E	401481	5584598	81	113	1 0 4
BC82A-2	204	39 52 57.4 S	145 50 51.2 E	401458	5584622	80	113	1 015
BC82A-2	205	39 52 56.5 S	145 50 50.2 E	401433	5584647	80	113	1 026
BC82A-2	206	39 52 55.8 S	145 50 49.2 E	401410	5584671	81	113	1 037
BC82A-2	207	39 52 54.9 S	145 50 48.2 E	401386	5584696	81	113	1 048
BC82A-2	208	39 52 54.1 S	145 50 47.2 E	401362	5584720	81	113	1 059
BC82A-2	209	39 52 53.3 S	145 50 46.3 E	401339	5584745	81	113	1 110
BC82A-2	210	39 52 52.5 S	145 50 45.3 E	401315	5584769	81	113	1 120
BC82A-2	211	39 52 51.8 S	145 50 44.3 E	401291	5584793	80	113	1 131
BC82A-2	212	39 52 50.9 S	145 50 43.3 E	401268	5584818	80	113	1 142
BC82A-2	213	39 52 50.1 S	145 50 42.3 E	401244	5584842	81	113	1 152
BC82A-2	214	39 52 49.4 S	145 50 41.3 E	401220	5584866	80	113	1 2 3
BC82A-2	215	39 52 48.6 S	145 50 40.4 E	401197	5584890	80	113	1 214
BC82A-2	216	39 52 47.7 S	145 50 39.4 E	401173	5584915	80	113	1 224

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LINE NAME	SHOT POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-2	217	39 52 47.0 S	145 50 38.4 E	401149	5584938	81	113	1 235
BC82A-2	218	39 52 46.2 S	145 50 37.4 E	401126	5584963	81	113	1 246
BC82A-2	219	39 52 45.4 S	145 50 36.4 E	401102	5584987	81	113	1 256
BC82A-2	220	39 52 44.6 S	145 50 35.4 E	401078	5585012	81	113	1 3 7
BC82A-2	221	39 52 43.8 S	145 50 34.5 E	401055	5585035	80	113	1 318
BC82A-2	222	39 52 43.0 S	145 50 33.5 E	401031	5585060	80	113	1 329
BC82A-2	223	39 52 42.2 S	145 50 32.5 E	401007	5585083	80	113	1 339
BC82A-2	224	39 52 41.4 S	145 50 31.5 E	400984	5585108	80	113	1 350
BC82A-2	225	39 52 40.6 S	145 50 30.5 E	400960	5585132	81	113	1 4 1
BC82A-2	226	39 52 39.8 S	145 50 29.5 E	400936	5585157	81	113	1 411
BC82A-2	227	39 52 39.0 S	145 50 28.6 E	400913	5585181	81	113	1 422
BC82A-2	228	39 52 38.2 S	145 50 27.6 E	400889	5585205	80	113	1 433
BC82A-2	229	39 52 37.4 S	145 50 26.6 E	400866	5585229	80	113	1 443
BC82A-2	230	39 52 36.6 S	145 50 25.6 E	400842	5585253	81	113	1 454
BC82A-2	231	39 52 35.9 S	145 50 24.6 E	400818	5585277	81	113	1 5 5
BC82A-2	232	39 52 35.1 S	145 50 23.7 E	400795	5585301	81	113	1 515
BC82A-2	233	39 52 34.3 S	145 50 22.7 E	400771	5585325	80	113	1 526
BC82A-2	234	39 52 33.5 S	145 50 21.7 E	400747	5585349	81	113	1 537
BC82A-2	235	39 52 32.7 S	145 50 20.7 E	400724	5585372	81	113	1 547
BC82A-2	236	39 52 31.9 S	145 50 19.7 E	400700	5585397	80	113	1 558
BC82A-2	237	39 52 31.1 S	145 50 18.7 E	400676	5585421	80	113	1 6 9
BC82A-2	238	39 52 30.3 S	145 50 17.8 E	400653	5585446	80	113	1 620
BC82A-2	239	39 52 29.5 S	145 50 16.8 E	400629	5585470	80	113	1 630
BC82A-2	240	39 52 28.7 S	145 50 15.8 E	400605	5585494	80	113	1 641
BC82A-2	241	39 52 27.9 S	145 50 14.8 E	400582	5585518	81	113	1 652
BC82A-2	242	39 52 27.2 S	145 50 13.8 E	400558	5585542	81	113	1 7 2
BC82A-2	243	39 52 26.4 S	145 50 12.8 E	400534	5585566	81	113	1 713
BC82A-2	244	39 52 25.6 S	145 50 11.9 E	400511	5585590	80	113	1 724
BC82A-2	245	39 52 24.8 S	145 50 10.9 E	400487	5585614	81	113	1 734
BC82A-2	246	39 52 24.0 S	145 50 09.9 E	400464	5585638	81	113	1 745
BC82A-2	247	39 52 23.2 S	145 50 08.9 E	400439	5585662	80	113	1 756
BC82A-2	248	39 52 22.4 S	145 50 07.9 E	400416	5585686	80	113	1 8 6
BC82A-2	249	39 52 21.6 S	145 50 06.9 E	400392	5585710	81	113	1 817
BC82A-2	250	39 52 20.8 S	145 50 05.9 E	400368	5585734	81	113	1 828
BC82A-2	251	39 52 20.1 S	145 50 05.0 E	400345	5585758	81	113	1 838
BC82A-2	252	39 52 19.3 S	145 50 04.0 E	400321	5585782	81	113	1 849
BC82A-2	253	39 52 18.5 S	145 50 03.0 E	400297	5585806	80	113	1 9 0
BC82A-2	254	39 52 17.7 S	145 50 02.0 E	400274	5585830	80	113	1 911
BC82A-2	255	39 52 16.9 S	145 50 01.0 E	400250	5585854	80	113	1 921
BC82A-2	256	39 52 16.1 S	145 50 00.1 E	400227	5585877	81	113	1 932
BC82A-2	257	39 52 15.3 S	145 49 59.0 E	400202	5585902	81	113	1 943
BC82A-2	258	39 52 14.5 S	145 49 58.1 E	400179	5585926	82	113	1 953
BC82A-2	259	39 52 13.7 S	145 49 57.1 E	400155	5585951	81	113	110 4
BC82A-2	260	39 52 12.9 S	145 49 56.1 E	400131	5585975	80	113	11015
BC82A-2	261	39 52 12.1 S	145 49 55.1 E	400108	5585999	81	113	11025
BC82A-2	262	39 52 11.4 S	145 49 54.1 E	400084	5586023	80	113	11036
BC82A-2	263	39 52 10.6 S	145 49 53.2 E	400061	5586047	80	113	11047
BC82A-2	264	39 52 09.8 S	145 49 52.2 E	400036	5586070	80	113	11057
BC82A-2	265	39 52 09.0 S	145 49 51.2 E	400013	5586095	80	113	111 8
BC82A-2	266	39 52 08.2 S	145 49 50.2 E	399989	5586119	81	113	11119
BC82A-2	267	39 52 07.4 S	145 49 49.2 E	399965	5586144	80	113	11129
BC82A-2	268	39 52 06.6 S	145 49 48.2 E	399942	5586167	81	113	11140
BC82A-2	269	39 52 05.8 S	145 49 47.3 E	399918	5586192	81	113	11151
BC82A-2	270	39 52 05.0 S	145 49 46.3 E	399895	5586215	81	113	112 2

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LINE NAME	SHOT POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-2	271	39 52 04.2 S	145 49 45.3 E	399870	5586240	80	113	11212
BC82A-2	272	39 52 03.4 S	145 49 44.3 E	399847	5586264	81	113	11223
BC82A-2	273	39 52 02.6 S	145 49 43.3 E	399823	5586289	81	113	11234
BC82A-2	274	39 52 01.9 S	145 49 42.3 E	399799	5586312	81	113	11244
BC82A-2	275	39 52 01.0 S	145 49 41.4 E	399776	5586337	81	113	11255
BC82A-2	276	39 52 00.3 S	145 49 40.4 E	399752	5586360	81	113	113 6
BC82A-2	277	39 51 59.5 S	145 49 39.4 E	399729	5586385	81	113	11316
BC82A-2	278	39 51 58.7 S	145 49 38.4 E	399704	5586409	80	113	11327
BC82A-2	279	39 51 57.9 S	145 49 37.4 E	399681	5586434	81	113	11338
BC82A-2	280	39 51 57.1 S	145 49 36.4 E	399657	5586457	81	113	11348
BC82A-2	281	39 51 56.3 S	145 49 35.4 E	399633	5586482	81	113	11359
BC82A-2	282	39 51 55.5 S	145 49 34.5 E	399610	5586506	81	113	11410
BC82A-2	283	39 51 54.7 S	145 49 33.5 E	399586	5586531	81	113	11420
BC82A-2	284	39 51 53.9 S	145 49 32.5 E	399562	5586555	81	113	11431
BC82A-2	285	39 51 53.1 S	145 49 31.5 E	399539	5586579	81	113	11441
BC82A-2	286	39 51 52.3 S	145 49 30.5 E	399515	5586603	80	113	11452
BC82A-2	287	39 51 51.5 S	145 49 29.5 E	399491	5586627	80	113	115 3
BC82A-2	288	39 51 50.7 S	145 49 28.6 E	399468	5586652	80	113	11513
BC82A-2	289	39 51 49.9 S	145 49 27.6 E	399444	5586676	80	113	11524
BC82A-2	290	39 51 49.1 S	145 49 26.6 E	399420	5586700	80	113	11534
BC82A-2	291	39 51 48.3 S	145 49 25.6 E	399397	5586724	81	113	11545
BC82A-2	292	39 51 47.5 S	145 49 24.6 E	399373	5586748	81	113	11556
BC82A-2	293	39 51 46.7 S	145 49 23.6 E	399349	5586773	81	113	116 6
BC82A-2	294	39 51 46.0 S	145 49 22.7 E	399326	5586796	81	113	11617
BC82A-2	295	39 51 45.1 S	145 49 21.7 E	399302	5586821	81	113	11627
BC82A-2	296	39 51 44.4 S	145 49 20.7 E	399279	5586844	81	113	11638
BC82A-2	297	39 51 43.6 S	145 49 19.7 E	399255	5586869	80	113	11649
BC82A-2	298	39 51 42.8 S	145 49 18.7 E	399231	5586893	80	113	11659
BC82A-2	299	39 51 42.0 S	145 49 17.8 E	399208	5586918	81	113	11710
BC82A-2	300	39 51 41.2 S	145 49 16.8 E	399184	5586942	80	113	11720
BC82A-2	301	39 51 40.4 S	145 49 15.8 E	399161	5586966	80	113	11731
BC82A-2	302	39 51 39.6 S	145 49 14.8 E	399137	5586990	81	113	11742
BC82A-2	303	39 51 38.8 S	145 49 13.9 E	399114	5587014	81	113	11752
BC82A-2	304	39 51 38.0 S	145 49 12.9 E	399090	5587038	81	113	118 3
BC82A-2	305	39 51 37.2 S	145 49 11.9 E	399066	5587062	80	113	11813
BC82A-2	306	39 51 36.4 S	145 49 10.9 E	399043	5587086	81	113	11824
BC82A-2	307	39 51 35.6 S	145 49 09.9 E	399019	5587110	80	113	11835
BC82A-2	308	39 51 34.9 S	145 49 09.0 E	398996	5587134	80	113	11845
BC82A-2	309	39 51 34.1 S	145 49 08.0 E	398972	5587158	80	113	11856
BC82A-2	310	39 51 33.3 S	145 49 07.0 E	398949	5587182	81	113	119 6
BC82A-2	311	39 51 32.5 S	145 49 06.0 E	398925	5587206	81	113	11917
BC82A-2	312	39 51 31.7 S	145 49 05.1 E	398902	5587230	81	113	11928
BC82A-2	313	39 51 30.9 S	145 49 04.1 E	398878	5587254	81	113	11938
BC82A-2	314	39 51 30.1 S	145 49 03.1 E	398855	5587278	81	113	11949
BC82A-2	315	39 51 29.3 S	145 49 02.2 E	398832	5587302	81	113	11959
BC82A-2	316	39 51 28.6 S	145 49 01.2 E	398808	5587326	80	113	12010
BC82A-2	317	39 51 27.8 S	145 49 00.2 E	398785	5587350	80	113	12020
BC82A-2	318	39 51 27.0 S	145 48 59.2 E	398761	5587374	81	113	12031
BC82A-2	319	39 51 26.2 S	145 48 58.3 E	398738	5587398	81	113	12042
BC82A-2	320	39 51 25.4 S	145 48 57.3 E	398714	5587422	80	113	12052
BC82A-2	321	39 51 24.6 S	145 48 56.3 E	398691	5587445	80	113	121 3
BC82A-2	322	39 51 23.9 S	145 48 55.4 E	398668	5587469	81	113	12113
BC82A-2	323	39 51 23.1 S	145 48 54.4 E	398644	5587492	80	113	12124
BC82A-2	324	39 51 22.3 S	145 48 53.4 E	398621	5587517	80	113	12135

LINE NAME	SHOT POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-2	325	39 51 21.5 S	145 48 52.4 E	398597	5587541	81	113	12145
BC82A-2	326	39 51 20.7 S	145 48 51.5 E	398574	5587564	81	113	12156
BC82A-2	327	39 51 19.9 S	145 48 50.5 E	398551	5587588	80	113	122 6
BC82A-2	328	39 51 19.2 S	145 48 49.5 E	398527	5587611	79	113	12217
BC82A-2	329	39 51 18.4 S	145 48 48.6 E	398504	5587636	80	113	12228
BC82A-2	330	39 51 17.6 S	145 48 47.6 E	398481	5587659	81	113	12238
BC82A-2	331	39 51 16.8 S	145 48 46.6 E	398457	5587683	81	113	12249
BC82A-2	332	39 51 16.0 S	145 48 45.6 E	398434	5587707	80	113	12259
BC82A-2	333	39 51 15.3 S	145 48 44.7 E	398411	5587730	81	113	12310
BC82A-2	334	39 51 14.5 S	145 48 43.7 E	398387	5587754	80	113	12321
BC82A-2	335	39 51 13.7 S	145 48 42.7 E	398364	5587778	80	113	12331
BC82A-2	336	39 51 12.9 S	145 48 41.8 E	398341	5587801	81	113	12342
BC82A-2	337	39 51 12.2 S	145 48 40.8 E	398317	5587825	81	113	12352
BC82A-2	338	39 51 11.4 S	145 48 39.8 E	398294	5587848	81	113	124 3
BC82A-2	339	39 51 10.6 S	145 48 38.9 E	398271	5587872	80	113	12414
BC82A-2	340	39 51 09.8 S	145 48 37.9 E	398248	5587896	81	113	12424
BC82A-2	341	39 51 09.1 S	145 48 36.9 E	398224	5587919	81	113	12435
BC82A-2	342	39 51 08.3 S	145 48 36.0 E	398201	5587943	80	113	12445
BC82A-2	343	39 51 07.5 S	145 48 35.0 E	398178	5587967	80	113	12456
BC82A-2	344	39 51 06.7 S	145 48 34.1 E	398155	5587990	80	113	125 7
BC82A-2	345	39 51 06.0 S	145 48 33.1 E	398131	5588014	80	113	12517
BC82A-2	346	39 51 05.2 S	145 48 32.1 E	398108	5588037	80	113	12528
BC82A-2	347	39 51 04.4 S	145 48 31.2 E	398085	5588061	81	113	12538
BC82A-2	348	39 51 03.6 S	145 48 30.2 E	398062	5588085	81	113	12549
BC82A-2	349	39 51 02.9 S	145 48 29.3 E	398039	5588108	80	113	12559
BC82A-2	350	39 51 02.1 S	145 48 28.3 E	398015	5588132	81	113	12610
BC82A-2	351	39 51 01.3 S	145 48 27.3 E	397992	5588155	81	113	12621
BC82A-2	352	39 51 00.5 S	145 48 26.3 E	397969	5588179	80	113	12631
BC82A-2	353	39 50 59.7 S	145 48 25.4 E	397946	5588203	81	113	12642
BC82A-2	354	39 50 59.0 S	145 48 24.4 E	397923	5588226	80	113	12652
BC82A-2	355	39 50 58.2 S	145 48 23.4 E	397899	5588250	81	113	127 3
BC82A-2	356	39 50 57.4 S	145 48 22.5 E	397876	5588274	80	113	12714
BC82A-2	357	39 50 56.7 S	145 48 21.5 E	397853	5588297	80	113	12724
BC82A-2	358	39 50 55.9 S	145 48 20.6 E	397830	5588321	81	113	12735
BC82A-2	359	39 50 55.1 S	145 48 19.6 E	397807	5588345	81	113	12745
BC82A-2	360	39 50 54.3 S	145 48 18.7 E	397784	5588368	80	113	12756
BC82A-2	361	39 50 53.5 S	145 48 17.7 E	397761	5588392	81	113	128 6
BC82A-2	362	39 50 52.7 S	145 48 16.8 E	397738	5588416	80	113	12817
BC82A-2	363	39 50 52.0 S	145 48 15.8 E	397714	5588439	80	113	12827
BC82A-2	364	39 50 51.2 S	145 48 14.8 E	397691	5588463	80	113	12838
BC82A-2	365	39 50 50.4 S	145 48 13.9 E	397668	5588486	80	113	12848
BC82A-2	366	39 50 49.6 S	145 48 12.9 E	397645	5588511	80	113	12858
BC82A-2	367	39 50 48.9 S	145 48 11.9 E	397622	5588534	80	113	129 9
BC82A-2	368	39 50 48.1 S	145 48 11.0 E	397599	5588558	81	113	12919
BC82A-2	369	39 50 47.3 S	145 48 10.0 E	397576	5588581	81	113	12930
BC82A-2	370	39 50 46.5 S	145 48 09.1 E	397553	5588606	81	113	12940
BC82A-2	371	39 50 45.7 S	145 48 08.1 E	397530	5588630	80	113	12950
BC82A-2	372	39 50 44.9 S	145 48 07.2 E	397507	5588654	80	113	130 1
BC82A-2	373	39 50 44.2 S	145 48 06.2 E	397484	5588677	81	113	13011
BC82A-2	374	39 50 43.4 S	145 48 05.3 E	397461	5588701	81	113	13021
BC82A-2	375	39 50 42.6 S	145 48 04.3 E	397438	5588724	80	113	13032
BC82A-2	376	39 50 41.8 S	145 48 03.4 E	397415	5588749	80	113	13042
BC82A-2	377	39 50 41.0 S	145 48 02.4 E	397392	5588773	80	113	13053
BC82A-2	378	39 50 40.2 S	145 48 01.4 E	397368	5588797	80	113	131 3

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LINE NAME	SHOT POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-2	379	39 50 39.4 S	145 48 00.5 E	397345	5588821	80	113	13113
BC82A-2	380	39 50 38.7 S	145 47 59.5 E	397322	5588845	81	113	13124
BC82A-2	381	39 50 37.9 S	145 47 58.5 E	397299	5588869	81	113	13134
BC82A-2	382	39 50 37.1 S	145 47 57.6 E	397276	5588893	81	113	13145
BC82A-2	383	39 50 36.3 S	145 47 56.6 E	397253	5588917	81	113	13155
BC82A-2	384	39 50 35.5 S	145 47 55.7 E	397230	5588940	80	113	132 5
BC82A-2	385	39 50 34.7 S	145 47 54.7 E	397207	5588965	80	113	13216
BC82A-2	386	39 50 33.9 S	145 47 53.8 E	397185	5588989	80	113	13226
BC82A-2	387	39 50 33.1 S	145 47 52.9 E	397162	5589014	80	113	13237
BC82A-2	388	39 50 32.3 S	145 47 51.9 E	397139	5589038	81	113	13247
BC82A-2	389	39 50 31.5 S	145 47 51.0 E	397116	5589062	80	113	13257
BC82A-2	390	39 50 30.8 S	145 47 50.0 E	397093	5589085	80	113	133 8
BC82A-2	391	39 50 29.9 S	145 47 49.0 E	397070	5589110	80	113	13318
BC82A-2	392	39 50 29.2 S	145 47 48.1 E	397047	5589134	80	113	13329
BC82A-2	393	39 50 28.3 S	145 47 47.1 E	397024	5589159	80	113	13339
BC82A-2	394	39 50 27.6 S	145 47 46.2 E	397001	5589182	81	113	13349
BC82A-2	395	39 50 26.8 S	145 47 45.2 E	396978	5589207	81	113	134 0
BC82A-2	396	39 50 26.0 S	145 47 44.3 E	396955	5589231	80	113	13410
BC82A-2	397	39 50 25.2 S	145 47 43.3 E	396932	5589256	80	113	13420
BC82A-2	398	39 50 24.4 S	145 47 42.4 E	396909	5589280	80	113	13431
BC82A-2	399	39 50 23.5 S	145 47 41.4 E	396886	5589305	80	113	13441
BC82A-2	400	39 50 22.8 S	145 47 40.5 E	396863	5589329	81	113	13452
BC82A-2	401	39 50 22.0 S	145 47 39.5 E	396840	5589353	81	113	135 2
BC82A-2	402	39 50 21.1 S	145 47 38.6 E	396817	5589378	80	113	13512
BC82A-2	403	39 50 20.4 S	145 47 37.6 E	396794	5589402	80	113	13523
BC82A-2	404	39 50 19.6 S	145 47 36.7 E	396772	5589426	80	113	13533
BC82A-2	405	39 50 18.8 S	145 47 35.7 E	396749	5589451	80	113	13544
BC82A-2	406	39 50 18.0 S	145 47 34.8 E	396726	5589475	81	113	13554
BC82A-2	407	39 50 17.2 S	145 47 33.8 E	396703	5589499	81	113	136 4
BC82A-2	408	39 50 16.4 S	145 47 32.9 E	396680	5589524	80	113	13615
BC82A-2	409	39 50 15.6 S	145 47 31.9 E	396657	5589548	80	113	13625
BC82A-2	410	39 50 14.8 S	145 47 31.0 E	396634	5589572	81	113	13636
BC82A-2	411	39 50 14.0 S	145 47 30.0 E	396611	5589596	80	113	13646
BC82A-2	412	39 50 13.2 S	145 47 29.1 E	396588	5589621	80	113	13656
BC82A-2	413	39 50 12.4 S	145 47 28.1 E	396565	5589645	80	113	137 7
BC82A-2	414	39 50 11.6 S	145 47 27.2 E	396542	5589670	80	113	13717
BC82A-2	415	39 50 10.8 S	145 47 26.2 E	396519	5589694	81	113	13728
BC82A-2	416	39 50 09.9 S	145 47 25.2 E	396496	5589719	80	113	13738
BC82A-2	417	39 50 09.2 S	145 47 24.3 E	396473	5589743	80	113	13748
BC82A-2	418	39 50 08.4 S	145 47 23.3 E	396450	5589767	81	113	13759
BC82A-2	419	39 50 07.6 S	145 47 22.4 E	396427	5589792	80	113	138 9
BC82A-2	420	39 50 06.8 S	145 47 21.4 E	396404	5589816	80	113	13819
BC82A-2	421	39 50 06.0 S	145 47 20.5 E	396381	5589840	81	113	13830
BC82A-2	422	39 50 05.2 S	145 47 19.5 E	396358	5589864	81	113	13840
BC82A-2	423	39 50 04.4 S	145 47 18.6 E	396335	5589889	80	113	13851
BC82A-2	424	39 50 03.6 S	145 47 17.6 E	396312	5589912	80	113	139 1
BC82A-2	425	39 50 02.8 S	145 47 16.7 E	396289	5589937	80	113	13911
BC82A-2	426	39 50 02.0 S	145 47 15.7 E	396266	5589961	80	113	13922
BC82A-2	427	39 50 01.2 S	145 47 14.8 E	396243	5589986	81	113	13932
BC82A-2	428	39 50 00.4 S	145 47 13.8 E	396220	5590010	81	113	13943
BC82A-2	429	39 49 59.6 S	145 47 12.9 E	396197	5590034	80	113	13953
BC82A-2	430	39 49 58.8 S	145 47 11.9 E	396174	5590058	80	113	140 3
BC82A-2	431	39 49 58.0 S	145 47 10.9 E	396151	5590082	80	113	14014
BC82A-2	432	39 49 57.2 S	145 47 10.0 E	396128	5590106	80	113	14024



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LINE NAME	SHOT POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-2	433	39 49 56.4 S	145 47 09.0 E	396104	5590130	81	113	14035
BC82A-2	434	39 49 55.7 S	145 47 08.0 E	396081	5590154	80	113	14045
BC82A-2	435	39 49 54.9 S	145 47 07.1 E	396058	5590178	80	113	14055
BC82A-2	436	39 49 54.1 S	145 47 06.1 E	396035	5590202	81	113	141 6
BC82A-2	437	39 49 53.3 S	145 47 05.2 E	396012	5590226	80	113	14116
BC82A-2	438	39 49 52.5 S	145 47 04.2 E	395988	5590250	80	113	14126
BC82A-2	439	39 49 51.7 S	145 47 03.2 E	395965	5590274	80	113	14137
BC82A-2	440	39 49 50.9 S	145 47 02.3 E	395942	5590298	80	113	14147
BC82A-2	441	39 49 50.1 S	145 47 01.3 E	395919	5590322	80	113	14158
BC82A-2	442	39 49 49.4 S	145 47 00.3 E	395895	5590346	80	113	142 8
BC82A-2	443	39 49 48.6 S	145 46 59.4 E	395872	5590369	80	113	14218
BC82A-2	444	39 49 47.8 S	145 46 58.4 E	395849	5590393	80	113	14229
BC82A-2	445	39 49 47.1 S	145 46 57.4 E	395825	5590416	80	113	14239
BC82A-2	446	39 49 46.2 S	145 46 56.5 E	395802	5590441	80	113	14250
BC82A-2	447	39 49 45.5 S	145 46 55.5 E	395778	5590464	81	113	143 0
BC82A-2	448	39 49 44.7 S	145 46 54.5 E	395755	5590488	80	113	14310
BC82A-2	449	39 49 43.9 S	145 46 53.5 E	395731	5590511	80	113	14321
BC82A-2	450	39 49 43.1 S	145 46 52.6 E	395708	5590535	80	113	14331
BC82A-2	451	39 49 42.4 S	145 46 51.6 E	395684	5590558	80	113	14342
BC82A-2	452	39 49 41.6 S	145 46 50.6 E	395661	5590582	80	113	14352
BC82A-2	453	39 49 40.8 S	145 46 49.6 E	395637	5590605	80	113	144 2
BC82A-2	454	39 49 40.0 S	145 46 48.6 E	395613	5590629	80	113	14413
BC82A-2	455	39 49 39.3 S	145 46 47.7 E	395590	5590652	80	113	14423
BC82A-2	456	39 49 38.5 S	145 46 46.7 E	395566	5590676	80	113	14434
BC82A-2	457	39 49 37.7 S	145 46 45.7 E	395542	5590699	80	113	14444
BC82A-2	458	39 49 37.0 S	145 46 44.7 E	395519	5590723	81	113	14454
BC82A-2	459	39 49 36.2 S	145 46 43.7 E	395495	5590746	81	113	145 5
BC82A-2	460	39 49 35.4 S	145 46 42.8 E	395472	5590769	80	113	14515
BC82A-2	461	39 49 34.7 S	145 46 41.7 E	395447	5590792	80	113	14525
BC82A-2	462	39 49 33.9 S	145 46 40.8 E	395424	5590816	81	113	14536
BC82A-2	463	39 49 33.1 S	145 46 39.8 E	395400	5590839	80	113	14546
BC82A-2	464	39 49 32.4 S	145 46 38.8 E	395377	5590862	80	113	14557
BC82A-2	465	39 49 31.6 S	145 46 37.8 E	395352	5590885	80	113	146 7
BC82A-2	466	39 49 30.8 S	145 46 36.8 E	395328	5590909	81	113	14617
BC82A-2	467	39 49 30.1 S	145 46 35.8 E	395304	5590932	81	113	14628
BC82A-2	468	39 49 29.3 S	145 46 34.8 E	395280	5590955	80	113	14638
BC82A-2	469	39 49 28.6 S	145 46 33.8 E	395256	5590978	80	113	14649
BC82A-2	470	39 49 27.8 S	145 46 32.8 E	395232	5591001	80	113	14659
BC82A-2	471	39 49 27.0 S	145 46 31.8 E	395208	5591025	80	113	147 9
BC82A-2	472	39 49 26.3 S	145 46 30.8 E	395184	5591048	80	113	14720
BC82A-2	473	39 49 25.5 S	145 46 29.8 E	395160	5591071	80	113	14730
BC82A-2	474	39 49 24.8 S	145 46 28.8 E	395136	5591094	81	113	14741
BC82A-2	475	39 49 24.0 S	145 46 27.8 E	395112	5591117	80	113	14751
BC82A-2	476	39 49 23.2 S	145 46 26.8 E	395088	5591140	80	113	148 1
BC82A-2	477	39 49 22.5 S	145 46 25.9 E	395065	5591163	80	113	14812
BC82A-2	478	39 49 21.7 S	145 46 24.8 E	395040	5591186	80	113	14822
BC82A-2	479	39 49 20.9 S	145 46 23.9 E	395016	5591210	80	113	14833
BC82A-2	480	39 49 20.2 S	145 46 22.8 E	394991	5591233	80	113	14843
BC82A-2	481	39 49 19.4 S	145 46 21.9 E	394968	5591256	80	113	14853
BC82A-2	482	39 49 18.7 S	145 46 20.8 E	394943	5591279	80	113	149 4
BC82A-2	483	39 49 17.9 S	145 46 19.8 E	394919	5591302	80	113	14914
BC82A-2	484	39 49 17.2 S	145 46 18.8 E	394894	5591325	80	113	14924
BC82A-2	485	39 49 16.4 S	145 46 17.8 E	394871	5591348	80	113	14935
BC82A-2	486	39 49 15.6 S	145 46 16.8 E	394846	5591372	80	113	14945

LINE NAME	SHO. POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-2	487	39 49 14.9 S	145 46 15.8 E	394822	5591395	80	113	14956
BC82A-2	488	39 49 14.1 S	145 46 14.8 E	394797	5591418	81	113	150 6
BC82A-2	489	39 49 13.3 S	145 46 13.8 E	394773	5591441	81	113	15016
BC82A-2	490	39 49 12.6 S	145 46 12.8 E	394749	5591464	80	113	15027
BC82A-2	491	39 49 11.8 S	145 46 11.7 E	394724	5591488	80	113	15037
BC82A-2	492	39 49 11.0 S	145 46 10.7 E	394700	5591511	81	113	15048
BC82A-2	493	39 49 10.3 S	145 46 09.7 E	394675	5591534	80	113	15058
BC82A-2	494	39 49 09.5 S	145 46 08.7 E	394651	5591558	80	113	151 8
BC82A-2	495	39 49 08.7 S	145 46 07.7 E	394627	5591581	80	113	15119
BC82A-2	496	39 49 08.0 S	145 46 06.7 E	394602	5591604	80	113	15129
BC82A-2	497	39 49 07.2 S	145 46 05.7 E	394578	5591628	80	113	15140
BC82A-2	498	39 49 06.4 S	145 46 04.6 E	394553	5591651	80	113	15150
BC82A-2	499	39 49 05.6 S	145 46 03.6 E	394529	5591675	80	113	152 0
BC82A-2	500	39 49 04.9 S	145 46 02.6 E	394505	5591698	0	113	15210
BC82A-2	501	39 49 04.1 S	145 46 01.6 E	394480	5591722	0	113	15221
BC82A-2	502	39 49 03.3 S	145 46 00.6 E	394456	5591745	0	113	15231
BC82A-2	503	39 49 02.6 S	145 45 59.6 E	394431	5591769	0	113	15242
BC82A-2	504	39 49 01.8 S	145 45 58.6 E	394407	5591792	0	113	15252
BC82A-2	505	39 49 01.0 S	145 45 57.6 E	394383	5591816	0	113	153 3
BC82A-2	506	39 49 00.3 S	145 45 56.5 E	394358	5591839	74	113	15313
BC82A-2	507	39 48 59.4 S	145 45 55.6 E	394334	5591864	74	113	15323
BC82A-2	508	39 48 58.7 S	145 45 54.5 E	394309	5591887	74	113	15334
BC82A-2	509	39 48 57.9 S	145 45 53.5 E	394285	5591911	74	113	15344
BC82A-2	510	39 48 57.1 S	145 45 52.5 E	394260	5591934	74	113	15355
BC82A-2	511	39 48 56.3 S	145 45 51.5 E	394236	5591959	74	113	154 5
BC82A-2	512	39 48 55.5 S	145 45 50.5 E	394212	5591983	73	113	15416
BC82A-2	513	39 48 54.7 S	145 45 49.5 E	394187	5592007	74	113	15426
BC82A-2	514	39 48 53.9 S	145 45 48.5 E	394163	5592031	73	113	15437
BC82A-2	515	39 48 53.2 S	145 45 47.5 E	394139	5592055	74	113	15447
BC82A-2	516	39 48 52.4 S	145 45 46.4 E	394114	5592079	74	113	15457
BC82A-2	517	39 48 51.6 S	145 45 45.4 E	394090	5592103	74	113	155 7
BC82A-2	518	39 48 50.8 S	145 45 44.4 E	394066	5592127	74	113	15518
BC82A-2	519	39 48 50.0 S	145 45 43.4 E	394042	5592151	74	113	15528
BC82A-2	520	39 48 49.2 S	145 45 42.4 E	394017	5592175	74	113	15538
BC82A-2	521	39 48 48.4 S	145 45 41.4 E	393993	5592198	74	113	15549
BC82A-2	522	39 48 47.6 S	145 45 40.4 E	393969	5592223	74	113	15559
BC82A-2	523	39 48 46.8 S	145 45 39.4 E	393945	5592247	73	113	15610
BC82A-2	524	39 48 46.0 S	145 45 38.4 E	393921	5592272	74	113	15620
BC82A-2	525	39 48 45.3 S	145 45 37.4 E	393896	5592295	73	113	15631
BC82A-2	526	39 48 44.4 S	145 45 36.4 E	393872	5592320	73	113	15641
BC82A-2	527	39 48 43.6 S	145 45 35.4 E	393848	5592344	74	113	15652
BC82A-2	528	39 48 42.8 S	145 45 34.4 E	393824	5592369	74	113	157 2
BC82A-2	529	39 48 42.0 S	145 45 33.4 E	393800	5592393	74	113	15713
BC82A-2	530	39 48 41.2 S	145 45 32.4 E	393776	5592418	73	113	15723
BC82A-2	531	39 48 40.4 S	145 45 31.4 E	393752	5592442	74	113	15734
BC82A-2	532	39 48 39.6 S	145 45 30.4 E	393728	5592467	74	113	15744
BC82A-2	533	39 48 38.8 S	145 45 29.4 E	393704	5592491	74	113	15755
BC82A-2	534	39 48 38.0 S	145 45 28.4 E	393680	5592516	74	113	158 5
BC82A-2	535	39 48 37.2 S	145 45 27.4 E	393656	5592540	74	113	15816
BC82A-2	536	39 48 36.4 S	145 45 26.5 E	393633	5592565	74	113	15826
BC82A-2	537	39 48 35.6 S	145 45 25.5 E	393609	5592590	74	113	15837
BC82A-2	538	39 48 34.7 S	145 45 24.5 E	393586	5592615	73	113	15847
BC82A-2	539	39 48 34.0 S	145 45 23.5 E	393561	5592639	74	113	15857
BC82A-2	540	39 48 33.1 S	145 45 22.5 E	393537	5592664	74	113	159 8

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LINE NAME	SHO. POINT	LATITUDE	LONGITUDE	EASTING	NOR. HING	DEPTH	DAY	TIME
BC82A-2	541	39 48 32.3 S	145 45 21.5 E	393514	5592689	73	113	15918
BC82A-2	542	39 48 31.5 S	145 45 20.6 E	393490	5592713	74	113	15928
BC82A-2	543	39 48 30.7 S	145 45 19.6 E	393466	5592738	74	113	15938
BC82A-2	544	39 48 29.9 S	145 45 18.6 E	393443	5592763	74	113	15949
BC82A-2	545	39 48 29.1 S	145 45 17.6 E	393419	5592787	74	113	15959
BC82A-2	546	39 48 28.3 S	145 45 16.7 E	393396	5592812	74	113	2 010
BC82A-2	547	39 48 27.4 S	145 45 15.7 E	393372	5592837	74	113	2 020
BC82A-2	548	39 48 26.7 S	145 45 14.7 E	393349	5592861	74	113	2 030
BC82A-2	549	39 48 25.8 S	145 45 13.7 E	393325	5592886	73	113	2 040
BC82A-2	550	39 48 25.0 S	145 45 12.8 E	393302	5592911	73	113	2 051
BC82A-2	551	39 48 24.2 S	145 45 11.8 E	393278	5592936	73	113	2 1 1
BC82A-2	552	39 48 23.4 S	145 45 10.8 E	393255	5592960	73	113	2 111
BC82A-2	553	39 48 22.6 S	145 45 09.8 E	393231	5592985	74	113	2 121
BC82A-2	554	39 48 21.8 S	145 45 08.9 E	393208	5593010	74	113	2 132
BC82A-2	555	39 48 20.9 S	145 45 07.9 E	393185	5593035	73	113	2 142
BC82A-2	556	39 48 20.2 S	145 45 06.9 E	393161	5593059	74	113	2 152
BC82A-2	557	39 48 19.3 S	145 45 06.0 E	393138	5593084	74	113	2 2 3
BC82A-2	558	39 48 18.5 S	145 45 05.0 E	393115	5593109	74	113	2 213
BC82A-2	559	39 48 17.7 S	145 45 04.0 E	393091	5593134	74	113	2 223
BC82A-2	560	39 48 16.9 S	145 45 03.1 E	393068	5593158	73	113	2 234
BC82A-2	561	39 48 16.1 S	145 45 02.1 E	393045	5593183	73	113	2 244
BC82A-2	562	39 48 15.3 S	145 45 01.2 E	393022	5593207	73	113	2 254
BC82A-2	563	39 48 14.5 S	145 45 00.2 E	392998	5593232	74	113	2 3 4
BC82A-2	564	39 48 13.7 S	145 44 59.2 E	392975	5593256	73	113	2 315
BC82A-2	565	39 48 12.9 S	145 44 58.3 E	392952	5593281	74	113	2 325
BC82A-2	566	39 48 12.1 S	145 44 57.3 E	392929	5593305	73	113	2 335
BC82A-2	567	39 48 11.2 S	145 44 56.4 E	392906	5593330	74	113	2 345
BC82A-2	568	39 48 10.5 S	145 44 55.4 E	392883	5593354	74	113	2 356
BC82A-2	569	39 48 09.6 S	145 44 54.5 E	392860	5593379	73	113	2 4 6
BC82A-2	570	39 48 08.8 S	145 44 53.5 E	392836	5593403	73	113	2 417
BC82A-2	571	39 48 08.0 S	145 44 52.5 E	392813	5593428	74	113	2 427
BC82A-2	572	39 48 07.2 S	145 44 51.6 E	392790	5593452	74	113	2 438
BC82A-2	573	39 48 06.4 S	145 44 50.6 E	392767	5593477	74	113	2 448
BC82A-2	574	39 48 05.6 S	145 44 49.7 E	392744	5593501	74	113	2 458
BC82A-2	575	39 48 04.8 S	145 44 48.7 E	392721	5593525	74	113	2 5 8
BC82A-2	576	39 48 04.0 S	145 44 47.7 E	392698	5593550	73	113	2 518
BC82A-2	577	39 48 03.3 S	145 44 46.8 E	392675	5593573	73	113	2 529
BC82A-2	578	39 48 02.4 S	145 44 45.8 E	392652	5593598	74	113	2 539
BC82A-2	579	39 48 01.7 S	145 44 44.9 E	392629	5593622	74	113	2 549
BC82A-2	580	39 48 00.8 S	145 44 43.9 E	392606	5593647	74	113	2 6 0
BC82A-2	581	39 48 00.0 S	145 44 43.0 E	392583	5593671	74	113	2 610
BC82A-2	582	39 47 59.3 S	145 44 42.0 E	392560	5593695	74	113	2 620
BC82A-2	583	39 47 58.5 S	145 44 41.1 E	392537	5593719	74	113	2 630
BC82A-2	584	39 47 57.7 S	145 44 40.1 E	392514	5593743	74	113	2 640
BC82A-2	585	39 47 56.9 S	145 44 39.2 E	392491	5593767	74	113	2 651
BC82A-2	586	39 47 56.1 S	145 44 38.2 E	392468	5593791	74	113	2 7 1
BC82A-2	587	39 47 55.3 S	145 44 37.3 E	392445	5593815	73	113	2 711
BC82A-2	588	39 47 54.5 S	145 44 36.3 E	392422	5593839	74	113	2 721
BC82A-2	589	39 47 53.7 S	145 44 35.4 E	392399	5593863	73	113	2 732
BC82A-2	590	39 47 53.0 S	145 44 34.4 E	392376	5593886	73	113	2 742
BC82A-2	591	39 47 52.2 S	145 44 33.5 E	392353	5593910	74	113	2 752
BC82A-2	592	39 47 51.4 S	145 44 32.5 E	392330	5593933	74	113	2 8 2
BC82A-2	593	39 47 50.6 S	145 44 31.5 E	392307	5593958	74	113	2 813
BC82A-2	594	39 47 49.9 S	145 44 30.6 E	392284	5593981	73	113	2 823

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LINE NAME	SHOT POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-2	595	39 47 49.1 S	145 44 29.6 E	392261	5594005	74	113	2 833
BC82A-2	596	39 47 48.3 S	145 44 28.6 E	392237	5594029	73	113	2 843
BC82A-2	597	39 47 47.5 S	145 44 27.7 E	392214	5594052	74	113	2 854
BC82A-2	598	39 47 46.7 S	145 44 26.7 E	392191	5594076	73	113	2 9 4
BC82A-2	599	39 47 46.0 S	145 44 25.8 E	392168	5594099	73	113	2 914
BC82A-2	600	39 47 45.2 S	145 44 24.8 E	392145	5594123	73	113	2 924
BC82A-2	601	39 47 44.4 S	145 44 23.9 E	392122	5594147	73	113	2 934
BC82A-2	602	39 47 43.6 S	145 44 22.9 E	392099	5594170	74	113	2 944
BC82A-2	603	39 47 42.9 S	145 44 22.0 E	392076	5594194	73	113	2 955
BC82A-2	604	39 47 42.1 S	145 44 21.0 E	392053	5594217	73	113	210 5
BC82A-2	605	39 47 41.3 S	145 44 20.1 E	392030	5594240	74	113	21015
BC82A-2	606	39 47 40.5 S	145 44 19.1 E	392006	5594264	73	113	21025
BC82A-2	607	39 47 39.8 S	145 44 18.1 E	391983	5594287	74	113	21036
BC82A-2	608	39 47 39.0 S	145 44 17.2 E	391960	5594311	73	113	21046
BC82A-2	609	39 47 38.2 S	145 44 16.2 E	391937	5594334	74	113	21057
BC82A-2	610	39 47 37.5 S	145 44 15.3 E	391914	5594358	73	113	211 7
BC82A-2	611	39 47 36.7 S	145 44 14.3 E	391891	5594381	73	113	21118
BC82A-2	612	39 47 35.9 S	145 44 13.3 E	391867	5594404	73	113	21128
BC82A-2	613	39 47 35.2 S	145 44 12.4 E	391844	5594428	74	113	21138
BC82A-2	614	39 47 34.4 S	145 44 11.4 E	391821	5594451	73	113	21149
BC82A-2	615	39 47 33.6 S	145 44 10.5 E	391798	5594474	73	113	21159
BC82A-2	616	39 47 32.9 S	145 44 09.5 E	391774	5594498	73	113	212 9
BC82A-2	617	39 47 32.1 S	145 44 08.5 E	391751	5594521	74	113	21219
BC82A-2	618	39 47 31.3 S	145 44 07.6 E	391728	5594545	73	113	21230
BC82A-2	619	39 47 30.6 S	145 44 06.6 E	391705	5594568	74	113	21240
BC82A-2	620	39 47 29.8 S	145 44 05.6 E	391681	5594591	74	113	21250
BC82A-2	621	39 47 29.0 S	145 44 04.7 E	391658	5594615	73	113	213 0
BC82A-2	622	39 47 28.3 S	145 44 03.7 E	391635	5594638	73	113	21311
BC82A-2	623	39 47 27.5 S	145 44 02.7 E	391612	5594662	73	113	21321
BC82A-2	624	39 47 26.7 S	145 44 01.8 E	391588	5594685	74	113	21331
BC82A-2	625	39 47 25.9 S	145 44 00.8 E	391565	5594708	73	113	21341
BC82A-2	626	39 47 25.2 S	145 43 59.8 E	391542	5594732	73	113	21352
BC82A-2	627	39 47 24.4 S	145 43 58.9 E	391518	5594755	73	113	214 2
BC82A-2	628	39 47 23.6 S	145 43 57.9 E	391495	5594779	73	113	21413
BC82A-2	629	39 47 22.9 S	145 43 56.9 E	391472	5594802	73	113	21423
BC82A-2	630	39 47 22.1 S	145 43 56.0 E	391448	5594826	74	113	21433
BC82A-2	631	39 47 21.3 S	145 43 55.0 E	391425	5594849	74	113	21444
BC82A-2	632	39 47 20.5 S	145 43 54.0 E	391402	5594873	73	113	21454
BC82A-2	633	39 47 19.8 S	145 43 53.1 E	391378	5594896	73	113	215 4
BC82A-2	634	39 47 19.0 S	145 43 52.1 E	391355	5594920	73	113	21514
BC82A-2	635	39 47 18.2 S	145 43 51.1 E	391332	5594944	74	113	21525
BC82A-2	636	39 47 17.4 S	145 43 50.2 E	391308	5594967	73	113	21535
BC82A-2	637	39 47 16.6 S	145 43 49.2 E	391285	5594991	73	113	21545
BC82A-2	638	39 47 15.9 S	145 43 48.2 E	391262	5595015	73	113	21555
BC82A-2	639	39 47 15.1 S	145 43 47.3 E	391238	5595038	74	113	216 6
BC82A-2	640	39 47 14.3 S	145 43 46.3 E	391215	5595062	74	113	21616
BC82A-2	641	39 47 13.6 S	145 43 45.3 E	391192	5595085	73	113	21626
BC82A-2	642	39 47 12.7 S	145 43 44.4 E	391168	5595110	73	113	21636
BC82A-2	643	39 47 11.9 S	145 43 43.4 E	391145	5595134	73	113	21647
BC82A-2	644	39 47 11.2 S	145 43 42.4 E	391122	5595157	74	113	21657
BC82A-2	645	39 47 10.4 S	145 43 41.5 E	391098	5595181	74	113	217 7
BC82A-2	646	39 47 09.6 S	145 43 40.5 E	391075	5595204	73	113	21717
BC82A-2	647	39 47 08.8 S	145 43 39.5 E	391052	5595229	73	113	21727
BC82A-2	648	39 47 08.0 S	145 43 38.6 E	391028	5595253	74	113	21738

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LINE NAME	SHOT POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-2	649	39 47 07.2 S	145 43 37.6 E	391005	5595277	73	113	21748
BC82A-2	650	39 47 06.5 S	145 43 36.6 E	390982	5595301	73	113	21759
BC82A-2	651	39 47 05.7 S	145 43 35.7 E	390959	5595325	73	113	218 9
BC82A-2	652	39 47 04.9 S	145 43 34.7 E	390935	5595349	73	113	21819
BC82A-2	653	39 47 04.1 S	145 43 33.7 E	390912	5595373	73	113	21830
BC82A-2	654	39 47 03.3 S	145 43 32.8 E	390889	5595397	73	113	21840
BC82A-2	655	39 47 02.5 S	145 43 31.8 E	390866	5595422	73	113	21851
BC82A-2	656	39 47 01.7 S	145 43 30.9 E	390842	5595446	73	113	219 1
BC82A-2	657	39 47 00.9 S	145 43 29.9 E	390819	5595470	74	113	21911



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LINE NAME	SHOT POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-7	1	39 50 03.3 S	145 43 07.8 E	390374	5589838	79	113	52617
BC82A-7	2	39 50 02.4 S	145 43 08.6 E	390392	5589867	79	113	52627
BC82A-7	3	39 50 01.5 S	145 43 09.3 E	390409	5589895	79	113	52637
BC82A-7	4	39 50 00.6 S	145 43 10.0 E	390426	5589924	79	113	52647
BC82A-7	5	39 49 59.6 S	145 43 10.8 E	390443	5589953	79	113	52658
BC82A-7	6	39 49 58.7 S	145 43 11.6 E	390461	5589982	79	113	527 9
BC82A-7	7	39 49 57.8 S	145 43 12.3 E	390478	5590011	79	113	52719
BC82A-7	8	39 49 56.8 S	145 43 13.1 E	390496	5590040	79	113	52730
BC82A-7	9	39 49 55.9 S	145 43 13.8 E	390514	5590069	79	113	52740
BC82A-7	10	39 49 55.0 S	145 43 14.6 E	390532	5590098	78	113	52750
BC82A-7	11	39 49 54.0 S	145 43 15.4 E	390550	5590127	78	113	528 0
BC82A-7	12	39 49 53.1 S	145 43 16.2 E	390568	5590156	79	113	52812
BC82A-7	13	39 49 52.1 S	145 43 16.9 E	390585	5590186	79	113	52824
BC82A-7	14	39 49 51.2 S	145 43 17.7 E	390603	5590215	78	113	52834
BC82A-7	15	39 49 50.3 S	145 43 18.4 E	390620	5590244	0	113	52844
BC82A-7	16	39 49 49.3 S	145 43 19.1 E	390637	5590273	0	113	52854
BC82A-7	17	39 49 48.4 S	145 43 19.9 E	390654	5590303	0	113	529 4
BC82A-7	18	39 49 47.4 S	145 43 20.6 E	390671	5590332	0	113	52915
BC82A-7	19	39 49 46.5 S	145 43 21.3 E	390687	5590361	0	113	52925
BC82A-7	20	39 49 45.5 S	145 43 22.0 E	390703	5590391	0	113	52935
BC82A-7	21	39 49 44.6 S	145 43 22.7 E	390720	5590420	0	113	52945
BC82A-7	22	39 49 43.6 S	145 43 23.4 E	390736	5590450	79	113	52955
BC82A-7	23	39 49 42.7 S	145 43 24.1 E	390752	5590479	79	113	530 5
BC82A-7	24	39 49 41.7 S	145 43 24.8 E	390768	5590509	78	113	53016
BC82A-7	25	39 49 40.8 S	145 43 25.5 E	390784	5590538	79	113	53026
BC82A-7	26	39 49 39.9 S	145 43 26.2 E	390800	5590568	79	113	53036
BC82A-7	27	39 49 38.9 S	145 43 26.9 E	390816	5590597	79	113	53046
BC82A-7	28	39 49 38.0 S	145 43 27.5 E	390831	5590627	79	113	53056
BC82A-7	29	39 49 37.0 S	145 43 28.2 E	390847	5590656	79	113	531 6
BC82A-7	30	39 49 36.1 S	145 43 28.8 E	390862	5590686	78	113	53116
BC82A-7	31	39 49 35.1 S	145 43 29.5 E	390877	5590715	79	113	53126
BC82A-7	32	39 49 34.2 S	145 43 30.1 E	390892	5590745	79	113	53136
BC82A-7	33	39 49 33.2 S	145 43 30.8 E	390907	5590774	79	113	53146
BC82A-7	34	39 49 32.3 S	145 43 31.4 E	390922	5590804	79	113	53157
BC82A-7	35	39 49 31.3 S	145 43 32.1 E	390937	5590833	78	113	532 8
BC82A-7	36	39 49 30.4 S	145 43 32.7 E	390952	5590863	79	113	53218
BC82A-7	37	39 49 29.4 S	145 43 33.3 E	390966	5590892	79	113	53228
BC82A-7	38	39 49 28.5 S	145 43 34.0 E	390981	5590922	79	113	53238
BC82A-7	39	39 49 27.5 S	145 43 34.6 E	390996	5590951	79	113	53248
BC82A-7	40	39 49 26.6 S	145 43 35.3 E	391011	5590981	79	113	53258
BC82A-7	41	39 49 25.6 S	145 43 35.9 E	391026	5591010	78	113	533 9
BC82A-7	42	39 49 24.7 S	145 43 36.6 E	391041	5591040	79	113	53319
BC82A-7	43	39 49 23.7 S	145 43 37.2 E	391056	5591069	79	113	53331
BC82A-7	44	39 49 22.8 S	145 43 37.9 E	391071	5591099	79	113	53341
BC82A-7	45	39 49 21.8 S	145 43 38.5 E	391086	5591128	79	113	53355
BC82A-7	46	39 49 20.9 S	145 43 39.2 E	391101	5591158	79	113	534 5
BC82A-7	47	39 49 19.9 S	145 43 39.8 E	391116	5591187	79	113	53415
BC82A-7	48	39 49 19.0 S	145 43 40.5 E	391131	5591216	79	113	53425
BC82A-7	49	39 49 18.0 S	145 43 41.1 E	391146	5591246	79	113	53435
BC82A-7	50	39 49 17.1 S	145 43 41.8 E	391161	5591275	79	113	53445
BC82A-7	51	39 49 16.1 S	145 43 42.4 E	391176	5591305	79	113	53455
BC82A-7	52	39 49 15.2 S	145 43 43.1 E	391191	5591334	79	113	535 7
BC82A-7	53	39 49 14.3 S	145 43 43.8 E	391207	5591363	79	113	53517
BC82A-7	54	39 49 13.3 S	145 43 44.4 E	391222	5591393	79	113	53527

LINE NAME	SHG. POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-7	55	39 49 12.4 S	145 43 45.1 E	391237	5591422	79	113	53537
BC82A-7	56	39 49 11.4 S	145 43 45.7 E	391253	5591452	79	113	53548
BC82A-7	57	39 49 10.5 S	145 43 46.4 E	391269	5591481	79	113	53558
BC82A-7	58	39 49 09.5 S	145 43 47.1 E	391284	5591511	79	113	536 8
BC82A-7	59	39 49 08.6 S	145 43 47.8 E	391300	5591540	79	113	53618
BC82A-7	60	39 49 07.6 S	145 43 48.5 E	391316	5591570	79	113	53628
BC82A-7	61	39 49 06.7 S	145 43 49.2 E	391332	5591599	79	113	53638
BC82A-7	62	39 49 05.7 S	145 43 49.8 E	391348	5591629	79	113	53651
BC82A-7	63	39 49 04.8 S	145 43 50.5 E	391364	5591658	78	113	537 1
BC82A-7	64	39 49 03.8 S	145 43 51.2 E	391380	5591687	80	113	53711
BC82A-7	65	39 49 02.9 S	145 43 51.9 E	391396	5591717	79	113	53722
BC82A-7	66	39 49 01.9 S	145 43 52.6 E	391412	5591746	79	113	53732
BC82A-7	67	39 49 01.0 S	145 43 53.3 E	391428	5591776	79	113	53742
BC82A-7	68	39 49 00.0 S	145 43 54.0 E	391444	5591805	79	113	53752
BC82A-7	69	39 48 59.1 S	145 43 54.7 E	391460	5591835	79	113	538 2
BC82A-7	70	39 48 58.1 S	145 43 55.4 E	391476	5591864	79	113	53813
BC82A-7	71	39 48 57.2 S	145 43 56.1 E	391492	5591893	79	113	53823
BC82A-7	72	39 48 56.2 S	145 43 56.8 E	391509	5591923	79	113	53833
BC82A-7	73	39 48 55.3 S	145 43 57.5 E	391525	5591952	79	113	53843
BC82A-7	74	39 48 54.3 S	145 43 58.2 E	391541	5591982	79	113	53853
BC82A-7	75	39 48 53.4 S	145 43 58.9 E	391557	5592011	79	113	539 4
BC82A-7	76	39 48 52.4 S	145 43 59.6 E	391573	5592041	79	113	53914
BC82A-7	77	39 48 51.5 S	145 44 00.2 E	391589	5592070	79	113	53924
BC82A-7	78	39 48 50.6 S	145 44 00.9 E	391605	5592099	79	113	53935
BC82A-7	79	39 48 49.6 S	145 44 01.6 E	391621	5592129	79	113	53946
BC82A-7	80	39 48 48.7 S	145 44 02.3 E	391637	5592158	79	113	53956
BC82A-7	81	39 48 47.7 S	145 44 03.0 E	391653	5592188	79	113	540 7
BC82A-7	82	39 48 46.8 S	145 44 03.7 E	391669	5592217	79	113	54017
BC82A-7	83	39 48 45.8 S	145 44 04.4 E	391685	5592246	79	113	54027
BC82A-7	84	39 48 44.9 S	145 44 05.1 E	391701	5592276	78	113	54037
BC82A-7	85	39 48 43.9 S	145 44 05.8 E	391717	5592305	48	113	54049
BC82A-7	86	39 48 43.0 S	145 44 06.4 E	391732	5592334	79	113	54059
BC82A-7	87	39 48 42.0 S	145 44 07.1 E	391748	5592364	78	113	541 9
BC82A-7	88	39 48 41.1 S	145 44 07.8 E	391764	5592393	79	113	54119
BC82A-7	89	39 48 40.2 S	145 44 08.4 E	391779	5592422	79	113	54130
BC82A-7	90	39 48 39.2 S	145 44 09.1 E	391795	5592452	79	113	54140
BC82A-7	91	39 48 38.3 S	145 44 09.8 E	391810	5592481	78	113	54150
BC82A-7	92	39 48 37.3 S	145 44 10.4 E	391825	5592510	80	113	542 1
BC82A-7	93	39 48 36.4 S	145 44 11.1 E	391841	5592540	79	113	54212
BC82A-7	94	39 48 35.4 S	145 44 11.8 E	391856	5592569	79	113	54222
BC82A-7	95	39 48 34.5 S	145 44 12.4 E	391871	5592598	79	113	54232
BC82A-7	96	39 48 33.6 S	145 44 13.1 E	391887	5592627	79	113	54242
BC82A-7	97	39 48 32.6 S	145 44 13.8 E	391902	5592657	79	113	54252
BC82A-7	98	39 48 31.7 S	145 44 14.4 E	391917	5592686	79	113	543 2
BC82A-7	99	39 48 30.7 S	145 44 15.0 E	391932	5592715	79	113	54312
BC82A-7	100	39 48 29.8 S	145 44 15.7 E	391947	5592744	79	113	54323
BC82A-7	101	39 48 28.8 S	145 44 16.3 E	391962	5592774	78	113	54333
BC82A-7	102	39 48 27.9 S	145 44 17.0 E	391977	5592803	78	113	54343
BC82A-7	103	39 48 27.0 S	145 44 17.7 E	391993	5592832	79	113	54354
BC82A-7	104	39 48 26.0 S	145 44 18.3 E	392008	5592861	79	113	544 5
BC82A-7	105	39 48 25.1 S	145 44 19.0 E	392023	5592891	79	113	54416
BC82A-7	106	39 48 24.1 S	145 44 19.6 E	392038	5592920	78	113	54426
BC82A-7	107	39 48 23.2 S	145 44 20.3 E	392053	5592949	80	113	54437
BC82A-7	108	39 48 22.3 S	145 44 20.9 E	392068	5592978	79	113	54447

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LINE NAME	SHOT POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-7	109	39 48 21.3 S	145 44 21.6 E	392083	5593008	79	113	54458
BC82A-7	110	39 48 20.4 S	145 44 22.2 E	392098	5593037	78	113	545 8
BC82A-7	111	39 48 19.4 S	145 44 22.9 E	392113	5593066	78	113	54519
BC82A-7	112	39 48 18.5 S	145 44 23.6 E	392129	5593096	79	113	54529
BC82A-7	113	39 48 17.5 S	145 44 24.2 E	392144	5593125	79	113	54540
BC82A-7	114	39 48 16.6 S	145 44 24.9 E	392159	5593154	79	113	54550
BC82A-7	115	39 48 15.7 S	145 44 25.5 E	392174	5593183	79	113	546 0
BC82A-7	116	39 48 14.7 S	145 44 26.2 E	392190	5593213	79	113	54611
BC82A-7	117	39 48 13.8 S	145 44 26.8 E	392205	5593242	79	113	54622
BC82A-7	118	39 48 12.8 S	145 44 27.5 E	392220	5593271	79	113	54632
BC82A-7	119	39 48 11.9 S	145 44 28.2 E	392236	5593301	78	113	54642
BC82A-7	120	39 48 10.9 S	145 44 28.8 E	392251	5593330	79	113	54652
BC82A-7	121	39 48 10.0 S	145 44 29.5 E	392266	5593360	79	113	547 2
BC82A-7	122	39 48 09.1 S	145 44 30.2 E	392282	5593389	78	113	54713
BC82A-7	123	39 48 08.1 S	145 44 30.8 E	392297	5593418	79	113	54723
BC82A-7	124	39 48 07.2 S	145 44 31.5 E	392313	5593448	79	113	54734
BC82A-7	125	39 48 06.2 S	145 44 32.1 E	392328	5593477	79	113	54744
BC82A-7	126	39 48 05.3 S	145 44 32.8 E	392344	5593507	79	113	54755
BC82A-7	127	39 48 04.3 S	145 44 33.5 E	392359	5593536	79	113	548 5
BC82A-7	128	39 48 03.4 S	145 44 34.2 E	392375	5593566	79	113	54816
BC82A-7	129	39 48 02.4 S	145 44 34.8 E	392390	5593595	79	113	54826
BC82A-7	130	39 48 01.5 S	145 44 35.5 E	392406	5593625	79	113	54836
BC82A-7	131	39 48 00.5 S	145 44 36.2 E	392422	5593654	79	113	54846
BC82A-7	132	39 47 59.6 S	145 44 36.9 E	392437	5593684	78	113	54856
BC82A-7	133	39 47 58.6 S	145 44 37.5 E	392453	5593713	79	113	549 6
BC82A-7	134	39 47 57.7 S	145 44 38.2 E	392468	5593743	79	113	54916
BC82A-7	135	39 47 56.7 S	145 44 38.9 E	392484	5593772	79	113	54927
BC82A-7	136	39 47 55.8 S	145 44 39.6 E	392500	5593802	79	113	54938
BC82A-7	137	39 47 54.8 S	145 44 40.2 E	392515	5593831	79	113	54948
BC82A-7	138	39 47 53.9 S	145 44 40.9 E	392531	5593861	79	113	54958
BC82A-7	139	39 47 52.9 S	145 44 41.6 E	392547	5593891	79	113	550 8
BC82A-7	140	39 47 52.0 S	145 44 42.2 E	392562	5593920	79	113	55018
BC82A-7	141	39 47 51.0 S	145 44 42.9 E	392578	5593950	79	113	55028
BC82A-7	142	39 47 50.1 S	145 44 43.6 E	392593	5593979	78	113	55039
BC82A-7	143	39 47 49.1 S	145 44 44.3 E	392609	5594009	79	113	55049
BC82A-7	144	39 47 48.1 S	145 44 45.0 E	392625	5594039	79	113	55059
BC82A-7	145	39 47 47.2 S	145 44 45.6 E	392640	5594068	78	113	55110
BC82A-7	146	39 47 46.2 S	145 44 46.3 E	392656	5594098	79	113	55120
BC82A-7	147	39 47 45.3 S	145 44 47.0 E	392671	5594127	78	113	55131
BC82A-7	148	39 47 44.3 S	145 44 47.6 E	392687	5594157	79	113	55143
BC82A-7	149	39 47 43.4 S	145 44 48.3 E	392703	5594187	79	113	55156
BC82A-7	150	39 47 42.4 S	145 44 49.0 E	392718	5594216	79	113	552 6
BC82A-7	151	39 47 41.5 S	145 44 49.7 E	392734	5594246	79	113	55216
BC82A-7	152	39 47 40.5 S	145 44 50.4 E	392750	5594275	79	113	55226
BC82A-7	153	39 47 39.6 S	145 44 51.0 E	392765	5594305	79	113	55236
BC82A-7	154	39 47 38.6 S	145 44 51.7 E	392781	5594334	79	113	55248
BC82A-7	155	39 47 37.7 S	145 44 52.4 E	392797	5594364	79	113	55258
BC82A-7	156	39 47 36.7 S	145 44 53.0 E	392812	5594393	78	113	553 8
BC82A-7	157	39 47 35.8 S	145 44 53.7 E	392828	5594423	79	113	55318
BC82A-7	158	39 47 34.8 S	145 44 54.4 E	392844	5594452	78	113	55328
BC82A-7	159	39 47 33.9 S	145 44 55.1 E	392860	5594482	78	113	55338
BC82A-7	160	39 47 32.9 S	145 44 55.8 E	392876	5594511	78	113	55348
BC82A-7	161	39 47 32.0 S	145 44 56.5 E	392892	5594541	78	113	55359
BC82A-7	162	39 47 31.0 S	145 44 57.2 E	392908	5594570	78	113	554 9

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LINE NAME	SHOT POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-7	163	39 47 30.1 S	145 44 57.9 E	392924	5594600	79	113	55419
BC82A-7	164	39 47 29.1 S	145 44 58.6 E	392940	5594629	79	113	55430
BC82A-7	165	39 47 28.2 S	145 44 59.2 E	392956	5594659	79	113	55440
BC82A-7	166	39 47 27.2 S	145 44 59.9 E	392972	5594688	78	113	55451
BC82A-7	167	39 47 26.3 S	145 45 00.6 E	392988	5594718	79	113	555 1
BC82A-7	168	39 47 25.3 S	145 45 01.3 E	393004	5594747	79	113	55511
BC82A-7	169	39 47 24.4 S	145 45 02.0 E	393021	5594777	79	113	55521
BC82A-7	170	39 47 23.4 S	145 45 02.7 E	393037	5594806	79	113	55531
BC82A-7	171	39 47 22.5 S	145 45 03.4 E	393053	5594836	79	113	55541
BC82A-7	172	39 47 21.5 S	145 45 04.2 E	393070	5594865	79	113	55552
BC82A-7	173	39 47 20.6 S	145 45 04.8 E	393086	5594895	79	113	556 4
BC82A-7	174	39 47 19.6 S	145 45 05.6 E	393103	5594924	78	113	55614
BC82A-7	175	39 47 18.7 S	145 45 06.3 E	393120	5594954	79	113	55625
BC82A-7	176	39 47 17.7 S	145 45 07.0 E	393136	5594983	79	113	55635
BC82A-7	177	39 47 16.8 S	145 45 07.7 E	393153	5595013	79	113	55645
BC82A-7	178	39 47 15.8 S	145 45 08.5 E	393170	5595042	80	113	55656
BC82A-7	179	39 47 14.9 S	145 45 09.2 E	393187	5595072	79	113	557 6
BC82A-7	180	39 47 14.0 S	145 45 09.9 E	393204	5595101	79	113	55717
BC82A-7	181	39 47 13.0 S	145 45 10.6 E	393220	5595131	79	113	55728
BC82A-7	182	39 47 12.0 S	145 45 11.4 E	393237	5595161	79	113	55739
BC82A-7	183	39 47 11.1 S	145 45 12.1 E	393254	5595190	78	113	55749
BC82A-7	184	39 47 10.1 S	145 45 12.8 E	393271	5595220	78	113	55759
BC82A-7	185	39 47 09.2 S	145 45 13.5 E	393288	5595250	78	113	55810
BC82A-7	186	39 47 08.2 S	145 45 14.3 E	393305	5595279	79	113	55820
BC82A-7	187	39 47 07.3 S	145 45 15.0 E	393322	5595309	79	113	55830
BC82A-7	188	39 47 06.3 S	145 45 15.7 E	393339	5595339	79	113	55842
BC82A-7	189	39 47 05.4 S	145 45 16.5 E	393356	5595368	79	113	55852
BC82A-7	190	39 47 04.4 S	145 45 17.2 E	393373	5595398	79	113	559 2
BC82A-7	191	39 47 03.4 S	145 45 17.9 E	393390	5595428	79	113	55912
BC82A-7	192	39 47 02.5 S	145 45 18.7 E	393407	5595458	79	113	55922
BC82A-7	193	39 47 01.5 S	145 45 19.4 E	393424	5595488	79	113	55932
BC82A-7	194	39 47 00.6 S	145 45 20.1 E	393441	5595517	79	113	55943
BC82A-7	195	39 46 59.6 S	145 45 20.9 E	393458	5595547	79	113	55953
BC82A-7	196	39 46 58.6 S	145 45 21.6 E	393475	5595577	79	113	6 0 4
BC82A-7	197	39 46 57.7 S	145 45 22.3 E	393492	5595607	79	113	6 015
BC82A-7	198	39 46 56.7 S	145 45 23.1 E	393509	5595637	79	113	6 026
BC82A-7	199	39 46 55.7 S	145 45 23.8 E	393525	5595667	79	113	6 036
BC82A-7	200	39 46 54.8 S	145 45 24.5 E	393542	5595697	78	113	6 048
BC82A-7	201	39 46 53.8 S	145 45 25.2 E	393558	5595726	79	113	6 059
BC82A-7	202	39 46 52.9 S	145 45 25.9 E	393575	5595756	78	113	6 110
BC82A-7	203	39 46 51.9 S	145 45 26.6 E	393591	5595786	79	113	6 120
BC82A-7	204	39 46 50.9 S	145 45 27.3 E	393608	5595816	78	113	6 130
BC82A-7	205	39 46 50.0 S	145 45 28.0 E	393624	5595846	78	113	6 140
BC82A-7	206	39 46 49.0 S	145 45 28.7 E	393640	5595875	79	113	6 151
BC82A-7	207	39 46 48.1 S	145 45 29.4 E	393656	5595905	79	113	6 2 1
BC82A-7	208	39 46 47.1 S	145 45 30.1 E	393672	5595935	80	113	6 211
BC82A-7	209	39 46 46.2 S	145 45 30.8 E	393688	5595964	79	113	6 222
BC82A-7	210	39 46 45.2 S	145 45 31.5 E	393704	5595994	79	113	6 232
BC82A-7	211	39 46 44.3 S	145 45 32.2 E	393720	5596023	79	113	6 242
BC82A-7	212	39 46 43.3 S	145 45 32.8 E	393735	5596053	79	113	6 255
BC82A-7	213	39 46 42.4 S	145 45 33.5 E	393751	5596082	79	113	6 3 5
BC82A-7	214	39 46 41.4 S	145 45 34.1 E	393766	5596112	78	113	6 315
BC82A-7	215	39 46 40.5 S	145 45 34.8 E	393782	5596141	79	113	6 325
BC82A-7	216	39 46 39.6 S	145 45 35.5 E	393797	5596170	79	113	6 335

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LINE NAME	SHOT POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-7	217	39 46 38.6 S	145 45 36.1 E	393812	5596199	78	113	6 345
BC82A-7	218	39 46 37.7 S	145 45 36.8 E	393828	5596228	79	113	6 356
BC82A-7	219	39 46 36.8 S	145 45 37.5 E	393843	5596257	79	113	6 4 6
BC82A-7	220	39 46 35.8 S	145 45 38.1 E	393858	5596286	79	113	6 417
BC82A-7	221	39 46 34.9 S	145 45 38.8 E	393873	5596315	79	113	6 427
BC82A-7	222	39 46 34.0 S	145 45 39.4 E	393888	5596343	79	113	6 436
BC82A-7	223	39 46 33.0 S	145 45 40.0 E	393903	5596372	78	113	6 446
BC82A-7	224	39 46 32.1 S	145 45 40.7 E	393918	5596400	79	113	6 455
BC82A-7	225	39 46 31.2 S	145 45 41.3 E	393932	5596429	79	113	6 5 5
BC82A-7	226	39 46 30.3 S	145 45 41.9 E	393947	5596457	79	113	6 514
BC82A-7	227	39 46 29.4 S	145 45 42.6 E	393962	5596485	78	113	6 524
BC82A-7	228	39 46 28.5 S	145 45 43.2 E	393977	5596513	78	113	6 533
BC82A-7	229	39 46 27.6 S	145 45 43.8 E	393991	5596541	78	113	6 543
BC82A-7	230	39 46 26.7 S	145 45 44.5 E	394006	5596569	79	113	6 552
BC82A-7	231	39 46 25.8 S	145 45 45.1 E	394021	5596597	79	113	6 6 2
BC82A-7	232	39 46 24.9 S	145 45 45.8 E	394036	5596625	79	113	6 611
BC82A-7	233	39 46 24.0 S	145 45 46.4 E	394050	5596652	79	113	6 621
BC82A-7	234	39 46 23.1 S	145 45 47.0 E	394065	5596680	79	113	6 630
BC82A-7	235	39 46 22.3 S	145 45 47.7 E	394080	5596707	79	113	6 640
BC82A-7	236	39 46 21.4 S	145 45 48.3 E	394094	5596735	79	113	6 649
BC82A-7	237	39 46 20.5 S	145 45 48.9 E	394109	5596762	79	113	6 659
BC82A-7	238	39 46 19.6 S	145 45 49.6 E	394124	5596790	79	113	6 7 8
BC82A-7	239	39 46 18.7 S	145 45 50.2 E	394139	5596817	79	113	6 718
BC82A-7	240	39 46 17.9 S	145 45 50.8 E	394153	5596844	78	113	6 727
BC82A-7	241	39 46 17.0 S	145 45 51.5 E	394168	5596872	78	113	6 737
BC82A-7	242	39 46 16.1 S	145 45 52.1 E	394183	5596899	79	113	6 746
BC82A-7	243	39 46 15.2 S	145 45 52.8 E	394198	5596926	79	113	6 756
BC82A-7	244	39 46 14.3 S	145 45 53.4 E	394212	5596953	79	113	6 8 5
BC82A-7	245	39 46 13.5 S	145 45 54.0 E	394227	5596980	78	113	6 815
BC82A-7	246	39 46 12.6 S	145 45 54.7 E	394242	5597008	79	113	6 824
BC82A-7	247	39 46 11.7 S	145 45 55.3 E	394257	5597035	78	113	6 834
BC82A-7	248	39 46 10.8 S	145 45 56.0 E	394272	5597062	78	113	6 843
BC82A-7	249	39 46 10.0 S	145 45 56.6 E	394287	5597089	78	113	6 853
BC82A-7	250	39 46 09.1 S	145 45 57.2 E	394301	5597117	79	113	6 9 2
BC82A-7	251	39 46 08.2 S	145 45 57.9 E	394316	5597144	79	113	6 912
BC82A-7	252	39 46 07.3 S	145 45 58.5 E	394331	5597172	78	113	6 921
BC82A-7	253	39 46 06.4 S	145 45 59.1 E	394346	5597199	78	113	6 931
BC82A-7	254	39 46 05.5 S	145 45 59.8 E	394361	5597227	77	113	6 940
BC82A-7	255	39 46 04.7 S	145 46 00.4 E	394376	5597254	78	113	6 950
BC82A-7	256	39 46 03.8 S	145 46 01.1 E	394391	5597282	78	113	6 959
BC82A-7	257	39 46 02.9 S	145 46 01.7 E	394406	5597310	78	113	610 9
BC82A-7	258	39 46 02.0 S	145 46 02.4 E	394421	5597338	78	113	61018
BC82A-7	259	39 46 01.1 S	145 46 03.0 E	394436	5597366	78	113	61028
BC82A-7	260	39 46 00.2 S	145 46 03.7 E	394451	5597394	78	113	61038
BC82A-7	261	39 45 59.2 S	145 46 04.3 E	394466	5597423	78	113	61048
BC82A-7	262	39 45 58.3 S	145 46 05.0 E	394481	5597451	77	113	61059
BC82A-7	263	39 45 57.4 S	145 46 05.6 E	394496	5597480	78	113	611 9
BC82A-7	264	39 45 56.5 S	145 46 06.3 E	394511	5597508	78	113	61120
BC82A-7	265	39 45 55.5 S	145 46 06.9 E	394526	5597537	78	113	61130
BC82A-7	266	39 45 54.6 S	145 46 07.6 E	394541	5597566	79	113	61140
BC82A-7	267	39 45 53.7 S	145 46 08.2 E	394556	5597595	79	113	61150
BC82A-7	268	39 45 52.7 S	145 46 08.8 E	394570	5597624	79	113	612 1
BC82A-7	269	39 45 51.8 S	145 46 09.5 E	394585	5597654	79	113	61211
BC82A-7	270	39 45 50.8 S	145 46 10.1 E	394600	5597683	79	113	61222



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LINE NAME	SHO. POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-7	271	39 45 49.9 S	145 46 10.7 E	394615	5597713	79	113	61232
BC82A-7	272	39 45 48.9 S	145 46 11.4 E	394630	5597743	79	113	61242
BC82A-7	273	39 45 48.0 S	145 46 12.0 E	394645	5597772	79	113	61252
BC82A-7	274	39 45 47.0 S	145 46 12.7 E	394660	5597802	79	113	613 3
BC82A-7	275	39 45 46.0 S	145 46 13.3 E	394675	5597832	79	113	61313
BC82A-7	276	39 45 45.0 S	145 46 14.0 E	394690	5597863	79	113	61324
BC82A-7	277	39 45 44.1 S	145 46 14.6 E	394705	5597893	78	113	61334
BC82A-7	278	39 45 43.1 S	145 46 15.3 E	394720	5597923	79	113	61344
BC82A-7	279	39 45 42.1 S	145 46 15.9 E	394735	5597954	79	113	61355
BC82A-7	280	39 45 41.2 S	145 46 16.6 E	394750	5597984	78	113	614 5
BC82A-7	281	39 45 40.2 S	145 46 17.2 E	394765	5598015	79	113	61415
BC82A-7	282	39 45 39.2 S	145 46 17.9 E	394780	5598045	79	113	61425
BC82A-7	283	39 45 38.2 S	145 46 18.5 E	394795	5598076	78	113	61435
BC82A-7	284	39 45 37.2 S	145 46 19.2 E	394810	5598106	79	113	61445
BC82A-7	285	39 45 36.2 S	145 46 19.8 E	394825	5598137	78	113	61455
BC82A-7	286	39 45 35.2 S	145 46 20.5 E	394840	5598168	79	113	615 5
BC82A-7	287	39 45 34.3 S	145 46 21.1 E	394855	5598198	79	113	61516
BC82A-7	288	39 45 33.3 S	145 46 21.8 E	394870	5598229	79	113	61526
BC82A-7	289	39 45 32.3 S	145 46 22.4 E	394885	5598259	78	113	61537
BC82A-7	290	39 45 31.3 S	145 46 23.1 E	394901	5598290	79	113	61547
BC82A-7	291	39 45 30.3 S	145 46 23.7 E	394916	5598321	79	113	61557
BC82A-7	292	39 45 29.3 S	145 46 24.4 E	394931	5598351	79	113	616 8
BC82A-7	293	39 45 28.3 S	145 46 25.1 E	394947	5598382	79	113	61619
BC82A-7	294	39 45 27.4 S	145 46 25.7 E	394962	5598412	79	113	61629
BC82A-7	295	39 45 26.4 S	145 46 26.4 E	394978	5598442	79	113	61639
BC82A-7	296	39 45 25.4 S	145 46 27.1 E	394994	5598473	79	113	61650
BC82A-7	297	39 45 24.4 S	145 46 27.8 E	395010	5598503	79	113	617 0
BC82A-7	298	39 45 23.5 S	145 46 28.4 E	395025	5598533	79	113	61710
BC82A-7	299	39 45 22.5 S	145 46 29.1 E	395041	5598563	79	113	61720
BC82A-7	300	39 45 21.5 S	145 46 29.8 E	395057	5598593	79	113	61730
BC82A-7	301	39 45 20.6 S	145 46 30.5 E	395073	5598623	79	113	61741
BC82A-7	302	39 45 19.6 S	145 46 31.2 E	395089	5598653	78	113	61752
BC82A-7	303	39 45 18.6 S	145 46 31.9 E	395106	5598683	79	113	618 2
BC82A-7	304	39 45 17.7 S	145 46 32.6 E	395122	5598712	79	113	61813
BC82A-7	305	39 45 16.7 S	145 46 33.3 E	395138	5598742	78	113	61824
BC82A-7	306	39 45 15.8 S	145 46 34.0 E	395155	5598771	79	113	61835
BC82A-7	307	39 45 14.8 S	145 46 34.7 E	395171	5598801	79	113	61845
BC82A-7	308	39 45 13.9 S	145 46 35.5 E	395188	5598830	79	113	61855
BC82A-7	309	39 45 12.9 S	145 46 36.2 E	395205	5598860	79	113	619 5
BC82A-7	310	39 45 12.0 S	145 46 36.9 E	395221	5598889	78	113	61915
BC82A-7	311	39 45 11.1 S	145 46 37.6 E	395238	5598918	79	113	61925
BC82A-7	312	39 45 10.1 S	145 46 38.3 E	395255	5598947	79	113	61935
BC82A-7	313	39 45 09.2 S	145 46 39.1 E	395272	5598976	79	113	61945
BC82A-7	314	39 45 08.3 S	145 46 39.8 E	395289	5599005	79	113	61955
BC82A-7	315	39 45 07.3 S	145 46 40.5 E	395306	5599034	79	113	620 5
BC82A-7	316	39 45 06.4 S	145 46 41.3 E	395323	5599063	0	113	62015
BC82A-7	317	39 45 05.5 S	145 46 42.0 E	395340	5599092	0	113	62026
BC82A-7	318	39 45 04.6 S	145 46 42.7 E	395357	5599120	0	113	62036
BC82A-7	319	39 45 03.6 S	145 46 43.5 E	395375	5599149	79	113	62046
BC82A-7	320	39 45 02.7 S	145 46 44.2 E	395392	5599178	79	113	62056
BC82A-7	321	39 45 01.8 S	145 46 45.0 E	395409	5599206	78	113	621 6
BC82A-7	322	39 45 00.9 S	145 46 45.7 E	395427	5599235	79	113	62116
BC82A-7	323	39 45 00.0 S	145 46 46.5 E	395444	5599264	79	113	62126
BC82A-7	324	39 44 59.1 S	145 46 47.2 E	395461	5599292	78	113	62136

LINE NAME	SHOT POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-7	325	39 44 58.1 S	145 46 48.0 E	395479	5599321	78	113	62147
BC82A-7	326	39 44 57.2 S	145 46 48.7 E	395496	5599349	79	113	62157
BC82A-7	327	39 44 56.3 S	145 46 49.4 E	395513	5599378	79	113	622 7
BC82A-7	328	39 44 55.4 S	145 46 50.2 E	395531	5599407	79	113	62217
BC82A-7	329	39 44 54.5 S	145 46 50.9 E	395548	5599435	79	113	62228
BC82A-7	330	39 44 53.5 S	145 46 51.7 E	395566	5599464	79	113	62238
BC82A-7	331	39 44 52.6 S	145 46 52.4 E	395583	5599493	79	113	62248
BC82A-7	332	39 44 51.7 S	145 46 53.2 E	395600	5599521	79	113	62258
BC82A-7	333	39 44 50.8 S	145 46 53.9 E	395618	5599550	78	113	623 8
BC82A-7	334	39 44 49.8 S	145 46 54.7 E	395635	5599579	79	113	62318
BC82A-7	335	39 44 48.9 S	145 46 55.4 E	395652	5599608	79	113	62328
BC82A-7	336	39 44 48.0 S	145 46 56.2 E	395670	5599636	79	113	62338
BC82A-7	337	39 44 47.1 S	145 46 56.9 E	395687	5599665	79	113	62348
BC82A-7	338	39 44 46.1 S	145 46 57.6 E	395704	5599694	79	113	62358
BC82A-7	339	39 44 45.2 S	145 46 58.4 E	395722	5599723	79	113	624 8
BC82A-7	340	39 44 44.3 S	145 46 59.1 E	395739	5599752	79	113	62418
BC82A-7	341	39 44 43.3 S	145 46 59.9 E	395756	5599781	79	113	62431
BC82A-7	342	39 44 42.4 S	145 47 00.6 E	395773	5599810	79	113	62441
BC82A-7	343	39 44 41.5 S	145 47 01.3 E	395790	5599839	78	113	62451
BC82A-7	344	39 44 40.5 S	145 47 02.1 E	395807	5599868	79	113	625 1
BC82A-7	345	39 44 39.6 S	145 47 02.8 E	395824	5599898	79	113	62511
BC82A-7	346	39 44 38.6 S	145 47 03.5 E	395840	5599927	78	113	62521
BC82A-7	347	39 44 37.7 S	145 47 04.2 E	395857	5599956	79	113	62532
BC82A-7	348	39 44 36.8 S	145 47 04.9 E	395874	5599985	78	113	62542
BC82A-7	349	39 44 35.8 S	145 47 05.7 E	395891	5600015	79	113	62553
BC82A-7	350	39 44 34.9 S	145 47 06.4 E	395907	5600044	79	113	626 3
BC82A-7	351	39 44 33.9 S	145 47 07.1 E	395924	5600073	78	113	62613
BC82A-7	352	39 44 33.0 S	145 47 07.8 E	395941	5600103	79	113	62624
BC82A-7	353	39 44 32.0 S	145 47 08.5 E	395957	5600132	79	113	62634
BC82A-7	354	39 44 31.1 S	145 47 09.2 E	395974	5600161	79	113	62644
BC82A-7	355	39 44 30.1 S	145 47 09.9 E	395990	5600191	79	113	62654
BC82A-7	356	39 44 29.2 S	145 47 10.7 E	396007	5600220	79	113	627 4
BC82A-7	357	39 44 28.2 S	145 47 11.4 E	396023	5600250	78	113	62714
BC82A-7	358	39 44 27.3 S	145 47 12.0 E	396039	5600279	79	113	62725
BC82A-7	359	39 44 26.3 S	145 47 12.8 E	396056	5600309	79	113	62735
BC82A-7	360	39 44 25.4 S	145 47 13.5 E	396072	5600338	79	113	62745
BC82A-7	361	39 44 24.4 S	145 47 14.2 E	396088	5600368	78	113	62755
BC82A-7	362	39 44 23.5 S	145 47 14.8 E	396104	5600398	79	113	628 5
BC82A-7	363	39 44 22.5 S	145 47 15.5 E	396120	5600427	79	113	62815
BC82A-7	364	39 44 21.6 S	145 47 16.2 E	396136	5600457	79	113	62825
BC82A-7	365	39 44 20.6 S	145 47 16.9 E	396152	5600486	79	113	62835
BC82A-7	366	39 44 19.7 S	145 47 17.6 E	396168	5600516	79	113	62846
BC82A-7	367	39 44 18.7 S	145 47 18.3 E	396184	5600546	78	113	62856
BC82A-7	368	39 44 17.8 S	145 47 19.0 E	396200	5600575	79	113	629 6
BC82A-7	369	39 44 16.8 S	145 47 19.7 E	396216	5600605	79	113	62917
BC82A-7	370	39 44 15.8 S	145 47 20.3 E	396231	5600635	79	113	62927
BC82A-7	371	39 44 14.9 S	145 47 21.0 E	396247	5600664	79	113	62937
BC82A-7	372	39 44 13.9 S	145 47 21.7 E	396263	5600694	79	113	62947
BC82A-7	373	39 44 13.0 S	145 47 22.4 E	396279	5600724	78	113	62957
BC82A-7	374	39 44 12.0 S	145 47 23.0 E	396294	5600754	78	113	630 7
BC82A-7	375	39 44 11.0 S	145 47 23.7 E	396310	5600784	79	113	63017
BC82A-7	376	39 44 10.1 S	145 47 24.4 E	396325	5600814	79	113	63027
BC82A-7	377	39 44 09.1 S	145 47 25.1 E	396341	5600844	78	113	63037
BC82A-7	378	39 44 08.1 S	145 47 25.7 E	396356	5600874	78	113	63048

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LINE NAME	SHOT POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-7	379	39 44 07.2 S	145 47 26.4 E	396372	5600904	79	113	63058
BC82A-7	380	39 44 06.2 S	145 47 27.0 E	396387	5600934	79	113	631 9
BC82A-7	381	39 44 05.2 S	145 47 27.7 E	396403	5600964	79	113	63119
BC82A-7	382	39 44 04.3 S	145 47 28.4 E	396418	5600994	78	113	63129
BC82A-7	383	39 44 03.3 S	145 47 29.1 E	396434	5601024	79	113	63139
BC82A-7	384	39 44 02.3 S	145 47 29.7 E	396449	5601055	79	113	63149
BC82A-7	385	39 44 01.3 S	145 47 30.4 E	396465	5601085	79	113	63159
BC82A-7	386	39 44 00.4 S	145 47 31.0 E	396480	5601115	79	113	63210
BC82A-7	387	39 43 59.4 S	145 47 31.7 E	396495	5601146	78	113	63220
BC82A-7	388	39 43 58.4 S	145 47 32.4 E	396511	5601176	78	113	63231
BC82A-7	389	39 43 57.4 S	145 47 33.0 E	396526	5601207	78	113	63241
BC82A-7	390	39 43 56.5 S	145 47 33.7 E	396542	5601237	78	113	63251
BC82A-7	391	39 43 55.5 S	145 47 34.4 E	396557	5601268	79	113	633 2
BC82A-7	392	39 43 54.5 S	145 47 35.1 E	396573	5601299	0	113	63313
BC82A-7	393	39 43 53.5 S	145 47 35.7 E	396588	5601329	0	113	63323
BC82A-7	394	39 43 52.5 S	145 47 36.3 E	396603	5601360	0	113	63334
BC82A-7	395	39 43 51.5 S	145 47 37.0 E	396619	5601390	0	113	63344
BC82A-7	396	39 43 50.5 S	145 47 37.7 E	396634	5601422	0	113	63355
BC82A-7	397	39 43 49.5 S	145 47 38.4 E	396650	5601452	0	113	634 5
BC82A-7	398	39 43 48.5 S	145 47 39.1 E	396666	5601483	0	113	63416
BC82A-7	399	39 43 47.6 S	145 47 39.7 E	396681	5601513	79	113	63426
BC82A-7	400	39 43 46.5 S	145 47 40.4 E	396697	5601545	79	113	63436
BC82A-7	401	39 43 45.6 S	145 47 41.1 E	396713	5601575	78	113	63446
BC82A-7	402	39 43 44.6 S	145 47 41.7 E	396728	5601606	79	113	63456
BC82A-7	403	39 43 43.6 S	145 47 42.4 E	396744	5601636	79	113	635 7
BC82A-7	404	39 43 42.6 S	145 47 43.1 E	396760	5601667	78	113	63517
BC82A-7	405	39 43 41.6 S	145 47 43.8 E	396776	5601698	79	113	63527
BC82A-7	406	39 43 40.6 S	145 47 44.5 E	396792	5601729	79	113	63538
BC82A-7	407	39 43 39.6 S	145 47 45.2 E	396808	5601759	78	113	63548
BC82A-7	408	39 43 38.6 S	145 47 45.9 E	396824	5601790	79	113	63558
BC82A-7	409	39 43 37.7 S	145 47 46.6 E	396840	5601820	79	113	636 9
BC82A-7	410	39 43 36.7 S	145 47 47.3 E	396856	5601851	78	113	63619
BC82A-7	411	39 43 35.7 S	145 47 47.9 E	396872	5601881	79	113	63629
BC82A-7	412	39 43 34.7 S	145 47 48.7 E	396889	5601911	79	113	63640
BC82A-7	413	39 43 33.8 S	145 47 49.4 E	396905	5601941	79	113	63650
BC82A-7	414	39 43 32.8 S	145 47 50.0 E	396921	5601971	48	113	637 0
BC82A-7	415	39 43 31.8 S	145 47 50.7 E	396937	5602001	79	113	63710
BC82A-7	416	39 43 30.9 S	145 47 51.5 E	396954	5602031	78	113	63721
BC82A-7	417	39 43 29.9 S	145 47 52.2 E	396970	5602060	79	113	63731
BC82A-7	418	39 43 29.0 S	145 47 52.9 E	396987	5602090	79	113	63741
BC82A-7	419	39 43 28.0 S	145 47 53.6 E	397003	5602119	78	113	63751
BC82A-7	420	39 43 27.1 S	145 47 54.3 E	397020	5602149	78	113	638 1
BC82A-7	421	39 43 26.1 S	145 47 55.0 E	397036	5602178	78	113	63811
BC82A-7	422	39 43 25.2 S	145 47 55.7 E	397053	5602207	78	113	63821
BC82A-7	423	39 43 24.3 S	145 47 56.4 E	397069	5602236	79	113	63831
BC82A-7	424	39 43 23.3 S	145 47 57.1 E	397086	5602265	78	113	63843
BC82A-7	425	39 43 22.4 S	145 47 57.8 E	397102	5602294	78	113	63853
BC82A-7	426	39 43 21.5 S	145 47 58.6 E	397119	5602322	79	113	639 3
BC82A-7	427	39 43 20.6 S	145 47 59.2 E	397135	5602351	79	113	63913
BC82A-7	428	39 43 19.7 S	145 48 00.0 E	397152	5602379	78	113	63923
BC82A-7	429	39 43 18.7 S	145 48 00.7 E	397168	5602408	78	113	63934
BC82A-7	430	39 43 17.8 S	145 48 01.4 E	397184	5602436	78	113	63945
BC82A-7	431	39 43 16.9 S	145 48 02.1 E	397201	5602464	78	113	63955
BC82A-7	432	39 43 16.0 S	145 48 02.8 E	397217	5602492	78	113	640 5

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LINE NAME	SHOT POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-7	433	39 43 15.1 S	145 48 03.5 E	397233	5602520	79	113	64014
BC82A-7	434	39 43 14.2 S	145 48 04.1 E	397249	5602548	79	113	64024
BC82A-7	435	39 43 13.4 S	145 48 04.8 E	397265	5602575	78	113	64033
BC82A-7	436	39 43 12.5 S	145 48 05.5 E	397281	5602603	78	113	64043
BC82A-7	437	39 43 11.6 S	145 48 06.2 E	397297	5602631	78	113	64053
BC82A-7	438	39 43 10.7 S	145 48 06.9 E	397313	5602659	79	113	641 2
BC82A-7	439	39 43 09.8 S	145 48 07.6 E	397329	5602686	79	113	64112
BC82A-7	440	39 43 08.9 S	145 48 08.2 E	397344	5602714	78	113	64121
BC82A-7	441	39 43 08.0 S	145 48 08.9 E	397360	5602742	79	113	64131
BC82A-7	442	39 43 07.1 S	145 48 09.6 E	397375	5602769	79	113	64141
BC82A-7	443	39 43 06.2 S	145 48 10.2 E	397390	5602797	79	113	64150
BC82A-7	444	39 43 05.3 S	145 48 10.9 E	397405	5602825	78	113	642 0
BC82A-7	445	39 43 04.4 S	145 48 11.5 E	397420	5602853	79	113	642 9
BC82A-7	446	39 43 03.5 S	145 48 12.1 E	397435	5602881	79	113	64219
BC82A-7	447	39 43 02.6 S	145 48 12.7 E	397449	5602909	79	113	64229
BC82A-7	448	39 43 01.7 S	145 48 13.4 E	397464	5602937	78	113	64238
BC82A-7	449	39 43 00.8 S	145 48 14.0 E	397478	5602965	78	113	64248
BC82A-7	450	39 42 59.9 S	145 48 14.6 E	397493	5602993	79	113	64257
BC82A-7	451	39 42 59.0 S	145 48 15.2 E	397507	5603021	78	113	643 7
BC82A-7	452	39 42 58.1 S	145 48 15.9 E	397522	5603049	78	113	64317
BC82A-7	453	39 42 57.2 S	145 48 16.5 E	397535	5603078	79	113	64326
BC82A-7	454	39 42 56.3 S	145 48 17.1 E	397550	5603106	79	113	64336
BC82A-7	455	39 42 55.3 S	145 48 17.7 E	397563	5603135	78	113	64345
BC82A-7	456	39 42 54.4 S	145 48 18.3 E	397578	5603164	79	113	64355
BC82A-7	457	39 42 53.5 S	145 48 18.9 E	397591	5603193	79	113	644 5
BC82A-7	458	39 42 52.5 S	145 48 19.5 E	397605	5603222	78	113	64414
BC82A-7	459	39 42 51.6 S	145 48 20.0 E	397618	5603251	78	113	64426
BC82A-7	460	39 42 50.7 S	145 48 20.6 E	397632	5603280	79	113	64437
BC82A-7	461	39 42 49.7 S	145 48 21.2 E	397646	5603310	79	113	64447
BC82A-7	462	39 42 48.8 S	145 48 21.8 E	397659	5603339	79	113	64457
BC82A-7	463	39 42 47.8 S	145 48 22.4 E	397673	5603369	79	113	645 7
BC82A-7	464	39 42 46.9 S	145 48 23.0 E	397687	5603398	79	113	64517
BC82A-7	465	39 42 45.9 S	145 48 23.6 E	397700	5603428	78	113	64527
BC82A-7	466	39 42 44.9 S	145 48 24.2 E	397715	5603458	78	113	64538
BC82A-7	467	39 42 44.0 S	145 48 24.8 E	397728	5603488	79	113	64548
BC82A-7	468	39 42 43.0 S	145 48 25.4 E	397742	5603518	79	113	64558
BC82A-7	469	39 42 42.0 S	145 48 26.0 E	397757	5603548	78	113	646 9
BC82A-7	470	39 42 41.1 S	145 48 26.6 E	397770	5603578	78	113	64619
BC82A-7	471	39 42 40.1 S	145 48 27.2 E	397785	5603609	78	113	64630
BC82A-7	472	39 42 39.1 S	145 48 27.9 E	397799	5603639	78	113	64640
BC82A-7	473	39 42 38.1 S	145 48 28.5 E	397814	5603669	79	113	64650
BC82A-7	474	39 42 37.1 S	145 48 29.1 E	397829	5603700	78	113	647 0
BC82A-7	475	39 42 36.2 S	145 48 29.8 E	397844	5603730	78	113	64710
BC82A-7	476	39 42 35.2 S	145 48 30.4 E	397859	5603760	78	113	64721
BC82A-7	477	39 42 34.2 S	145 48 31.1 E	397874	5603790	78	113	64732
BC82A-7	478	39 42 33.2 S	145 48 31.8 E	397890	5603821	78	113	64742
BC82A-7	479	39 42 32.3 S	145 48 32.4 E	397905	5603851	79	113	64752
BC82A-7	480	39 42 31.3 S	145 48 33.1 E	397921	5603881	78	113	648 2
BC82A-7	481	39 42 30.3 S	145 48 33.8 E	397937	5603911	78	113	64812
BC82A-7	482	39 42 29.4 S	145 48 34.5 E	397953	5603941	79	113	64823
BC82A-7	483	39 42 28.4 S	145 48 35.2 E	397970	5603971	79	113	64833
BC82A-7	484	39 42 27.4 S	145 48 35.9 E	397987	5604001	78	113	64843
BC82A-7	485	39 42 26.5 S	145 48 36.6 E	398003	5604031	78	113	64853
BC82A-7	486	39 42 25.5 S	145 48 37.4 E	398021	5604061	78	113	649 4

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LINE NAME	SHOT POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-7	487	39 42 24.5 S	145 48 38.1 E	398038	5604091	78	113	64914
BC82A-7	488	39 42 23.6 S	145 48 38.9 E	398055	5604120	78	113	64925
BC82A-7	489	39 42 22.6 S	145 48 39.6 E	398073	5604150	78	113	64935
BC82A-7	490	39 42 21.7 S	145 48 40.4 E	398091	5604179	78	113	64946
BC82A-7	491	39 42 20.7 S	145 48 41.2 E	398109	5604209	78	113	64956
BC82A-7	492	39 42 19.8 S	145 48 42.0 E	398127	5604238	78	113	650 6
BC82A-7	493	39 42 18.9 S	145 48 42.8 E	398146	5604267	79	113	65016
BC82A-7	494	39 42 18.0 S	145 48 43.5 E	398164	5604296	79	113	65026
BC82A-7	495	39 42 17.0 S	145 48 44.4 E	398183	5604325	79	113	65036
BC82A-7	496	39 42 16.1 S	145 48 45.2 E	398202	5604354	79	113	65046
BC82A-7	497	39 42 15.2 S	145 48 46.0 E	398221	5604382	78	113	65057
BC82A-7	498	39 42 14.3 S	145 48 46.8 E	398240	5604411	78	113	651 7
BC82A-7	499	39 42 13.4 S	145 48 47.6 E	398259	5604439	78	113	65117
BC82A-7	500	39 42 12.4 S	145 48 48.4 E	398278	5604468	78	113	65127
BC82A-7	501	39 42 11.5 S	145 48 49.3 E	398298	5604496	78	113	65137
BC82A-7	502	39 42 10.6 S	145 48 50.1 E	398317	5604524	79	113	65148
BC82A-7	503	39 42 09.7 S	145 48 50.9 E	398336	5604553	78	113	652 0
BC82A-7	504	39 42 08.8 S	145 48 51.7 E	398355	5604581	78	113	65210
BC82A-7	505	39 42 07.9 S	145 48 52.6 E	398375	5604609	78	113	65220
BC82A-7	506	39 42 07.0 S	145 48 53.4 E	398394	5604637	78	113	65231
BC82A-7	507	39 42 06.1 S	145 48 54.2 E	398413	5604665	78	113	65241
BC82A-7	508	39 42 05.2 S	145 48 55.0 E	398432	5604694	79	113	65251
BC82A-7	509	39 42 04.3 S	145 48 55.8 E	398451	5604722	78	113	653 1
BC82A-7	510	39 42 03.4 S	145 48 56.6 E	398469	5604750	78	113	65311
BC82A-7	511	39 42 02.5 S	145 48 57.4 E	398488	5604778	78	113	65322
BC82A-7	512	39 42 01.5 S	145 48 58.2 E	398507	5604807	78	113	65332
BC82A-7	513	39 42 00.6 S	145 48 59.0 E	398525	5604835	79	113	65342
BC82A-7	514	39 41 59.7 S	145 48 59.8 E	398543	5604863	78	113	65353
BC82A-7	515	39 41 58.8 S	145 49 00.5 E	398561	5604892	78	113	654 3
BC82A-7	516	39 41 57.9 S	145 49 01.3 E	398579	5604920	79	113	65413
BC82A-7	517	39 41 57.0 S	145 49 02.1 E	398597	5604949	78	113	65424
BC82A-7	518	39 41 56.0 S	145 49 02.8 E	398614	5604978	78	113	65435
BC82A-7	519	39 41 55.1 S	145 49 03.5 E	398631	5605006	78	113	65446
BC82A-7	520	39 41 54.2 S	145 49 04.3 E	398648	5605035	78	113	65458
BC82A-7	521	39 41 53.3 S	145 49 05.0 E	398665	5605064	78	113	655 8
BC82A-7	522	39 41 52.3 S	145 49 05.7 E	398682	5605093	78	113	65518
BC82A-7	523	39 41 51.4 S	145 49 06.4 E	398698	5605123	78	113	65528
BC82A-7	524	39 41 50.4 S	145 49 07.1 E	398714	5605152	79	113	65539
BC82A-7	525	39 41 49.5 S	145 49 07.8 E	398730	5605182	79	113	65549
BC82A-7	526	39 41 48.5 S	145 49 08.5 E	398746	5605211	78	113	65559
BC82A-7	527	39 41 47.6 S	145 49 09.1 E	398761	5605241	78	113	656 9
BC82A-7	528	39 41 46.6 S	145 49 09.8 E	398776	5605271	78	113	65620
BC82A-7	529	39 41 45.6 S	145 49 10.4 E	398791	5605301	77	113	65630
BC82A-7	530	39 41 44.6 S	145 49 11.1 E	398806	5605332	78	113	65640
BC82A-7	531	39 41 43.7 S	145 49 11.7 E	398820	5605362	78	113	65650
BC82A-7	532	39 41 42.7 S	145 49 12.3 E	398835	5605393	78	113	657 0
BC82A-7	533	39 41 41.7 S	145 49 12.9 E	398849	5605423	77	113	65710
BC82A-7	534	39 41 40.7 S	145 49 13.6 E	398864	5605454	78	113	65720
BC82A-7	535	39 41 39.7 S	145 49 14.1 E	398877	5605484	78	113	65731
BC82A-7	536	39 41 38.7 S	145 49 14.7 E	398891	5605515	78	113	65741
BC82A-7	537	39 41 37.7 S	145 49 15.4 E	398906	5605546	77	113	65752
BC82A-7	538	39 41 36.8 S	145 49 16.0 E	398919	5605576	78	113	658 2
BC82A-7	539	39 41 35.7 S	145 49 16.6 E	398933	5605608	78	113	65812
BC82A-7	540	39 41 34.7 S	145 49 17.1 E	398946	5605639	0	113	65822

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LINE NAME	SHOT POINT	LATITUDE		LONGITUDE		EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-7	541	39 41	33.7 S	145 49	17.7 E	398960	5605670	0	113	65832
BC82A-7	542	39 41	32.7 S	145 49	18.3 E	398973	5605701	0	113	65842
BC82A-7	543	39 41	31.7 S	145 49	18.9 E	398987	5605732	77	113	65852
BC82A-7	544	39 41	30.7 S	145 49	19.5 E	399000	5605763	78	113	659 2
BC82A-7	545	39 41	29.7 S	145 49	20.1 E	399014	5605794	78	113	65912
BC82A-7	546	39 41	28.7 S	145 49	20.7 E	399028	5605825	78	113	65922
BC82A-7	547	39 41	27.7 S	145 49	21.2 E	399041	5605856	78	113	65932
BC82A-7	548	39 41	26.7 S	145 49	21.9 E	399056	5605887	78	113	65943
BC82A-7	549	39 41	25.7 S	145 49	22.5 E	399070	5605918	78	113	65953
BC82A-7	550	39 41	24.7 S	145 49	23.0 E	399083	5605949	78	113	7 0 4
BC82A-7	551	39 41	23.8 S	145 49	23.7 E	399098	5605979	78	113	7 014
BC82A-7	552	39 41	22.7 S	145 49	24.3 E	399112	5606011	78	113	7 025
BC82A-7	553	39 41	21.8 S	145 49	24.9 E	399127	5606041	79	113	7 035
BC82A-7	554	39 41	20.8 S	145 49	25.6 E	399142	5606072	78	113	7 045
BC82A-7	555	39 41	19.8 S	145 49	26.2 E	399157	5606102	78	113	7 055
BC82A-7	556	39 41	18.8 S	145 49	26.9 E	399172	5606133	78	113	7 1 6
BC82A-7	557	39 41	17.8 S	145 49	27.5 E	399187	5606163	78	113	7 116
BC82A-7	558	39 41	16.9 S	145 49	28.2 E	399202	5606193	77	113	7 127
BC82A-7	559	39 41	15.9 S	145 49	28.9 E	399218	5606223	77	113	7 137
BC82A-7	560	39 41	14.9 S	145 49	29.5 E	399233	5606253	77	113	7 148
BC82A-7	561	39 41	14.0 S	145 49	30.2 E	399249	5606283	77	113	7 158
BC82A-7	562	39 41	13.0 S	145 49	30.9 E	399265	5606313	77	113	7 2 8
BC82A-7	563	39 41	12.0 S	145 49	31.6 E	399281	5606343	77	113	7 218
BC82A-7	564	39 41	11.1 S	145 49	32.3 E	399297	5606372	77	113	7 228
BC82A-7	565	39 41	10.1 S	145 49	33.0 E	399314	5606402	78	113	7 239
BC82A-7	566	39 41	09.2 S	145 49	33.7 E	399330	5606431	78	113	7 249
BC82A-7	567	39 41	08.2 S	145 49	34.4 E	399347	5606461	78	113	7 259
BC82A-7	568	39 41	07.3 S	145 49	35.1 E	399364	5606490	77	113	7 3 9
BC82A-7	569	39 41	06.4 S	145 49	35.9 E	399381	5606519	78	113	7 319
BC82A-7	570	39 41	05.4 S	145 49	36.6 E	399398	5606548	78	113	7 330
BC82A-7	571	39 41	04.5 S	145 49	37.3 E	399415	5606577	78	113	7 340
BC82A-7	572	39 41	03.6 S	145 49	38.1 E	399432	5606606	78	113	7 350
BC82A-7	573	39 41	02.6 S	145 49	38.8 E	399450	5606635	78	113	7 4 0
BC82A-7	574	39 41	01.7 S	145 49	39.6 E	399467	5606664	77	113	7 410
BC82A-7	575	39 41	00.8 S	145 49	40.3 E	399484	5606693	77	113	7 420
BC82A-7	576	39 40	59.8 S	145 49	41.1 E	399502	5606722	78	113	7 430
BC82A-7	577	39 40	58.9 S	145 49	41.8 E	399519	5606751	77	113	7 440
BC82A-7	578	39 40	58.0 S	145 49	42.6 E	399537	5606779	77	113	7 450
BC82A-7	579	39 40	57.1 S	145 49	43.3 E	399554	5606808	78	113	7 5 1
BC82A-7	580	39 40	56.1 S	145 49	44.0 E	399571	5606837	78	113	7 511
BC82A-7	581	39 40	55.2 S	145 49	44.8 E	399589	5606866	77	113	7 521
BC82A-7	582	39 40	54.3 S	145 49	45.5 E	399606	5606895	78	113	7 531
BC82A-7	583	39 40	53.3 S	145 49	46.2 E	399623	5606924	78	113	7 542
BC82A-7	584	39 40	52.4 S	145 49	47.0 E	399640	5606952	78	113	7 552
BC82A-7	585	39 40	51.5 S	145 49	47.7 E	399657	5606981	78	113	7 6 2
BC82A-7	586	39 40	50.6 S	145 49	48.4 E	399674	5607010	78	113	7 612
BC82A-7	587	39 40	49.6 S	145 49	49.2 E	399691	5607039	77	113	7 622
BC82A-7	588	39 40	48.7 S	145 49	49.9 E	399708	5607069	77	113	7 633
BC82A-7	589	39 40	47.7 S	145 49	50.6 E	399725	5607098	78	113	7 643
BC82A-7	590	39 40	46.8 S	145 49	51.3 E	399741	5607127	77	113	7 653
BC82A-7	591	39 40	45.9 S	145 49	52.0 E	399758	5607156	78	113	7 7 4
BC82A-7	592	39 40	44.9 S	145 49	52.7 E	399774	5607186	78	113	7 715
BC82A-7	593	39 40	44.0 S	145 49	53.4 E	399790	5607215	78	113	7 726
BC82A-7	594	39 40	43.0 S	145 49	54.1 E	399806	5607244	78	113	7 736

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LINE NAME	SHOT POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-7	595	39 40 42.1 S	145 49 54.8 E	399822	5607274	78	113	7 746
BC82A-7	596	39 40 41.1 S	145 49 55.5 E	399838	5607304	78	113	7 756
BC82A-7	597	39 40 40.2 S	145 49 56.2 E	399854	5607333	78	113	7 8 7
BC82A-7	598	39 40 39.2 S	145 49 56.8 E	399869	5607363	77	113	7 817
BC82A-7	599	39 40 38.2 S	145 49 57.5 E	399885	5607393	78	113	7 827
BC82A-7	600	39 40 37.3 S	145 49 58.1 E	399900	5607423	78	113	7 838
BC82A-7	601	39 40 36.3 S	145 49 58.8 E	399915	5607453	78	113	7 848
BC82A-7	602	39 40 35.3 S	145 49 59.5 E	399931	5607483	78	113	7 859
BC82A-7	603	39 40 34.4 S	145 50 00.1 E	399946	5607513	77	113	7 9 9
BC82A-7	604	39 40 33.4 S	145 50 00.8 E	399961	5607543	77	113	7 920
BC82A-7	605	39 40 32.4 S	145 50 01.4 E	399976	5607573	78	113	7 930
BC82A-7	606	39 40 31.4 S	145 50 02.0 E	399990	5607604	78	113	7 940
BC82A-7	607	39 40 30.5 S	145 50 02.7 E	400005	5607634	78	113	7 950
BC82A-7	608	39 40 29.5 S	145 50 03.3 E	400020	5607664	0	113	710 0
BC82A-7	609	39 40 28.5 S	145 50 03.9 E	400034	5607695	0	113	71011
BC82A-7	610	39 40 27.5 S	145 50 04.6 E	400049	5607725	0	113	71021
BC82A-7	611	39 40 26.6 S	145 50 05.2 E	400064	5607755	78	113	71031
BC82A-7	612	39 40 25.6 S	145 50 05.9 E	400079	5607786	77	113	71042
BC82A-7	613	39 40 24.6 S	145 50 06.5 E	400093	5607816	77	113	71052
BC82A-7	614	39 40 23.7 S	145 50 07.1 E	400108	5607846	78	113	711 2
BC82A-7	615	39 40 22.7 S	145 50 07.7 E	400123	5607877	78	113	71112
BC82A-7	616	39 40 21.7 S	145 50 08.4 E	400138	5607907	78	113	71123
BC82A-7	617	39 40 20.7 S	145 50 09.0 E	400153	5607937	78	113	71134
BC82A-7	618	39 40 19.7 S	145 50 09.7 E	400168	5607968	77	113	71144
BC82A-7	619	39 40 18.8 S	145 50 10.3 E	400183	5607998	78	113	71154
BC82A-7	620	39 40 17.8 S	145 50 11.0 E	400198	5608028	78	113	712 4
BC82A-7	621	39 40 16.8 S	145 50 11.7 E	400214	5608058	77	113	71214
BC82A-7	622	39 40 15.9 S	145 50 12.3 E	400229	5608088	77	113	71225
BC82A-7	623	39 40 14.9 S	145 50 13.0 E	400244	5608118	77	113	71235
BC82A-7	624	39 40 13.9 S	145 50 13.6 E	400260	5608148	78	113	71245
BC82A-7	625	39 40 13.0 S	145 50 14.3 E	400276	5608178	78	113	71256
BC82A-7	626	39 40 12.0 S	145 50 15.0 E	400291	5608208	78	113	713 6
BC82A-7	627	39 40 11.0 S	145 50 15.7 E	400307	5608238	77	113	71316
BC82A-7	628	39 40 10.1 S	145 50 16.4 E	400323	5608268	77	113	71326
BC82A-7	629	39 40 09.1 S	145 50 17.0 E	400339	5608298	77	113	71336
BC82A-7	630	39 40 08.1 S	145 50 17.7 E	400355	5608328	78	113	71346
BC82A-7	631	39 40 07.2 S	145 50 18.5 E	400372	5608358	78	113	71357
BC82A-7	632	39 40 06.2 S	145 50 19.1 E	400388	5608387	78	113	714 7
BC82A-7	633	39 40 05.3 S	145 50 19.8 E	400404	5608417	78	113	71417
BC82A-7	634	39 40 04.3 S	145 50 20.6 E	400421	5608447	77	113	71427
BC82A-7	635	39 40 03.4 S	145 50 21.2 E	400437	5608476	77	113	71437
BC82A-7	636	39 40 02.4 S	145 50 22.0 E	400454	5608506	78	113	71448
BC82A-7	637	39 40 01.4 S	145 50 22.7 E	400471	5608536	78	113	71458
BC82A-7	638	39 40 00.5 S	145 50 23.4 E	400487	5608565	78	113	715 9
BC82A-7	639	39 39 59.5 S	145 50 24.1 E	400504	5608595	77	113	71520
BC82A-7	640	39 39 58.6 S	145 50 24.9 E	400521	5608624	78	113	71530
BC82A-7	641	39 39 57.6 S	145 50 25.6 E	400538	5608654	78	113	71540
BC82A-7	642	39 39 56.7 S	145 50 26.3 E	400555	5608683	78	113	71550
BC82A-7	643	39 39 55.7 S	145 50 27.0 E	400572	5608713	78	113	716 0
BC82A-7	644	39 39 54.8 S	145 50 27.7 E	400588	5608742	78	113	71610
BC82A-7	645	39 39 53.8 S	145 50 28.5 E	400605	5608772	78	113	71620
BC82A-7	646	39 39 52.9 S	145 50 29.2 E	400622	5608801	78	113	71631
BC82A-7	647	39 39 51.9 S	145 50 29.9 E	400639	5608831	78	113	71642
BC82A-7	648	39 39 51.0 S	145 50 30.6 E	400656	5608860	78	113	71652

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LINE NAME	SHOT POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-7	649	39 39 50.0 S	145 50 31.3 E	400672	5608890	77	113	717 2
BC82A-7	650	39 39 49.1 S	145 50 32.1 E	400689	5608919	77	113	71714
BC82A-7	651	39 39 48.1 S	145 50 32.8 E	400706	5608949	77	113	71724
BC82A-7	652	39 39 47.2 S	145 50 33.5 E	400722	5608979	77	113	71734
BC82A-7	653	39 39 46.2 S	145 50 34.2 E	400739	5609008	77	113	71744
BC82A-7	654	39 39 45.3 S	145 50 34.9 E	400755	5609038	77	113	71755
BC82A-7	655	39 39 44.3 S	145 50 35.6 E	400771	5609068	78	113	718 5
BC82A-7	656	39 39 43.3 S	145 50 36.3 E	400788	5609098	77	113	71815
BC82A-7	657	39 39 42.4 S	145 50 37.0 E	400804	5609127	77	113	71826
BC82A-7	658	39 39 41.4 S	145 50 37.7 E	400820	5609157	77	113	71836
BC82A-7	659	39 39 40.5 S	145 50 38.4 E	400836	5609187	77	113	71846
BC82A-7	660	39 39 39.5 S	145 50 39.1 E	400852	5609217	77	113	71856
BC82A-7	661	39 39 38.5 S	145 50 39.8 E	400868	5609247	77	113	719 7
BC82A-7	662	39 39 37.6 S	145 50 40.4 E	400884	5609277	77	113	71917
BC82A-7	663	39 39 36.6 S	145 50 41.1 E	400900	5609307	77	113	71928
BC82A-7	664	39 39 35.6 S	145 50 41.8 E	400916	5609337	78	113	71938
BC82A-7	665	39 39 34.7 S	145 50 42.5 E	400932	5609367	77	113	71949
BC82A-7	666	39 39 33.7 S	145 50 43.2 E	400948	5609397	77	113	720 0
BC82A-7	667	39 39 32.7 S	145 50 43.8 E	400963	5609427	77	113	72010
BC82A-7	668	39 39 31.8 S	145 50 44.5 E	400979	5609457	77	113	72021
BC82A-7	669	39 39 30.8 S	145 50 45.2 E	400995	5609487	77	113	72031
BC82A-7	670	39 39 29.8 S	145 50 45.9 E	401011	5609517	77	113	72041
BC82A-7	671	39 39 28.9 S	145 50 46.5 E	401026	5609547	78	113	72051
BC82A-7	672	39 39 27.9 S	145 50 47.2 E	401042	5609577	77	113	721 1
BC82A-7	673	39 39 26.9 S	145 50 47.9 E	401058	5609607	77	113	72111
BC82A-7	674	39 39 25.9 S	145 50 48.6 E	401074	5609638	77	113	72122
BC82A-7	675	39 39 25.0 S	145 50 49.3 E	401090	5609668	77	113	72133
BC82A-7	676	39 39 24.0 S	145 50 50.0 E	401106	5609698	77	113	72144
BC82A-7	677	39 39 23.0 S	145 50 50.7 E	401122	5609728	77	113	72154
BC82A-7	678	39 39 22.1 S	145 50 51.4 E	401138	5609758	77	113	722 4
BC82A-7	679	39 39 21.1 S	145 50 52.0 E	401154	5609788	77	113	72214
BC82A-7	680	39 39 20.1 S	145 50 52.7 E	401170	5609818	77	113	72225
BC82A-7	681	39 39 19.2 S	145 50 53.4 E	401186	5609848	77	113	72235
BC82A-7	682	39 39 18.2 S	145 50 54.1 E	401203	5609878	77	113	72246
BC82A-7	683	39 39 17.2 S	145 50 54.8 E	401219	5609908	77	113	72256
BC82A-7	684	39 39 16.3 S	145 50 55.6 E	401236	5609937	77	113	723 7
BC82A-7	685	39 39 15.3 S	145 50 56.3 E	401252	5609967	77	113	72318
BC82A-7	686	39 39 14.4 S	145 50 57.0 E	401269	5609997	77	113	72328
BC82A-7	687	39 39 13.4 S	145 50 57.7 E	401286	5610026	76	113	72338
BC82A-7	688	39 39 12.5 S	145 50 58.4 E	401303	5610056	77	113	72349
BC82A-7	689	39 39 11.5 S	145 50 59.2 E	401320	5610085	77	113	72359
BC82A-7	690	39 39 10.6 S	145 50 59.9 E	401337	5610115	77	113	724 9
BC82A-7	691	39 39 09.6 S	145 51 00.7 E	401355	5610144	77	113	72419
BC82A-7	692	39 39 08.7 S	145 51 01.4 E	401372	5610173	77	113	72429
BC82A-7	693	39 39 07.7 S	145 51 02.2 E	401390	5610203	76	113	72440
BC82A-7	694	39 39 06.8 S	145 51 02.9 E	401407	5610232	76	113	72450
BC82A-7	695	39 39 05.9 S	145 51 03.7 E	401425	5610261	76	113	725 1
BC82A-7	696	39 39 04.9 S	145 51 04.4 E	401442	5610290	77	113	72511
BC82A-7	697	39 39 04.0 S	145 51 05.2 E	401460	5610319	77	113	72521
BC82A-7	698	39 39 03.1 S	145 51 05.9 E	401478	5610348	77	113	72531
BC82A-7	699	39 39 02.1 S	145 51 06.7 E	401495	5610377	76	113	72541
BC82A-7	700	39 39 01.2 S	145 51 07.4 E	401513	5610406	77	113	72552
BC82A-7	701	39 39 00.3 S	145 51 08.2 E	401531	5610435	77	113	726 2
BC82A-7	702	39 38 59.4 S	145 51 08.9 E	401548	5610463	77	113	72612

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LINE NAME	SHOT POINT	LATITUDE			LONGITUDE			EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-7	703	39	38	58.4	S	145	51	09.7	E	401566	5610492	77 113 72623
BC82A-7	704	39	38	57.5	S	145	51	10.5	E	401584	5610521	77 113 72633
BC82A-7	705	39	38	56.6	S	145	51	11.2	E	401601	5610549	77 113 72643
BC82A-7	706	39	38	55.7	S	145	51	12.0	E	401619	5610578	77 113 72653
BC82A-7	707	39	38	54.8	S	145	51	12.7	E	401636	5610606	77 113 727 3
BC82A-7	708	39	38	53.9	S	145	51	13.5	E	401654	5610634	77 113 72713
BC82A-7	709	39	38	52.9	S	145	51	14.2	E	401671	5610663	77 113 72722
BC82A-7	710	39	38	52.0	S	145	51	14.9	E	401688	5610691	77 113 72732
BC82A-7	711	39	38	51.1	S	145	51	15.7	E	401705	5610719	77 113 72742
BC82A-7	712	39	38	50.2	S	145	51	16.4	E	401722	5610747	77 113 72751
BC82A-7	713	39	38	49.3	S	145	51	17.1	E	401739	5610775	77 113 728 1
BC82A-7	714	39	38	48.4	S	145	51	17.8	E	401755	5610803	77 113 72811
BC82A-7	715	39	38	47.5	S	145	51	18.5	E	401772	5610831	78 113 72820
BC82A-7	716	39	38	46.6	S	145	51	19.2	E	401788	5610859	77 113 72830
BC82A-7	717	39	38	45.7	S	145	51	19.9	E	401804	5610887	77 113 72840
BC82A-7	718	39	38	44.8	S	145	51	20.6	E	401820	5610915	77 113 72849
BC82A-7	719	39	38	43.9	S	145	51	21.3	E	401836	5610943	76 113 72859
BC82A-7	720	39	38	43.0	S	145	51	21.9	E	401851	5610971	77 113 729 9
BC82A-7	721	39	38	42.1	S	145	51	22.6	E	401867	5610999	77 113 72918
BC82A-7	722	39	38	41.2	S	145	51	23.2	E	401882	5611027	77 113 72928
BC82A-7	723	39	38	40.3	S	145	51	23.9	E	401897	5611055	78 113 72938
BC82A-7	724	39	38	39.5	S	145	51	24.5	E	401912	5611082	77 113 72948
BC82A-7	725	39	38	38.6	S	145	51	25.2	E	401927	5611110	77 113 72957
BC82A-7	726	39	38	37.7	S	145	51	25.8	E	401941	5611138	77 113 730 7
BC82A-7	727	39	38	36.8	S	145	51	26.4	E	401955	5611166	77 113 73017
BC82A-7	728	39	38	35.9	S	145	51	27.0	E	401970	5611193	77 113 73026
BC82A-7	729	39	38	35.0	S	145	51	27.6	E	401984	5611221	77 113 73036
BC82A-7	730	39	38	34.1	S	145	51	28.2	E	401998	5611249	77 113 73046
BC82A-7	731	39	38	33.2	S	145	51	28.8	E	402011	5611276	77 113 73055
BC82A-7	732	39	38	32.3	S	145	51	29.4	E	402025	5611304	77 113 731 5
BC82A-7	733	39	38	31.4	S	145	51	30.0	E	402039	5611332	76 113 73115
BC82A-7	734	39	38	30.5	S	145	51	30.6	E	402053	5611359	77 113 73124
BC82A-7	735	39	38	29.6	S	145	51	31.2	E	402066	5611387	77 113 73134
BC82A-7	736	39	38	28.7	S	145	51	31.8	E	402080	5611415	77 113 73144
BC82A-7	737	39	38	27.9	S	145	51	32.3	E	402093	5611442	77 113 73153
BC82A-7	738	39	38	27.0	S	145	51	32.9	E	402106	5611470	76 113 732 3
BC82A-7	739	39	38	26.1	S	145	51	33.5	E	402120	5611498	77 113 73213
BC82A-7	740	39	38	25.1	S	145	51	34.0	E	402133	5611526	77 113 73223
BC82A-7	741	39	38	24.3	S	145	51	34.6	E	402147	5611553	77 113 73232
BC82A-7	742	39	38	23.4	S	145	51	35.2	E	402160	5611581	78 113 73242
BC82A-7	743	39	38	22.5	S	145	51	35.8	E	402174	5611609	77 113 73252
BC82A-7	744	39	38	21.6	S	145	51	36.4	E	402187	5611637	77 113 733 1
BC82A-7	745	39	38	20.7	S	145	51	37.0	E	402201	5611664	76 113 73311
BC82A-7	746	39	38	19.8	S	145	51	37.5	E	402214	5611692	78 113 73321
BC82A-7	747	39	38	18.9	S	145	51	38.1	E	402228	5611720	77 113 73330
BC82A-7	748	39	38	18.0	S	145	51	38.7	E	402241	5611748	77 113 73340
BC82A-7	749	39	38	17.1	S	145	51	39.3	E	402256	5611776	77 113 73350
BC82A-7	750	39	38	16.2	S	145	51	39.9	E	402269	5611804	77 113 73359
BC82A-7	751	39	38	15.3	S	145	51	40.5	E	402284	5611832	77 113 734 9
BC82A-7	752	39	38	14.4	S	145	51	41.1	E	402297	5611860	77 113 73419
BC82A-7	753	39	38	13.5	S	145	51	41.7	E	402312	5611888	77 113 73428
BC82A-7	754	39	38	12.6	S	145	51	42.3	E	402326	5611916	76 113 73438
BC82A-7	755	39	38	11.7	S	145	51	43.0	E	402341	5611944	76 113 73448
BC82A-7	756	39	38	10.8	S	145	51	43.6	E	402355	5611972	77 113 73458

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LINE NAME	SHOT POINT	LATITUDE	LONGITUDE	EASTING	NORTHING	DEPTH	DAY	TIME
BC82A-7	757	39 38 09.9 S	145 51 44.2 E	402370	5612000	76	113	735 7
BC82A-7	758	39 38 09.0 S	145 51 44.9 E	402385	5612028	77	113	73517
BC82A-7	759	39 38 08.1 S	145 51 45.5 E	402400	5612056	76	113	73527
BC82A-7	760	39 38 07.2 S	145 51 46.2 E	402415	5612084	77	113	73536
BC82A-7	761	39 38 06.3 S	145 51 46.9 E	402431	5612112	77	113	73546
BC82A-7	762	39 38 05.4 S	145 51 47.5 E	402446	5612140	76	113	73556
BC82A-7	763	39 38 04.5 S	145 51 48.2 E	402462	5612168	77	113	736 5
BC82A-7	764	39 38 03.5 S	145 51 48.8 E	402477	5612197	77	113	73615
BC82A-7	765	39 38 02.6 S	145 51 49.5 E	402493	5612225	77	113	73625
BC82A-7	766	39 38 01.7 S	145 51 50.2 E	402509	5612253	77	113	73634
BC82A-7	767	39 38 00.8 S	145 51 50.9 E	402525	5612282	77	113	73644
BC82A-7	768	39 37 59.9 S	145 51 51.6 E	402541	5612310	77	113	73654
BC82A-7	769	39 37 59.0 S	145 51 52.3 E	402557	5612339	76	113	737 3
BC82A-7	770	39 37 58.1 S	145 51 52.9 E	402573	5612367	77	113	73713
BC82A-7	771	39 37 57.1 S	145 51 53.6 E	402589	5612396	77	113	73723
BC82A-7	772	39 37 56.2 S	145 51 54.3 E	402605	5612424	77	113	73733
BC82A-7	773	39 37 55.3 S	145 51 55.0 E	402621	5612453	76	113	73742
BC82A-7	774	39 37 54.4 S	145 51 55.7 E	402637	5612481	77	113	73753
BC82A-7	775	39 37 53.5 S	145 51 56.4 E	402653	5612510	77	113	738 3
BC82A-7	776	39 37 52.5 S	145 51 57.1 E	402669	5612538	76	113	73813
BC82A-7	777	39 37 51.6 S	145 51 57.8 E	402686	5612567	77	113	73823
BC82A-7	778	39 37 50.7 S	145 51 58.5 E	402702	5612595	76	113	73834
BC82A-7	779	39 37 49.8 S	145 51 59.2 E	402718	5612624	76	113	73844
BC82A-7	780	39 37 48.8 S	145 51 59.9 E	402734	5612653	77	113	73854
BC82A-7	781	39 37 47.9 S	145 52 00.5 E	402750	5612682	76	113	739 4
BC82A-7	782	39 37 47.0 S	145 52 01.2 E	402766	5612710	77	113	73914
BC82A-7	783	39 37 46.1 S	145 52 01.9 E	402782	5612739	78	113	73925
BC82A-7	784	39 37 45.1 S	145 52 02.6 E	402798	5612768	76	113	73935
BC82A-7	785	39 37 44.2 S	145 52 03.3 E	402814	5612797	77	113	73946
BC82A-7	786	39 37 43.3 S	145 52 03.9 E	402829	5612826	77	113	73957
BC82A-7	787	39 37 42.3 S	145 52 04.6 E	402845	5612855	78	113	740 7
BC82A-7	788	39 37 41.4 S	145 52 05.3 E	402860	5612883	76	113	74017
BC82A-7	789	39 37 40.5 S	145 52 05.9 E	402875	5612912	77	113	74028
BC82A-7	790	39 37 39.6 S	145 52 06.6 E	402891	5612941	77	113	74039
BC82A-7	791	39 37 38.6 S	145 52 07.2 E	402906	5612970	77	113	74049
BC82A-7	792	39 37 37.7 S	145 52 07.9 E	402921	5612999	77	113	741 0
BC82A-7	793	39 37 36.8 S	145 52 08.5 E	402936	5613028	77	113	74110
BC82A-7	794	39 37 35.8 S	145 52 09.2 E	402951	5613057	77	113	74120
BC82A-7	795	39 37 34.9 S	145 52 09.8 E	402966	5613086	77	113	74130
BC82A-7	796	39 37 34.0 S	145 52 10.5 E	402981	5613115	77	113	74140

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