1992 McARTHUR RIVER SEISMIC SURVEY

EP 18, 23, 24, 33 PHASE 1
McARTHUR BASIN
NORTHERN TERRITORY

FINAL REPORT - OPERATIONS

by

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of

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for

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1. INTRODUCTION

The 1992 McArthur River Seismic Survey was carried out by Party 205 of Geo Systems Pty Ltd, 2 Mooney Place, O'Connor, Western Australia for Pacific Oil and Gas Pty Ltd of Melbourne, Victoria. 684.50 kms of 275 fold with 5.0 m CDP interval, 550 channel reflection profiling was recorded between 1st June 1992 and 1st September, 1992.

This report covers various field operations relating to line clearing, drilling, velocity survey, chaining and survey crews, recording and processing.

1.1 Geographical Area

The seismic survey was located in the McArthur Basin east of Daly Waters and Dunmarra N.T in Permits EP 18,23,24,33 of the Northern Territory. These permits are operated by Pacific Oil & Gas Pty Ltd. The approximate area is marked on the Australian map sheet (See Plate "A").

1.2 Weather

The weather conditions were generally hot and humid. The temperature ranged between 25°c in the morning to 35°c in the afternoon. No rain was recorded during the survey.

1.3 Terrain

The survey was situated approximately east of Daly Waters and Dunmarra, Northern Territory. Large areas of the prospect were mainly flat heavily timbered, with clay pans, gullys and rocks in parts. The soils in the area were soft and sandy with clay and bull dust in some parts.

1.4 Logistics

The crew was accommodated at four different Geosystems field camp locations throughout the survey. Supplies were obtained in Perth and Katherine and transported by air and Geosystems supply truck to the survey area. Fuel supplies were obtained from the Ampol Depot in Katherine. Access to the area was along Stuart Highway, Station Roads and existing seismic lines.

Daily communications were by satellite iterra dish supplied by Pacific Oil and Gas pty Ltd to Geosystems Perth office. Tapes were directly shipped to Digital Exploration in Brisbane for processing.

1.5 Recording

Experimental parameter testing was conducted on the 1st, 2nd and 3rd June 1992 on Line MC 92 - 83. Production recording commenced on the 4th June ending on the 31st August, 1992. A total of 684.50 kms of seismic data was recorded. The program consisted of 16 lines.

There were 512.50 recording hours, 23.75 hours daily testing, 140.75 hours travel time, 84.75 hours equipment downtime and/or lost recording time, 274.50 hours of other time involved with line changes, camp moves and experimental testing for a total of 1,036.25 hours. The average rate of production was 0.7194 kms per hour or 7.4403 kms for a 10.3424 hour production day. This time includes travel time, daily testing, other time (excluding downtime).

2. SURVEYING

2.1 Advance Party

Geosystems surveyors J. Jeffries and A. Brett arrived at Daly Waters NT on 27th May, 1992. Line clearing started on 29th May, 1992 and finished on 8th July, 1992. Chaining was started on 30th May and completed on 12th August, 1992. Surveying commenced on the 30th May and completed on 26th August, 1992.

2.2 Datum Control

Due to the large area of the Prospect, several of the lines had different take-off Datums (see closure sketches). Total kms 684.500. Most of the Misties were pretty large, most likely a combination of numerous take-offs with different Datum origins, and most recently a problem with line of sight due to environmental line clearing. (See closure sketch)

2.3 Survey Control

Horizontal control was maintained by the use of solar observations along the lines at regular intervals, with ties made to current and previously established permanent markers. Reciprocal angle levelling was used for vertical control.
An inexperienced line clearing crew, who refused to stop using compass bearings in close proximity of earthmoving equipment, created numerous bends which could have been averted if surveyors advice had been needed (i.e. keep line of sight by pegs but in at initial points, not use a compass).

Only two lines did not have correctional bends put in them, the rest had to have between 2 and 4 corrections to bring them back on line. The distance these lines were out at way points, varied from 250 meters to 550 meters.

Permanent markers were placed at the start, finish, bends and intersections of lines. The PM's consisted of half a star iron picket driven to ground level with a witness post, both set in concrete with an aluminium tag bolted to the witness post marked with the relevant line and VP numbers. The vibrator points and

intermediate stations were marked with a pin marker varying from 12.5 meters to 10.0 meters in distance.

Survey equipment used:
- 1 x Nikon Total Station
- 1 x Wild T16 Theodolite
- 2 x Wild T1 Theodolites
- 2 x Sokkish Red 1A EDM's
- 2 x HP 41 41 CX calculators
- Various prisms and tripods
- 2 x Toyota pickups

2.4 Line Clearing

The line clearing was carried out by Dugald Fisher under contract to Pacific Oil and Gas.

Equipment consisted of :
- 2 x D 6 Dozers
- 1 x Log Skidder
- 1 x Bucket Loader (Modified)
- 4 x Land Cruisers
- 4 x Operations
- 4 x Peggers

3. PERMITTING

All permitting had been completed by Mr. Les Collins, representative for Pacific Oil & Gas Pty Limited, prior to the commencement of the seismic survey. Relations were fair with local land owners.

4. RECORDING

4.1 Experimental

The experimental program was conducted on Tuesday the 2nd and Wednesday the 3rd June 1992 by Geo Systems Pty. Ltd. for Pacific Oil and Gas Pty. Ltd. at the commencement of their 1992 McArthur Basin Seismic Survey - Phase 1. The program consisted of 16 seismic lines spread across EPs 18, 23, 24 and 33 crossing mainly north and south of the Carpentaria Highway east of Daly Waters in the McArthur Basin area of the Northern Territory.

The principle aim of the experimental program was to conduct a comparison of different geophone array lengths [10m Array vs 20m Array] and to test and compare the spatial resolution and S/N properties of utilising 1, 2, 3 or 4 Vibroseis units online. To facilitate this, Line MC92-83 was selected as the desired Test Line and two receiver lines A and B were laid out parallel with each other as follows:

Line A: SP 3234 (North) to 2784 (South) - Distance 4.50 Kms
10.0 metre V.P. Interval
10.0 metre Group Interval
Recorded with 450 traces Live
12 geophones over 10 metres with 0.83 metre phone spacing
Geophone array centred 5.0 metres South of Station peg
Offset Range: 0-4500 metres maximum
Max CDP Fold: 225 Fold with 5.0 metre CDP interval

Line B: SP 3234 (North) to 2784 (South) - Distance 4.50 Kms
10.0 metre V.P. Interval
10.0 metre Group Interval
Recorded with 450 traces Live
12 geophones over 20 metres with 1.67 metre phone spacing
Geophone array centred 10.0 metres South of Station peg
Offset Range: 0-4500 metres maximum
Max CDP Fold: 225 Fold with 5.0 metre CDP interval

The fundamental parameters of number of channels, group interval, V.P. interval, source effort and stack fold had been decided prior to survey commencement after consideration of the data recorded previously through the area.

The infield experimental program was coordinated by Mr Stephen Tobin of Geo Systems Pty. Ltd. and supervised and overseen by Mr Koya Suto and Mr Robert Castleden both of Pacific Oil and Gas Pty. Ltd. Mr Bill Foster, an independant consultant also oversaw the testing operation.

On the morning of Tuesday 2nd June the above experimental lines A and B were laid out on Line MC92-83. At approximately 10.00am after similarities were completed on a 6-54 Hz Monosweep shown below, Test Lines A and B were recorded with a 10.0 metre VPI via the 450 receivers laid out of Lines A and B using Three (3) Vibroseis units and a 31.0m source array. Recording commenced at VP 3234 shooting into 275 channels of receivers from VP 3234 away to VP 2960 [2750 metres]. The off-end spread was then rolled into a split spread in the normal fashion. The vibes continued on recording from VP 3234 through to VP 2935 [3.00 kms].

Recording of this first test was completed at 4.15pm and the vibes moved back up to VP 3234 where the recording commenced again utilising One (1) vibrator only. Once again the vibes recorded 600 profiles [300 from each of Lines A and B] from VP 3234 through to VP 2935. This recording commenced at 4.30pm and was completed at 8.50pm on Tuesday night.

The following morning on Wednesday 3rd June the four Vibroseis units were put through a Point Source Phase Test where they individually vibrated into the twin test spreads and the shot records recorded on tape. Vibes 1, 4, 2 and 3 were used and then Vibe 1 was repeated at the end of the test.

During field processing at night a particular offset trace is selected from each of the five tests and plotted next to each other. Apart from the expected random noise effects the traces were identical with all refractions and reflectors very similar in amplitude. This indicates that all vibes are of the same polarity and are outputing approximately the same level of drive from each of the Baseplates.

Following the Phase Test, Four (4) vibes were set up on line and the same 3.00 kms recorded from VP 3234 through to VP 2935. The two Test Lines A and B with 10 metre and 20 metre Geophone Arrays were recorded into once again commencing at 8.30am and finishing at 1.40pm.

Finally the two Test Lines were recorded into using Two (2) vibes only from VP 3234 through to VP 2935. This recording started at 2.00pm and was completed by 6.30pm on Wednesday evening.

File No.	Line No.	V.P.	Frequency	No. Comps	Sweep Length	Pad-Pad Spacing	Moveup	Source Array	Drive Level	No. Vibe
	Tuesday 2nd June 1992									
	Three (3) Vibes On Line									
1	A	3234	6-54 Hz	2	6.0sec	12.0m	5.0m	29.0m	Force	3
2	B	3234	As Above							
3	A	3234	6-54 Hz	2	6.0sec	12.0m	5.0m	29.0m	Force	3
4	B	3234	As Above							
	"		"			"				
	"		"			"				
599	A	2935	6-54 Hz	2	6.0sec	12.0m	5.0m	29.0m	Force	3
600	B	2935	As Above							

File No.	Line No.	V.P.	Frequency	No. Comps	Sweep Length	Pad-Pad Spacing	Moveup	Source Array	Drive Level	No. Vibe
	One (1) Vibe On Line									
1	A	3234	6-54 Hz	2	6.0sec	0m	5.0m	5.0m	Force	1
2	B	3234	As Above							
3	A	3233	6-54 Hz	2	6.0sec	0m	5.0m	5.0m	Force	1
4	B	3233	As Above							
	"		"			"				
	"		"			"				
599	A	2935	6-54 Hz	2	6.0sec	0m	5.0m	5.0m	Force	1
600	B	2935	As Above							
	Wednesday 3rd June 1992									
	Four (4) Vibes On Line									
1	A	3234	6-54 Hz	2	6.0sec	12.0m	5.0m	41.0m	Force	4
2	B	3234	As Above							
3	A	3233	6-54 Hz	2	6.0sec	12.0m	5.0m	41.0m	Force	4
4	B	3233	As Above							
	"		"			"				
	"		"			"				
599	A	2935	6-54 Hz	2	6.0sec	12.0m	5.0m	41.0m	Force	4
600	B	2935	As Above							
	Two (2) Vibes On Line									
1	A	3234	6-54 Hz	2	6.0sec	12.0m	5.0m	17.0m	Force	2
2	B	3234	As Above							
3	A	3233	6-54 Hz	2	6.0sec	12.0m	5.0m	17.0m	Force	2
4	B	3233	As Above							
	"		"			"				
	"		"			"				
599	A	2935	6-54 Hz	2	6.0sec	12.0m	5.0m	17.0m	Force	2
600	B	2935	As Above							

With the recording into the two receiver lines A and B for both 3 and 1 Vibe completed on Tuesday evening Four Field stacks were generated through the GEOCOR/VISTA Processing System on Tuesday night. The GEOCOR System was used for Coordinate generation, Mute and Velocity Analysis and Stacking while the Stack tapes were then read into the VISTA System for Post Stack Deconvolution, Filtering, Scaling and Plotting in both Colour and a Black/Red Wiggle Trace display format.

Generally these showed that there was very little difference between the S/N and Signal penetration from 3 Vibes versus that seen from 1 Vibe. It was decided based on arguments of spatial resolution that the use of 1 or 2 Vibes on line may be ideal because signal penetration would be adequate with a very short Point Source or 10 metre Source Array being generated.

It was noted from the field stacks also that very little benefit in terms of noise cancellation accrued from spreading the twelve (12) Geophones over 20 metres as opposed to laying them out over 10 metres. Based on these results it was decided that once again, in an effort to reduce spatial degradation of both Refractions and Reflection data, the shorter 10 metre Geophone Array would be used throughout the survey.

The data recorded on Wednesday was similarly processed through the GEOCOR/VISTA System and readily confirmed that the preferred option in terms of S/N and Spatial Sampling [Refraction and Reflection] was to use One or Two Vibes on Line and a short 10 metre Geophone Array.

With the experimental program completed the production spread was laid out from the Northern end of Line MC92-83 toward the South. The vibrators were driven down to Station 2934 and recording commenced at approximately 12.20pm on Thursday 4th June 1992.

Data from the Start of Line at VP 3234 had already been recorded during the Experimental Program and could be used for the data processing of this line thus there was no need to Re-record from VP 3234 down to VP 2935. The final acquisition parameters are summarised over the page.

4.2 1992 McArthur Basin Seismic Survey - Recording Parameters

Energy Source:	2 LRS311 Truck Mounted Vibroseis Units Online [1 on Operational Standby]
Vibrator Station Interval:	10.0 metres
Vibrator Array:	12.0 metres Stacked
Vibrator Array Location:	Centred on the V.P. flag
Receivers:	12 X L21A 10Hz Geophones per Group
Receiver Interval:	10.0 metres
Receiver Array:	10.0 metres [12 phones with 0.83m spacing]
Receiver Array Location:	Centred midway between stations ie. 5.0 metres offset in the direction of line layout.
Sweep Length:	6 seconds
Sweep Type:	Linear Upsweeps
Number of Composites:	2
Monosweep Frequencies:	6-54 Hz
Sweep Taper:	250 msec
Vibrator Drive Level:	Force Control with Ground Force Phase Lock
Vibrator Spacing:	12.0 metres Pad-Pad with 2 vibes
Vibrator Moveup:	Stacked Shots
No. of Channels:	550
Spread Geometry:	2750-0-2750 metres
Channel Geometry:	1 - 275 - 276[V.P.location] - 550
Fold:	275 Fold with 5.0m CDP's
Record Length:	3.0 seconds
Correlation Sample Rate:	2 milliseconds
Written to Tape S.R.:	4 milliseconds

RECORDING INSTRUMENT PARAMETER SUMMARY

CLIENT:	PACIFIC OIL AND GAS PTY. LTD.
SURVEY:	1992 McARTHUR BASIN SEISMIC SURVEY
AREA:	McARTHUR BASIN - NORTHERN TERRITORY
LINE NO:	MC92-83
RECORDING DATES:	4TH - 8TH JUNE 1992 INCLUSIVE
SEISMIC CONTRACTOR:	GEO SYSTEMS PTY. LTD. - PARTY 205
FIRST V.P. ON LINE:	2934
LAST V.P. ON LINE:	100
FIRST STATION ON LINE:	2933.5 [STATION 2934 - 5.0M SOUTH]
LAST STATION ON LINE:	99.5 [STATION 100 - 5.0M SOUTH]
TAPE NUMBERS:	PAC920001 TO PAC9200--
RECORDING INSTRUMENT:	GEOCOR IV 1024 CHANNEL ACQUISITION SYSTEM
NO. RECORDING CHANNELS:	550 - SYMMETRIC SPLIT SPREAD
CHANNEL GEOMETRY:	1 - 276 [V.P] - 550 *CHECK OBSERVERS LOG*
OFFSET RANGE:	2750 - 0 - 2740 METRES
STACK FOLD:	275 FOLD WITH 5.0 METRE CDP INTERVAL
SWEEP LENGTH:	6.0 SECONDS
SWEEP TYPE:	LINEAR UPSWEEPS
NO. OF COMPOSITES PER V.P.:	2
SWEEP FREQUENCIES:	6-54 HZ MONOSWEEPS
CORRELATED RECORD LENGTH:	3.0 SECONDS
CORRELATION TYPE:	ZERO PHASE USING SIGN-BIT PILOT AND SIGN BIT RECORD - CORRELATED 16 BIT INTEGER ON TAPE
CORRELATION SAMPLE RATE:	2 MILLISECONDS
WRITTEN TO TAPE SAMPLE RATE:	4 MILLISECONDS

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RECEIVER PARAMETER SUMMARY

CLIENT:	PACIFIC OIL AND GAS PTY. LTD.
SURVEY:	1992 McARTHUR BASIN SEISMIC SURVEY
AREA:	McARTHUR BASIN - NORTHERN TERRITORY
LINE NO:	MC92-83
RECEIVER TYPE:	L21A 10 HZ GEOPHONES
GROUP INTERVAL:	10.0 METRES
NO.OF RECEIVERS:	12 GEOPHONES [2 STRINGS OF 6 PHONES EACH IN SERIES WITH STRINGS CONNECTED IN PARALLEL]
RECEIVER ARRAY:	10.0 METRES [ACTUALLY 9.16 METRES - 12 PHONES WITH 0.83 METRE PHONE SPACING]
RECEIVER ARRAY LOCATION:	CENTRED MIDWAY BETWEEN STATIONS - OFFSET 5.0 METRES IN DIRECTION OF LINE LAYOUT
RECEIVER LAYOUT:	LINEAR INLINE WITH NO OVERLAP - CONTINUOUS GEOPHONES
LINE RECORDING DIRECTION:	NORTH [HIGH NO.S] TO SOUTH [LOW NO.S]
NO. RECORDING CHANNELS:	550 - SYMMETRIC SPLIT SPREAD
CHANNEL GEOMETRY:	1 - 276 [V.P] - 550 *CHECK OBSERVERS LOG*
OFFSET RANGE:	2750 - 0 - 2740 METRES
CENTRE GAP:	NO GAP - CONTINUOUS LIVE SPREAD
DISTANCE FROM VP TO CENTRE OF TRACE 1:	METRES DIRECTION: NORTH
DISTANCE FROM VP TO CENTRE OF TRACE 275:	METRES DIRECTION: NORTH
DISTANCE FROM VP TO CENTRE OF TRACE 276:	METRES DIRECTION: SOUTH
DISTANCE FROM VP TO CENTRE OF TRACE 550:	METRES DIRECTION: SOUTH

SOURCE PARAMETER SUMMARY

CLIENT:	PACIFIC OIL AND GAS PTY. LTD.
SURVEY:	1992 McARTHUR BASIN SEISMIC SURVEY
AREA:	McARTHUR BASIN - NORTHERN TERRITORY
LINE NO:	MC92-83
SOURCE TYPE:	LRS311 VIBRATOR UNITS
VIBRATOR POINT INTERVAL:	10.0 METRES
NO.OF VIBRATORS:	TWO (2) LRS311 VIBRATOR UNITS MOUNTED ON PAYSTAR 5000 6X6 TRUCKS [TWO (2) UNITS ON OPERATIONAL STANDBY
SOURCE ARRAY:	12.0 METRES STACKED
VIBE SPACING:	12.0M PAD TO PAD
VIBE MOVEUP:	NO MOVEUP - STACKED SHOTS
SOURCE ARRAY LOCATION:	CENTRED ON THE V.P. PEG LOCATION
SOURCE LAYOUT:	LINEAR INLINE
SWEEP LENGTH:	6.0 SECONDS
SWEEP TYPE:	LINEAR UPSWEEPS
NO. OF COMPOSITES PER V.P.:	2
SWEEP FREQUENCIES:	6-54 HZ MONOSWEEPS
AMPLITUDE TAPER:	250 MSEC TAPER TO FULL POWER
CORRELATED RECORD LENGTH:	3.0 SECONDS
VIBE ELECTRONICS:	PELTON MODEL 5 ADVANCE I
CORRELATION TYPE:	ZERO PHASE USING SIGN-BIT PILOT AND SIGN BIT RECORD - CORRELATED 16 BIT INTEGER ON TAPE
CORRELATION REFERENCE:	TRUE REFERENCE FROM PELTON ENCODER
PHASE SHIFT:	RECORDER ENCODER PHASE SHIFT IN 0 DEGREE POSITION
CORRELATION SAMPLE RATE:	2 MILLISECONDS
WRITTEN TO TAPE SAMPLE RATE:	4 MILLISECONDS
VIBRATOR HOLD-DOWN WEIGHT:	40600 LBS
VIBRATOR PEAK FORCE:	30500 LBS
PHASE LOCKING:	GROUND FORCE PHASE LOCK
AMPLITUDE DRIVE SYSTEM:	AUTOMATIC FORCE CONTROL ON

4.3 Recording Statistics

Line Number	92 - 83	92 - 123	92 - 281	92 - 100	92 - 251
VP to VP [a]	2934 - 100	101 - 3094	100 - 2680	100 - 2720	100 - 8600
Geophone to Geophone [b]	2934 - 100	100 - 3094	100 - 2680	100 - 2720	100 - 8600
Number of Profiles	2835	2994	2570	2610	8441
Number Skipped	0	1	11	11	60
Total kms [a]	28.340	29.930	25.800	26.200	85.000
Total kms [b]	28.340	29.940	25.800	26.200	85.00
Record Hours	30.25	30.25	27.50	23.75	79.50
Test Time	2.00	1.25	1.00	0.75	3.00
Down Time	4.00	5.00	6.25	3.00	6.00
Travel Time	14.75	9.75	3.25	3.25	12.75
Other Time	41.25	7.25	10.00	3.50	28.25
Camp Move			14th June		25th June
Dates Recorded	1st to 8th June 1992	9th to 13th June 1992	13th to 17th June 1992	17th to 20th June 1992	24th,30th June 1992 1st,2nd June 1992

4.3 Recording Statistics

Line Number	92 - 202	92 - 104W	92 - 93	92 - 104	92 - 43
VP to VP [a]	1082 - 100	101 - 2655	100 - 3334	100 - 6860	6640 - 1020
Geophone to Geophone [b]	1082 - 100	100 - 2656	100 - 3334	100 - 6860	6640 - 1020
Number of Profiles	983	2527	3134	6724	5620
Number Skipped	0	30	101	37	1
Total kms [a]	9.820	25.540	32.340	84.500	70.250
Total kms [b]	9.820	25.560	32.340	84.500	70.250
Record Hours	8.75	16.00	29.50	47.75	39.00
Test Time	0.50	0.75	1.25	2.75	2.25
Down Time	0	1.50	2.00	13.50	15.50
Travel Time	0.75	2.50	10.25	21.75	10.25
Other Time	3.75	12.25	10.50	33.75	16.50
Camp Move				15th July	
Dates Recorded	2nd, 3rd July 1992	4th,5th,6th July 1992	7th to 12th July 1992	12th to 22nd July 1992	23rd to 30th July 1992

4.3 Recording Statistics

Line Number	92 - 53	92 - 61	92 - 63	92 - 73	92 - 73N
VP to VP [a]	100 - 5224	101 - 2330	4208 - 120	100 - 7300	100 - 1250
Geophone to Geophone [b]	100 - 5224	100 - 2330	4208 - 120	110 - 7300	100 - 1250
Number of Profiles	5123	2155	4078	7179	1058
Number Skipped	2	76	11	12	93
Total kms [a]	64.050	22.300	51.100	71.900	11.500
Total kms [b]	64.050	22.300	51.100	71.900	11.500
Record Hours	37.25	22.00	41.00	47.75	8.75
Test Time	1.75	1.00	1.50	2.50	0.50
Down Time	3.50	2.50	7.00	8.50	0.75
Travel Time	7.75	10.75	6.50	15.50	4.25
Other Time	23.25	9.50	13.50	37.25	6.75
Camp Move					
Dates Recorded	30,31st Jul 1st to 5th August 1992	6th, 7th, 8th, 9th August 1992	9th to 15th August 1992	16th to 25th August 1992	25th, 26th, 27th, August 1992

4.3 Recording Statistics

Line Number	92 - 102				
VP to VP [a]	100 - 3772				
Geophone to Geophone [b]	100 - 3772				
Number of Profiles	3671				
Number Skipped	2				
Total kms [a]	45.900				
Total kms [b]	45.900				
Record Hours	25.50				
Test Time	1.00				
Down Time	5.75				
Travel Time	5.25				
Other Time	14.25				
Camp Move					
Dates Recorded	27th to 31st August 1992				

5. FIELD PROCESSING

5.1 Introduction

The 1992 McArthur Seismic Survey comprised of 16 lines totalling 684.50 kms. Processing of the data was conducted over a 10 hour per day period from the commencement of the survey. The objective of the field processing was to provide for the immediate interpretation of testing parameters, quality control of all acquisition data and to complete a standard processing sequence over all lines on a daily basis.

5.2 Testing

Testing for the McArthur survey commenced on the 2nd of June 1992 and was completed on the 5th June, 1992. Testing comprised of eight tests over the same area including both 10 and 20 metre arrays with one to four vibrators on line.

Test 1: 2 x 6-54Hz 6.0 Sec 3 Vibe 10M Pad to Pad
Test 2: 2 x 6-54Hz 6.0 Sec 3 Vibe 12M Pad to Pad
Test 3: 2 x 6-54Hz 6.0 Sec 1 Vibe 10M Pad to Pad
Test 4: 2 x 6-54Hz 6.0 Sec 1 Vibe 12M Pad to Pad
Test 5: 2 x 6-54Hz 6.0 Sec 4 Vibe 10M Pad to Pad
Test 6: 2 x 6-54Hz 6.0 Sec 2 Vibe 10M Pad to Pad
Test 7: 2 x 6-54Hz 6.0 Sec 2 Vibe 12M Pad to Pad
Test 8: 2 x 6-54Hz 6.0 Sec 4 Vibe 12M Pad to Pad

The processing of each Test was completed with identical stacking velocities and post stack sequence. Both color amplitude and wiggle trace / variable area plots were produced plus corresponding power spectra plots. A "Point Source" test was conducted prior to production recording to compare polarity and phase for each of the vibrators and this was repeated intermittently throughout the permit in conjunction with vibroseis simarlarity "Vibrocheck" run at two too six hourly intervals.

5.3 Recording Parameter Summary

Line Number	Station Interval	VP Interval	Sweep Number	Recording Channels
MC92 - 43	12.5m	12.5m	1	480
MC92 - 53	12.5m	12.5m	1	480
MC92 - 61	10.0m	10.0m	2	550
MC92 - 63	12.5m	12.5m	2	480
MC92 - 73	10.0m	10.0m	1	550
MC92 - 73N	10.0m	10.0m	2	550
MC92 - 83	10.0m	10.0m	2	550
MC92 - 93	10.0m	10.0m	2	550
MC92 - 100	10.0m	10.0m	2	550
MC92 - 102	12.5m	12.5m	1	480
MC92 - 104	12.5m	12.5m	1	480
MC92 - 104W	10.0m	10.0m	1	550
MC92 - 123	10.0m	10.0m	2	550
MC92 - 202	10.0m	10.0m	1	550
MC92 - 251	10.0m	10.0m	2	550
MC92 - 281	10.0m	10.0m	2	550

5.4 Quality Control

The aims of quality control for this contract consisted of:

1. Maintenance of acquisition data and tape quality on a daily basis.
2. Ensuring the Observers logs were correct and consecutive.
3. The monitoring of shot records through full scale plots of selected profiles.
4. The provision of secondary quality control on all survey data.

5.5 Processing Review

Co-ordinate Information:

All surveyors listings were transferred into a co-ordinate tape which listed the co-ordinate and elevation for each station on the lines. Values are entered for various stations and then interpolated. As a final quality control check an elevation profile and co-ordinate map line trace is completed.

Mute & Velocity Analysis:

Mute and velocity analysis was conducted at approximately 10 to 20 kms interval. For mute analysis and arbitrary 3-file stack is produced using a velocity function from data previously processed. For velocity analysis a full fold stack section of 30 CDP's is produced whereby the velocity increment is increased and the best event was matched with its appropriate velocity.

5.6 Raw Brute Stack

A raw brute stack was completed for all lines incorporating velocity, mute and static analysis. To facilitate the need for 'next day' observation of previous acquisition all field stacks were completed with a field file stacking increment of 2, whereby every second file was used as input and of 3, whereby every third file was used as input. This in effect produces a stack section at a reduced fold of one half and of one third of the full fold. After consultation with the client representative, stack sections were restricted to a depth of 1.5 secs to ensure the processing of stack sections kept up with acquisition.

5.7 Post Stack Analysis

A post stack processing sequence was thoroughly tested during the experimental phase of the seismic survey including Bandpass Frequency Filters, Predictive Deconvolution, Trace Weighted Mix and AGC Scaling.

Vista 65 Analysis

The Vista 65 desktop seismic processing system with colour amplitude plotting was incorporated into field processing. The speed and flexibility of the system for analysis of testing parameters including FK Spectrum, Source and Receiver Array

calculation, Velocity and Post Stack analysis was of benefit when operating within time constraints. When combined with the "on the fly" stacking capacities of the Geocor IV field processing capacities were enhanced.

Exabyte Tape Copy

The 9 Track acquisition tapes were copied to Geo Systems Exabyte high capacity data storage system. The system incorporating the Exb-8200T 8mm exatape cartridge tape subsystem allowed for increased security of data in transport and storage, further quality control and increased flexibility in final processing.

5.8 Field Processing Sequence

The standard processing sequence consisted of:

1. The construction of co-ordinate tape
   a. Elevation profile plot.
   b. Map profile plot.
   c. Ukoa format upload to floppy disc.
2. Mue Analysis
   a. Calculation of NMO reflection verses noise and refraction separation.
3. Velocity Analysis
   a. Calculation of correct velocity verses multiple event or inversion.
4. Raw Brute Stack
   a. Incorporating all velocity analysis, mute elevation static correction.
5. Vista 65 Analysis
   a. Testing of all post stack sequences in real time.
6. Post Stack
   a. Bandpass frequency filter of 8 12 50 54Hz @ 72Db Slope.
   b. Predictive Deconvolution @ 80Msec operator.
   c. Bandpass frequency filter of 8 12 50 54Hz @ 72Db Slope.
   d. AGC scaling @ 400Msec Window.
   e. Trace Weighted Mix of 3 @ 33 66 99%
   f. Final Plot @ 2 Scales Colour amplitude plus Wt/Va.

7. Exabyte Copy
   a. Raw copy 9 track production tape to 8mm Data Cartridge.
   b. Quality control though selected plots.
8. Stack Data Copy
   a. Magnetic tape copy to floppy disc in Sgy format.

5.9 Data Transmittal

Field tapes were sent to Pacific Oil and Gas Pty Ltd (Alice Springs) and Exatape 8mm cartridge data copy of field acquisition tapes to Digital Exploration Ltd (Brisbane) accompanied by relevant field records. Survey information in a Ukoa format plus uphole information was also delivered to Pacific Oil and Gas Pty Ltd (Melbourne).

		STATICS APPLICATION						VELOCITY ANALYSIS	POST STACK APPLICATION			COMMENTS
			Uphole			Residual						
Line No	Completion Date	Elevation	Real	Dummy	33	65	129	Interval	Velocity Filter	Frequency Filter	Sum 2xl	
92 - 83	8/6/92	✓						4 km		6-8-52-54 Hz	✓	Post stack filter and sum via VISTA
92 - 123	14/6/92	✓						5 km		✓	✓	
92 - 281	18/6/92	✓						4 km		✓	✓	
92 - 100	20/6/92	✓						6 km		✓	✓	
92 - 251	2/7/92	✓						5 km		✓	✓	
92 - 202	3/7/92	✓						4 km		✓	✓	
92 - 104W	7/7/92	✓						5 km		✓	✓	
92 - 93	11/7/92	✓						6 km		✓	✓	
92 - 104	22/7/92	✓						6 km		✓	✓	
92 - 43	30/7/92	✓						6 km		✓	✓	
92 - 53	5/8/92	✓						5 km		✓	✓	
92 - 61	9/8/92	✓						6 km		✓	✓	
92 - 63	15/8/92	✓						6 km		✓	✓	
92 - 73	25/8/92	✓						5 km		✓	✓	
92 - 73N	27/8/92	✓						5 km		✓	✓	
92 - 102	31/8/92	✓						6 km		✓	✓	

6. PERSONNEL LIST

Party Manager	:	E. Bowron
Assistant Party Manager	:	L. Willmott
Senior Observers/ATV Repair	:	B. Carter, M. Bokor
Processors	:	T. Featherby, R. Pearce, K. Sheldon
Senior Surveyor	:	M. Storer, J. Jeffery
Surveyor	:	A. Brett
Vibrator Technician	:	S. MacDonald, R. Bradley
Senior Mechanic	:	I. Bowron, D. Jaggers
Asst Mechanic	:	P. MacDonald
Cable Repair	:	C. Catoni
Geophone Repair	:	J. Fing
Line Boss	:	E. Williams
Box Truck	:	Dave Casey
Supply Driver	:	T. Hoyle
Cook	:	W. Curtis
Instrument Engineer	:	D. Parker

Plus 28 Field Assistants.

7. WEATHERING CONTROL

7.1 Recording

Uphole weathering recording was carried out by Velocity Data Pty Ltd of 5 Westcombe Street, Darra, Queensland. (For logging information refer to Final Report).

7.2 Drilling

The uphole drilling was carried out by Thompson Drilling of Adelaide, South Australia.

Equipment used:

- One (1) T1000 rotary drilling rig mounted on Man 8x6 truck with twin 5x6 mud pumps, 420 CFM 170 PSI air-compressor, 220 metres of drill rods.
- One (1) Man 6x6 9000 litre water truck.
- One (1) Mack 6x4 9000 litre water truck.
- One (1) 1985 4x4 Toyota Land Cruiser.

Down Hole Hammers:

- One (1) SSB Codan radio with communications to Adelaide, Millicent and Pine Creek NT bases.
- One (1) serf contained camp with 15KVA generator.

APPENDIX "A"

TECHNICAL EQUIPMENT

1.1. Recording Equipment

- Geosystems GEOCOR IV 1024-Channel Seismic Data Acquisition and Processing System including :-
  - CRT Terminal
  - Diablo Printer
  - Benson-Varian Electrostatic Plotter
  - Three (3) Kennedy 1600 BPI Tape Drives
  - Real Time Correlator
  - Pelton Advance Encoder
- Sixty (60) Array Terminals Units
- One hundred (100) data cables, 230 metres long, (750 feet) with eight (8) takeouts spaced at 25.0 metres (85 feet) apart, centre core of coax cable for data transmission of geophone signals.
- Nine hundred (900) geophone strings, each string with six (6) Mark Products L21, 10 Hz geophones per string spaced at five (5) metre (20 feet) intervals.
- Four (4) 280 metres (1000 feet) coax jumper cables.
- Array terminal, cable and geophone repair facilities, including a Geosource 'grip' geophone checker, line simulators, geophone shake table, truck simulators and assorted test equipment.
- Two (2) "Vibracheck" Vibroseis QC instrument.
- Nineteen (19) Motorola Mitrex 25 or equivalent FM radios for communication along the line.

1.2 Source Equipment

- Five (5) Litton LRS 311 vibrator units mounted on 1982 Internation Paystar 6x6 trucks. Each unit equipped with Pelton Model V Advance I Vibrator Electronics capable of correlating various individual sweep frequencies and composition up to a total of eight (8) different sweeps. This process is trade marked as Varisweep. Four (4) vibrators operating on the line and one on operational standby.

- Vibrators are equipped with Force Control and Ground Force Phase Locks.

1.3 Office equipment

- Two (2) VHF/SSB radio (110 watt output) capable of communicating with Geosystems field units and Perth base and all subcontractors mobile units. The radio frequencies included are 2020 kHz, 4010 kHz, 5300 kHz, 6850 kHz, 10177 kHz and 15627 kHz.
- One (1) Motorola Mitrex or equivalent FM radio.
- Calculator and assorted drafting equipment.
- Assorted forms, etc.
- Photocopier.

1.4 Vehicles

- One (1) Ford F-700 four wheel drive recording truck (1982) equipped with an air-conditioned recording cab and power generator set.

No.	Year	Model	Type
- One (1)	[1984]	HJ75 Toyota 4x4	Telemetry unit.
- One (1)	[1984]	HJ75 Toyota 4x4	Telemetry unit.
- One (1)	[1984]	HJ75 Toyota 4x4	Line unit.
- One (1)	[1988]	HJ75 Toyota 4x4	Party Manager unit.
- One (1)	[1985]	HJ75 Toyota 4x4	Personnel carrier.
- One (1)	[1985]	HJ75 Toyota 4x4	Personnel carrier.
- One (1)	[1985]	HJ75 Toyota 4x4	Mechanics unit.
- One (1)	[1985]	HJ75 Toyota 4x4	Auxiliary unit.
- One (1)	[1982]	Isuzu 4x4	Vibrator service unit.
- Two (2)	[1982]	Isuzu 4x4	Cable/geophone units.
- One (1)	[1982]	Isuzu 4x4	Generator unit (two 70 kva Generators).
- One (1)	[1982]	Isuzu 4x4	Water truck with 4500L water tank.
- One (1)	[1982]	Isuzu 6x6	Fuel truck with 8000L fuel tanks.
- One (1)	[1982]	Isuzu 4x4	Auxiliary truck.
- One (1)	[1986]	Hino 4x4	Supply truck plus VHF/SSB radio.

Note: The above list does not include vehicles listed separately under Advance Survey Crew and Uphole Recording Crew.

1.5 Camp Equipment

- One (1) Kitchen unit equipped with stove, deep freezes, refrigeration and assorted kitchen equipment.
- One (1) Dining Caravan.
- One (1) Shower and Laundry facility trailer.
- One (1) Workshop trailer equipped with power and hand tools including electric and oxy/acetylene welding equipment.
- Five (5) air conditioned (8) berth sleeping trailers.
- One (1) PM Office and adjoining Client representative's private accommodation and office.
- One (1) ATU and Cable/Geophone repair trailer.
- One (1) Chemical Toilet Trailer (Three mounted units).
- Fuel and water storage facilities.

1.6 Client Provisions

- One (1) HJ75 4WD Landcruiser equipped with contractor compatible radio.

2. Field Data Processing System

2.1 Personnel

- One (1) Experienced Processing Geophysicist trained in both GEOCOR IV and VISTA software data processing. Infield data processing is based on 12 hours/day of operation..
  Total One (1) Person in the field.

2.2 Geocor IV - Field Processing

- Prestack, Post-stack and Experimental Software for full 2D and 3D Seismic Data Processing with Monochrome displays.
- Sperry Univac based GEOCOR IV processing system with VGA graphics screen, 3x1600 BPI Tape Drives, Benson Varian 22 inch Electrostatic Monochrome plotter.

2.3 VISTA 486 PC - Field Processing

- Prestack, Post-stack and Experimental Software for full 2D and 3D Seismic Data Processing with Colour graphics and Attribute Analysis displays.

- 486 33Mz PC with SVGA graphics screen, 1.8GB Hard Disk, Qualstar 3412 Quad Density tape drive, 24 pin dot matrix printer and HP Paintjet Colour plotter [Purchase New Oct 1991].

2.4 Services

- Hardcopy of Final Stacks of every recorded line produced in the field and/or intensive Noise Analysis, Experimental and Attribute colour processing of selected lines.

3. Advance Survey Party

3.1 Survey Personnel

- Two (2) Senior Surveyors
- Two (2) Chaining persons/field hands
  Total FOUR (4) Persons in the Field.

3.2 Survey Equipment

- One (1) [1988] HJ75 Toyota 4x4 survey unit
- One (1) [1985] HJ75 Toyota 4x4 survey unit
- One (1) self-contained trailer mounted messing and sleeping facility with 5 kVA portable power generator.
- Two (2) Nikon or Topcon Total Station Theodolites with built in Electronic Distance Measuring Units [Purchased New Oct 1991].
- One (1) 286 PC Laptop Computer and printer
- Assorted survey rods, chains, notebooks, programmable calculator, prismatic compasses.
- GEOCOR IV co-ordinate and elevation listing software.

APPENDIX "B"

SURVEYED LINE STATISTICS

LINE NUMBER:	MC 92 - 43
FIRST VP:	1020
LAST VP:	6640
TOTAL LENGTH:	70.250 kms
TOTAL PMs:	16
DIRECTION:	North - South
TERRAIN:	Reasonable, along fence
SURVEY PROCEDURE:	Standard Reciprocal
UNUSUAL OCCURRENCES:	Nil
LINE CLEARED:	With log skidder

30479

APPENDIX "B"

SURVEYED LINE STATISTICS

LINE NUMBER:	MC 92 - 53
FIRST VP:	100
LAST VP:	5224
TOTAL LENGTH:	64.050 kms
TOTAL PMs:	15
DIRECTION:	North - South
TERRAIN:	Bulldust on north section
SURVEY PROCEDURE:	Standard Reciprocal
UNUSUAL OCCURRENCES:	Nil
LINE CLEARED:	Dozed

APPENDIX "B"

SURVEYED LINE STATISTICS

LINE NUMBER:	MC 92 - 61
FIRST VP:	VP - 100
LAST VP:	VP - 2330
TOTAL LENGTH:	22.300 kms
TOTAL PMs:	6
DIRECTION:	North - South
TERRAIN:	Reasonable with some breakaway country
SURVEY PROCEDURE:	Standard Reciprocal
UNUSUAL OCCURRENCES:	Nil
LINE CLEARED:	Dozed

APPENDIX "B"

SURVEYED LINE STATISTICS

LINE NUMBER:	MC 92 - 63
FIRST VP:	120
LAST VP:	4208
TOTAL LENGTH:	51.100 kms
TOTAL PMs:	13
DIRECTION:	North - South
TERRAIN:	Flat, Bulldust, Lancewood, Bullwaddy
SURVEY PROCEDURE:	Standard Reciprocal
UNUSUAL OCCURRENCES:	Nil
LINE CLEARED:	Dozed

APPENDIX "B"

SURVEYED LINE STATISTICS

LINE NUMBER:	MC 92 - 73
FIRST VP:	110
LAST VP:	7300
TOTAL LENGTH:	71.900 kms
TOTAL PMs:	17
DIRECTION:	North - South
TERRAIN:	Bulldust, Lancewood, Bullwaddy
SURVEY PROCEDURE:	Standard Reciprocal
UNUSUAL OCCURRENCES:	Nil
LINE CLEARED:	Dozed 1½ Blades

APPENDIX "B"

SURVEYED LINE STATISTICS

LINE NUMBER:	MC 92 - 73 (N)
FIRST VP:	100
LAST VP:	1250
TOTAL LENGTH:	11.500 kms
TOTAL PMs:	4
DIRECTION:	North - North West
TERRAIN:	North half in breakaway country
SURVEY PROCEDURE:	Standard Reciprocal
UNUSUAL OCCURRENCES:	Nil
LINE CLEARED:	Dozed

APPENDIX "B"

SURVEYED LINE STATISTICS

LINE NUMBER:	MC 92 - 83
FIRST VP:	100
LAST VP:	2934
TOTAL LENGTH:	28.340 kms
TOTAL PMs:	8
DIRECTION:	North - South
TERRAIN:	Lancewood, Bulwaddy, some rocky ground to the north
SURVEY PROCEDURE:	Standard Reciprocal
UNUSUAL OCCURRENCES:	Nil
LINE CLEARED:	Dozed

APPENDIX "B"

SURVEYED LINE STATISTICS

LINE NUMBER:	MC 92 - 93
FIRST VP:	100
LAST VP:	3334
TOTAL LENGTH:	32.34 kms
TOTAL PMs:	8
DIRECTION:	South - North
TERRAIN:	Lancewood, Bullwaddy, some gullys and dry creeks
SURVEY PROCEDURE:	Standard Reciprocal
UNUSUAL OCCURRENCES:	Nil
LINE CLEARED:	Dozed

APPENDIX "B"

SURVEYED LINE STATISTICS

LINE NUMBER:	MC 92 - 100
FIRST VP:	100
LAST VP:	2720
TOTAL LENGTH:	26.20 kms
TOTAL PMs:	7
DIRECTION:	West - East
TERRAIN:	Follows fenceline in the west, Lancewood, Bullwaddy
SURVEY PROCEDURE:	Standard Reciprocal
UNUSUAL OCCURRENCES:	Nil
LINE CLEARED:	Dozed

APPENDIX "B"

SURVEYED LINE STATISTICS

LINE NUMBER:	MC 92 - 102
FIRST VP:	100
LAST VP:	3772
TOTAL LENGTH:	45.900 kms
TOTAL PMs:	11
DIRECTION:	South - East
TERRAIN:	Reasonable to Bulldust, Lancewood, Bullwaddy
SURVEY PROCEDURE:	Standard Reciprocal
UNUSUAL OCCURRENCES:	Nil
LINE CLEARED:	Dozed

APPENDIX "B"

SURVEYED LINE STATISTICS

LINE NUMBER:	MC 92 - 104
FIRST VP:	100
LAST VP:	6860
TOTAL LENGTH:	84.50 kms
TOTAL PMs:	19
DIRECTION:	West - East
TERRAIN:	Bullwaddy, Lancewood
SURVEY PROCEDURE:	Standard Reciprocal
UNUSUAL OCCURRENCES:	Nil
LINE CLEARED:	Dozed

APPENDIX "B"

SURVEYED LINE STATISTICS

LINE NUMBER:	MC 92 - 104 (W)
FIRST VP:	100
LAST VP:	2656
TOTAL LENGTH:	25.56 kms
TOTAL PMs:	8
DIRECTION:	West - East
TERRAIN:	Follows fenceline
SURVEY PROCEDURE:	Standard Reciprocal
UNUSUAL OCCURRENCES:	Nil
LINE CLEARED:	Dozed

APPENDIX "B"

SURVEYED LINE STATISTICS

LINE NUMBER:	MC 92 - 123
FIRST VP:	100
LAST VP:	3094
TOTAL LENGTH:	29.940 kms
TOTAL PMs:	8
DIRECTION:	North - South
TERRAIN:	Lancewood, Bullwaddy, Rough, Bulldusty
SURVEY PROCEDURE:	Standard Reciprocal
UNUSUAL OCCURRENCES:	Nil
LINE CLEARED:	Dozed

APPENDIX "B"

SURVEYED LINE STATISTICS

LINE NUMBER:	MC 92 - 202
FIRST VP:	100
LAST VP:	1082
TOTAL LENGTH:	9.820 kms
TOTAL PMs:	4
DIRECTION:	East - West
TERRAIN:	Follows Carpentaria Highway in the east, Lancewood, some rough ground
SURVEY PROCEDURE:	Standard Reciprocal
UNUSUAL OCCURRENCES:	Nil
LINE CLEARED:	Dozed

APPENDIX "B"

SURVEYED LINE STATISTICS

LINE NUMBER:	MC 92 - 251
FIRST VP:	100
LAST VP:	8600
TOTAL LENGTH:	85.00 kms
TOTAL PMs:	22
DIRECTION:	South - North
TERRAIN:	Follows track in the north, Lancewood, Bullwaddy
SURVEY PROCEDURE:	Standard Reciprocal
UNUSUAL OCCURRENCES:	Nil
LINE CLEARED:	Dozed

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APPENDIX "B"

SURVEYED LINE STATISTICS

LINE NUMBER:	MC 92 - 281
FIRST VP:	100
LAST VP:	2680
TOTAL LENGTH:	25.800 kms
TOTAL PMs:	6
DIRECTION:	North - South
TERRAIN:	Follows fenceline in the south, some rough ground, Lancewood
SURVEY PROCEDURE:	Standard Reciprocal
UNUSUAL OCCURRENCES:	Nil
LINE CLEARED:	Dozed

PERMANENT MARKERS

Prospect..MACARTHUR.....Client..PACIFIC OIL & GAS.. LINE..MC.92.-.43...

Party....205.....Surveyor..M.S. & A.R.T...Date..29/7/92.....Page....1.....

Station	Northing	Easting	Elev	Refers to Int Line	Station Int	Remarks
1020+3	8,159,134.71	427,810.81	291.49			On fence corner, S.O.L. 3m South
1224+4	8,161,684.96	427,802.62	279.64	MA91- 250	1605+6	Fence
1700	8,167,628.02	427,782.04	283.87			Fence
2100	8,172,626.54	427,764.64	305.83			Fence
2500	8,177,623.79	427,747.20	296.83			Fence
2887	8,182,459.15	427,731.36	276.55	MC92-102		Fence
3200	8,186,369.39	427,718.58	263.29			Fence
3600	8,191,367.69	427,703.38	254.03			Fence
4000	8,196,365.45	427,688.60	246.67			Fence
4392	8,201,261.54	427,673.21	238.02	MC92-104	5119+7	Fence
4800	8,206,358.08	427,657.05	235.97			Fence
5200	8,211,355.45	427,639.89	225.90			Fence
5600	8,216,353.13	427,624.03	238.59			Fence
6000	8,221,349.67	427,608.11	247.09			Fence
6400	8,226,347.36	427,591.65	235.65			Fence
6640	8,229,345.65	427,582.15	259.41			Fence E.O.L.

PERMANENT MARKERS

Prospect.....MACARTHUR.....Client.....PACIFIC OIL & GAS LINE.....MC 92 - 53

Party.....205.....Surveyor.....M.S. & A.R.T Date.....3/8/92.....Page...1.....

Station	Northing	Easting	Elev	Refers to Int Line	Station Int	Remarks
100	8,157,940.83	414,637.07	251.60			S.O.L.
400	8,161,688.12	414,642.26	260.87	MA91-250	1079+2	
800	8,166,685.24	414,683.41	291.81			
1200	8,171,682.62	414,722.21	278.98			
1610	8,176,803.86	414,754.05	304.95			
2000	8,181,674.46	414,774.87	306.38			
2285	8,185,234.63	414,784.94	286.27	MC92-102		
2800	8,191,668.64	414,719.11	280.45			
3200	8,196,665.84	414,657.68	272.51			
3600	8,201,663.20	414,595.03	245.99			
3812+7	8,204,310.21	414,570.11	243.04	MC92-104	4042+3	
4200	8,209,159.13	414,500.65	249.25			
4600	8,214,155.69	414,423.15	279.58			
5000	8,219,150.91	414,295.81	278.72			
5224	8,221,947.86	414,216.67	278.79			E.O.L.

PERMANENT MARKERS

Prospect...MACARTHUR.....Client.PACIFIC OIL & GAS. LINE...MC 92 - 61...

Party....205.....Surveyor.M.S. & A.R.T..Date...6/8/92.....Page....1.....

Station	Northing	Easting	Elev	Refers to Int Line	Station Int	Remarks
100	8,204,926.42	402,132.33	256.55			S.O.L.
300	8,206,924.47	402,136.60	259.16	MC92-104	3024+10	
800	8,211,921.45	402,166.51	270.56			
1300	8,216,918.37	402,180.99	287.37			
1798	8,221,889.28	402,212.30	234.63			
2330	8,227,206.79	402,166.49	197.66			E.O.L.

PERMANENT MARKERS

Prospect...MACARTHUR.....Client..PACIFIC OIL & GAS LINE..MC 92 - 63...

Party...205.....Surveyor....M.S.....Date..17/8/92.....Page...1.....

Station	Northing	Easting	Elev	Refers to Int Line	Station Int	Remarks
120	8,158,131.05	400,661.51	260.28			S.O.L.
405	8,161,692.58	400,648.66	267.91	MA91-250	519	
700	8,165,377.45	400,635.72	274.92			
1100	8,170,374.37	400,655.19	271.96			
1480	8,175,121.55	400,662.30	272.64			
1880	8,180,119.54	400,641.91	282.16			
2280	8,185,118.64	400,581.03	293.32			
2538	8,188,344.65	400,554.80	301.23	90-102	3196	Carpentaria Highway
2680	8,190,116.94	400,564.76	308.89			
3080	8,195,115.77	400,635.05	277.58			
3600	8,201,614.51	400,672.12	254.33			
4048	8,207,213.90	400,725.54	261.35	MC92-104	2909+6	
4208	8,209,212.48	400,743.41	265.70			E.O.L.

PERMANENT MARKERS

Prospect..MACARTHUR.....Client..PACIFIC OIL & GAS. **LINE**...MC 92 - 73..

Party....205.....Surveyor..MS/JJ/AB.....Date....20/8/92....Page....1.....

Station	Northing	Easting	Elev	Refers to Int Line	Station Int	Remarks
110	8,142,547.41	391,184.68	242.80			S.O.L.
350+3	8,144,945.86	391,180.44	250.55			
900	8,150,442.32	391,215.18	246.63			
1494	8,156,383.95	391,259.58	255.91			
2030	8,161,740.54	391,304.66	246.74			
2600	8,167,437.14	391,345.51	250.86			
3100	8,172,434.90	391,420.17	260.12			
3620	8,177,631.22	391,488.00	264.24			
4100	8,182,428.96	391,545.34	280.60			
4596	8,187,386.76	391,536.85	291.90			
4898	8,190,126.12	391,547.72	281.85			Carpentaria Highway
5400	8,195,422.41	391,405.50	253.11			
5900	8,200,416.81	391,234.89	235.46			
6370	8,205,113.01	391,078.60	247.79			
6788+5	8,209,294.91	390,928.55	256.66	MC92-104	2108+3	
7086	8,212,266.04	390,830.90	269.95	MC92-73N	250	
7300	8,214,404.65	390,772.00	275.66			E.O.L.

PERMANENT MARKERS

Prospect..MACARTHUR........Client..PACIFIC OIL & GAS **LINE**..MC 92 - 73 (N)

Party....205.......Surveyor.....J.J.........Date..27/8/92......Page...1..........

Station	Northing	Easting	Elev	Refers to Int Line	Station Int	Remarks
100	8,210,802.05	391,150.85	263.52			S.O.L.
250	8,212,266.04	390,830.90	269.95	MC92-73	7086	
750	8,217,135.20	389,738.86	220.80			
1250	8,222,009.30	388,635.97	192.63			E.O.L.

PERMANENT MARKERS

Prospect..MACARTHUR.....Client.PACIFIC OIL & GAS.. LINE.MC.92-.83....

Party...205.....Surveyor...J.J. & A.B...Date..21/6/92.....Page..1.....

Station	Northing	Easting	Elev	Refers to Int Line	Station Int	Remarks
100	8,111,030.18	378,203.83	232.70			S.O.L.
247+4	8,112,504.80	378,206.82	238.15	ME91-83	3554	Overlap
800	8,118,016.77	378,387.98	239.87			
1300	8,122,990.36	378,891.48	242.06			
1800	8,127,961.90	379,423.89	248.94			
2300	8,132,929.21	379,987.66	260.32			
2784	8,137,734.55	380,595.21	246.06	MA91-93	200	Overlap
2934	8,139,237.01	380,585.44	244.40			E.O.L.

PERMANENT MARKERS

Prospect...MACARTHUR.....Client..PACIFIC OIL & GAS. LINE..MC 92 - 93...

Party....205.....Surveyor...ARTHURSTON...Date..3/7/92.....Page...1.....

Station	Northing	Easting	Elev	Refers to Int Line	Station Int	Remarks
100	8,201,622.88	380,648.69	228.28			S.O.L.
250	8,203,122.08	380,651.79	230.90	MA91-93	VP2817	Overlap
750	8,208,119.07	380,594.17	260.05			
1089+1	8,211,507.01	380,491.82	259.06	MC92-104	1254+9	
1620	8,216,814.37	380,374.09	218.05			
2200	8,222,610.09	380,382.00	195.74			
2787	8,228,478.35	380,429.31	198.20			
3334	8,233,945.62	380,424.83	202.62			E.O.L.

PERMANENT MARKERS

Prospect...MACARTHUR.....Client.PACIFIC.OIL.&.GAS. LINE....MC.92.-.100

Party...205.....Surveyor...J.J.....Date..21/6/92.....Page..1.....

Station	Northing	Easting	Elev	Refers to Int Line	Station Int	Remarks
100	8,162,653.98	332,089.58	240.83			S.O.L. along Fence
480	8,162,686.67	335,889.25	235.07	MC92-281	2069+8	Along Fence
1000	8,162,566.03	341,074.95	226.47			Along Fence
1450	8,161,801.91	345,509.28	226.76			Bend Fence
1896+6	8,161,945.98	349,970.68	226.69	MC92-251	671+4	
2570	8,161,911.80	356,699.97	244.69	90-100	100	Overlap
2720	8,161,888.77	358,199.70	243.29			E.O.L.

PERMANENT MARKERS

Prospect.....MACARTHUR.....Client.....PACIFIC OIL & GAS..... LINE.....MC 92 - 102.....

Party.....205.....Surveyor.....J.J. & A.B.....Date.....27/8/92.....Page.....1.....

Station	Northing	Easting	Elev	Refers to Int Line	Station Int	Remarks
100	8,188,671.70	399,102.30	305.97			S.O.L.
219	8,188,344.65	400,554.80	301.23	MC92-63	2568	Overlaps 90-102
620	8,187,291.90	405,448.38	278.88			
1020	8,186,202.51	410,323.65	289.15			
1385+5	8,185,230.79	414,795.95	288.55	MC92-53	2285	
1780	8,184,196.94	419,600.10	292.18			
2444+8	8,182,459.98	427,730.53	276.65	MC92-43	2887	
2900	8,181,019.68	433,222.66	301.15			
3300	8,179,766.37	438,060.59	294.11			
3531+10	8,179,046.86	440,865.54	288.73	89-203	3531+6	
3772	8,178,287.04	443,768,53	289.05			E.O.L.

PERMANENT MARKERS

Prospect....MACARTHUR.....Client..PACIFIC OIL & GAS LINE....MC 92 - 104

Party....205.....Surveyor J.J. & A.R.T...Date..23/7/92.....Page....1.....

Station	Northing	Easting	Elev	Refers to Int Line	Station Int	Remarks
100	8,214,652.93	366,417.42	263.45			S.O.L.
220	8,214,344.08	367,884.82	264.03	MC92-104W	2505	
343+11	8,214,017.68	369,397.81	264.10	90-103	5050+9	
800	8,212,791.92	374,964.04	237.03			
1254+9	8,211,507.01	380,491.82	259.06	MC92-93	1089+1	
1700	8,210,393.93	385,951.17	260.80			
2108+3	8,209,294.17	390,933.26	258.93	MC92-73		
2909+6	8,207,213.90	400,725.54	261.35	MC92-63	4048	
3024+10	8,206,924.47	402,136.60	259.16	MC92-61	300	
3508	8,205,698.89	408,042.67	244.62			
4042+3	8,204,310.21	414,570.11	243.04	MC92-53	3812+7	
4450	8,203,175.87	419,533.45	243.35			
4920	8,201,831.55	425,249.33	236.90			
5119+7	8,201,261.54	427,673.21	238.02	MC92-43	4392	Fence
5540	8,200,073.96	432,789.27	260.96			
5940	8,198,919.72	437,652.85	254.14			
6364+10	8,197,708.18	442,819.55	247.61			Fence
6616+3	8,196,984.97	445,879.15	243.29	89-203	5084+7	
6860	8,196,270.93	448,838.28	256.48			E.O.L.

PERMANENT MARKERS

Prospect..MACARTHUR.....Client..PACIFIC OIL & GAS.. LINE..MC 92 - 104 WEST

Party..205.....Surveyor...A.R.T.....Date..3/7/92.....Page..1.....

Station	Northing	Easting	Elev	Refers to Int Line	Station Int	Remarks
100	8,215,271.83	343,855.91	203.43			S.O.L. Fence Cnr
211	8,215,208.39	344,962.43	203.58	SH90-105		
700	8,215,016.65	349,847.49	218.59			
875+9	8,214,946.46	351,603.80	210.88	MC92-251	VP5978+5	
1410	8,214,745.85	356,940.41	221.58			
1900	8,214,565.89	361,837.54	241.54			
2505	8,214,344.08	367,884.82	264.03	MC92-104	VP220	
2656+4	8,214,287.74	369,396.20	265.73	MA89-103	VP5069	E.O.L. Fence Cnr

PERMANENT MARKERS

Prospect...MACARTHUR.....Client.PACIFIC OIL & GAS. LINE..MC 92 - 123..

Party....205.....Surveyor.....A.B.....Date....21/6/92.....Page..1.....

Station	Northing	Easting	Elev	Refers to Int Line	Station Int	Remarks
100	8,111,076.09	358,190.18	237.20			S.O.L.
250	8,112,576.00	358,192.00	238.00	ME91-123	2744	Overlap & Bend
800	8,118,070.94	358,060.54	239.19			
1300	8,123,071.35	358,089.77	244.84			
1800	8,128,071.39	358,163.02	252.23			
2300	8,133,072.70	358,179.81	273.16			
2945	8,139,528.48	358,176.91	265.71	ME91-294	893+21	
3094	8,141,016.10	358,184.43	266.59			E.O.L.

PERMANENT MARKERS

Prospect..MACARTHUR.......Client.PACIFIC OIL & GAS. LINE.MC 92 - 202..

Party...205.......Surveyor..A.R.T.........Date.27/6/92.......Page...1.........

Station	Northing	Easting	Elev	Refers to Int Line	Station Int	Remarks
100	8,201,184.49	347,363.78	234.72			S.O.L.
449+8	8,200,264.12	350,739.25	241.08	MC92-251	4508	
931+4	8,199,096.03	355,413.43	250.50	SH90-102	100	Overlap on Carpentaria Highway
1082	8,198,750.87	356,881.08	244.35			E.O.L. on Carpentaria Highway

PERMANENT MARKERS

Prospect...MACARTHUR.......Client..PACIFIC OIL & GAS LINE..MC 92 - 251..

Party....205.......Surveyor.....A.R.T.......Date..11/7/92.......Page...2.........

Station	Northing	Easting	Elev	Refers to Int Line	Station Int	Remarks
7459+6	8,229,726.40	352,566.21	209.60	90-107		
8000	8,235,114.73	352,944.99	205.26			
8419	8,239,292.02	353,252.97	192.35	90-109		
8600	8,241,096.82	353,372.62	190.06			E.O.L.

PERMANENT MARKERS

Prospect...MACARTHUR.....Client..PACIFIC OIL & GAS. LINE..MC 92 - 251..

Party...205.....Surveyor..J.J. & M.S....Date..11/7/92.....Page...1.....

Station	Northing	Easting	Elev	Refers to Int Line	Station Int	Remarks
100	8,156,233.12	349,851.36	228.42			S.O.L.
144+7	8,156,680.14	349,856.74	227.12	MA91-230	578+6	
250	8,157,732.98	349,858.49	227.04	MA91-251	1000	
671+4	8,161,945.98	349,970.68	226.69	MC92-100	1896+6	
1200	8,167,231.47	350,138.55	226.88			
1700	8,172,230.67	350,312.27	226.93			
2200	8,177,227.87	350,514.49	227.10			
2700	8,182,222.62	350,754.13	227.42			
3200	8,187,222.24	350,904.97	227.75			
3700	8,192,221.80	351,094.44	240.12			
4300	8,198,199.75	350,805.81	247.56			Carpentaria Highway
4508	8,200,264.12	350,739.25	241.08	MC92-202	449+8	
5000	8,205,176.10	351,030.27	217.58			
5500	8,210,169.42	351,315.72	209.43			
5978+5	8,214,946.46	351,603.80	210.88	MC92-104W	875+9	Fence,Gate, Track
6504+7	8,220,199.28	351,939.77	207.17			Fence,Yard, Bore
6674	8,221,888.31	352,045.15	206.49			
7000	8,225,142.46	352,260.20	216.49			

PERMANENT MARKERS

Prospect..MACARTHUR........Client..PACIFIC OIL & GAS LINE.MC 92 - 281...

Party...205........Surveyor......M.S.......Date...21/6/92.....Page...1..........

Station	Northing	Easting	Elev	Refers to Int Line	Station Int	Remarks
100	8,143,007.49	335,329.36	240.17			S.O.L. on Fence at Gate
600	8,147,996.78	335,722.07	228.48			on Fence
1100	8,152,988.91	335,974.37	226.89			
1600	8,157,988.38	335,943.25	228.30			
2069+8	8,162,686.67	335,889.45	235.07	MC92-100	480	Fence
2680	8,168,785.40	335,820.94	248.92			E.O.L.

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 83		
Test 1 92001 - 013	1 - 600	3234 - 2935
Test 2 92014 - 026	1 - 600	3234 - 2935
Test 3 92027 - 038	1 - 600	3234 - 2935
Test 4 92039 - 052	1 - 600	3234 - 2935
Line MC 92 - 83		
PAC 920001	1 - 43	2934 - 2892
920002	44 - 86	2891 - 2849
920003	87 - 129	2848 - 2806
920004	130 - 172	2805 - 2763
920005	173 - 216	2762 - 2719
920006	217 - 227	2718 - 2708
920007	228 - 271	2707 - 2664
920008	272 - 303	2663 - 2632
920009	304 - 347	2631 - 2588
920010	348 - 381	2587 - 2554
920011	382 - 425	2553 - 2510
920012	426 - 469	2509 - 2466
920013	470 - 480	2465 - 2455
920014	481 - 524	2454 - 2411
920015	525 - 532	2410 - 2403
920016	533 - 576	2402 - 2359
920017	577 - 585	2358 - 2350
920018	586 - 629	2349 - 2306
920019	630 - 647	2305 - 2288
920020	648 - 691	2287 - 2244

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 83		
PAC 920021	692 - 709	2243 - 2226
920022	710 - 753	2225 - 2182
920023	754 - 758	2181 - 2177
920024	759 - 802	2176 - 2133
920025	803 - 846	2132 - 2089
920026	847 - 890	2088 - 2045
920027	891 - 893	2044 - 2040
920028	894 - 937	2039 - 1996
920029	938 - 973	1995 - 1962
920030	974 - 1017	1961 - 1918
920031	1018 - 1061	1917 - 1874
920032	1062 - 1105	1873 - 1830
920033	1106 - 1110	1829 - 1825
920034	1111 - 1154	1824 - 1781
920035	1155 - 1198	1780 - 1737
920036	1199 - 1243	1736 - 1692
920037	1244 - 1288	1691 - 1647
920038	1289 - 1333	1646 - 1602
920039	1334 - 1378	1601 - 1557
920040	1379 - 1423	1556 - 1512
920041	1424 - 1468	1511 - 1467
920042	1469 - 1513	1466 - 1422
920043	1514 - 1558	1421 - 1377
920044	1559 - 1603	1376 - 1332
920045	1604 - 1649	1331 - 1286
920046	1650 - 1682	1285 - 1253

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 83		
PAC 920047	1683 - 1727	1252 - 1208
920048	1728 - 1772	1207 - 1163
920049	1773 - 1817	1162 - 1118
920050	1818 - 1855	1117 - 1080
920051	1856 - 1900	1079 - 1035
920052	1901 - 1945	1034 - 990
920053	1946 - 1990	989 - 945
920054	1991 - 1998	944 - 937
920055	1999 - 2043	936 - 892
920056	2044 - 2088	891 - 847
920057	2089 - 2133	846 - 802
920058	2134 - 2178	801 - 757
920059	2179 - 2223	756 - 712
920060	2224 - 2269	711 - 666
920061	2270 - 2314	665 - 621
920062	2315 - 2359	620 - 576
920063	2360 - 2404	575 - 531
920064	2405 - 2449	530 - 486
920065	2450 - 2465	485 - 470
920066	2466 - 2510	469 - 425
920067	2511 - 2555	424 - 380
920068	2556 - 2600	379 - 335
920069	2601 - 2645	334 - 290
920070	2646 - 2690	289 - 245
920071	2691 - 2733	244 - 202
920072	2734 - 2777	201 - 158

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 83		
PAC 920073	2778 - 2821	157 - 114
920074	2822 - 2835	113 - 100

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 123		
PAC 920075	1 - 44	101 - 144
920076	45 - 88	145 - 188
920077	89 - 132	189 - 232
920078	133 - 139	233 - 239
920079	140 - 182	240 - 282
920080	183 - 208	283 - 308
920081	209 - 252	309 - 352
920082	253 - 296	353 - 396
920083	297 - 340	397 - 440
920084	341 - 384	441 - 484
920085	385 - 400	485 - 500
920086	401 - 444	501 - 544
920087	445 - 488	545 - 588
920088	489 - 519	589 - 619
920089	520 - 563	620 - 663
920090	564 - 607	664 - 707
920091	608 - 631	708 - 731
920092	632 - 663	732 - 763
920093	664 - 695	764 - 795
920094	696 - 727	796 - 827
920095	728 - 759	828 - 859
920096	760 - 791	860 - 891
920097	792 - 835	892 - 935
920098	836 - 879	936 - 979
920099	880 - 923	980 - 1023
920100	924 - 967	1024 - 1067

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 123		
PAC 920101	968 - 978	1068 - 1078
920102	979 - 1022	1079 - 1122
920103	1023 - 1066	1123 - 1166
920104	1067 - 1110	1167 - 1210
920105	1111 - 1154	1211 - 1254
920106	1155 - 1185	1255 - 1285
920107	1186 - 1222	1286 - 1322
920108	1223 - 1265	1323 - 1365
920109	1266 - 1309	1366 - 1409
920110	1310 - 1311	1410 - 1411
920111	1312 - 1353	1412 - 1453
920112	1354 - 1397	1454 - 1497
920113	1398 - 1422	1498 - 1522
920114	1423 - 1466	1523 - 1566
920115	1467 - 1509	1567 - 1609
920116	1510 - 1553	1610 - 1653
920117	1554 - 1597	1654 - 1697
920118	1598 - 1641	1698 - 1741
920119	1642 - 1685	1742 - 1785
920120	1686 - 1729	1786 - 1829
920121	1730 - 1773	1830 - 1873
920122	1774 - 1817	1874 - 1917
920123	1818 - 1861	1918 - 1961
920124	1862 - 1905	1962 - 2005
920125	1906 - 1949	2006 - 2049
920126	1950 - 1993	2050 - 2093

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 123		
PAC 920127	1994 - 2037	2094 - 2137
920128	2038 - 2051	2138 - 2151
920129	2052 - 2095	2152 - 2195
920130	2096 - 2139	2196 - 2239
920131	2140 - 2183	2240 - 2283
920132	2184 - 2227	2284 - 2327
920133	2228 - 2242	2328 - 2342
920134	2243 - 2286	2343 - 2386
920135	2287 - 2330	2387 - 2430
920136	2331 - 2374	2431 - 2474
920137	2375 - 2418	2475 - 2518
920138	2419 - 2462	2519 - 2562
920139	2463 - 2506	2563 - 2606
920140	2507 - 2550	2607 - 2650
920141	2551 - 2594	2651 - 2694
920142	2595 - 2638	2695 - 2738
920143	2639 - 2682	2739 - 2782
920144	2683 - 2726	2783 - 2826
920145	2727 - 2744	2827 - 2844
920146	2745 - 2763	2845 - 2863
920147	2764 - 2776	2864 - 2876
920148	2777 - 2793	2877 - 2893
920149	2794 - 2837	2894 - 2937
920150	2838 - 2866	2938 - 2966
920151	2867 - 2896	2967 - 2996
920152	2897 - 2938	2997 - 3038

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 123		
PAC 920153	2939 - 2982	3039 - 3082
920154	2983 - 2994	3083 - 3094

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 281		
PAC 920155	1 - 44	100 - 143
920156	45 - 88	144 - 187
920157	89 - 132	188 - 231
920158	133 - 183	232 - 282
920159	184 - 223	283 - 322
920160	224 - 267	323 - 366
920161	268 - 311	367 - 410
920162	312 - 355	411 - 454
920163	356 - 396	455 - 495
920164	397 - 440	496 - 539
920165	441 - 484	540 - 583
920166	485 - 523	584 - 622
920167	524 - 567	623 - 666
920168	568 - 603	667 - 702
920169	604 - 647	703 - 746
920170	648 - 691	747 - 790
920171	692 - 735	791 - 834
920172	736 - 779	835 - 878
920173	780 - 823	879 - 922
920174	824 - 869	923 - 968
920175	870 - 913	969 - 1012
920176	914 - 958	1013 - 1057
920177	959 - 1002	1058 - 1101
920178	1003 - 1046	1102 - 1145
920179	1047 - 1090	1146 - 1189
920180	1091 - 1134	1190 - 1233

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 281		
PAC 920181	1135 - 1178	1234 - 1277
920182	1179 - 1222	1278 - 1321
920183	1223 - 1247	1322 - 1346
920184	1248 - 1291	1347 - 1390
920185	1292 - 1335	1391 - 1434
920186	1336 - 1383	1435 - 1482
920187	1384 - 1427	1483 - 1526
920188	1428 - 1471	1527 - 1570
920189	1472 - 1507	1571 - 1606
920190	1508 - 1551	1607 - 1650
920191	1552 - 1568	1651 - 1667
920192	1569 - 1612	1668 - 1711
920193	1613 - 1656	1712 - 1755
920194	1657 - 1666	1756 - 1765
920195	1667 - 1710	1766 - 1809
920196	1711 - 1757	1810 - 1856
920197	1758 - 1801	1857 - 1900
920198	1802 - 1809	1901 - 1908
920199	1810 - 1814	1909 - 1913
920200	1815 - 1858	1914 - 1957
920201	1859 - 1902	1958 - 2001
920202	1903 - 1946	2002 - 2045
920203	1947 - 1956	2046 - 2055
920204	1957 - 2002	2056 - 2101
920205	2003 - 2025	2102 - 2124
920206	2026 - 2069	2125 - 2168

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 281		
PAC 920207	2070 - 2113	2169 - 2212
920208	2114 - 2157	2213 - 2256
920209	2158 - 2203	2257 - 2302
920210	2204 - 2247	2303 - 2357
920211	2248 - 2291	2358 - 2401
920212	2292 - 2335	2402 - 2445
920213	2336 - 2379	2446 - 2489
920214	2380 - 2408	2490 - 2518
920215	2409 - 2452	2519 - 2562
920216	2453 - 2496	2563 - 2606
920217	2497 - 2540	2607 - 2650
920218	2541 - 2570	2651 - 2680

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 100		
PAC 920219	1 - 44	100 - 143
920220	45 - 88	144 - 187
920221	89 - 118	188 - 217
920222	119 - 148	218 - 247
920223	149 - 192	248 - 299
920224	193 - 234	300 - 341
920225	235 - 278	342 - 385
920226	279 - 304	386 - 411
920227	305 - 348	412 - 456
920228	349 - 391	457 - 499
920229	392 - 435	500 - 543
920230	436 - 479	544 - 587
920231	480 - 522	588 - 630
920232	523 - 531	631 - 639
920233	532 - 575	640 - 683
920234	576 - 619	684 - 727
920235	620 - 663	728 - 771
920236	664 - 710	772 - 818
920237	711 - 754	819 - 862
920238	755 - 800	863 - 910
920239	801 - 844	911 - 954
920240	845 - 888	955 - 998
920241	889 - 932	999 - 1042
920242	933 - 959	1043 - 1069
920243	960 - 1003	1070 - 1113
920244	1004 - 1047	1114 - 1157

APPENDIX "D"

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LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 100		
PAC 920245	1048 - 1091	1158 - 1201
920246	1092 - 1135	1202 - 1245
920247	1136 - 1179	1246 - 1289
920248	1180 - 1223	1290 - 1333
920249	1224 - 1267	1334 - 1377
920250	1268 - 1311	1378 - 1421
920251	1312 - 1355	1422 - 1465
920252	1356 - 1399	1466 - 1509
920253	1400 - 1432	1510 - 1542
920254	1433 - 1476	1543 - 1586
920255	1477 - 1520	1587 - 1630
920256	1521 - 1564	1631 - 1674
920257	1565 - 1608	1675 - 1718
920258	1609 - 1652	1719 - 1762
920259	1653 - 1696	1763 - 1806
920260	1697 - 1740	1807 - 1850
920261	1741 - 1776	1851 - 1886
920262	1777 - 1820	1887 - 1930
920263	1821 - 1864	1931 - 1974
920264	1865 - 1908	1975 - 2018
920265	1909 - 1952	2019 - 2062
920266	1953 - 1996	2063 - 2106
920267	1997 - 2008	2107 - 2118
920268	2009 - 2040	2119 - 2150
920269	2041 - 2084	2151 - 2194
920270	2085 - 2128	2195 - 2238

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 100		
PAC 920271	2129 - 2172	2239 - 2282
920272	2173 - 2216	2283 - 2326
920273	2217 - 2260	2327 - 2370
920274	2261 - 2304	2371 - 2414
920275	2305 - 2348	2415 - 2458
920276	2349 - 2392	2459 - 2502
920277	2393 - 2436	2503 - 2546
920278	2437 - 2480	2547 - 2590
920279	2481 - 2524	2591 - 2634
920280	2525 - 2570	2635 - 2680
920281	2571 - 2610	2681 - 2720

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 251		
PAC 920282	1 - 31	100 - 130
920283	32 - 75	131 - 174
920284	76 - 83	175 - 182
920285	84 - 127	183 - 226
920286	128 - 171	227 - 270
920287	172 - 215	271 - 314
920288	216 - 259	315 - 358
920289	260 - 303	359 - 402
920290	304 - 347	403 - 446
920291	348 - 380	447 - 479
920292	381 - 424	480 - 523
920293	425 - 468	524 - 567
920294	469 - 512	568 - 611
920295	513 - 556	612 - 655
920296	557 - 600	656 - 699
920297	601 - 644	700 - 743
920298	645 - 688	744 - 787
920299	689 - 732	788 - 831
920300	733 - 776	832 - 875
920301	777 - 820	876 - 919
920302	821 - 864	920 - 963
920303	865 - 908	964 - 1007
920304	909 - 947	1008 - 1046
920305	948 - 991	1047 - 1090
920306	992 - 1035	1091 - 1134
920307	1036 - 1079	1135 - 1178

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 251		
PAC 920308	1080 - 1123	1179 - 1222
920309	1124 - 1167	1223 - 1266
920310	1168 - 1211	1267 - 1310
920311	1212 - 1255	1311 - 1354
920312	1256 - 1299	1355 - 1398
920313	1300 - 1343	1399 - 1442
920314	1344 - 1359	1443 - 1458
920315	1360 - 1403	1459 - 1502
920316	1404 - 1447	1503 - 1546
920317	1448 - 1491	1547 - 1590
920318	1492 - 1535	1591 - 1634
920319	1536 - 1579	1635 - 1678
920320	1580 - 1623	1679 - 1722
920321	1624 - 1667	1723 - 1766
920322	1668 - 1711	1767 - 1810
920323	1712 - 1755	1811 - 1854
920324	1756 - 1799	1855 - 1898
920325	1800 - 1843	1899 - 1942
920326	1844 - 1860	1943 - 1959
920327	1861 - 1879	1960 - 1978
920328	1880 - 1888	1979 - 1987
920329	1889 - 1893	1988 - 1992
920330	1894 - 1901	1993 - 2000
920331	1902 - 1945	2001 - 2044
920332	1946 - 1962	2045 - 2061
920333	1963 - 2006	2062 - 2105

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LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 251		
PAC 920334	2007 - 2048	2106 - 2147
920335	2049 - 2092	2148 - 2191
920336	2093 - 2136	2192 - 2235
920337	2137 - 2185	2236 - 2284
920338	2186 - 2229	2285 - 2328
920339	2230 - 2269	2329 - 2368
920340	2270 - 2313	2369 - 2412
920341	2314 - 2345	2413 - 2444
920342	2346 - 2389	2445 - 2488
920343	2390 - 2433	2489 - 2532
920344	2434 - 2477	2533 - 2576
920345	2478 - 2521	2577 - 2620
920346	2522 - 2565	2621 - 2664
920347	2566 - 2609	2665 - 2708
920348	2610 - 2652	2709 - 2751
920349	2653 - 2697	2752 - 2796
920350	2698 - 2742	2797 - 2841
920351	2743 - 2787	2842 - 2886
920352	2788 - 2832	2887 - 2931
920353	2833 - 2877	2932 - 2976
920354	2878 - 2922	2977 - 3021
920355	2923 - 2967	3022 - 3066
920356	2968 - 3015	3067 - 3114
920357	3016 - 3060	3115 - 3159
920358	3061 - 3107	3160 - 3206
920359	3108 - 3152	3207 - 3251

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LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 251		
PAC 920360	3153 - 3197	3252 - 3296
920361	3198 - 3242	3297 - 3341
920362	3243 - 3287	3342 - 3386
920363	3288 - 3332	3387 - 3431
920364	3333 - 3377	3432 - 3476
920365	3378 - 3424	3477 - 3523
920366	3425 - 3470	3524 - 3569
920367	3471 - 3519	3570 - 3618
920368	3520 - 3565	3619 - 3664
920369	3566 - 3611	3665 - 3710
920370	3612 - 3657	3711 - 3756
920371	3658 - 3703	3757 - 3802
920372	3704 - 3749	3803 - 3848
920373	3750 - 3795	3849 - 3894
920374	3796 - 3842	3895 - 3941
920375	3843 - 3889	3942 - 3988
920376	3890 - 3935	3989 - 4034
920377	3936 - 3981	4035 - 4080
920378	3982 - 4027	4081 - 4126
920379	4028 - 4073	4127 - 4172
920380	4074 - 4119	4173 - 4218
920381	4120 - 4165	4219 - 4264
920382	4166 - 4211	4265 - 4316
920383	4212 - 4257	4317 - 4362
920384	4258 - 4303	4363 - 4408
920385	4304 - 4349	4409 - 4454

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 251		
PAC 920386	4350 - 4396	4455 - 4501
920387	4397 - 4442	4502 - 4547
920388	4443 - 4488	4548 - 4593
920389	4489 - 4534	4594 - 4639
920390	4535 - 4580	4640 - 4685
920391	4581 - 4626	4686 - 4731
920392	4627 - 4672	4732 - 4777
920393	4673 - 4718	4778 - 4823
920394	4719 - 4764	4824 - 4869
920395	4765 - 4810	4870 - 4915
920396	4811 - 4856	4916 - 4961
920397	4857 - 4902	4962 - 5007
920398	4903 - 4948	5008 - 5053
920399	4949 - 4994	5054 - 5099
920400	4995 - 5040	5100 - 5145
920401	5041 - 5086	5146 - 5191
920402	5087 - 5132	5192 - 5237
920403	5133 - 5178	5238 - 5283
920404	5179 - 5224	5284 - 5329
920405	5225 - 5270	5330 - 5375
920406	5271 - 5316	5376 - 5421
920407	5317 - 5362	5422 - 5467
920408	5363 - 5408	5468 - 5513
920409	5409 - 5454	5514 - 5559
920410	5455 - 5500	5560 - 5605
920411	5501 - 5547	5606 - 5652

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 251		
PAC 920412	5548 - 5587	5653 - 5692
920413	5588 - 5631	5693 - 5736
920414	5632 - 5679	5737 - 5784
920415	5680 - 5725	5785 - 5830
920416	5726 - 5771	5831 - 5876
920417	5772 - 5817	5877 - 5922
920418	5818 - 5863	5923 - 5968
920419	5864 - 5909	5969 - 6014
920420	5910 - 5955	6015 - 6060
920421	5956 - 6001	6061 - 6106
920422	6002 - 6047	6107 - 6152
920423	6048 - 6093	6153 - 6198
920424	6094 - 6139	6199 - 6244
920425	6140 - 6185	6245 - 6290
920426	6186 - 6231	6291 - 6336
920427	6232 - 6277	6339 - 6384
920428	6278 - 6323	6385 - 6430
920429	6324 - 6369	6431 - 6476
920430	6370 - 6415	6477 - 6532
920431	6416 - 6461	6533 - 6579
920432	6462 - 6507	6580 - 6625
920433	6508 - 6553	6626 - 6671
920434	6554 - 6599	6672 - 6717
920435	6600 - 6645	6718 - 6763
920436	6646 - 6692	6764 - 6810
920437	6693 - 6738	6811 - 6856

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LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 251		
PAC 920438	6739 - 6784	6857 - 6902
920439	6785 - 6830	6903 - 6948
920440	6831 - 6876	6949 - 6994
920441	6877 - 6922	6995 - 7040
920442	6923 - 6968	7041 - 7086
920443	6969 - 7015	7087 - 7133
920444	7016 - 7061	7134 - 7179
920445	7062 - 7107	7180 - 7225
920446	7108 - 7153	7226 - 7271
920447	7154 - 7199	7272 - 7317
920448	7200 - 7245	7318 - 7363
920449	7246 - 7291	7364 - 7409
920450	7292 - 7337	7410 - 7455
920451	7338 - 7383	7456 - 7501
920452	7384 - 7429	7502 - 7547
920453	7430 - 7475	7548 - 7593
920454	7476 - 7521	7594 - 7639
920455	7522 - 7567	7640 - 7685
920456	7568 - 7615	7686 - 7733
920457	7616 - 7661	7734 - 7779
920458	7662 - 7697	7780 - 7815
920459	7698 - 7744	7816 - 7863
920460	7745 - 7790	7864 - 7909
920461	7791 - 7836	7910 - 7955
920462	7837 - 7882	7956 - 8001
920463	7883 - 7928	8002 - 8047

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LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 251		
PAC 920464	7929 - 7974	8048 - 8093
920465	7975 - 8020	8094 - 8139
920466	8021 - 8066	8140 - 8185
920467	8067 - 8108	8186 - 8227
920468	8109 - 8154	8228 - 8273
920469	8155 - 8200	8274 - 8319
920470	8201 - 8246	8320 - 8365
920471	8247 - 8290	8366 - 8409
920472	8291 - 8336	8410 - 8492
920473	8337 - 8382	8496 - 8541
920474	8383 - 8428	8442 - 8587
920475	8429 - 8441	8588 - 8600

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 202		
PAC 920476	1 - 46	1082 - 1037
920477	47 - 86	1036 - 997
920478	87 - 132	996 - 951
920479	133 - 178	950 - 905
920480	179 - 224	904 - 859
920481	225 - 270	858 - 813
920482	271 - 316	812 - 767
920483	317 - 362	766 - 721
920484	363 - 408	720 - 675
920485	409 - 454	674 - 629
920486	455 - 500	628 - 583
920487	501 - 546	582 - 537
920488	547 - 592	536 - 491
920489	593 - 638	490 - 445
920490	639 - 684	444 - 399
920491	685 - 730	398 - 353
920492	731 - 776	352 - 307
920493	777 - 822	306 - 261
920494	823 - 868	260 - 215
920495	869 - 914	214 - 169
920496	915 - 962	168 - 121
920497	963 - 983	120 - 100

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 104W		
PAC 920498	1 - 46	101 - 146
920499	47 - 92	147 - 199
920500	93 - 138	200 - 245
920501	139 - 184	246 - 292
920502	185 - 230	293 - 338
920503	231 - 276	339 - 384
920504	277 - 322	385 - 435
920505	323 - 368	436 - 481
920506	369 - 414	482 - 527
920507	415 - 460	528 - 573
920508	461 - 501	574 - 614
920509	502 - 547	615 - 660
920510	548 - 593	661 - 706
920511	594 - 639	707 - 752
920512	640 - 685	753 - 798
920513	686 - 731	799 - 844
920514	732 - 777	845 - 890
920515	778 - 823	891 - 936
920516	824 - 869	937 - 982
920517	870 - 912	983 - 1025
920518	913 - 959	1026 - 1072
920519	960 - 1005	1073 - 1118
920520	1006 - 1051	1119 - 1164
920521	1052 - 1097	1165 - 1210
920522	1098 - 1143	1211 - 1256
920523	1144 - 1189	1257 - 1302

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 104W		
PAC 920524	1190 - 1235	1303 - 1348
920525	1236 - 1281	1349 - 1409
920526	1282 - 1327	1410 - 1455
920527	1328 - 1373	1456 - 1501
920528	1374 - 1403	1502 - 1531
920529	1404 - 1449	1532 - 1577
920530	1450 - 1495	1578 - 1623
920531	1496 - 1541	1624 - 1669
920532	1542 - 1587	1670 - 1715
920533	1588 - 1633	1716 - 1761
920534	1634 - 1679	1762 - 1807
920535	1680 - 1725	1808 - 1853
920536	1726 - 1771	1854 - 1899
920537	1772 - 1817	1900 - 1945
920538	1818 - 1864	1946 - 1992
920539	1865 - 1910	1993 - 2038
920540	1911 - 1956	2039 - 2084
920541	1957 - 2001	2085 - 2129
920542	2002 - 2023	2130 - 2151
920543	2024 - 2069	2152 - 2197
920544	2070 - 2115	2198 - 2243
920545	2116 - 2161	2244 - 2289
920546	2162 - 2207	2290 - 2335
920547	2208 - 2253	2336 - 2381
920548	2254 - 2299	2382 - 2427
920549	2300 - 2345	2428 - 2473

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 104W		
PAC 920550	2346 - 2391	2474 - 2519
920551	2392 - 2437	2520 - 2565
920552	2438 - 2483	2566 - 2611
920553	2484 - 2527	2612 - 2655

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 93		
PAC 920554	1 - 46	100 - 145
920555	47 - 92	146 - 191
920556	93 - 138	192 - 237
920557	139 - 184	238 - 283
920558	185 - 230	284 - 329
920559	231 - 276	330 - 375
920560	277 - 322	376 - 421
920561	323 - 368	422 - 467
920562	369 - 414	468 - 513
920563	415 - 460	514 - 559
920564	461 - 506	560 - 605
920565	507 - 552	606 - 651
920566	553 - 598	652 - 697
920567	599 - 644	698 - 743
920568	645 - 690	744 - 789
920569	691 - 736	790 - 835
920570	737 - 782	836 - 881
920571	783 - 828	882 - 927
920572	829 - 874	928 - 973
920573	875 - 921	974 - 1020
920574	922 - 969	1021 - 1068
920575	970 - 1015	1069 - 1114
920576	1016 - 1061	1115 - 1160
920577	1062 - 1107	1161 - 1206
920578	1108 - 1153	1207 - 1252
920579	1154 - 1199	1253 - 1298

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 93		
PAC 920580	1200 - 1245	1299 - 1344
920581	1246 - 1291	1345 - 1390
920582	1292 - 1337	1391 - 1436
920583	1338 - 1383	1437 - 1509
920584	1384 - 1429	1510 - 1562
920585	1430 - 1475	1563 - 1615
920586	1476 - 1521	1616 - 1661
920587	1522 - 1567	1662 - 1732
920588	1568 - 1613	1733 - 1778
920589	1614 - 1659	1779 - 1824
920590	1660 - 1705	1825 - 1870
920591	1706 - 1751	1871 - 1916
920592	1752 - 1797	1917 - 1962
920593	1798 - 1843	1963 - 2008
920594	1844 - 1889	2009 - 2058
920595	1890 - 1935	2059 - 2104
920596	1936 - 1981	2105 - 2150
920597	1982 - 2027	2151 - 2196
920598	2028 - 2073	2197 - 2242
920599	2074 - 2119	2243 - 2288
920600	2120 - 2165	2289 - 2334
920601	2166 - 2211	2335 - 2380
920602	2212 - 2257	2381 - 2426
920603	2258 - 2303	2427 - 2472
920604	2304 - 2349	2473 - 2518
920605	2350 - 2395	2519 - 2564

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LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 93		
PAC 920606	2396 - 2441	2565 - 2613
920607	2442 - 2487	2614 - 2659
920608	2488 - 2533	2660 - 2710
920609	2534 - 2579	2711 - 2756
920610	2580 - 2625	2757 - 2805
920611	2626 - 2672	2806 - 2852
920612	2673 - 2718	2853 - 2902
920613	2719 - 2764	2903 - 2948
920614	2765 - 2810	2949 - 2994
920615	2811 - 2856	2995 - 3048
920616	2857 - 2902	3049 - 3097
920617	2903 - 2948	3098 - 3143
920618	2949 - 2994	3144 - 3189
920619	2995 - 3040	3190 - 3235
920620	3041 - 3085	3236 - 3281
920621	3086 - 3132	3282 - 3332
920622	3133 - 3134	3333 - 3334

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LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 104		
PAC 920623	1 - 56	100 - 155
920624	57 - 110	156 - 209
920625	111 - 164	210 - 263
920626	165 - 218	264 - 317
920627	219 - 272	318 - 371
920628	273 - 326	372 - 425
920629	327 - 380	426 - 479
920630	381 - 434	480 - 533
920631	435 - 489	534 - 588
920632	490 - 543	589 - 642
920633	544 - 597	643 - 696
920634	598 - 651	697 - 750
920635	652 - 705	751 - 804
920636	706 - 759	805 - 858
920637	760 - 813	859 - 912
920638	814 - 867	913 - 966
920639	868 - 921	967 - 1020
920640	922 - 974	1021 - 1073
920641	975 - 1027	1074 - 1126
920642	1028 - 1081	1127 - 1180
920643	1082 - 1135	1181 - 1234
920644	1136 - 1189	1235 - 1288
920645	1190 - 1244	1289 - 1343
920646	1245 - 1297	1344 - 1396
920647	1298 - 1351	1397 - 1450
920648	1352 - 1405	1451 - 1504

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LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 104		
PAC 920649	1406 - 1459	1505 - 1558
920650	1460 - 1510	1559 - 1609
920651	1511 - 1565	1610 - 1664
920652	1566 - 1619	1665 - 1718
920653	1620 - 1673	1719 - 1772
920654	1674 - 1727	1773 - 1826
920655	1728 - 1781	1827 - 1880
920656	1782 - 1835	1881 - 1934
920657	1836 - 1889	1935 - 1988
920658	1890 - 1943	1989 - 2042
920659	1944 - 1997	2043 - 2096
920660	1998 - 2051	2097 - 2150
920661	2052 - 2105	2151 - 2204
920662	2106 - 2159	2205 - 2258
920663	2160 - 2213	2259 - 2312
920664	2214 - 2267	2313 - 2366
920665	2268 - 2321	2367 - 2420
920666	2322 - 2375	2421 - 2474
920667	2376 - 2429	2475 - 2528
920668	2430 - 2483	2529 - 2582
920669	2484 - 2537	2583 - 2636
920670	2538 - 2591	2637 - 2690
920671	2592 - 2645	2691 - 2744
920672	2646 - 2699	2745 - 2798
920673	2700 - 2753	2799 - 2852
920674	2754 - 2807	2853 - 2906

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LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 104		
PAC 920675	2808 - 2861	2907 - 2960
920676	2862 - 2915	2961 - 3014
920677	2916 - 2969	3015 - 3068
920678	2970 - 3023	3069 - 3122
920679	3024 - 3075	3123 - 3174
920680	3076 - 3129	3175 - 3228
920681	3130 - 3185	3229 - 3284
920682	3186 - 3239	3285 - 3338
920683	3240 - 3293	3339 - 3392
920684	3294 - 3347	3393 - 3446
920685	3348 - 3401	3447 - 3500
920686	3402 - 3454	3501 - 3553
920687	3455 - 3508	3554 - 3607
920688	3509 - 3562	3608 - 3661
920689	3563 - 3616	3662 - 3715
920690	3617 - 3668	3716 - 3767
920691	3669 - 3722	3768 - 3821
920692	3723 - 3776	3822 - 3875
920693	3777 - 3830	3876 - 3929
920694	3831 - 3884	3930 - 3983
920695	3885 - 3938	3984 - 4037
920696	3939 - 3992	4038 - 4091
920697	3993 - 4046	4092 - 4145
920698	4047 - 4100	4146 - 4199
920699	4101 - 4154	4200 - 4253
920700	4155 - 4208	4254 - 4307

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 104		
PAC 920701	4209 - 4262	4308 - 4361
920702	4263 - 4318	4362 - 4417
920703	4319 - 4372	4418 - 4471
920704	4373 - 4424	4472 - 4523
920705	4425 - 4476	4524 - 4575
920706	4477 - 4530	4576 - 4629
920707	4531 - 4586	4630 - 4685
920708	4587 - 4641	4686 - 4740
920709	4642 - 4691	4741 - 4790
920710	4692 - 4745	4791 - 4844
920711	4746 - 4799	4845 - 4898
920712	4800 - 4848	4899 - 4947
920713	4849 - 4904	4948 - 5003
920714	4905 - 4955	5004 - 5057
920715	4956 - 5000	5058 - 5102
920716	5001 - 5054	5103 - 5181
920717	5055 - 5108	5182 - 5235
920718	5109 - 5159	5236 - 5286
920719	5160 - 5213	5287 - 5340
920720	5214 - 5267	5341 - 5394
920721	5268 - 5321	5395 - 5448
920722	5322 - 5375	5449 - 5502
920723	5376 - 5429	5503 - 5556
920724	5430 - 5483	5557 - 5610
920725	5484 - 5539	5611 - 5666
920726	5540 - 5580	5667 - 5707

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 104		
PAC 920727	5581 - 5634	5708 - 5761
920728	5635 - 5689	5762 - 5816
920729	5690 - 5743	5817 - 5870
920730	5744 - 5794	5871 - 5921
920731	5795 - 5847	5922 - 5974
920732	5848 - 5901	5975 - 6028
920733	5902 - 5955	6029 - 6083
920734	5956 - 6009	6084 - 6140
920735	6010 - 6063	6141 - 6194
920736	6064 - 6113	6195 - 6244
920737	6114 - 6167	6245 - 6298
920738	6168 - 6221	6299 - 6352
920739	6222 - 6275	6353 - 6406
920740	6276 - 6329	6407 - 6460
920741	6330 - 6383	6461 - 6514
920742	6384 - 6437	6515 - 6569
920743	6438 - 6491	6570 - 6627
920744	6492 - 6545	6628 - 6681
920745	6546 - 6599	6682 - 6735
920746	6600 - 6653	6736 - 6789
920747	6654 - 6707	6790 - 6843
920748	6708 - 6724	6844 - 6860

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 43		
PAC 920749	1 - 54	6640 - 6587
920750	55 - 108	6586 - 6533
920751	109 - 163	6532 - 6478
920752	164 - 217	6477 - 6424
920753	218 - 272	6423 - 6369
920754	273 - 326	6368 - 6315
920755	327 - 380	6314 - 6261
920756	381 - 434	6260 - 6207
920757	435 - 490	6206 - 6151
920758	491 - 544	6150 - 6097
920759	545 - 598	6096 - 6043
920760	599 - 652	6042 - 5989
920761	653 - 706	5988 - 5935
920762	707 - 739	5934 - 5902
920763	740 - 793	5901 - 5848
920764	794 - 847	5847 - 5794
920765	848 - 903	5793 - 5738
920766	904 - 958	5737 - 5683
920767	959 - 1013	5682 - 5628
920768	1014 - 1068	5627 - 5573
920769	1069 - 1123	5572 - 5518
920770	1124 - 1178	5517 - 5463
920771	1179 - 1233	5462 - 5408
920772	1234 - 1288	5407 - 5353
920773	1289 - 1343	5352 - 5298
920774	1344 - 1397	5297 - 5244

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 43		
PAC 920775	1398 - 1452	5243 - 5189
920776	1453 - 1506	5188 - 5135
920777	1507 - 1560	5134 - 5081
920778	1561 - 1614	5080 - 5027
920779	1615 - 1668	5026 - 4973
920780	1669 - 1722	4972 - 4919
920781	1723 - 1776	4918 - 4865
920782	1777 - 1830	4864 - 4811
920783	1831 - 1883	4810 - 4758
920784	1884 - 1937	4757 - 4704
920785	1938 - 1993	4703 - 4648
920786	1994 - 2045	4647 - 4596
920787	2046 - 2099	4595 - 4542
920788	2100 - 2153	4541 - 4488
920789	2154 - 2207	4487 - 4434
920790	2208 - 2260	4433 - 4381
920791	2261 - 2284	4380 - 4357
920792	2285 - 2338	4356 - 4303
920793	2339 - 2392	4302 - 4249
920794	2393 - 2442	4248 - 4199
920795	2443 - 2492	4198 - 4149
920796	2493 - 2546	4148 - 4095
920797	2547 - 2592	4094 - 4049
920798	2593 - 2636	4048 - 4005
920799	2637 - 2691	4004 - 3950
920800	2692 - 2745	3949 - 3896

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 43		
PAC 920801	2746 - 2799	3895 - 3842
920802	2800 - 2853	3841 - 3788
920803	2854 - 2907	3787 - 3734
804804	2908 - 2961	3733 - 3680
920805	2962 - 3015	3679 - 3626
920806	3016 - 3069	3625 - 3572
920807	3070 - 3125	3571 - 3516
920808	3126 - 3179	3515 - 3462
920809	3180 - 3233	3461 - 3408
920810	3234 - 3273	3407 - 3368
920811	3274 - 3324	3367 - 3317
920812	3325 - 3344	3316 - 3297
920813	3345 - 3398	3296 - 3243
920814	3399 - 3452	3242 - 3189
920815	3453 - 3507	3188 - 3134
920816	3508 - 3563	3133 - 3078
920817	3564 - 3617	3077 - 3024
920818	3618 - 3671	3023 - 2970
920819	3672 - 3726	2969 - 2915
920820	3727 - 3780	2914 - 2861
920821	3781 - 3833	2860 - 2808
920822	3834 - 3880	2807 - 2761
920823	3881 - 3912	2760 - 2729
920824	3913 - 3966	2728 - 2675
920825	3967 - 4021	2674 - 2620
920826	4022 - 4075	2619 - 2566

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 43		
PAC 920827	4076 - 4129	2565 - 2512
920828	4130 - 4183	2511 - 2458
920829	4184 - 4236	2457 - 2405
920830	4237 - 4289	2404 - 2351
920831	4290 - 4343	2350 - 2297
920832	4344 - 4397	2296 - 2243
920833	4398 - 4451	2242 - 2189
920834	4452 - 4505	2188 - 2135
920835	4506 - 4530	2134 - 2110
920836	4531 - 4584	2109 - 2056
920837	4585 - 4633	2055 - 2007
920838	4634 - 4687	2006 - 1953
920839	4688 - 4741	1952 - 1899
920840	4742 - 4795	1898 - 1845
920841	4796 - 4849	1844 - 1791
920842	4850 - 4903	1790 - 1737
920843	4904 - 4957	1736 - 1683
920844	4958 - 5011	1682 - 1629
920845	5012 - 5064	1628 - 1576
920846	5065 - 5114	1575 - 1526
920847	5115 - 5168	1525 - 1472
920848	5169 - 5220	1471 - 1420
920849	5221 - 5274	1419 - 1366
920850	5275 - 5328	1365 - 1312
920851	5329 - 5382	1311 - 1258
920852	5383 - 5436	1257 - 1204

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LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 43		
PAC 920853	5437 - 5490	1203 - 1150
920854	5491 - 5544	1149 - 1096
920855	5545 - 5598	1095 - 1042
920856	5599 - 5620	1041 - 1020

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 53		
PAC 920857	1 - 54	100 - 153
920858	55 - 108	154 - 207
920859	109 - 162	208 - 261
920860	163 - 216	262 - 315
920861	217 - 270	316 - 369
920862	271 - 324	370 - 423
920863	325 - 378	424 - 477
920864	379 - 433	478 - 532
920865	434 - 486	533 - 585
920866	487 - 541	586 - 640
920867	542 - 592	641 - 691
920868	593 - 646	692 - 745
920869	647 - 700	746 - 799
920870	701 - 754	800 - 853
920871	755 - 808	854 - 907
920872	809 - 862	908 - 961
920873	863 - 916	962 - 1015
920874	917 - 970	1016 - 1069
920875	971 - 1024	1070 - 1123
920876	1025 - 1078	1124 - 1177
920877	1079 - 1129	1178 - 1228
920878	1130 - 1183	1229 - 1282
920879	1184 - 1238	1283 - 1337
920880	1239 - 1292	1338 - 1391
920881	1293 - 1334	1392 - 1433
920882	1335 - 1388	1434 - 1487

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 53		
PAC 920883	1389 - 1442	1488 - 1541
920884	1443 - 1496	1542 - 1595
920885	1497 - 1550	1596 - 1649
920886	1551 - 1604	1650 - 1703
920887	1605 - 1659	1704 - 1758
920888	1660 - 1715	1759 - 1814
920889	1716 - 1769	1815 - 1868
920890	1770 - 1823	1869 - 1922
920891	1824 - 1860	1923 - 1961
920892	1861 - 1914	1962 - 2015
920893	1915 - 1968	2016 - 2069
920894	1969 - 2023	2070 - 2124
920895	2024 - 2079	2125 - 2180
920896	2080 - 2133	2181 - 2234
920897	2134 - 2187	2235 - 2288
920898	2188 - 2241	2289 - 2342
920899	2242 - 2295	2343 - 2396
920900	2296 - 2351	2397 - 2452
920901	2352 - 2405	2453 - 2506
920902	2406 - 2459	2507 - 2560
920903	2460 - 2511	2561 - 2612
920904	2512 - 2566	2613 - 2667
920905	2567 - 2618	2668 - 2719
920906	2619 - 2673	2720 - 2774
920907	2674 - 2723	2775 - 2824
920908	2724 - 2777	2825 - 2878

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 53		
PAC 920909	2778 - 2831	2879 - 2932
920910	2832 - 2887	2933 - 2988
920911	2888 - 2943	2989 - 3044
920912	2944 - 2997	3045 - 3098
920913	2998 - 3051	3099 - 3152
920914	3052 - 3102	3153 - 3203
920915	3103 - 3158	3204 - 3259
920916	3159 - 3212	3260 - 3313
920917	3213 - 3266	3314 - 3367
920918	3267 - 3320	3368 - 3421
920919	3321 - 3374	3422 - 3475
920920	3375 - 3416	3476 - 3517
920921	3417 - 3469	3518 - 3570
920922	3470 - 3523	3571 - 3624
920923	3524 - 3577	3625 - 3678
920924	3578 - 3631	3679 - 3732
920925	3632 - 3685	3733 - 3786
920926	3686 - 3738	3787 - 3839
920927	3739 - 3793	3840 - 3894
920928	3794 - 3844	3895 - 3945
920929	3845 - 3898	3946 - 3999
920930	3899 - 3952	4000 - 4053
920931	3953 - 4006	4054 - 4107
920932	4007 - 4060	4108 - 4161
920933	4061 - 4114	4162 - 4215
920934	4115 - 4168	4216 - 4269

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 53		
PAC 920935	4169 - 4222	4270 - 4323
920936	4223 - 4276	4324 - 4377
920937	4277 - 4331	4378 - 4432
920938	4332 - 4385	4433 - 4486
920939	4386 - 4439	4487 - 4540
920940	4440 - 4493	4541 - 4594
920941	4494 - 4547	4595 - 4648
920942	4548 - 4601	4649 - 4702
920943	4602 - 4655	4703 - 4756
920944	4656 - 4709	4757 - 4810
920945	4710 - 4763	4811 - 4864
920946	4764 - 4817	4865 - 4918
920947	4818 - 4871	4919 - 4972
920948	4872 - 4925	4973 - 5026
920949	4926 - 4979	5027 - 5080
920950	4980 - 5033	5081 - 5134
920951	5034 - 5087	5135 - 5188
920952	5088 - 5123	5189 - 5224

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LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 61		
PAC 920953	1 - 46	100 - 145
920954	47 - 92	146 - 191
920955	93 - 138	192 - 237
920956	139 - 184	238 - 283
920957	185 - 230	284 - 329
920958	231 - 276	330 - 375
920959	277 - 322	376 - 421
920960	323 - 368	422 - 467
920961	369 - 414	468 - 513
920962	415 - 460	514 - 559
920963	461 - 508	560 - 607
920964	509 - 555	608 - 654
920965	556 - 601	655 - 700
920966	602 - 635	701 - 734
920967	636 - 681	735 - 780
920968	682 - 727	781 - 826
920969	728 - 773	827 - 872
920970	774 - 819	873 - 918
920971	820 - 864	919 - 963
920972	865 - 911	964 - 1010
920973	912 - 957	1011 - 1056
920974	958 - 999	1057 - 1098
920975	1000 - 1046	1099 - 1145
920976	1047 - 1092	1146 - 1191
920977	1093 - 1138	1192 - 1237
920978	1139 - 1184	1238 - 1283

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 61		
PAC 920979	1185 - 1230	1284 - 1329
920980	1231 - 1276	1330 - 1375
920981	1277 - 1322	1376 - 1421
920982	1323 - 1343	1422 - 1442
920983	1344 - 1389	1443 - 1498
920984	1390 - 1435	1525 - 1572
920985	1436 - 1481	1573 - 1618
920986	1482 - 1530	1619 - 1688
920987	1531 - 1577	1689 - 1735
920988	1578 - 1623	1736 - 1784
920989	1624 - 1669	1785 - 1830
920990	1670 - 1715	1831 - 1880
920991	1716 - 1761	1881 - 1929
920992	1762 - 1794	1930 - 1962
920993	1795 - 1840	1963 - 2010
920994	1841 - 1886	2011 - 2058
920995	1887 - 1934	2059 - 2106
920996	1935 - 1980	2107 - 2152
920997	1981 - 2026	2153 - 2201
920998	2027 - 2072	2202 - 2247
920999	2073 - 2115	2248 - 2290
921000	2116 - 2155	2291 - 2330

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LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 63		
PAC 921001	1 - 54	4208 - 4155
921002	55 - 108	4154 - 4101
921003	109 - 162	4100 - 4047
921004	163 - 210	4046 - 3999
921005	211 - 256	3998 - 3953
921006	257 - 310	3952 - 3899
921007	311 - 343	3898 - 3866
921008	344 - 397	3865 - 3812
921009	398 - 424	3811 - 3785
921010	425 - 478	3784 - 3731
921011	479 - 534	3730 - 3675
921012	535 - 588	3674 - 3621
921013	589 - 640	3620 - 3569
921014	641 - 694	3568 - 3515
921015	695 - 734	3514 - 3475
921016	735 - 791	3474 - 3418
921017	792 - 845	3417 - 3363
921018	846 - 899	3362 - 3309
921019	900 - 953	3308 - 3255
921020	954 - 1007	3254 - 3201
921021	1008 - 1061	3200 - 3147
921022	1062 - 1115	3146 - 3093
921023	1116 - 1169	3092 - 3039
921024	1170 - 1223	3038 - 2985
921025	1224 - 1279	2984 - 2929
921026	1280 - 1334	2928 - 2874

APPENDIX "D"

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LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 63		
PAC 921027	1335 - 1389	2873 - 2819
921028	1390 - 1444	2818 - 2764
921029	1445 - 1499	2763 - 2709
921030	1500 - 1552	2708 - 2656
921031	1553 - 1605	2655 - 2603
921032	1606 - 1658	2602 - 2550
921033	1659 - 1711	2549 - 2489
921034	1712 - 1764	2488 - 2436
921035	1765 - 1795	2435 - 2405
921036	1796 - 1849	2404 - 2351
921037	1850 - 1895	2350 - 2305
921038	1896 - 1949	2304 - 2250
921039	1950 - 1996	2249 - 2203
921040	1997 - 2044	2202 - 2155
921041	2045 - 2097	2154 - 2102
921042	2098 - 2150	2101 - 2049
921043	2151 - 2203	2048 - 1996
921044	2204 - 2256	1995 - 1943
921045	2257 - 2309	1942 - 1890
921046	2310 - 2362	1889 - 1837
921047	2363 - 2415	1836 - 1784
921048	2416 - 2468	1783 - 1731
921049	2469 - 2523	1730 - 1676
921050	2524 - 2577	1675 - 1622
921051	2578 - 2631	1621 - 1568
921052	2632 - 2685	1567 - 1514

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 63		
PAC 921053	2686 - 2739	1513 - 1460
921054	2740 - 2788	1459 - 1411
921055	2789 - 2841	1410 - 1358
921056	2842 - 2895	1357 - 1304
921057	2896 - 2948	1303 - 1251
921058	2949 - 3001	1250 - 1198
921059	3002 - 3054	1197 - 1145
921060	3055 - 3107	1144 - 1092
921061	3108 - 3160	1091 - 1039
921062	3161 - 3213	1038 - 986
921063	3214 - 3266	985 - 933
921064	3267 - 3319	932 - 880
921065	3320 - 3374	879 - 823
921066	3375 - 3422	822 - 776
921067	3423 - 3475	775 - 723
921068	3476 - 3528	722 - 670
921069	3529 - 3581	669 - 617
921070	3582 - 3634	616 - 564
921071	3635 - 3685	563 - 513
921072	3686 - 3738	512 - 460
921073	3739 - 3791	459 - 407
921074	3792 - 3844	406 - 354
921075	3845 - 3897	353 - 301
921076	3898 - 3951	300 - 247
921077	3952 - 3980	246 - 218
921078	3981 - 4009	217 - 189

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LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 63		
PAC 921079	4010 - 4062	188 - 136
921080	4063 - 4078	135 - 120

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LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 73		
PAC 921081	1 - 46	110 - 155
921082	47 - 92	156 - 201
921083	93 - 138	202 - 247
921084	139 - 184	248 - 293
921085	185 - 230	294 - 339
921086	231 - 276	340 - 385
921087	277 - 322	386 - 431
921088	323 - 369	432 - 478
921089	370 - 402	479 - 511
921090	403 - 449	512 - 558
921091	450 - 495	559 - 604
921092	496 - 541	605 - 650
921093	542 - 587	651 - 696
921094	588 - 633	697 - 742
921095	634 - 679	743 - 788
921096	680 - 725	789 - 834
921097	726 - 771	835 - 880
921098	772 - 817	881 - 926
921099	818 - 863	927 - 972
921100	864 - 909	973 - 1018
921101	910 - 936	1019 - 1045
921102	937 - 982	1046 - 1091
921103	983 - 997	1092 - 1106
921104	998 - 1043	1107 - 1152
921105	1044 - 1091	1153 - 1200
921106	1092 - 1137	1201 - 1246

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LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 73		
PAC 921107	1138 - 1183	1247 - 1292
921108	1184 - 1229	1293 - 1338
921109	1230 - 1275	1339 - 1384
921110	1276 - 1321	1385 - 1430
921111	1322 - 1367	1431 - 1476
921112	1368 - 1413	1477 - 1522
921113	1414 - 1459	1523 - 1568
921114	1460 - 1503	1569 - 1612
921115	1504 - 1550	1613 - 1659
921116	1551 - 1596	1660 - 1705
921117	1597 - 1642	1706 - 1751
921118	1643 - 1688	1752 - 1797
921119	1689 - 1734	1798 - 1843
921120	1735 - 1780	1844 - 1889
921121	1781 - 1826	1890 - 1935
921122	1827 - 1872	1936 - 1981
921123	1873 - 1918	1982 - 2027
921124	1919 - 1968	2028 - 2077
921125	1969 - 2015	2078 - 2124
921126	2016 - 2062	2125 - 2171
921127	2063 - 2109	2172 - 2218
921128	2110 - 2156	2219 - 2265
921129	2157 - 2192	2266 - 2301
921130	2193 - 2239	2302 - 2348
921131	2240 - 2286	2349 - 2395
921132	2287 - 2333	2396 - 2442

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 73		
PAC 921133	2334 - 2380	2443 - 2489
921134	2381 - 2427	2490 - 2536
921135	2428 - 2474	2537 - 2583
921136	2475 - 2521	2584 - 2630
921137	2522 - 2568	2631 - 2677
921138	2569 - 2615	2678 - 2724
921139	2616 - 2662	2725 - 2771
921140	2663 - 2707	2772 - 2816
921141	2708 - 2754	2817 - 2863
921142	2755 - 2801	2864 - 2910
921143	2802 - 2849	2911 - 2958
921144	2850 - 2896	2959 - 3005
921145	2897 - 2943	3006 - 3052
921146	2944 - 2990	3053 - 3099
921147	2991 - 3037	3100 - 3146
921148	3038 - 3084	3147 - 3193
921149	3085 - 3130	3194 - 3239
921150	3131 - 3178	3240 - 3287
921151	3179 - 3225	3288 - 3334
921152	3226 - 3272	3335 - 3381
921153	3273 - 3319	3382 - 3428
921154	3320 - 3366	3429 - 3475
921155	3367 - 3413	3476 - 3522
921156	3414 - 3460	3523 - 3569
921157	3461 - 3507	3570 - 3616
921158	3508 - 3554	3617 - 3663

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 73		
PAC 921159	3555 - 3601	3664 - 3710
921160	3602 - 3648	3711 - 3757
921161	3649 - 3695	3758 - 3804
921162	3696 - 3742	3805 - 3851
921163	3743 - 3789	3852 - 3898
921164	3790 - 3836	3899 - 3945
921165	3837 - 3883	3946 - 3992
921166	3884 - 3930	3993 - 4039
921167	3931 - 3977	4040 - 4086
921168	3978 - 4024	4087 - 4133
921169	4025 - 4071	4134 - 4180
921170	4072 - 4118	4181 - 4227
921171	4119 - 4152	4228 - 4261
921172	4153 - 4199	4262 - 4308
921173	4200 - 4246	4309 - 4355
921174	4247 - 4289	4356 - 4398
921175	4290 - 4336	4399 - 4445
921176	4337 - 4383	4446 - 4492
921177	4384 - 4430	4493 - 4539
921178	4431 - 4477	4540 - 4586
921179	4478 - 4524	4587 - 4633
921180	4525 - 4571	4634 - 4680
921181	4572 - 4618	4681 - 4727
921182	4619 - 4665	4728 - 4774
921183	4666 - 4712	4775 - 4821
921184	4713 - 4753	4822 - 4862

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 73		
PAC 921185	4754 - 4800	4863 - 4921
921186	4801 - 4847	4922 - 4968
921187	4848 - 4894	4969 - 5015
921188	4895 - 4941	5016 - 5062
921189	4942 - 4988	5063 - 5109
921190	4989 - 5035	5110 - 5156
921191	5036 - 5082	5157 - 5203
921192	5083 - 5129	5204 - 5250
921193	5130 - 5176	5251 - 5297
921194	5177 - 5223	5298 - 5344
921195	5224 - 5270	5345 - 5391
921196	5271 - 5314	5392 - 5435
921197	5315 - 5361	5436 - 5482
921198	5362 - 5394	5483 - 5515
921199	5395 - 5440	5516 - 5561
921200	5441 - 5483	5562 - 5604
921201	5484 - 5526	5605 - 5647
921202	5527 - 5569	5648 - 5690
921203	5570 - 5616	5691 - 5737
921204	5617 - 5663	5738 - 5784
921205	5664 - 5710	5785 - 5831
921206	5711 - 5747	5832 - 5868
921207	5748 - 5794	5869 - 5915
921208	5795 - 5841	5916 - 5962
921209	5842 - 5888	5963 - 6009
921210	5889 - 5935	6010 - 6056

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 73		
PAC 921211	5936 - 5982	6057 - 6103
921212	5983 - 6029	6104 - 6150
921213	6030 - 6076	6151 - 6197
921214	6077 - 6123	6198 - 6244
921215	6124 - 6170	6245 - 6291
921216	6171 - 6217	6292 - 6338
921217	6218 - 6255	6339 - 6376
921218	6256 - 6302	6377 - 6423
921219	6303 - 6349	6424 - 6470
921220	6350 - 6396	6471 - 6517
921221	6397 - 6443	6518 - 6564
921222	6444 - 6490	6565 - 6611
921223	6491 - 6537	6612 - 6658
921224	6538 - 6584	6659 - 6705
921225	6585 - 6631	6706 - 6752
921226	6632 - 6678	6753 - 6799
921227	6679 - 6726	6800 - 6847
921228	6727 - 6773	6848 - 6894
921229	6774 - 6809	6895 - 6930
921230	6810 - 6856	6931 - 6977
921231	6857 - 6903	6978 - 7024
921232	6904 - 6950	7025 - 7071
921233	6951 - 6997	7072 - 7118
921234	6998 - 7044	7119 - 7165
921235	7045 - 7091	7166 - 7212
921236	7092 - 7138	7213 - 7259
921237	7139 - 7179	7260 - 7300

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 73N		
PAC 921238	1 - 47	100 - 146
921239	48 - 94	147 - 193
921240	95 - 141	194 - 240
921241	142 - 188	241 - 287
921242	189 - 235	288 - 334
921243	236 - 279	335 - 378
921244	280 - 326	379 - 425
921245	327 - 373	426 - 472
921246	374 - 421	473 - 613
921247	422 - 467	614 - 659
921248	468 - 513	660 - 705
921249	514 - 559	706 - 751
921250	560 - 605	752 - 797
921251	606 - 640	798 - 832
921252	641 - 682	833 - 874
921253	683 - 728	875 - 920
921254	729 - 774	921 - 966
921255	775 - 820	967 - 1012
921256	821 - 858	1013 - 1050
921257	859 - 904	1051 - 1096
921258	905 - 952	1097 - 1144
921259	953 - 998	1145 - 1190
921260	999 - 1044	1191 - 1236
921261	1045 - 1058	1237 - 1250

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 102		
PAC 921262	1 - 54	100 - 153
921263	55 - 108	154 - 207
921264	109 - 162	208 - 263
921265	163 - 215	264 - 316
921266	216 - 269	317 - 370
921267	270 - 323	371 - 424
921268	324 - 377	425 - 478
921269	378 - 431	479 - 532
921270	432 - 484	533 - 585
921271	485 - 538	586 - 639
921272	539 - 592	640 - 693
921273	593 - 646	694 - 747
921274	647 - 674	748 - 775
921275	675 - 728	776 - 829
921276	729 - 782	830 - 883
921277	783 - 836	884 - 937
921278	837 - 890	938 - 991
921279	891 - 943	992 - 1044
921280	944 - 977	1045 - 1098
921281	998 - 1031	1099 - 1132
921282	1032 - 1085	1133 - 1186
921283	1086 - 1138	1187 - 1239
921284	1139 - 1170	1240 - 1271
921285	1171 - 1219	1272 - 1320
921286	1220 - 1272	1321 - 1373
921287	1273 - 1325	1374 - 1426

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 102		
PAC 921288	1326 - 1378	1427 - 1479
921289	1379 - 1431	1480 - 1532
921290	1432 - 1481	1533 - 1582
921291	1482 - 1534	1583 - 1635
921292	1535 - 1587	1636 - 1688
921293	1588 - 1640	1689 - 1741
921294	1641 - 1693	1742 - 1794
921295	1694 - 1746	1795 - 1847
921296	1747 - 1799	1848 - 1900
921297	1800 - 1852	1901 - 1953
921298	1853 - 1905	1954 - 2006
921299	1906 - 1957	2007 - 2058
921300	1958 - 2010	2059 - 2111
921301	2011 - 2063	2112 - 2164
921302	2064 - 2116	2165 - 2217
921303	2117 - 2169	2218 - 2270
921304	2170 - 2222	2271 - 2323
921305	2223 - 2275	2324 - 2376
921306	2276 - 2328	2377 - 2429
921307	2329 - 2368	2430 - 2469
921308	2369 - 2421	2470 - 2522
921309	2422 - 2474	2523 - 2575
921310	2475 - 2527	2576 - 2628
921311	2528 - 2579	2629 - 2680
921312	2580 - 2632	2681 - 2733
921313	2633 - 2683	2734 - 2784

APPENDIX "D"

LIST OF DATA TAPES

Tape #	File #	V.P. #
Line MC 92 - 102		
PAC 921314	2684 - 2736	2785 - 2837
921315	2737 - 2786	2838 - 2887
921316	2787 - 2838	2888 - 2939
921317	2839 - 2891	2940 - 2992
921318	2892 - 2944	2993 - 3045
921319	2945 - 2997	3046 - 3098
921320	2998 - 3050	3099 - 3151
921321	3051 - 3102	3152 - 3203
921322	3103 - 3155	3204 - 3256
921323	3156 - 3208	3257 - 3309
921324	3209 - 3253	3310 - 3354
921325	3254 - 3305	3355 - 3406
921326	3306 - 3355	3407 - 3456
921327	3356 - 3408	3457 - 3509
921328	3409 - 3461	3510 - 3562
921329	3462 - 3514	3563 - 3615
921330	3515 - 3519	3616 - 3620
921331	3520 - 3572	3621 - 3673
921332	3573 - 3625	3674 - 3726
921333	3626 - 3671	3727 - 3772

APPENDIX B

GEOCOR IV

SEISMIC DATA ACQUISITION AND PROCESSING SYSTEM

FIELD TAPE FORMAT

(May 3, 1979)

GEOPHYSICAL SYSTEMS CORPORATION
2085 EAST FOOTHILL BOULEVARD
PASADENA, CALIFORNIA, 91107

GEOCOR IV

FIELD TAPE FORMAT

Field data is recorded on IBM compatible ½ inch, 9 track tape in demultiplexed format at either 800 or 1600 bits-per-inch density. Each tape reel is divided into trace data blocks each containing a trace identification header and data values from one channel (Fig. 1). Each trace data block is separated from the next by a .6 inch interblock gap (IBG). Data values are recorded in two's complement notation with 16 bits per sample standard (recording 1 or 8 bits per sample is available as a non-standard option).

Two trace data block formats are available:

Trace Data Block - 4 word Trace Identification Header (Fig. 2)
Format #1

Trace Data Block - 32 word Trace Identification Header (Fig. 3)
Format #2

Trace Data Block Format #2 contains more header information and is standard.

TRACE HEADER ITEM DEFINITIONS

	Format	Limits
File number is the sequential number assigned to each record (or file) on a magnetic tape. Each line of receivers generates one record at each source point. A record may contain from one to 1024 traces. The file numbering begins at one for the first record on the first tape and continues sequentially through all the tapes for the line.	16 bit two's complement	1 to 32767
Trace Number is the sequential number, beginning at 1, assigned to each trace collected at a source point.	16 bit two's complement	1 to 1024
Source Point Number represents the actual number assigned to each source point by the surveyor.	16 bit two's complement	-32767 to 32767
Port/Channel Code is a code identifying the input port and channel used to collect each trace. The most significant 6 bits represent the port (0-15) and the least significant 10 bits represent the channel (0-1023).	6 bit/10 bit	0-15/0-1023
Source Line Name is the alphabetic or numeric identification of the line of source points.	6 ASCII characters left justified.	
Receiver Line Name is the alphabetic or numeric identification of the line of receivers.	6 ASCII characters left justified.	
Receiver Number represents the actual number assigned to each receiver location by the surveyor.	16 bit two's complement	-32767 to 32767

GEOCOR IV

FIELD TAPE FORMAT

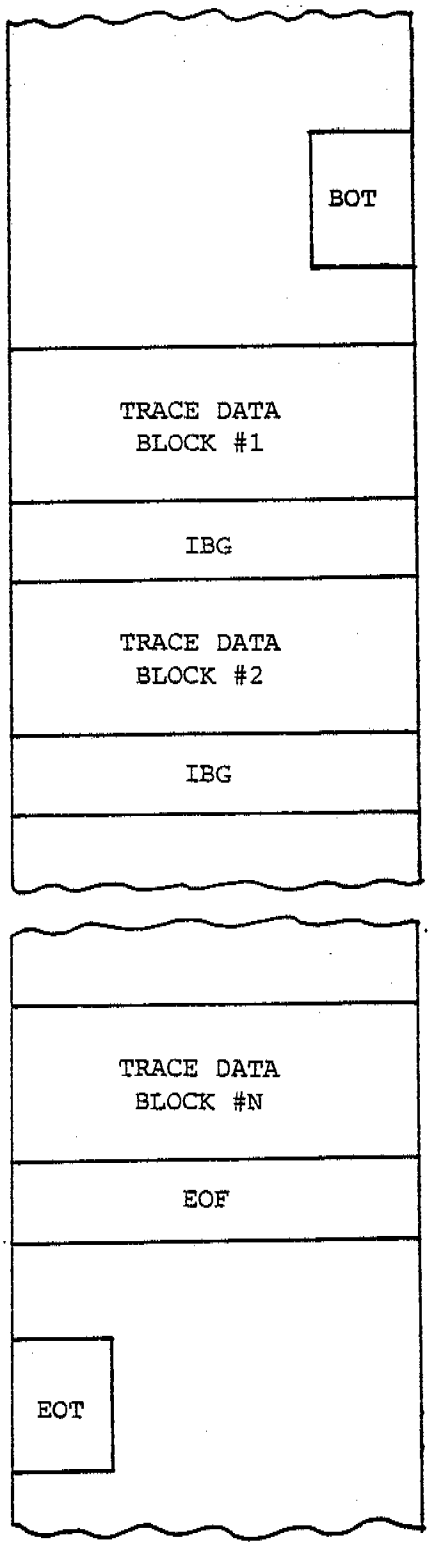


FIG. 1

FORMAT #1

TRACE DATA BLOCK

WORD	BYTE
1	1 2
2	3 4
3	5 6
4	7 8
5	9 10
6	11 12
N+4	2N+7 2N+8

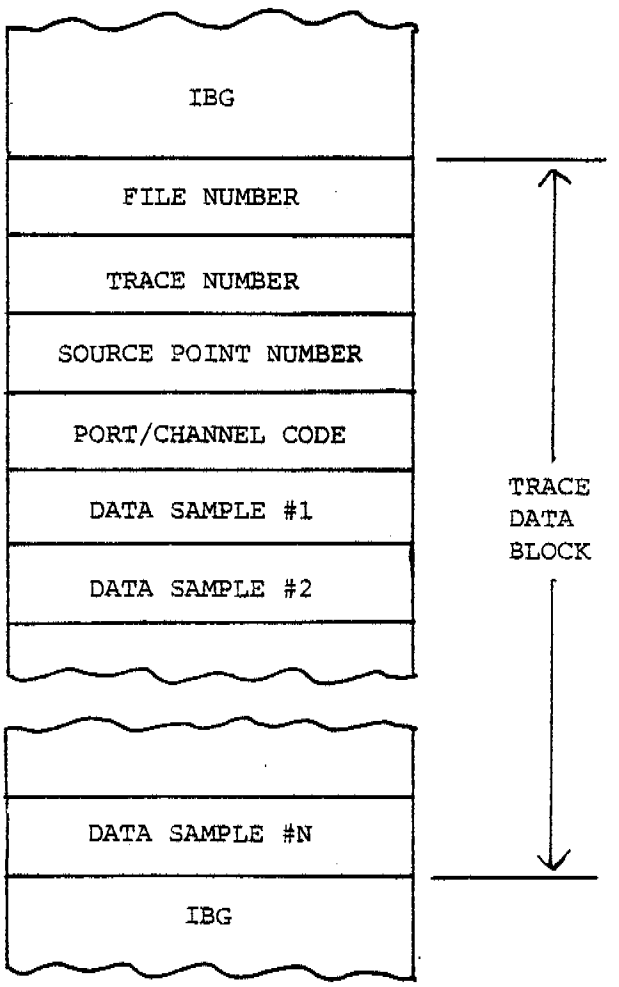


FIG. 2

TRACE DATA BLOCK FORMAT #2

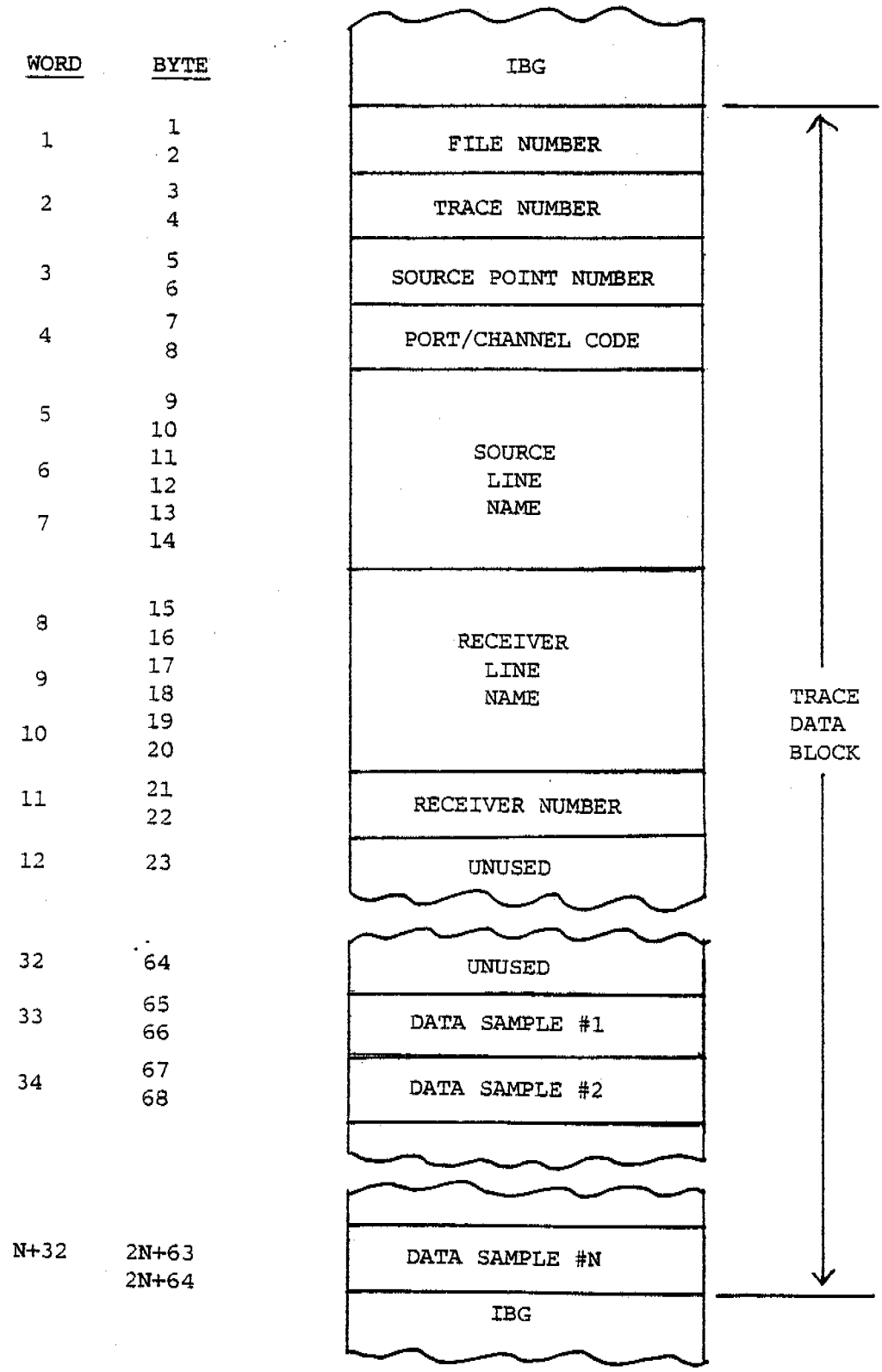


FIG. 3

STACK TAPE FORMAT

WORD	CONTENTS
1	File
2	Trace (=1)
	(Not Used)
23	Avg X
24	Avg X
25	Avg Y
26	Avg Y
27	Avg Static
28	Avg Weight
29	RCP X
30	RCP X
31	RCP Y
32	RCP Y

GATHER TRACE FORMAT

WORD	BYTE	
1	1-2	File Number
2	3-4	Trace Number
3	5-6	Source Point Number
4	7-8	Port/Channel Code
5-7	9-14	Source Line Name
8-10	15-20	Receiver Line Name
11	21-22	Receiver Number
12-13	23-26	Source X
14-15	27-30	Source Y
16	31-32	Source Elevation
17	33-34	Source Residual
18-19	35-38	Receiver X
20-21	39-42	Receiver Y
22	43-44	Receiver Elevation
23	45-46	Receiver Residual
33-n	65-2n	Data Samples

GEOCOR IV

SEISMIC DATA ACQUISITION AND PROCESSING SYSTEM

LOG TAPE FORMAT

(May 15, 1979)

GEOPHYSICAL SYSTEMS CORPORATION
2085 EAST FOOTHILL BOULEVARD
PASADENA, CALIFORNIA, 91107

GEOCOR IV

LOG TAPE FORMAT

All acquisition parameters and log entries recorded in the GEOCOR IV Acquisition Log may also be recorded on magnetic tape for input to subsequent data processing steps. Each line of text written in the log may be recorded as a 65-word block on tape. The format of each text block is described in Figure 2.

Information describing each source point as it is acquired is also recorded in a second format (figures 3, 4, 5). Each source point generates one block of information which contains one section describing the source location and identification and sixteen sections describing the receiver configurations. The source point blocks are 501 words long with the source section occupying words 2-101 and the receiver sections occupying words 102-501. One receiver section is filled in for each independent line of active receivers. An illustration of the total log tape is shown in figure 1.

The information is recorded on IBM compatible, ½ inch, 9-track magnetic tape at either 800 or 1600 bits-per-inch density. Each block of information is separated from the next by a .6 inch inter-block gap (IBG). The source point blocks are written on tape in triplicate to insure that they can be read correctly. Each source point block contains a checksum word to permit detection of incorrect reads.

DEFINITIONS

	Format	Limits
Source Point Number - the number assigned to the actual ground location of each shot or vibrator point.	16 bit two's complement	-32767 to 32767
Source Line Name - the alphabetic or numeric identification of the line of source points.	6 ASCII characters left justified	
Number of Receiver Lines - the number of independent lines of receivers active during data acquisition.	16 bit two's complement	1 to 16
Checksum - the exclusive-or checksum of all the data within the block.	16 bit two's complement	-32768 to 32767
File Number - the number assigned to each group of traces generated by a line of receivers. The file numbers are sequential on tape.	16 bit two's complement	1 to 32767
Receiver Line Name - the alphabetic or numeric identification of the line of receivers.	6 ASCII characters left justified	
Reel Identification - the alphabetic or numeric identification of the magnetic tape reel.	10 ASCII characters left justified	
Number of First Active Trace - the number of the first trace containing seismic data.	16 bit two's complement	1 to 1025
Receiver Number of First Active Trace - the number assigned to the receiver location of the first active tract.	16 bit two's complement	-32767 to 32767
Number of Last Active Trace - the number of the last trace containing seismic data.	16 bit two's complement	1 to 1025
Receiver Number of Last Active Trace - the number assigned to the receiver location of the last active trace.	16 bit two's complement	-32767 to 32767
Number of Traces/File - the number of active and dummy traces within each file on tape. The number of traces/file does not change within a line.	16 bit two's complement	1 to 1025
Block Identification Code - the number which identifies the type of block. 0 = Source Point Block 1 = Text Block	16 bit two's complement	0 to 1

LOG TAPE

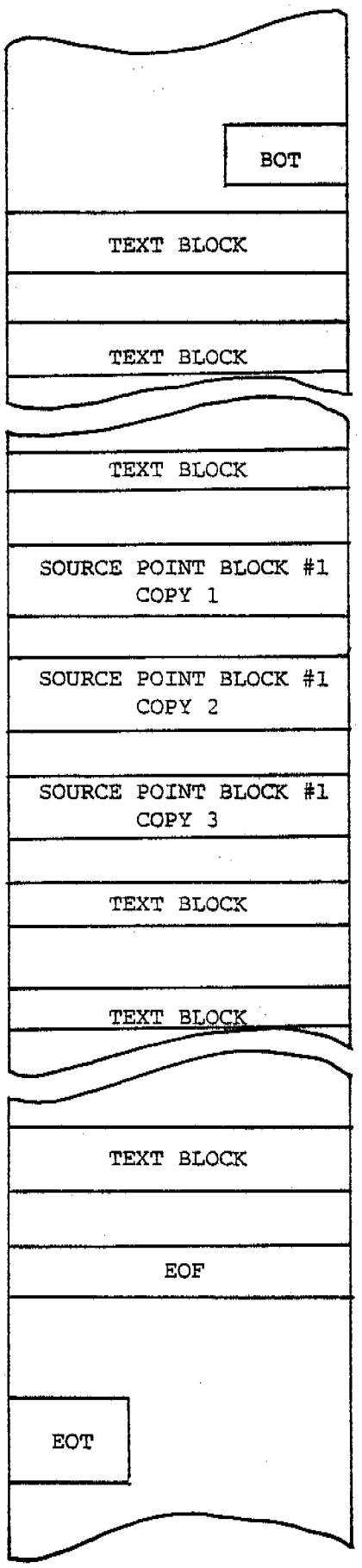


FIG. 1

TEXT BLOCK

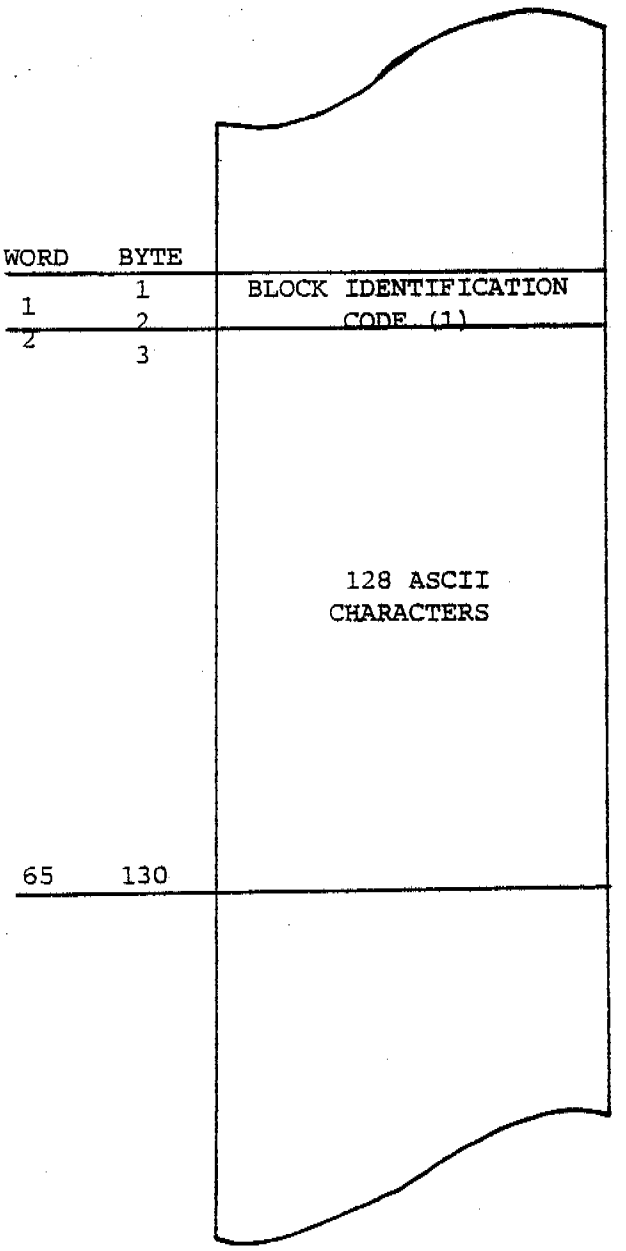


FIG. 2

SOURCE POINT BLOCK

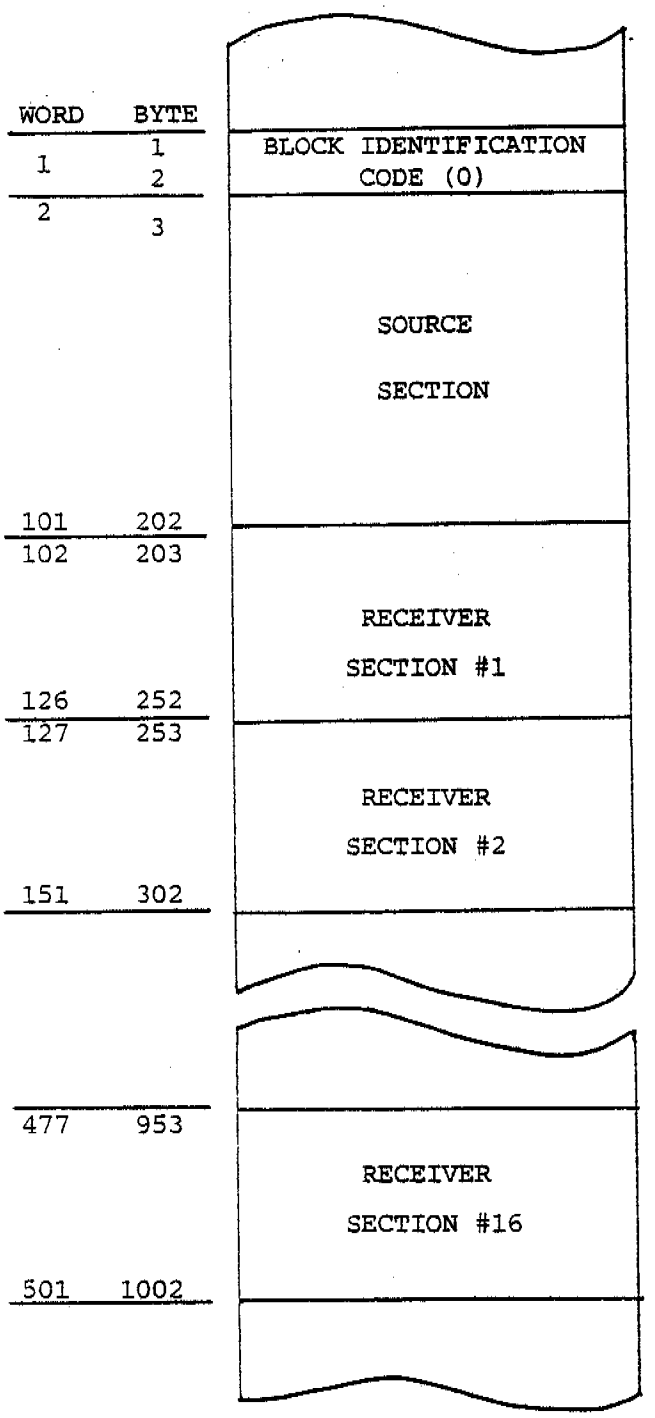


FIG. 3

SOURCE SECTION

OF SOURCE POINT BLOCK

WORD	BYTE
2	3
	4
3	5
5	10
6	11
	12
7	13
	14
8	15
100	200
101	201
	202

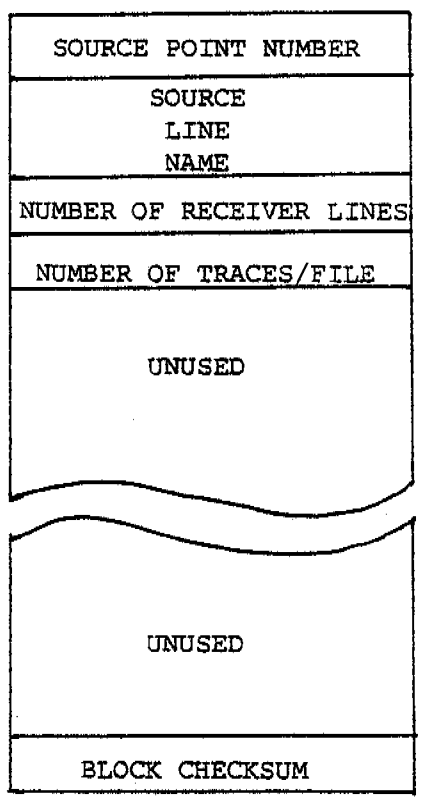


FIG. 4

RECEIVER SECTION #1

OF SOURCE POINT BLOCK

WORD	BYTE
102	203
	204
103	205
105	210
106	211
110	220
111	221
	222
112	223
	224
113	225
	226
114	227
	228
115	229
126	252

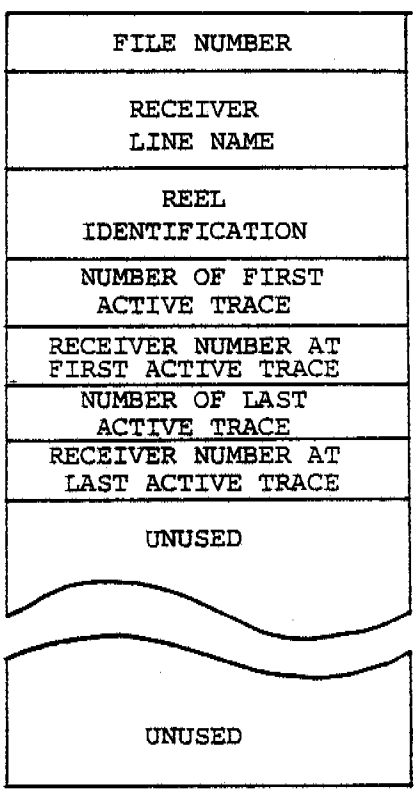


FIG. 5

GEOCOR IV

SEISMIC DATA ACQUISITION AND PROCESSING SYSTEM

COORDINATE TAPE FORMAT

(PRELIMINARY WRITEUP)

GEOPHYSICAL SYSTEMS CORPORATION
2085 EAST FOOTHILL BOULEVARD
PASADENA, CALIFORNIA, 91107

GEOCOR IV

Coordinate Tape Format

The GEOCOR IV System records geophysical survey information on magnetic tape in a blocked, gapped format which is fully IBM compatible. For each source point and receiver location associated with the survey, X, Y, and Z coordinate, residual static correction, latitude and longitude information is included. This information is recorded in data blocks which are followed on the coordinate tape by edit blocks which include receiver edit information for each source point.

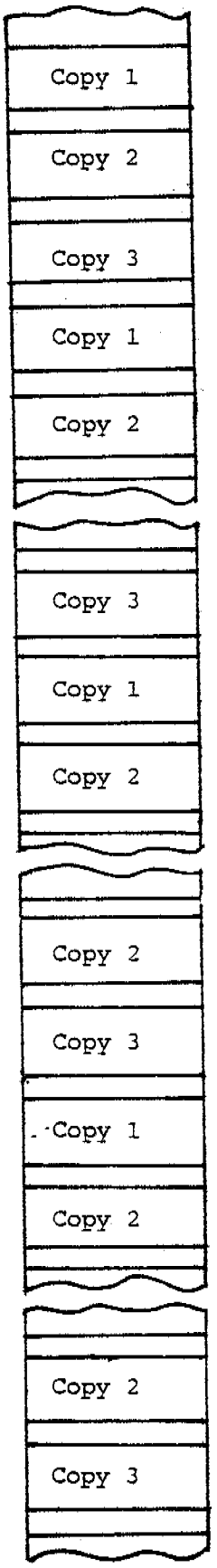
The tape is an IBM-compatible 9-track-magnetic tape that is recorded at either 800 or 1600 bits-per-inch (BPI). Tape codes consist of 16-bit words which include a sign bit and 15 data bits. The data bits are recorded in a straight binary code with a two's complement negative number representation. The sign bit of the least significant word of two word values is always set to zero.

The coordinate tape is written with three identical copies of each block. Each block is separated from the next block by a .6 inch interblock gap (IBG). Data blocks contain 2002 words each and edit blocks contain 1040 words each. (Fig. 1).

Each data block contains a block number (word 1), 100 20-word records (2ords 2-2001) and a checksum (word 2002). (Fig. 2). Each 20-word record is associated with a source point of receiver location. Latitude and longitude are expressed in hundredths of a second as 32-bit integer values. (Fig. 3).

Each edit block contains a block number (word 1), the source point number to which the edits apply (word 2), the number of receiver edits included in the block (word 3), spare words (words 4-15), receiver edits (words 16-1039) and a checksum (word 1040). (Fig. 4).

The first n blocks on the coordinate tape contain source point location data and are numbered consecutively from 1 to n. These are followed by m blocks containing receiver location data numbered from 1 to m. An all-zero record indicates the termination of data within a block, and the remainder of the records in that block will also be all-zero. These data blocks are followed by p edit blocks numbered consecutively from 1 to p. There is one 1040-word edit block for each source point described in the first n data blocks.



Data Block #1
Source Point
Location Data

Data Block #2
Source Point
Location Data

Data Block #n
Source Point
Location Data

Data Block #1
Receiver
Location Data

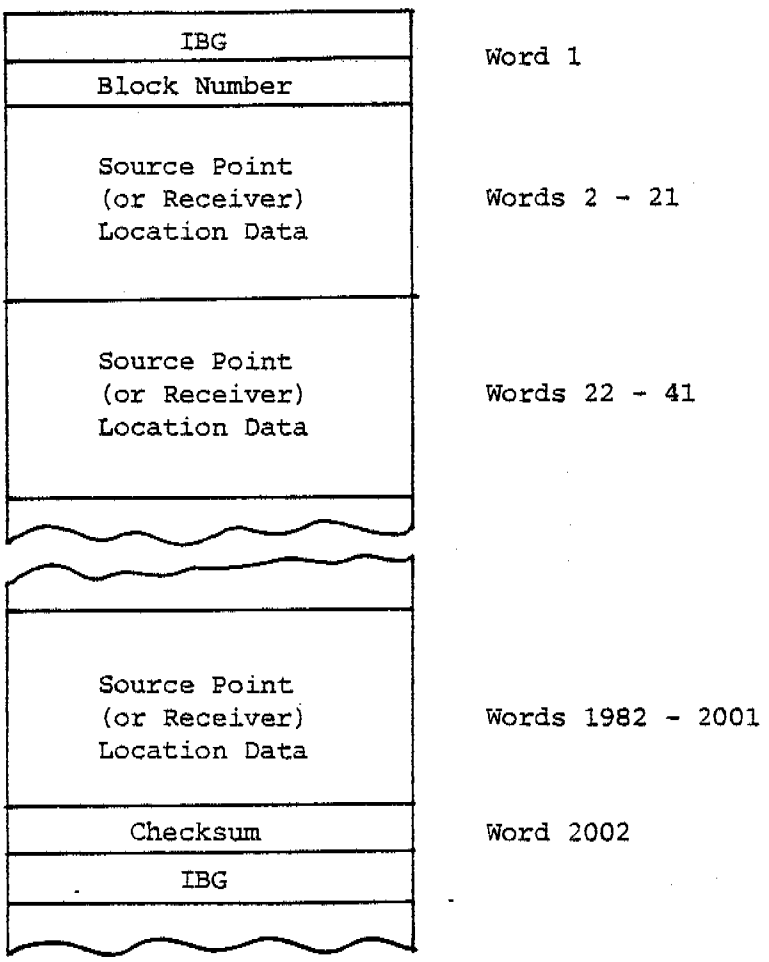
Data Block #m
Receiver
Location Data

Edit Block for
Source Point 1

Edit Block for
Source Point p

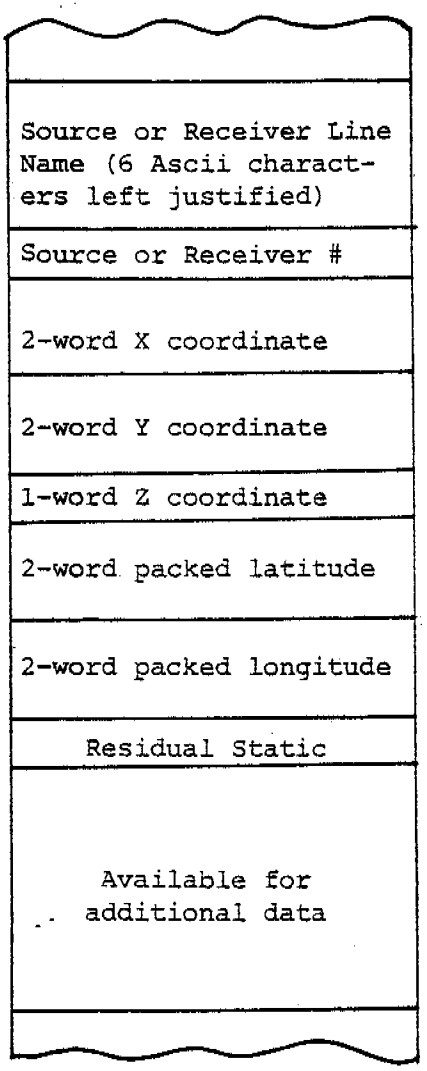
COORDINATE TAPE FORMAT

FIG. 1



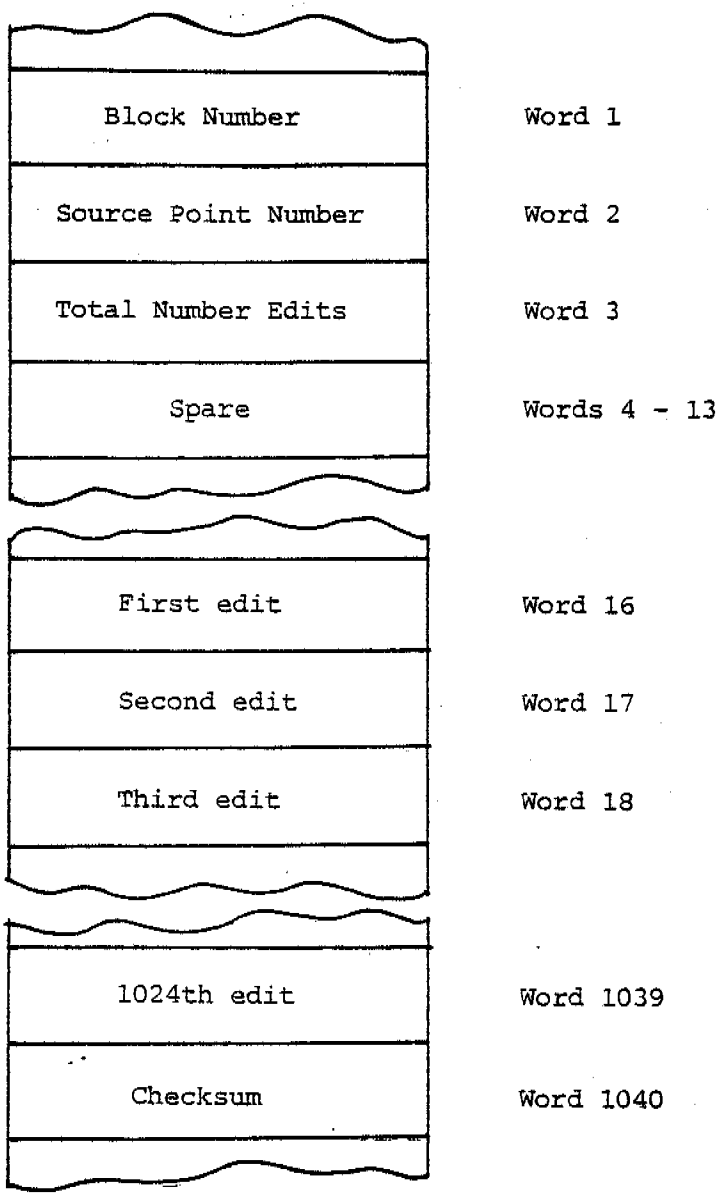
BLOCK FORMAT

FIG. 2



DATA RECORD FORMAT

FIG. 3



EDIT BLOCK FORMAT

FIG. 4

RESIDUAL TAPE FORMAT

The raw residuals output by TDR100 are stored on magnetic tape in variable length records (not longer than 2055 16-bit words). Each source or receiver line is split into segments not exceeding 2048 residual points worth of data. Each record on tape (described below) includes either the raw residuals or correlation counts for one segment and is output in triplicate. The block numbers for residuals are increasing positive integers, while the correlation blocks immediately follow and are numbered with the additive inverse of the corresponding residual block.

All source lines are present on the residual tape before the receiver lines, and the coordinate tape information is used to differentiate the source and receiver records.

For example, a typical 3D prospect might include:

	LINE NAME	POINTS
Source	SRC001	1 - 3500
	SRC002	5001 - 6000
Receiver	REC001	1 - 256
	REC002	1001 - 1256

This would produce a residual output tape as follows:

BLOCK	CONTENT	(Each block in triplicate)	
1	SRC001	1 - 2048	Raw residuals
-1	SRC001	1 - 2048	Correlation count
2	SRC001	2049 - 3500	Raw residuals
-2	SRC001	2049 - 3500	Correlation count
3	SRC002	5001 - 6000	Raw residuals
-3	SRC002	5001 - 6000	Correlation count
4	REC001	1 - 256	Raw residuals
-4	REC001	1 - 256	Correlation count
5	REC002	1001 - 1256	Raw residuals
-5	REC002	1001 - 1256	Correlation count

Each block (either raw residuals or correlation count) is formatted as follows. The checksum is an exclusive - or checksum of all the data (words 1 to n-1) with the block.

WORD		
1	.....	Block number
2 - 4	.....	Source or receiver line name
5	.....	First source or receiver point this record
6	.....	Last source or receiver point this record
7		
.	.....	Raw residuals or correlation count
.	.....	for each source or receiver point
n - 1		
n	.....	Checksum

GEOSYSTEMS PTY LTD

CREW NO..... 205 WEEKLY OPERATIONS SUMMARY WEEK ENDING.... 7/6/1992

Client.....	PACIFIC OIL & GAS	Party Manager.....	Eric Bowron
Survey Name....	1992 McArthur Seismic Survey	Client Rep.....	Bill Foster
Area.....	EP-33 & EP-18 McArthur Basin	Crew Address.....	Jamieson No.1
State.....	N.T.	Crew Phone No.....	007 114 121

	MON 1	TUE 2	WED 3	THU 4	FRI 5	SAT 6	SUN 7	WEEK	MONTH	JOB
Travel Hours.....	1.25	1.25	1.25	1.50	2.00	2.25	2.75	12.25	12.25	12.25
Test Hours.....	0.00	0.75	0.25	0.00	0.25	0.25	0.25	1.75	1.75	1.75
Recording Hours...	0.00	0.00	0.00	4.00	7.25	7.25	6.50	25.00	25.00	25.00
Other Pd Hours....	8.75	10.50	9.75	5.50	1.00	1.25	1.50	38.25	38.25	38.25
Total Pd Hours....	10.00	12.50	11.25	11.00	10.50	11.00	11.00	77.25	77.25	77.25
Production Kms....	0.000	0.000	0.000	3.800	5.920	7.090	6.370	23.180	23.180	23.180
Processing Hours..	0.00	24.00	24.00	12.00	12.00	12.00	12.00	96.00	96.00	96.00
Profiles.....	0	0	0	381	592	709	637			
Weather.....	Hot	Hot	Hot	Hot	Hot	Hot	Hot			
Down Time -										
Vibes.....	0.00	0.50	1.00	0.00	0.50	0.00	0.00	2.00	2.00	2.00
Recorder.....	0.00	1.50	0.00	0.00	0.25	0.00	0.00	1.75	1.75	1.75
Cables.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ATU's.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Down Time..	0.00	2.00	1.00	0.00	0.75	0.00	0.00	3.75	3.75	3.75

WEEKLY EQUIPMENT STATUS

	Good	Bad	Total
ATU's.....	57	33	90
Cables.....	132	19	151
Geophones....	1850	16	1866

COMMENTS, VISITORS, ETC.

Contract commenced 1/6/92 and experimental spread was laid out that day. Koya Suto (P.O.G.) already on crew Steve Tobin (Geo Systems) and Bob Castleden (P.O.G.) arrived pm 1/6/92. Experimental programme conducted 2-3/6/92 and production recording commenced 4/6/92. All above visitors departed crew 4/6/92.

OPERATING PARAMETERS AND EQUIPMENT

Av. Road Cond....	Very Rough	ATU Type.....	Model 1	Geo. Group.....	12
Av. Fld. Cond....	Very rough	Notch Filter....	Out	Geo. Interval...	10m
Av. Rec. Qual....	Good	Geo. Mfg. Type..	Mark	VP Interval.....	10m
System No.....	Geocor IV	Geo. Freq.....	10 Hz.	Traces/File.....	550
System Mfg.....	G.S.C.	Geo. Int. Res...	215 Ohm	Swps/VP.....	2
Tape Format.....	1600 BPI	Geo. Base.....	Spike	Sweep Time.....	6 sec
Vib. Type.....	International	Spread Confr....	2750-0-2750	Listen Time.....	3 sec
Vib. Elect.....	Pelton			Sample Rate.....	4 ms

VEHICLES

Party Manager....	8GA 136	Mechanic.....	7MC 078	Recorder.....	7DJ 823
Client.....	7IE 895	Line PC.....	7IO 055	Processing.....	7BB 109
Survey (1).....	7OS 643	Vibe Crew Cab...	8AD 128	Cable (1).....	7EG 108
Chaining	7IB 916	Vib Service.....	6YR 166	Cable (2).....	7IG 615
Box Truck (1)....	7LT 150	Hino.....	7DT 982	Vibrator (1)....	6KF 386
Box Truck (2)....	8CF 106	Fuel.....	7AL 125	Vibrator (2)....	6KF 387
Line Boss.....	7LT 149	Generator.....	7IG 612	Vibrator (3)....	6KF 388
Line Ute.....	8HT 059	Water.....	7AU 532	Vibrator (4)....	6KF 390
Line Ute.....	7IB 918				

GEOSYSTEMS PTY LTD

CREW NO..... 205 — WEEKLY OPERATIONS SUMMARY — WEEK ENDING.... 14/6/1992

Client.....	PACIFIC OIL & GAS	Party Manager.....	Eric Bowron
Survey Name....	1992 McArthur Seismic Survey	Client Rep.....	Bill Foster
Area.....	EP-33 & EP-18 McArthur Basin	Crew Address.....	Stuart Hwy, Dunmarra.
State.....	N.T.	Crew Phone No.....	007 114 121

	MON 8	TUE 9	WED 10	THU 11	FRI 12	SAT 13	SUN 14	WEEK	MONTH	JOB
Travel Hours.....	2.50	2.75	2.50	2.00	1.25	1.25	0.50	12.75	25.00	25.00
Test Hours.....	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1.75	3.50	3.50
Recording Hours...	5.25	5.25	6.75	7.25	8.00	6.00	4.50	43.00	68.00	68.00
Other Pd Hours....	3.00	1.25	1.25	1.00	1.00	2.75	5.25	15.50	53.75	53.75
Total Pd Hours....	11.00	9.50	10.75	10.50	10.50	10.25	10.50	73.00	150.25	150.25
Production Kms....	5.160	5.190	7.030	7.270	8.270	5.720	4.060	42.700	65.880	65.880
Processing Hours..	12.00	10.00	24.00	24.00	24.00	24.00	15.00	133.00	229.00	229.00
Profiles.....	516	519	703	727	827	573	406			
Weather.....	Hot	Hot	Hot	Cool	Cool	Hot	Hot			
Down Time -										
Vibes.....	0.00	0.00	0.00	0.25	0.00	0.25	0.00	0.50	2.50	2.50
Recorder.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.75	1.75
Cables.....	0.00	0.00	0.25	0.00	0.25	0.00	0.00	0.50	0.50	0.50
ATU's.....	0.25	0.25	0.00	0.25	0.25	0.00	0.25	1.25	1.25	1.25
Other.....	0.00	3.25	0.00	0.00	0.00	0.00	0.00	3.25	3.25	3.25
Total Down Time..	0.25	3.50	0.25	0.50	0.50	0.25	0.25	5.50	9.25	9.25

WEEKLY EQUIPMENT STATUS

	Good	Bad	Total
ATU's.....	62	28	90
Cables.....	126	25	151
Geophones....	1845	21	1866

COMMENTS, VISITORS, ETC.

Ian Clemenson and Kevin Tuckwell (P.O.G.) visited crew on 11/12 June.
Moved camp from Jamieson No.1 well site to gravel pit 9km north of Dunmarra on eastern side of Stuart Hwy on Sunday 14th June.

OPERATING PARAMETERS AND EQUIPMENT

Av. Road Cond....	Very Rough	ATU Type.....	Model 1	Geo. Group.....	12
Av. Fld. Cond....	Very rough	Notch Filter....	Out	Geo. Interval...	10m
Av. Rec. Qual....	Good	Geo. Mfg. Type..	Mark	VP Interval.....	10m
System No.....	Geocor IV	Geo. Freq.....	10 Hz.	Traces/File.....	550
System Mfg.....	G.S.C.	Geo. Int. Res...	215 Ohm	Swps/VP.....	2
Tape Format.....	1600 BPI	Geo. Base.....	Spike	Sweep Time.....	6 sec
Vib. Type.....	International	Spread Confr....	2750-0-2750	Listen Time.....	3 sec
Vib. Elect.....	Pelton			Sample Rate.....	4 ms

VEHICLES

Party Manager....	8GA 136	Line Ute.....	7IB 918	Recorder.....	7DJ 823
Client.....	7IE 895	Mechanic.....	7MC 078	Processing.....	7BB 109
Survey (1).....	70S 643	Line PC.....	7IQ 055	Cable (1).....	7EG 108
Chaining	7IB 916	Vibe Crew Cab...	8AD 128	Cable (2).....	7IG 615
Box Truck (1)....	7LT 150	Vib Service.....	6YR 166	Vibrator (1)....	6KF 386
Box Truck (2)....	8CF 106	Hino.....	7DT 982	Vibrator (2)....	6KF 387
Line Boss.....	7LT 149	Fuel.....	7AL 125	Vibrator (3)....	6KF 388
Line Ute.....	8HT 059	Generator.....	7IG 612	Vibrator (4)....	6KF 390
		Water.....	7AU 532		

GEOSYSTEMS PTY LTD

CREW NO..... 205 — WEEKLY OPERATIONS SUMMARY — WEEK ENDING.... 21/6/1992

Client.....	PACIFIC OIL & GAS	Party Manager.....	Eric Bowron
Survey Name....	1992 McArthur Seismic Survey	Client Rep.....	Bill Foster
Area.....	EP-33 & EP-18 McArthur Basin	Crew Address.....	Stuart Hwy, Dunmarra.
State.....	N.T.	Crew Phone No.....	007 114 121

	MON 15	TUE 16	WED 17	THU 18	FRI 19	SAT 20	SUN 21	WEEK	MONTH	JOB
Travel Hours.....	1.00	1.00	0.75	0.75	1.25	1.25	1.25	7.25	32.25	32.25
Test Hours.....	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1.75	5.25	5.25
Recording Hours...	6.00	6.75	7.25	7.75	8.00	8.00	6.25	50.00	118.00	118.00
Other Pd Hours....	1.00	1.75	2.00	1.00	1.25	1.25	2.75	11.00	64.75	64.75
Total Pd Hours....	8.25	9.75	10.25	9.75	10.75	10.75	10.50	70.00	220.25	220.25
Production Kms....	5.820	6.820	7.550	7.700	8.170	8.340	5.990	50.390	116.270	116.270
Processing Hours..	24.00	24.00	23.00	23.00	23.00	23.00	23.00	163.00	392.00	392.00
Profiles.....	582	682	737	767	817	834	600			
Weather.....	Hot	Hot	Hot	Hot	Hot	Hot	Hot			
Down Time -										
Vibes.....	0.25	0.00	0.00	0.00	0.25	0.00	0.00	0.50	3.00	3.00
Recorder.....	0.25	2.00	0.00	2.00	0.00	0.25	0.50	5.00	6.75	6.75
Cables.....	0.00	0.00	0.25	0.00	0.00	0.25	0.25	0.75	1.25	1.25
ATU's.....	0.00	0.00	0.25	0.00	0.00	0.25	0.00	0.50	1.75	1.75
Other.....	3.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00	6.25	6.25
Total Down Time..	3.50	2.00	0.50	2.00	0.25	0.75	0.75	9.75	19.00	19.00

WEEKLY EQUIPMENT STATUS

	Good	Bad	Total
ATU's.....	70	20	90
Cables.....	113	36	149
Geophones....	1780	86	1866

COMMENTS, VISITORS, ETC.

Considerable re-chaining of lines due to cattle. Excessive cable damage due to rough nature of line clearing (cables continually entangling in heavy scrub)

OPERATING PARAMETERS AND EQUIPMENT

Av. Road Cond....	Very Rough	ATU Type.....	Model 1	Geo. Group.....	12
Av. Fld. Cond....	Very Rough	Notch Filter....	Out	Geo. Interval...	10m
Av. Rec. Qual....	Good	Geo. Mfg. Type..	Mark	VP Interval.....	10m
System No.....	Geocor IV	Geo. Freq.....	10 Hz.	Traces/File.....	550
System Mfg.....	G.S.C.	Geo. Int. Res...	215 Ohm	Swps/VP.....	2
Tape Format.....	1600 BPI	Geo. Base.....	Spike	Sweep Time.....	6 sec
Vib. Type.....	International	Spread Confr....	2750-0-2750	Listen Time.....	3 sec
Vib. Elect.....	Pelton			Sample Rate.....	4 ms

VEHICLES

Party Manager....	8GA 136	Line Ute.....	7IB 918	Recorder.....	7DJ 823
Client.....	7IE 895	Mechanic.....	7MC 078	Processing.....	7BB 109
Survey (1).....	70S 643	Line PC.....	7ID 055	Cable (1).....	7EG 108
Chaining	7IB 916	Vibe Crew Cab...	8AD 128	Cable (2).....	7IG 615
Box Truck (1)....	7LT 150	Vib Service.....	6YR 166	Vibrator (1)....	6KF 386
Box Truck (2)....	8CF 106	Hino.....	7DT 982	Vibrator (2)....	6KF 387
Line Boss.....	7LT 149	Fuel.....	7AL 125	Vibrator (3)....	6KF 388
Line Ute.....	7HR 848	Generator.....	7IG 612	Vibrator (4)....	6KF 390
		Water.....	7AU 532		

GEOSYSTEMS PTY LTD

CREW NO..... 205 — WEEKLY OPERATIONS SUMMARY — WEEK ENDING.... 28/6/1992

Client.....	PACIFIC OIL & GAS	Party Manager.....	Eric Bowron
Survey Name....	1992 McArthur Seismic Survey	Client Rep.....	Bill Foster
Area.....	EP-33 & EP-18 McArthur Basin	Crew Address.....	Nutwood Downs
State.....	N.T.	Crew Phone No.....	007 114 121

	MON 22	TUE 23	WED 24	THU 25	FRI 26	SAT 27	SUN 28	WEEK	MONTH	JOB
Travel Hours.....	1.00	1.75	2.25	1.75	1.25	0.75	0.50	9.25	41.50	41.50
Test Hours.....	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1.75	7.00	7.00
Recording Hours...	7.25	6.75	6.00	4.25	7.50	8.00	8.25	48.00	166.00	166.00
Other Pd Hours....	2.25	2.00	2.00	5.25	1.75	1.00	1.75	16.00	80.75	80.75
Total Pd Hours....	10.75	10.75	10.50	11.50	10.75	10.00	10.75	75.00	294.75	294.75
Production Kms....	7.590	6.890	6.040	4.270	7.860	8.370	8.910	49.930	166.200	166.200
Processing Hours..	23.00	23.00	23.00	0.00	22.00	22.00	22.00	135.00	527.00	527.00
Profiles.....	759	689	604	427	786	831	891			
Weather.....	Hot	Cool	Cool	Cool	Cool	Cool	Cool			
Down Time -	0.00	0.00	0.00	0.00	0.25	0.25	0.25	0.75	3.75	3.75
Vibes.....	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25	7.00	7.00
Recorder.....	0.50	0.25	0.00	0.00	0.50	0.25	0.25	1.75	3.00	3.00
Cables.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.75	1.75
ATU's.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.25	6.25
Other.....	0.50	0.50	0.00	0.00	0.75	0.50	0.50	2.75	21.75	21.75
Total Down Time..										

WEEKLY EQUIPMENT STATUS

	Good	Bad	Total
ATU's.....	72	18	90
Cables.....	126	20	146
Geophones....	1800	66	1866

COMMENTS, VISITORS, ETC.

Continued re-chaining of lines due to cattle damage.
Moved camp from Dunmarra to a site 26kms along the Nutwood Downs road from Stuart Hwy on Thursday 25th.
* .50 hour deductad from cumulative total 24/6/92 to compensate Client for loss of first 30 files MC92-251

OPERATING PARAMETERS AND EQUIPMENT

Av. Road Cond....	Very Rough	ATU Type.....	Model 1	Geo. Group.....	12
Av. Fld. Cond....	Very Rough	Notch Filter....	Out	Geo. Interval...	10m
Av. Rec. Qual....	Good	Geo. Mfg. Type..	Mark	VP Interval.....	10m
System No.....	Geocor IV	Geo. Freq.....	10 Hz.	Traces/File.....	550
System Mfg.....	G.S.C.	Geo. Int. Res...	215 Ohm	Swps/VP.....	2
Tape Format.....	1600 BPI	Geo. Base.....	Spike	Sweep Time.....	6 sec
Vib. Type.....	International	Spread Confr....	2750-0-2750	Listen Time.....	3 sec
Vib. Elect.....	Pelton			Sample Rate.....	4 ms

VEHICLES

Party Manager....	8GA 136	Line Ute.....	7IB 918	Recorder.....	7DJ 823
Client.....	7IE 895	Mechanic.....	7MC 078	Processing.....	7BB 109
Survey (1).....	70S 643	Line PC.....	7IO 055	Cable (1).....	7EG 108
Chaining	7IB 916	Vibe Crew Cab...	8AD 128	Cable (2).....	7IG 615
Box Truck (1)....	7LT 150	Vib Service.....	6YR 166	Vibrator (1)....	6KF 386
Box Truck (2)....	70Y 058	Hino.....	7DT 982	Vibrator (2)....	6KF 387
Line Boss.....	7LT 149	Fuel.....	7AL 125	Vibrator (3)....	6KF 388
Line Ute.....	7HR 848	Generator.....	7IG 612	Vibrator (4)....	6KF 390
		Water.....	7AU 532		

GEOSYSTEMS PTY LTD

CREW NO..... 205 — WEEKLY OPERATIONS SUMMARY — WEEK ENDING.... 5/7/1992

Client	PACIFIC OIL & GAS	Party Manager.....	Laurie Willmott
Survey Name	1992 McArthur Seismic Survey	Client Rep.....	Bill Foster
Area	EP-18 & EP-24 McArthur Basin	Crew Address.....	Nutwood Downs
State	N.T.	Crew Phone No.....	007 114 021

	MON 29	TUE 30	WED 1	THU 2	FRI 3	SAT 4	SUN 5	WEEK	MONTH	JOB
Travel Hours.....	0.25	0.50	0.50	1.00	0.75	0.50	0.50	4.00	3.25	45.50
Test Hours.....	0.25	0.25	0.25	0.25	0.50	0.25	0.25	2.00	1.50	9.00
Recording Hours...	8.25	7.75	7.50	4.75	5.75	5.50	5.75	45.25	29.25	211.25
Other Pd Hours....	1.25	1.75	2.00	4.50	3.75	4.00	4.25	21.50	18.50	102.25
Total Pd Hours....	10.00	10.25	10.25	10.50	10.75	10.25	10.75	72.75	52.50	367.50
Production Kms....	8.930	7.870	7.450	5.680	8.970	9.250	9.360	57.510	40.710	223.710
Processing Hours..	22.00	22.00	24.00	16.00	16.00	22.00	22.00	144.00	100.00	671.00
Profiles.....	880	787	744	529	897	912	921			
Weather.....	Cool	Hot	Cool	Hot	Hot	Hot	Hot			
Down Time -										
Vibes.....	0.25	0.00	0.50	0.00	0.00	0.25	0.75	1.75	1.50	5.50
Recorder.....	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.25	0.25	7.25
Cables.....	0.25	0.25	0.00	0.50	0.00	0.00	0.00	1.00	0.50	4.00
ATU's.....	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25	0.00	2.00
Other.....	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.25	0.25	6.50
Total Down Time..	0.50	0.50	0.50	1.00	0.00	0.25	0.75	3.50	2.50	25.25

WEEKLY EQUIPMENT STATUS

	Good	Bad	Total
ATU's.....	71	19	90
Cables.....	127	18	145
Geophones....	1819	47	1866

COMMENTS, VISITORS, ETC.

Vibes went to 1 sweep,(**2) on line MC32-202.
Line MC32-104W is also being shot this way.
Thus explaining the increase in production
from 2/7/92.Koya Suto (P.O.S.) arrived 2/7/92,
staying until 6/7/92.

OPERATING PARAMETERS AND EQUIPMENT

Av. Road Cond....	Very Rough	ATU Type.....	Model 1	Geo. Group.....	12
Av. Fld. Cond....	Very rough	Notch Filter....	Out	Geo. Interval...	10m
Av. Rec. Qual....	Good	Geo. Mfg. Type..	Mark	VP Interval.....	10m
System No.....	Geocor IV	Geo. Freq.....	10 Hz.	Traces/File.....	550
System Mfg.....	G.S.C.	Geo. Int. Res...	215 Ohm	Swps/VP.....	**2
Tape Format.....	1600 BPI	Geo. Base.....	Spike	Sweep Time.....	6 sec
Vib. Type.....	International	Spread Confr....	2750-0-2750	Listen Time.....	3 sec
Vib. Elect.....	Pelton			Sample Rate.....	4 ms

VEHICLES

Party Manager....	8GA 136	Line Ute.....	7IB 918	Recorder.....	7DJ 823
Client.....	7IE 895	Mechanic.....	8HT 059	Processing.....	7BB 109
Survey (1).....	7DS 643	Line PC.....	7ID 055	Cable (1).....	7EG 108
Chaining	7IB 916	Vibe Crew Cab...	8AD 128	Cable (2).....	7IG 615
Box Truck (1)....	7LT 150	Vibe Service....	6YR 166	Vibrator (1)....	6KF 386
Box Truck (2)....	7DY 058	Hino.....	7DT 982	Vibrator (2)....	6KF 387
Line Boss.....	7LT 149	Fuel.....	7AL 125	Vibrator (3)....	6KF 388
Line Ute.....	7HR 848	Generator.....	7IG 612	Vibrator (4)....	6KF 390
		Water.....	7AU 532		

GEOSYSTEMS PTY LTD

CREW NO..... 205 — WEEKLY OPERATIONS SUMMARY — WEEK ENDING.... 12/7/199

Client ..... PACIFIC OIL & GAS
Survey Name ..... 1992 McArthur Seismic Survey
Area ..... EP-18 & EP-24 McArthur Basin
State ..... N.T.

Party Manager..... Laurie Willmott
Client Rep..... Bill Foster
Crew Address..... Nutwood Downs
Crew Phone No..... 007 114 021

	MON 6	TUE 7	WED 8	THU 9	FRI 10	SAT 11	SUN 12	WEEK	MONTH	JOB
Travel Hours.....	1.50	2.50	2.25	2.00	2.00	1.50	1.25	13.00	16.25	58.50
Test Hours.....	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1.75	3.25	10.75
Recording Hours...	4.75	5.50	6.00	5.25	6.25	6.50	4.75	39.00	68.25	250.25
Other Pd Hours....	4.00	2.00	1.75	2.75	2.00	2.00	4.00	18.50	37.00	120.75
Total Pd Hours....	10.50	10.25	10.25	10.25	10.50	10.25	10.25	72.25	124.75	439.75
Production Kms....	6.950	5.770	6.410	5.380	6.660	6.990	8.180	46.340	87.650	270.650
Processing Hours..	22.00	22.00	14.00	20.00	20.00	22.00	24.00	144.00	244.00	815.00
Profiles.....	694	578	641	532	659	675	662			
Weather.....	Hot	Hot	Hot	Hot	Hot	Hot	Hot			
Down Time -										
Vibes.....	0.00	0.25	0.00	0.25	0.00	0.00	0.25	0.75	2.25	6.25
Recorder.....	0.00	0.00	0.50	0.25	0.25	0.00	0.00	1.00	1.25	3.25
Cables.....	0.25	0.00	0.00	0.00	0.00	0.25	0.00	0.50	1.00	4.50
ATU's.....	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.25	2.25
Other.....	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.25	6.50
Total Down Time..	0.50	0.50	0.50	0.50	0.25	0.25	0.25	2.75	5.25	23.00

WEEKLY EQUIPMENT STATUS

	Good	Bad	Total
ATU's.....	66	24	90
Cables.....	125	20	145
Geophones....	1777	88	1865

COMMENTS, VISITORS, ETC.

Acquisition on line MC92-80 reverted to two (2) sweeps per VP, with no other recording parameter changes. Several changes have been made for the recording of line MC92-104: - 12.5m group interval, 12.5m VP interval, one (1) sweep, and 480 recording channels (symmetrical split 240/240).

OPERATING PARAMETERS AND EQUIPMENT

Av. Road Cond....	Very Rough	ATU Type.....	Model 1	Geo. Group.....	12
Av. Fld. Cond....	Very rough	Notch Filter....	Out	Geo. Interval...	10m
Av. Rec. Qual....	Good	Geo. Mfg. Type..	Mark	VP Interval.....	10m
System No.....	Geocor IV	Geo. Freq.....	10 Hz.	Traces/File.....	550
System Mfg.....	G.S.C.	Geo. Int. Res...	215 Ohm	Swps/VP.....	2
Tape Format.....	1600 BPI	Geo. Base.....	Spike	Sweep Time.....	6 sec
Vib. Type.....	International	Spread Confr....	2750-0-2750	Listen Time.....	3 sec
Vib. Elect.....	Pelton			Sample Rate.....	4 ms

VEHICLES

Party Manager....	8GA 136	Line Ute.....	7IB 918	Recorder.....	7DJ 823
Client.....	7IE 895	Mechanic.....	8HT 059	Processing.....	7BB 109
Survey (1).....	7QS 643	Line PC.....	7IQ 055	Cable (1).....	7EG 108
Chaining	7IB 916	Vibe Crew Cab...	8AD 128	Cable (2).....	7IG 615
Box Truck (1)....	7LT 150	Vibe Service....	6YR 166	Vibrator (1)....	6KF 386
Box Truck (2)....	7QY 058	Hino.....	7DT 982	Vibrator (2)....	6KF 387
Line Boss.....	7LT 149	Fuel.....	7AL 125	Vibrator (3)....	6KF 388
Line Ute.....	7HR 848	Generator.....	7IG 612	Vibrator (4)....	6KF 390
		Water.....	7AU 532		

GEOSYSTEMS PTY LTD

CREW NO..... 205 — WEEKLY OPERATIONS SUMMARY — WEEK ENDING.... 19/7/1992

Client	PACIFIC OIL & GAS	Party Manager.....	Eric Bowron
Survey Name	1992 McArthur Seismic Survey	Client Rep.....	Bill Foster
Area	EP-18 & EP-24 McArthur Basin	Crew Address.....	Nutwood Downs
State	N.T.	Crew Phone No.....	007 114 021

	MON 13	TUE 14	WED 15	THU 16	FRI 17	SAT 18	SUN 19	WEEK	MONTH	JOB
Travel Hours.....	1.75	2.50	3.25	2.00	1.75	1.25	1.75	14.25	30.50	72.75
Test Hours.....	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1.75	5.00	12.50
Recording Hours...	5.00	4.00	1.50	4.50	5.00	5.25	3.00	28.25	96.50	278.50
Other Pd Hours....	3.25	1.75	5.25	3.25	2.75	3.25	1.00	20.50	57.50	141.25
Total Pd Hours....	10.25	8.50	10.25	10.00	9.75	10.00	6.00	64.75	189.50	504.50
Production Kms....	0.025	7.350	2.475	7.025	9.225	9.650	5.325	50.975	138.625	321.625
Processing Hours..	16.00	18.00	12.00	18.00	20.00	20.00	16.00	120.00	364.00	935.00
Profiles.....	722	588	138	634	738	772	426			
Weather.....	Hot	Hot	Hot	Hot	Hot	Hot	Hot			
Down Time -										
Vibes.....	0.00	1.50	0.00	0.00	0.25	1.00	4.50	7.25	9.50	15.50
Recorder.....	0.00	0.00	0.25	0.25	0.25	0.00	2.50	3.25	4.50	11.50
Cables.....	0.25	0.25	0.00	0.25	0.25	0.00	0.00	1.00	2.00	5.50
ATU's.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.25
Other.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	5.50
Total Down Time..	0.25	1.75	0.25	0.50	0.75	1.00	7.00	11.50	16.75	39.50

WEEKLY EQUIPMENT STATUS

	Good	Bad	Total
ATU's.....	64	26	90
Cables.....	127	17	144
Geophones....	1803	62	1865

COMMENTS, VISITORS, ETC.

Moved camp on 15/7/92, to an old P.W.D. site 89kms down the Carpentaria HWY. Eric Bowron returned from break.

OPERATING PARAMETERS AND EQUIPMENT

Av. Road Cond....	Very Rough	ATU Type.....	Model 1	Geo. Group.....	12
Av. Fld. Cond....	Very rough	Notch Filter....	Out	Geo. Interval...	10m
Av. Rec. Qual....	Good	Geo. Mfg. Type..	Mark	VP Interval.....	10m
System No.....	Geocor IV	Geo. Freq.....	10 Hz.	Traces/File.....	550
System Mfg.....	G.S.C.	Geo. Int. Res...	21Ω Ohm	Swps/VP.....	2
Tape Format.....	1600 BPI	Geo. Base.....	Spike	Sweep Time.....	6 sec
Vib. Type.....	International	Spread Confr....	2750-0-2750	Listen Time.....	8 sec
Vib. Elect.....	Pelton			Sample Rate.....	4 ms

VEHICLES

Party Manager....	8GA 136	Line Ute.....	7IB 318	Recorder.....	7DJ 323
Client.....	7IE 895	Mechanic.....	3HT 059	Processing.....	7BB 109
Survey (1).....	7OS 643	Line PC.....	7ID 055	Cable (1).....	7EG 108
Chaining	7IB 916	Vibe Crew Cab...	8AD 128	Cable (2).....	7IG 615
Box Truck (1)....	7LT 150	Vibe Service....	5YR 166	Vibrator (1)....	5KF 386
Box Truck (2)....	7OY 058	Hino.....	7DT 382	Vibrator (2)....	5KF 357
Line Boss.....	7LT 149	Fuel.....	7AL 125	Vibrator (3)....	5KF 388
Line Ute.....	7HR 848	Generator.....	7IG 612	Vibrator (4)....	5KF 390
		Water.....	7AU 532		

GEOSYSTEMS PTY LTD

CREW NO..... 205 — WEEKLY OPERATIONS SUMMARY — WEEK ENDING.... 26/7/1992

Client	PACIFIC OIL & GAS	Party Manager.....	Eric Bowron
Survey Name	1992 McArthur Seismic Survey	Client Rep.....	Bill Foster
Area	EP-18 & EP-24 McArthur Basin	Crew Address.....	Carpentaria Hwy
State	N.T.	Crew Phone No.....	007 114 121

	MON 20	TUE 21	WED 22	THU 23	FRI 24	SAT 25	SUN 26	WEEK	MONTH	JOB
Travel Hours.....	2.25	2.00	2.00	2.25	1.75	1.50	1.25	13.00	43.50	85.75
Test Hours.....	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1.75	6.75	14.25
Recording Hours...	4.75	5.50	4.50	4.75	5.25	6.00	5.25	36.00	132.50	314.50
Other Pd Hours....	3.00	1.75	4.50	2.75	2.75	2.75	1.50	19.00	76.50	160.25
Total Pd Hours....	10.25	9.50	11.25	10.00	10.00	10.50	8.25	69.75	259.25	574.25
Production Kms....	8.575	9.600	7.700	8.350	9.225	11.025	9.325	63.800	202.425	385.425
Processing Hours..	20.00	20.00	20.00	20.00	20.00	20.00	20.00	140.00	504.00	1075.00
Profiles.....	658	764	611	668	738	882	746			
Weather.....	Hot	Hot	Hot	Cool	O/Cast	O/Cast	O/Cast			
Down Time -										
Vibes.....	0.25	0.25	0.00	0.25	0.25	0.25	0.25	1.50	11.00	15.00
Recorder.....	0.00	1.00	0.00	0.75	0.50	0.00	2.50	4.75	9.25	16.25
Cables.....	0.00	0.25	0.00	0.00	0.25	0.25	0.00	0.75	2.75	6.25
ATU's.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	2.25
Other.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	6.50
Total Down Time..	0.25	1.50	0.00	1.00	1.00	0.50	2.75	7.00	23.75	46.50

WEEKLY EQUIPMENT STATUS

	Good	Bad	Total
ATU's.....	54	36	90
Cables.....	135	7	142
Geophones....	1805	60	1865

COMMENTS, VISITORS, ETC.

Long line change from MC92-104 to MC92-43 due to distance and quality of lines.
Obtained burning off permit from Borroloola Fire Council representative Karl Badstuebner (Fire Warden) Permit No. 09582, for burning off rubbish pit.

OPERATING PARAMETERS AND EQUIPMENT

Av. Road Cond....	Very Rough	ATU Type.....	Model 1	Geo. Group.....	12
Av. Fld. Cond....	Very rough	Notch Filter....	Out	Geo. Interval...	12.5m
Av. Rec. Qual....	Good	Geo. Mfg. Type..	Mark	VP Interval.....	12.5m
System No.....	Geocor IV	Geo. Freq.....	10 Hz.	Traces/File.....	480
System Mfg.....	G.S.C.	Geo. Int. Res...	215 Ohm	Swps/VP.....	1
Tape Format.....	1600 BPI	Geo. Base.....	Spike	Sweep Time.....	6 sec
Vib. Type.....	International	Spread Confr....	3000-0-3000	Listen Time.....	3 sec
Vib. Elect.....	Pelton			Sample Rate.....	4 ms

VEHICLES

Party Manager....	8GA 136	Line Ute.....	7IB 918	Recorder.....	8HJ 872
Client.....	7IE 895	Mechanic.....	8HT 059	Processing.....	8HJ 745
Survey (1).....	KM 26394	Line PC.....	8HZ 354	Cable (1).....	7EG 108
Chaining	7IB 916	Vibe Crew Cab...	8IK 962	Cable (2).....	7IG 615
Box Truck (1)....	7LT 150	Vibe Service....	8HW 701	Vibrator (1)....	6KF 386
Box Truck (2)....	7OY 058	Hino.....	7DT 982	Vibrator (2)....	6KF 387
Line Boss.....	7LT 149	Fuel.....	7AL 125	Vibrator (3)....	6KF 388
Line Ute.....	8CF 106	Generator.....	8HW 930	Vibrator (4)....	6KF 390
		Water.....	7AU 532		

GEOSYSTEMS PTY LTD

CREW NO..... 205 — WEEKLY OPERATIONS SUMMARY — WEEK ENDING.... 2/8/1992

Client	PACIFIC OIL & GAS	Party Manager.....	Eric Bowron
Survey Name	1992 McArthur Seismic Survey	Client Rep.....	Bill Foster
Area	EP-18 & EP-24 McArthur Basin	Crew Address.....	Carpentaria Hwy
State	N.T.	Crew Phone No.....	007 114 121

	MON 27	TUE 28	WED 29	THU 30	FRI 31	SAT 1	SUN 2	WEEK	MONTH	JOB
Travel Hours.....	0.75	0.75	1.00	1.25	1.25	0.75	0.75	6.50	1.50	92.25
Test Hours.....	0.25	0.25	0.50	0.50	0.25	0.25	0.25	2.25	0.50	16.50
Recording Hours...	4.75	6.00	4.25	5.50	6.75	6.75	5.75	39.75	12.50	354.25
Other Pd Hours....	1.75	2.00	1.50	3.00	3.50	3.50	3.00	18.25	5.50	178.50
Total Pd Hours....	7.50	9.00	7.25	10.25	11.75	11.25	9.75	66.75	21.00	641.00
Production Kms....	8.275	10.425	7.050	9.425	11.350	12.475	10.125	69.125	22.600	454.550
Processing Hours..	20.00	20.00	16.00	18.00	18.00	20.00	20.00	132.00	40.00	1207.00
Profiles.....	662	833	564	755	908	996	810			
Weather.....	Fine	Fine	Fine	Hot	Hot	Hot	Hot			
Down Time -										
Vibes.....	0.50	0.50	0.00	0.25	0.25	0.00	0.50	2.00	0.50	17.00
Recorder.....	3.00	1.00	4.75	0.50	0.00	0.00	0.25	9.50	0.25	25.75
Cables.....	0.00	0.25	0.00	0.00	0.00	0.00	0.75	1.00	0.75	7.25
ATU's.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.25
Other.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.75
Total Down Time..	3.50	1.75	4.75	0.75	0.25	0.00	1.50	12.50	1.50	59.00

WEEKLY EQUIPMENT STATUS

	Good	Bad	Total
ATU's.....	95	95	99
Cables.....	134	8	142
Geophones....	1803	62	1865

COMMENTS, VISITORS, ETC.

New back motor fitted to vibe # 2.

OPERATING PARAMETERS AND EQUIPMENT

Av. Road Cond....	Very Rough	ATU Type.....	Model 1	Geo. Group.....	12
Av. Fld. Cond....	Very rough	Notch Filter....	Out	Geo. Interval...	12.5m
Av. Rec. Qual....	Good	Geo. Mfg. Type..	Mark	VP Interval.....	12.5m
System No.....	Geocor IV	Geo. Freq.....	10 Hz.	Traces/File.....	480
System Mfg.....	G.S.C.	Geo. Int. Res...	215 Ohm	Swps/VP.....	1
Tape Format.....	1600 BPI	Geo. Base.....	Spike	Sweep Time.....	6 sec
Vib. Type.....	International	Spread Confr....	3000-0-3000	Listen Time.....	3 sec
Vib. Elect.....	Pelton			Sample Rate.....	4 ms

VEHICLES

Party Manager....	8GA 106	Line Ute.....	7IB 910	Recorder.....	8HJ 872
Client.....	7IE 895	Mechanic.....	8HT 059	Processing.....	8HJ 745
Survey (1).....	KM 26394	Line PC.....	8HZ 354	Cable (1).....	7EB 108
Chaining	7IB 916	Vibe Crew Cab...	8IK 962	Cable (2).....	7IG 615
Box Truck (1)....	7LT 150	Vibe Service....	8HW 701	Vibrator (1)....	6KF 386
Box Truck (2)....	7GY 058	Hino.....	7DT 982	Vibrator (2)....	6KF 387
Line Boss.....	7LT 149	Fuel.....	7AL 125	Vibrator (3)....	6KF 388
Line Ute.....	8CF 106	Generator.....	8HW 930	Vibrator (4)....	6KF 390
		Water.....	7AU 532		

GEOSYSTEMS PTY LTD

CREW NO..... 205 — WEEKLY OPERATIONS SUMMARY — WEEK ENDING.... 9/8/1992

Client.....	PACIFIC OIL & GAS	Party Manager.....	Eric Bowron
Survey Name....	1992 McArthur Seismic Survey	Client Rep.....	Bill Foster
Area.....	EP-18 McArthur Basin	Crew Address.....	Carpentaria Hwy
State.....	N.T.	Crew Phone No.....	007 114 121

	MON 3	TUE 4	WED 5	THU 6	FRI 7	SAT 8	SUN 9	WEEK	MONTH	JOB
Travel Hours.....	1.25	1.50	2.00	2.00	2.75	3.25	2.75	15.50	17.00	107.75
Test Hours.....	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1.75	2.25	18.25
Recording Hours...	6.00	5.25	4.00	6.50	6.50	5.25	3.75	37.25	49.75	391.00
Other Pd Hours....	3.50	3.50	4.75	2.00	1.50	2.00	4.00	21.25	27.75	199.75
Total Pd Hours....	11.00	10.50	11.00	10.75	11.00	10.75	10.75	75.75	96.75	716.75
Production Kms....	10.075	10.225	6.950	6.340	6.410	5.870	4.155	50.025	72.625	504.575
Processing Hours..	16.00	18.00	10.00	20.00	20.00	20.00	20.00	124.00	144.00	1351.00
Profiles.....	806	818	556	635	641	518	400			
Weather.....	Hot	Hot	Hot	Hot	Hot	Hot	Hot			
Down Time -										
Vibes.....	0.00	0.25	0.25	0.50	0.00	0.75	0.00	1.75	2.25	18.75
Recorder.....	0.25	0.25	0.00	0.25	0.50	0.00	0.50	1.75	2.00	27.50
Cables.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	7.25
ATU's.....	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.25	2.50
Other.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.75
Total Down Time..	0.50	0.50	0.25	0.75	0.50	0.75	0.50	3.75	5.25	62.75

WEEKLY EQUIPMENT STATUS

	Good	Bad	Total
ATU's.....	72	18	90
Cables.....	140	2	142
Geophones....	1820	45	1865

COMMENTS, VISITORS, ETC.

Long travel hours due to the minimal clearing and meandering nature of seismic line. Rough terrain has caused damage to Isuzu cable truck (replace front springs and steering), Toyota PC (springs), Toyota line ute (springs and front end).

OPERATING PARAMETERS AND EQUIPMENT

Av. Road Cond....	Good	ATU Type.....	Model 1	Geo. Group.....	12
Av. Fld. Cond....	Very rough	Notch Filter....	Out	Geo. Interval...	12.5
Av. Rec. Qual....	Good	Geo. Mfg. Type..	Mark	VP Interval.....	12.5
System No.....	Geocor IV	Geo. Freq.....	10 Hz.	Traces/File.....	550/480
System Mfg.....	G.S.C.	Geo. Int. Res...	215 Ohm	Gwps/VP.....	2
Tape Format.....	1600 BPI	Geo. Base.....	Spike	Sweep Time.....	6 sec
Vib. Type.....	International	Spread Confr....	3000-0-3000	Listen Time.....	3
Vib. Elect.....	Pelton		2750-0-2750	Sample Rate.....	4 ms

VEHICLES

Party Manager....	8GA 136	Line Ute.....	7IB 918	Recorder.....	8HJ 872
Client.....	7IE 895	Mechanic.....	8HT 059	Processing.....	8HJ 745
Survey (1).....	KM 26394	Line PC.....	8HZ 354	Cable (1).....	7EG 108
Chaining	7IB 916	Vibe Crew Cab...	8IK 962	Cable (2).....	7IG 615
Box Truck (1)....	7LT 150	Vibe Service....	8HW 701	Vibrator (1)....	6KF 386
Box Truck (2)....	7DY 058	Hino.....	7DT 982	Vibrator (2)....	6KF 387
Line Boss.....	7LT 149	Fuel.....	7AL 125	Vibrator (3)....	6KF 388
Line Ute.....	8CF 106	Generator.....	8HW 930	Vibrator (4)....	6KF 390
		Water.....	7AU 532		

GEOSYSTEMS PTY LTD

CREW NO..... 205 — WEEKLY OPERATIONS SUMMARY — WEEK ENDING.... 16/8/1992

Client.....	PACIFIC OIL & GAS	Party Manager.....	Eric Bowron
Survey Name....	1992 McArthur Seismic Survey	Client Rep.....	Bill Foster
Area.....	EP-18 McArthur Basin	Crew Address.....	Carpentaria Hwy
State.....	N.T.	Crew Phone No.....	007 114 121

	MON 10	TUE 11	WED 12	THU 13	FRI 14	SAT 15	SUN 16	WEEK	MONTH	JOB
Travel Hours.....	1.50	1.00	0.75	1.00	1.00	1.25	1.75	8.25	25.25	116.00
Test Hours.....	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1.75	4.00	20.00
Recording Hours...	6.75	7.00	6.75	6.75	7.25	6.50	3.00	44.00	93.75	435.00
Other Pd Hours....	2.00	1.75	2.25	2.75	2.25	2.50	6.50	20.00	47.75	219.75
Total Pd Hours....	10.50	10.00	10.00	10.75	10.75	10.50	11.50	74.00	170.75	790.75
Production Kms....	8.550	8.625	8.0125	8.300	8.9375	8.200	4.660	55.285	127.910	559.860
Processing Hours..	12.00	20.00	20.00	15.00	16.00	20.00	10.00	113.00	247.00	1454.00
Profiles.....	684	689	632	664	714	656	467			
Weather.....	Hot	Hot	Hot	Hot	Hot	Hot	Hot			
Down Time -										
Vibes.....	0.00	0.00	0.75	1.00	0.00	0.25	0.00	2.00	4.25	20.75
Recorder.....	0.50	1.50	0.75	0.00	0.75	0.00	0.00	3.50	5.50	31.00
Cables.....	0.50	0.50	0.25	0.00	0.00	0.25	0.00	1.50	2.25	8.75
ATU's.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	2.50
Other.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.75
Total Down Time..	1.00	2.00	1.75	1.00	0.75	0.50	0.00	7.00	12.25	69.75

WEEKLY EQUIPMENT STATUS

	Good	Bad	Total
ATU's.....	68	22	90
Cables.....	110	31	141
Geophones....	1825	40	1865

COMMENTS, VISITORS, ETC.

Rough lines continuing to cause considerable damage to line vehicles. Springs replaced on three of the line Toyotas, sump holed on survey vehicle & steering arm fell apart on chaining vehicle.

OPERATING PARAMETERS AND EQUIPMENT

Av. Road Cond....	Rough	ATU Type.....	Model 1	Geo. Group.....	12
Av. Fld. Cond....	Very rough	Notch Filter....	Out	Geo. Interval...	12.5/10
Av. Rec. Qual....	Good	Geo. Mfg. Type..	Mark	VP Interval.....	12.5/10
System No.....	Geocor IV	Geo. Freq.....	10 Hz.	Traces/File.....	480/550
System Mfg.....	G.S.C.	Geo. Int. Res...	215 Ohm	Swps/VP.....	2/1
Tape Format.....	1600 BPI	Geo. Base.....	Spike	Sweep Time.....	6 sec
Vib. Type.....	International	Spread Confr....	2750-0-2750	Listen Time.....	3
Vib. Elect.....	Pelton		3000-0-3000	Sample Rate.....	4 ms

VEHICLES

Party Manager....	8GA 136	Line Ute.....	7IB 918	Recorder.....	8HJ 872
Client.....	7IE 895	Mechanic.....	8HT 059	Processing.....	8HJ 745
Survey (1).....	KM 26394	Line PC.....	8HZ 354	Cable (1).....	7EB 108
Chaining	7IB 916	Vibe Crew Cab...	8IK 962	Cable (2).....	7IG 615
Box Truck (1)....	7LT 150	Vibe Service....	8HW 701	Vibrator (1)....	6KF 386
Box Truck (2)....	70Y 058	Hino.....	7DT 982	Vibrator (2)....	6KF 387
Line Boss.....	7LT 149	Fuel.....	7AL 125	Vibrator (3)....	6KF 388
Line Ute.....	8CF 106	Generator.....	8HW 930	Vibrator (4)....	6KF 390
		Water.....	7AU 532		

GEOSYSTEMS PTY LTD

CREW NO..... 205 — WEEKLY OPERATIONS SUMMARY — WEEK ENDING.... 23/8/1992

Client.....	PACIFIC OIL & GAS	Party Manager.....	Eric Bowron
Survey Name....	1992 McArthur Seismic Survey	Client Rep.....	Bill Foster
Area.....	EP-18 McArthur Basin	Crew Address.....	Carpentaria Hwy
State.....	N.T.	Crew Phone No.....	007 114 121

	MON 17	TUE 18	WED 19	THU 20	FRI 21	SAT 22	SUN 23	WEEK	MONTH	JOB
Travel Hours.....	2.50	1.75	1.25	1.50	1.50	1.00	1.25	10.75	36.00	126.75
Test Hours.....	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1.75	5.75	21.75
Recording Hours...	5.00	3.25	5.00	5.25	5.25	5.75	5.25	34.75	128.50	469.75
Other Pd Hours....	2.00	3.00	3.75	4.25	4.00	4.25	4.50	25.75	73.50	245.50
Total Pd Hours....	9.75	8.25	10.25	11.25	11.00	11.25	11.25	73.00	243.75	863.75
Production Kms....	6.020	5.270	8.160	8.600	8.800	9.230	8.480	54.560	182.470	614.720
Processing Hours..	12.00	10.00	12.00	14.00	13.00	11.00	10.00	82.00	329.00	1536.00
Profiles.....	602	527	816	860	880	911	848			
Weather.....	Hot	Hot	Hot	Hot	Hot	Hot	Hot			
Down Time -										
Vibes.....	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.50	4.75	21.25
Recorder.....	0.00	0.25	0.50	0.00	0.25	0.00	0.00	1.00	6.50	32.00
Cables.....	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.25	2.50	9.00
ATU's.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	2.50
Other.....	2.25	2.75	0.00	0.00	0.00	0.00	0.00	5.00	5.00	11.75
Total Down Time..	2.25	3.00	1.00	0.25	0.25	0.00	0.00	6.75	19.00	76.50

WEEKLY EQUIPMENT STATUS

	Good	Bad	Total
ATU's.....	72	18	90
Cables.....	118	18	136
Geophones....	1830	35	1865

COMMENTS, VISITORS, ETC.

Eric Bowron (P.M.) left the crew on Tuesday to scout the next job at Yuendumu. Members from a Velseis crew working nearby visited the crew on Wednesday night. Good Production towards the end of the week.

OPERATING PARAMETERS AND EQUIPMENT

Av. Road Cond....	Rough	ATU Type.....	Model 1	Geo. Group.....	12
Av. Fld. Cond....	Very rough	Notch Filter....	Out	Geo. Interval...	12.5/10
Av. Rec. Qual....	Good	Geo. Mfg. Type..	Mark	VP Interval.....	12.5/10
System No.....	Geocor IV	Geo. Freq.....	10 Hz.	Traces/File.....	480/550
System Mfg.....	G.S.C.	Geo. Int. Res...	215 Ohm	Swps/VP.....	2/1
Tape Format.....	1600 BPI	Geo. Base.....	Spike	Sweep Time.....	6 sec
Vib. Type.....	International	Spread Confr....	2750-0-2750	Listen Time.....	3
Vib. Elect.....	Pelton		3000-0-3000	Sample Rate.....	4 ms

VEHICLES

Party Manager....	8GA 136	Line Ute.....	7IB 918	Recorder.....	8HJ 872
Client.....	7IE 895	Mechanic.....	8HT 059	Processing.....	8HJ 745
Survey (1).....	KM 26394	Line PC.....	8HZ 354	Cable (1).....	7EG 108
Chaining	7IB 916	Vibe Crew Cab...	8IK 962	Cable (2).....	7IG 615
Box Truck (1)....	7LT 150	Vibe Service....	8HW 701	Vibrator (1)....	6KF 386
Box Truck (2)....	7OY 058	Hino.....	7DT 982	Vibrator (2)....	6KF 387
Line Boss.....	7LT 149	Fuel.....	7AL 125	Vibrator (3)....	6KF 388
Line Ute.....	8CF 106	Generator.....	8HW 930	Vibrator (4)....	6KF 390
		Water.....	7AU 532		

GEOSYSTEMS PTY LTD

CREW NO..... 205 — WEEKLY OPERATIONS SUMMARY — WEEK ENDING.... 30/8/1992

Client	PACIFIC OIL & GAS	Party Manager.....	Eric Bowron
Survey Name ...	1992 McArthur River Survey	Client Rep.....	Bill Foster
Area	EP'S 18, 23, 24 & 33	Crew Address.....	Carpentaria Hwy
State	N.T.	Crew Phone No.....	007 114 121

	MON 24	TUE 25	WED 26	THU 27	FRI 28	SAT 29	SUN 30	WEEK	MONTH	JOB
Travel Hours.....	1.75	2.25	2.50	1.75	0.75	0.75	1.25	11.00	47.00	137.75
Test Hours.....	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1.75	7.50	23.50
Recording Hours...	5.00	5.25	5.50	3.00	5.75	5.75	5.25	35.50	164.00	505.25
Other Pd Hours....	3.50	2.75	3.00	5.75	3.00	3.75	2.75	24.50	98.00	270.00
Total Pd Hours....	10.50	10.50	11.25	10.75	9.75	10.50	9.50	72.75	316.50	936.50
Production Kms....	8.150	7.310	6.720	4.400	10.500	10.525	10.125	57.730	240.200	672.150
Processing Hours..	11.00	22.00	22.00	24.00	17.00	12.00	12.00	120.00	449.00	1656.00
Profiles.....	815	732	579	391	840	842	810			
Weather.....	Hot	Hot	Hot	Hot	Hot	Hot	Hot			
Down Time -										
Vibes.....	0.75	0.75	0.00	0.25	1.25	0.25	1.00	4.25	9.00	25.50
Recorder.....	0.00	0.25	0.00	0.25	0.00	1.00	0.25	1.75	8.25	33.75
Cables.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.50	9.00
ATU's.....	0.00	0.00	0.25	0.00	0.00	0.00	0.25	0.50	0.75	3.00
Other.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00	11.75
Total Down Time..	0.75	1.00	0.25	0.50	1.25	1.25	1.50	6.50	25.50	83.00

WEEKLY EQUIPMENT STATUS

	Good	Bad	Total
ATU's.....	75	15	90
Cables.....	121	11	132
Geophones....	1836	34	1870

COMMENTS, VISITORS, ETC.

Survey completed 28/8/92 and Surveyors and Chainies departed crew for Yuendumu on 29/8/92. Rough lines continue to cause vehicle damage - rear main spring on cable truck, front spring and steering damper on line ute and three radiators with stress fractures!

OPERATING PARAMETERS AND EQUIPMENT

Av. Road Cond....	Rough	ATU Type.....	Model 1	Geo. Group.....	12
Av. Fld. Cond....	Very rough	Notch Filter....	Out	Geo. Interval...	10/12.5
Av. Rec. Qual....	Good	Geo. Mfg. Type..	Mark	VP Interval.....	10/12.5
System No.....	Geocor IV	Geo. Freq.....	10 Hz.	Traces/File.....	550/480
System Mfg.....	G.S.C.	Geo. Int. Res...	215 Ohm	Swps/VP.....	2/1
Tape Format.....	1600 BPI	Geo. Base.....	Spike	Sweep Time.....	6 sec
Vib. Type.....	International	Spread Confr....	3000-0-3000	Listen Time.....	3 secs
Vib. Elect.....	Pelton		2750-0-2750	Sample Rate.....	4 ms

VEHICLES

Party Manager....	8GA 136	Line Ute.....	7IB 918	Recorder.....	8HJ 872
Client.....	7IE 895	Mechanic.....	8HT 059	Processing.....	8HJ 745
Survey (1).....	KM 26394	Line PC.....	8HZ 354	Cable (1).....	7EB 108
Chaining	7IB 916	Vibe Crew Cab...	8IK 962	Cable (2).....	7IG 615
Box Truck (1)....	7LT 150	Vib Service.....	8HW 701	Vibrator (1)....	6KF 386
Box Truck (2)....	7OY 058	Hino.....	7DT 982	Vibrator (2)....	6KF 387
Line Boss	7LT 149	Fuel.....	7AL 125	Vibrator (3)....	6KF 388
Line Ute.....	8CF 106	Generator.....	8HW 930	Vibrator (4)....	6KF 390
		Water.....	7AU 532		

GEOSYSTEMS PTY LTD

CREW NO..... 205 WEEKLY OPERATIONS SUMMARY WEEK ENDING.... 6/9/1992

Client	PACIFIC OIL & GAS	Party Manager.....	Eric Bowron
Survey Name ...	1992 McArthur River Survey	Client Rep.....	Bill Foster
Area	EP'S 18, 23, 24 & 33	Crew Address.....	Carpentaria Hwy
State	N.T.	Crew Phone No.....	007 114 121

	MON 31	TUE 1	WED 2	THU 3	FRI 4	SAT 5	SUN 6	WEEK	MONTH	JOB
Travel Hours.....	1.50	1.50						3.00	50.00	140.75
Test Hours.....	0.25	0.00						0.25	7.75	23.75
Recording Hours...	6.75	0.00						6.75	170.75	512.00
Other Pd Hours....	1.75	3.00						4.75	102.75	274.75
Total Pd Hours....	10.25	4.50						14.75	331.25	951.25
Production Kms....	12.350	0.000						12.35	252.550	684.500
Processing Hours..	19.00	2.00						21.00	470.00	1677.00
Profiles.....	988	0.00								
Weather.....	Hot	Hot								
Down Time -										
Vibes.....	0.00	0.00						0.00	9.00	25.50
Recorder.....	1.00	0.00						1.00	9.25	34.75
Cables.....	0.50	0.00						0.50	3.00	9.50
ATU's.....	0.25	0.00						0.25	1.00	3.25
Other.....	0.00	0.00						0.00	5.00	11.75
Total Down Time..	1.75	0.00						1.75	27.25	84.75

WEEKLY EQUIPMENT STATUS

	Good	Bad	Total
ATU's.....	72	18	90
Cables.....	126	8	134
Geophones....	1860	10	1870

COMMENTS, VISITORS, ETC.

Contract completed 1/9/1992. Crew prepare for move to Yuendumu.

OPERATING PARAMETERS AND EQUIPMENT

Av. Road Cond....	Rough	ATU Type.....	Model 1	Geo. Group.....	12
Av. Fld. Cond....	Very rough	Notch Filter....	Out	Geo. Interval...	10/12.5
Av. Rec. Qual....	Good	Geo. Mfg. Type..	Mark	VP Interval.....	10/12.5
System No.....	Geocor IV	Geo. Freq.....	10 Hz.	Traces/File.....	550/480
System Mfg.....	G.S.C.	Geo. Int. Res...	215 Ohm	Swps/VP.....	2/1
Tape Format.....	1600 BPI	Geo. Base.....	Spike	Sweep Time.....	6 sec
Vib. Type.....	International	Spread Confr....	3000-0-3000	Listen Time.....	3 secs
Vib. Elect.....	Pelton		2750-0-2750	Sample Rate.....	4 ms

VEHICLES

Party Manager....	8GA 136	Line Ute.....	7IB 918	Recorder.....	8HJ 872
Client.....	7IE 895	Mechanic.....	8HT 059	Processing.....	8HJ 745
Survey (1).....	KM 26394	Line PC.....	8HZ 354	Cable (1).....	7EG 108
Chaining	7IB 916	Vibe Crew Cab...	8IK 962	Cable (2).....	7IG 615
Box Truck (1)....	7LT 150	Vib Service.....	8HW 701	Vibrator (1)....	6KF 386
Box Truck (2)....	7OY 058	Hino.....	7DT 982	Vibrator (2)....	6KF 387
Line Boss	7LT 149	Fuel.....	7AL 125	Vibrator (3)....	6KF 388
Line Ute.....	8CF 106	Generator.....	8HW 930	Vibrator (4)....	6KF 390
		Water.....	7AU 532		

EDSYSTEMS PTY LTD — MONTHLY OPERATIONS SUMMARY — CLIENT... PACIFIC OIL & GAS

CREW NO... 205 — MONTH..... JUNE, 1992. — AREA..... EP-33 & EP-18, N.T.

DAY	LINE NO.	SKIP	PROF.	KMS.	CUM. KMS.	TRAVEL TIME	TEST TIME	REC. TIME	OTHER CHGE. TIME	WX TIME	TOTAL CHGE. HOURS	CUM. CHGE. HOURS	DOWN TIME	CUM. DOWN TIME
1	MC92-83	0	0	0.000	0.000	1.25	0.00	0.00	8.75	0.00	10.00	10.00	0.00	0.00
2	MC92-83	0	0	0.000	0.000	1.25	0.75	0.00	10.50	0.00	12.50	22.50	2.00	2.00
3	MC92-83	0	0	0.000	0.000	1.25	0.25	0.00	9.75	0.00	11.25	33.75	1.00	3.00
4	MC92-83	0	381	3.800	3.800	1.50	0.00	4.00	5.50	0.00	11.00	44.75	0.00	3.00
5	MC92-83	0	592	5.920	9.720	2.00	0.25	7.25	1.00	0.00	10.50	55.25	0.75	3.75
6	MC92-83	0	709	7.090	16.810	2.25	0.25	7.25	1.25	0.00	11.00	66.25	0.00	3.75
7	MC92-83	0	637	6.370	23.180	2.75	0.25	6.50	1.50	0.00	11.00	77.25	0.00	3.75
8	MC92-83	0	516	5.160	28.340	2.50	0.25	5.25	3.00	0.00	11.00	88.25	0.25	4.00
9	MC92-123	1	519	5.190	33.530	2.75	0.25	5.25	1.25	0.00	9.50	97.75	3.50	7.50
10	MC92-123	0	703	7.030	40.560	2.50	0.25	6.75	1.25	0.00	10.75	108.50	0.25	7.75
11	MC92-123	0	727	7.270	47.830	2.00	0.25	7.25	1.00	0.00	10.50	119.00	0.50	8.25
12	MC92-123	0	827	8.270	56.100	1.25	0.25	8.00	1.00	0.00	10.50	129.50	0.50	8.75
13	MC92-123	0	218	2.180										
	MC92-281		355	3.540	61.820	1.25	0.25	6.00	2.75	0.00	10.25	139.75	0.25	9.00
14	MC92-281	0	406	4.060	65.880	0.50	0.25	4.50	5.25	0.00	10.50	150.25	0.25	9.25
15	MC92-281	0	582	5.820	71.700	1.00	0.25	6.00	1.00	0.00	8.25	158.50	3.50	12.75
					71.700	26.00	3.75	74.00	54.75	0.00		158.50		12.75

EOSYSTEMS PTY LTD — MONTHLY OPERATIONS SUMMARY — CLIENT... PACIFIC OIL & GAS

CREW NO... 205 — MONTH..... JUNE, 1992. — AREA..... EP-33 & EP-18, N.T.

DAY	LINE NO.	SKIP	PROF.	KMS.	CUM. KMS.	TRAVEL TIME	TEST TIME	REC. TIME	OTHER CHGE. TIME	WX TIME	TOTAL CHGE. HOURS	CUM. CHGE. HOURS	DOWN TIME	CUM. DOWN TIME
16	MC92-281	0	682	6.820										
				0.000	78.520	1.00	0.25	6.75	1.75	0.00	9.75	168.25	2.00	14.75
17	MC92-281		545	5.560										
	MC92-100		192	1.990	86.070	0.75	0.25	7.25	2.00	0.00	10.25	178.50	0.50	15.25
18	MC92-100	2	767	7.700										
				0.000	93.770	0.75	0.25	7.75	1.00	0.00	9.75	188.25	2.00	17.25
19	MC92-100	0	817	8.170										
				0.000	101.940	1.25	0.25	8.00	1.25	0.00	10.75	199.00	0.25	17.50
20	MC92-100	0	834	8.340										
				0.000	110.280	1.25	0.25	8.00	1.25	0.00	10.75	209.75	0.75	18.25
21	MC92-251	0	600	5.990										
				0.000	116.270	1.25	0.25	6.25	2.75	0.00	10.50	220.25	0.75	19.00
22	MC92-251	0	759	7.590										
				0.000	123.860	1.00	0.25	7.25	2.25	0.00	10.75	231.00	0.50	19.50
23	MC92-251	0	689	6.890										
				0.000	130.750	1.75	0.25	6.75	2.00	0.00	10.75	241.75	0.50	20.00
24	MC92-251	0	604	6.040										
				0.000	136.790	2.25	0.25	6.00	2.00	0.00	10.50	251.75	0.00	20.00
25	MC92-251	0	427	4.270										
				0.000	141.060	1.75	0.25	4.25	5.25	0.00	11.50	263.25	0.00	20.00
26	MC92-251	0	786	7.860										
				0.000	148.920	1.25	0.25	7.50	1.75	0.00	10.75	274.00	0.75	20.75
27	MC92-251	6	831	8.370										
				0.000	157.290	0.75	0.25	8.00	1.00	0.00	10.00	284.00	0.50	21.25
28	MC92-251	0	891	8.910										
				0.000	166.200	0.50	0.25	8.25	1.75	0.00	10.75	294.75	0.50	21.75
29	MC92-251	13	880	8.930										
				0.000	175.130	0.25	0.25	8.25	1.25	0.00	10.00	304.75	0.50	22.25
30	MC92-251	0	787	7.870										
				0.000	183.000	0.50	0.25	7.75	1.75	0.00	10.25	315.00	0.50	22.75
					183.000	16.25	3.75	108.00	29.00	0.00		315.00		22.75

EDSYSTEMS PTY LTD — MONTHLY OPERATIONS SUMMARY — CLIENT.. PACIFIC OIL & GAS

CREW NO... 205 — MONTH.... JULY 1992 — AREA.... EP-18,23 & 24, N.T.

DY	LINE NO.	SKIP	PROF.	KMS.	CUM. KMS.	TRAVEL TIME	TEST TIME	REC. TIME	OTHER CHGE. TIME	WX TIME	TOTAL CHGE. HOURS	CUM. CHGE. HOURS	DOWN TIME	CUM. DOWN TIME
1	MC92-251	1	744	7.450										
				0.000	7.450	0.50	0.25	7.50	2.00	0.00	10.25	10.25	0.50	0.50
2	MC92-251	40	529	4.830										
	MC92-202			0.850	13.130	1.00	0.25	4.75	4.50	0.00	10.50	20.75	1.00	1.50
3	MC92-202	0	897	8.970										
				0.000	22.100	0.75	0.50	5.75	3.75	0.00	10.75	31.50	0.00	1.50
4	MC92-104	14	912	9.250										
				0.000	31.350	0.50	0.25	5.50	4.00	0.00	10.25	41.75	0.25	1.75
5	MC92-104	15	921	9.360										
				0.000	40.710	0.50	0.25	5.75	4.25	0.00	10.75	52.50	0.75	2.50
6	MC92-104	1	694	6.950										
				0.000	47.660	1.50	0.25	4.75	4.00	0.00	10.50	63.00	0.50	3.00
7	MC92-93	0	578	5.770										
				0.000	53.430	2.50	0.25	5.50	2.00	0.00	10.25	73.25	0.50	3.50
8	MC92-93	0	641	6.410										
				0.000	59.840	2.25	0.25	6.00	1.75	0.00	10.25	83.50	0.50	4.00
9	MC92-93	66	532	5.380										
				0.000	65.220	2.00	0.25	5.25	2.75	0.00	10.25	93.75	0.50	4.50
10	MC92-93	7	659	6.660										
				0.000	72.480	2.00	0.25	6.25	2.00	0.00	10.50	104.25	0.25	4.75
11	MC92-93	24	675	6.990										
				0.000	79.470	1.50	0.25	6.50	2.00	0.00	10.25	114.50	0.25	5.00
12	MC92-93	4	662	0.530										
	MC92-104			7.650	87.650	1.25	0.25	4.75	4.00	0.00	10.25	124.75	0.25	5.25
13	MC92-104	0	722	9.025										
				0.000	96.675	1.75	0.25	5.00	3.25	0.00	10.25	135.00	0.25	5.50
14	MC92-104	0	588	7.350										
				0.000	104.025	2.50	0.25	4.00	1.75	0.00	8.50	143.50	1.75	7.25
15	MC92-104	0	198	2.475										
				0.000	106.500	3.25	0.25	1.50	5.25	0.00	10.25	153.75	0.25	7.50
					106.500	23.75	4.00	78.75	47.25	0.00		153.75		7.50

GEOSYSTEMS PTY LTD — MONTHLY OPERATIONS SUMMARY — CLIENT.. PACIFIC OIL & GAS

CREW NO... 205 — MONTH.... JULY, 1992. — AREA.... EP-18,23 & 24, N.T.

DAY	LINE NO.	SKIP	PROF.	KMS.	CUM. KMS.	TRAVEL TIME	TEST TIME	REC. TIME	OTHER CHGE. TIME	WX TIME	TOTAL CHGE. HOURS	CUM. CHGE. HOURS	DOWN TIME	CUM. DOWN TIME
16	MC92-104	0	634	7.925										
				0.000	114.425	2.00	0.25	4.50	3.25	0.00	10.00	163.75	0.50	8.00
17	MC92-104	0	738	9.225										
				0.000	123.650	1.75	0.25	5.00	2.75	0.00	9.75	173.50	0.75	8.75
18	MC92-104	0	772	9.650										
				0.000	133.300	1.25	0.25	5.25	3.25	0.00	10.00	183.50	1.00	9.75
19	MC92-104	0	426	5.325										
				0.000	138.625	1.75	0.25	3.00	1.00	0.00	6.00	189.50	7.00	16.75
20	MC92-104	28	658	8.575										
				0.000	147.200	2.25	0.25	4.75	3.00	0.00	10.25	199.75	0.25	17.00
21	MC92-104	4	764	9.600										
				0.000	156.800	2.00	0.25	5.50	1.75	0.00	9.50	209.25	1.50	18.50
22	MC92-104	5	611	7.700										
				0.000	164.500	2.00	0.25	4.50	4.50	0.00	11.25	220.50	0.00	18.50
23	MC29-43	0	668	8.350										
				0.000	172.850	2.25	0.25	4.75	2.75	0.00	10.00	230.50	1.00	19.50
24	MC92-43	0	738	9.225										
				0.000	182.075	1.75	0.25	5.25	2.75	0.00	10.00	240.50	1.00	20.50
25	MC92-43	0	882	11.025										
				0.000	193.100	1.50	0.25	6.00	2.75	0.00	10.50	251.00	0.50	21.00
26	MC92-43	0	746	9.325										
				0.000	202.425	1.25	0.25	5.25	1.50	0.00	8.25	259.25	2.75	23.75
27	MC92-43	0	662	8.275										
				0.000	210.700	0.75	0.25	4.75	1.75	0.00	7.50	266.75	3.50	27.25
28	MC92-43	1	833	10.425										
				0.000	221.125	0.75	0.25	6.00	2.00	0.00	9.00	275.75	1.75	29.00
29	MC92-43	0	564	7.050										
				0.000	228.175	1.00	0.50	4.25	1.50	0.00	7.25	283.00	4.75	33.75
30	MC92-43	0	526	6.575										
	MC92-53	0	229	2.850	237.600	1.25	0.50	5.50	3.00	0.00	10.25	293.25	0.75	34.50
31	MC92-53	0	908	11.350		1.5							5.0	
				0.000	248.950	1.25	0.25	6.75	3.50	0.00	11.75	305.00	0.25	34.75
					248.950	48.50	8.50	159.75	88.25	0.00		305.00		34.75

GEOSYSTEMS PTY LTD — MONTHLY OPERATIONS SUMMARY — CLIENT.... PACIFIC OIL & GAS

CREW NO... 205 — MONTH.... AUGUST, 1992. — AREA..... EP'S 18,23,24 & 33

DAY	LINE NO.	SKIP	PROF.	KMS.	CUM. KMS.	TRAVEL TIME	TEST TIME	REC. TIME	OTHER CHGE. TIME	WX TIME	TOTAL CHGE. HOURS	CUM. CHGE. HOURS	DOWN TIME	CUM. DOWN TIME
1	MC92-53	2	996	12.475										
				0.000	12.475	0.75	0.25	6.75	3.50	0.00	11.25	11.25	0.00	0.00
2	MC92-53	0	810	10.125										
				0.000	22.600	0.75	0.25	5.75	3.00	0.00	9.75	21.00	1.50	1.50
3	MC92-53	0	806	10.075										
				0.000	32.675	1.25	0.25	6.00	3.50	0.00	11.00	32.00	0.50	2.00
4	MC92-53	0	818	10.225										
				0.000	42.900	1.50	0.25	5.25	3.50	0.00	10.50	42.50	0.50	2.50
5	MC92-53	0	556	6.950										
				0.000	49.850	2.00	0.25	4.00	4.75	0.00	11.00	53.50	0.25	2.75
6	MC92-61	0	635	6.340										
				0.000	56.190	2.00	0.25	6.50	2.00	0.00	10.75	64.25	0.75	3.50
7	MC92-61	0	641	6.410										
				0.000	62.600	2.75	0.25	6.50	1.50	0.00	11.00	75.25	0.50	4.00
8	MC92-61	69	518	5.870										
				0.000	68.470	3.25	0.25	5.25	2.00	0.00	10.75	86.00	0.75	4.75
9	MC92-61	7	361	3.680										
	MC92-63	0	39	0.475	72.625	2.75	0.25	3.75	4.00	0.00	10.75	96.75	0.50	5.25
10	MC92-63	0	684	8.550										
				0.000	81.175	1.50	0.25	6.75	2.00	0.00	10.50	107.25	1.00	6.25
11	MC92-63	1	689	8.625										
				0.000	89.800	1.00	0.25	7.00	1.75	0.00	10.00	117.25	2.00	8.25
12	MC92-63	9	632	8.0125										
				0.0000	97.8125	0.75	0.25	6.75	2.25	0.00	10.00	127.25	1.75	10.00
13	MC92-63	0	664	8.3000										
				0.0000	106.1125	1.00	0.25	6.75	2.75	0.00	10.75	138.00	1.00	11.00
14	MC92-63	1	714	8.9375										
				0.0000	115.050	1.00	0.25	7.25	2.25	0.00	10.75	148.75	0.75	11.75
15	MC92-63	0	656	8.200										
				0.000	123.250	1.25	0.25	6.50	2.50	0.00	10.50	159.25	0.50	12.25
					123.250	23.50	3.75	90.75	41.25			159.25		12.25

EOSYSTEMS PTY LTD — MONTHLY OPERATIONS SUMMARY — CLIENT.. PACIFIC OIL & GAS

CREW NO... 205 — MONTH.... AUGUST, 1992. — AREA.... EP-18,23,24,33,N.T.

DY	LINE NO.	SKIP	PROF.	KMS.	CUM. KMS.	TRAVEL TIME	TEST TIME	REC. TIME	OTHER CHGE. TIME	WX TIME	TOTAL CHGE. HOURS	CUM. CHGE. HOURS	DOWN TIME	CUM. DOWN TIME
16	MC92-73	0	467	4.660										
				0.000	127.910	1.75	0.25	3.00	6.50	0.00	11.50	170.75	0.00	12.25
17	MC92-73	0	602	6.020										
				0.000	133.930	2.50	0.25	5.00	2.00	0.00	9.75	180.50	2.25	14.50
18	MC92-73	0	527	5.270										
				0.000	139.200	1.75	0.25	3.25	3.00	0.00	8.25	188.75	3.00	17.50
19	MC92-73	0	816	8.160										
				0.000	147.360	1.25	0.25	5.00	3.75	0.00	10.25	199.00	1.00	18.50
20	MC92-73	0	860	8.600										
				0.000	155.960	1.50	0.25	5.25	4.00	0.00	11.00	210.25	0.25	18.75
21	MC92-73	0	880	8.800										
				0.000	164.760	1.50	0.25	5.25	4.00	0.00	11.00	221.25	0.25	19.00
22	MC92-73	12	911	9.230										
				0.000	173.990	1.00	0.25	5.75	4.25	0.00	11.25	232.50	0.00	19.00
23	MC92-73	0	848	8.480										
				0.000	182.470	1.25	0.25	5.25	4.50	0.00	11.25	243.75	0.00	19.00
24	MC92-73	0	815	8.150										
				0.000	190.620	1.75	0.25	5.00	3.50	0.00	10.50	254.25	0.75	19.75
25	MC92-73	0	453	4.530										
	MC92-73N	0	279	2.780	197.930	2.25	0.25	5.25	2.75	0.00	10.50	264.75	1.00	20.75
						1.00		2.25	1.00					
26	MC92-73N	93	579	6.720										
				0.000	204.650	2.50	0.25	5.50	3.00	0.00	11.25	276.00	0.25	21.00
27	MC92-73N	0	200	2.000		0.75		1.00	2.75					
	MC92-102	2	191	2.400	209.050	1.75	0.25	3.00	5.75	0.00	10.75	286.75	0.50	21.50
						1.00		2.00	3.00					
28	MC92-102	0	840	10.500										
				0.000	219.550	0.75	0.25	5.75	3.00	0.00	9.75	296.50	1.25	22.75
29	MC92-102	0	842	10.525										
				0.000	230.075	0.75	0.25	5.75	3.75	0.00	10.50	307.00	1.25	24.00
30	MC92-102	0	810	10.125										
				0.000	240.200	1.25	0.25	5.25	2.75	0.00	9.50	316.50	1.50	25.50
31	MC92-102	0	988	12.350										
				0.000	252.550	1.50	0.25	6.75	1.75	0.00	10.25	326.75	1.75	27.25
					252.550	48.50	7.75	170.75	99.50	0.00		326.75		27.25

[redacted]EOSYSTEMS PTY LTD — MONTHLY OPERATIONS SUMMARY — CLIENT... PACIFIC OIL & GAS

CREW NO... 205 — MONTH.... SEPTEMBER, 1992. — AREA..... EP-18,23,24 & 33

DAY	LINE NO.	SKIP	PROF.	KMS.	CUM. KMS.	TRAVEL TIME	TEST TIME	REC. TIME	OTHER CHGE. TIME	WX TIME	TOTAL CHGE. HOURS	CUM. CHGE. HOURS	DOWN TIME	CUM. DOWN TIME
1	MC92-102	0	0	0.000										
				0.000	0.000	1.50	0.00	0.00	3.00	0.00	4.50	4.50	0.00	0.00
2		0	0	0.000										
				0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3		0	0	0.000										
				0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4		0	0	0.000										
				0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5		0	0	0.000										
				0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6		0	0	0.000										
				0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7		0	0	0.000										
				0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8		0	0	0.000										
				0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9		0	0	0.000										
				0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10		0	0	0.000										
				0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11		0	0	0.000										
				0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12		0	0	0.000										
				0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13		0	0	0.000										
				0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14		0	0	0.000										
				0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15		0	0	0.000										
				0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
					0.000	1.50	0.00	0.00	3.00	0.00		4.50		0.00

APPENDIX "H"

GEOSYSTEMS PTY LTD

CREW NO.. 205 SAFETY MEETING REPORT DATE.....7/6/1992

Client.....	PACIFIC OIL & GAS	Party Manager....	Eric Bowron
Survey Name....	1992 McArthur River Seismic Survey	Client Rep.....	Bill Foster
Area.....	EP'S 18, 23, 24 & 33.	Weather.....	Hot
State.....	N.T.		

CONDUCTED BY : Eric BOWRON
Laurie WILLMOTT

CLIENT REP. PRESENT : Bill FOSTER

TOPICS COVERED :

(1).. All crew members were familiarised with the company policy in regards to gates and fences i.e. gates or fences found closed to be left closed, those found open to be left open. Damaged or broken gates or fences to be reported to Sen. Observer, Party Manager or Bird Dog.

(2).. Vehicle speed to be kept to a minimum around the camp area and whilst travelling along seismic and/or access roads.

(3).. Special precautions to be taken when travelling along all access tracks to and from recording line as C-TEM crew are working in the vicinity.

(4).. All crew members to use the provided sun block-outs, and wear sensible, but sufficient clothing to protect themselves against the negative effects of the sun.

ABSENTEES : Full crew attendance.

GEOSYSTEMS PTY LTD

CREW NO.. 205 SAFETY MEETING REPORT DATE.....13/6/1992

Client.....	PACIFIC OIL & GAS	Party Manager....	Eric Bowron
Survey Name....	1992 McArthur River Seismic Survey	Client Rep.....	Bill Foster
Area.....	EP'S 18, 23, 24 & 33.	Weather.....	Hot
State.....	N.T.		

CONDUCTED BY : Eric BOWRON
Laurie WILLMOTT

CLIENT REP. PRESENT : Bill FOSTER

TOPICS COVERED :

(1).. A quick and efficient camp move is expected for tomorrow (14/6/1992). It is each and every employee's priority to make it so. Thus, the packing up of camp must be orchestrated in the usual professional manner. Priority is to be given to the quick departure and unloading of the vibes, so that they may return to line A.S.A.P.

(2).. All crew members driving on the camp move tomorrow, are to travel at no more than 60 kms per hour. Vehicles will be equally spaced, at approximately 200 metre intervals. This will provide a safe overtaking margin for truck drivers, bus drivers and all other motorists on the Stuart Hwy.

(3).. Extreme caution is to be taken when turning onto or off the Stuart Hwy. This can be a potentially fatal trouble spot, for fatigued, and unwary drivers if anything less than full concentration is applied.

(4).. Crew members found to be still intoxicated tomorrow morning will be dealt with harshly. Driving under the influence of alcohol is a Federal offence, and will not be tolerated on any Geo-System's crew.

ABSENTEES : Full crew attendance.

GEOSYSTEMS PTY LTD

CREW NO.. 205 — SAFETY MEETING REPORT — DATE.....24/6/1992

Client.....	PACIFIC OIL & GAS	Party Manager....	Eric Bowron
Survey Name....	1992 McArthur River Seismic Survey	Client Rep.....	Bill Foster
Area.....	EP'S 18, 23, 24 & 33.	Weather.....	Hot
State.....	N.T.		

CONDUCTED BY : Eric BOWRON, Laurie WILLMOTT — CLIENT REP. PRESENT : Bill FOSTER

TOPICS COVERED :

(1).. Tomorrows' (25/6/1992) camp move to the Nutwood Downs camp was discussed. There will be no changes made to the driver allocations. With the success of the previous camp move, whereby a speed limit of 60km/h was set, and no damage to equipment was incurred. The same condition will also be applied to this camp move.
All new crew personnel, with the exception of the very latest newcomers, should by now know what exactly is expected of them when moving camp.

(2).. The positioning of the various road signs on the Carpentaria Hwy, is to be made a major priority by all crew members. The signs are to be spaced in accordance to the Northern Territory Public Works Departments' regulations and guidelines, concerning safety when working on, and around, roads or highways.

(3).. Routine checks on the road signs must be made to ensure that they are all still positioned correctly. these checks will be conducted frequently while recording is in progress over the Carpentaria Hwy. The signs will be in position from when the first equipment is layed across the highway, until the last piece of equipment is picked back up across it.

(4).. All crew members are recquired to wear red safety jackets, (stress jackets), while working on or across the Carpentaria Hwy.

(5).. The above conditions will be immediately implemented on the arrival of the first sets of equipment to be layed across the highway on line MC92-251.
These conditions will of course also apply to all other instances where seismic lines intersect highways or roads. In doing so, it is hoped that the hazards are reduced to a minimum, and the safety factors increased.

ABSENTEES : Steve McDONALD, John JEFFREY

GEOSYSTEMS PTY LTD

CREW NO.. 205 SAFETY MEETING REPORT DATE.....4/7/1992

Client.....	PACIFIC OIL & GAS	Party Manager....	Eric Bowron
Survey Name....	1992 McArthur River Seismic Survey	Client Rep.....	Bill Foster
Area.....	EP'S 18, 23, 24 & 33.	Weather.....	Hot
State.....	N.T.		

CONDUCTED BY : Laurie WILLMOTT

CLIENT REP. PRESENT : Bill FOSTER
Koya SUTO

TOPICS COVERED :

(1).. A high fire danger exists in grasslands on the northern end of line MC92-93. All line vehicles already carry backpack water-spray containers, and these must be checked daily for loss of water through evaporation or leaks etc. Smoking is permissable only inside vehicles. This is a standard crew policy instructed at the beginning of this job.

(2).. Special care should be taken by line crew members, when hand carrying the equipment through the heavily timbered sections on line MC92-93. These sections are often steep and hilly, proving quite difficult to traverse whilst laden with equipment. Line crew members, I'm sure, are painfully aware of splinters and spikes.

(3).. Several crew members, over the past few weeks, have succumbed to a particularly vicious strain of the flu. The spread of this virus can be impeded by basic, good hygiene. Ways of stopping the spread of germs are-:

a). Washing hands before handling the food layed out for lunches.

b). Extracting water from the tap on the gotts, and not taking off lids and dipping cups and hands straight in.

c). Using the one cup all the time, and not sharing around unwashed ones that have been used by flu afflicted crew members.

ABSENTEES : Mal STORER
Rob BRADLEY

GEOSYSTEMS PTY LTD

CREW NO.. 205 SAFETY MEETING REPORT DATE.....14/7/1992

Client.....	PACIFIC OIL & GAS	Party Manager....	Eric Bowron
Survey Name....	1992 McArthur River Seismic Survey	Client Rep.....	Bill Foster
Area.....	EP'S 18, 23, 24 & 33.	Weather.....	Hot
State.....	N.T.		

CONDUCTED BY : Laurie WILLMOTT CLIENT REP. PRESENT : Bill FOSTER

TOPICS COVERED : (1).. Camp move to old P.W.D. camp site discussed. Especially turning on and off the highways. Drivers are to be very careful, and to check for on-coming traffic. Drivers are to keep a distance of approximately 200 metres between them and the vehicle ahead of them. Once again, a speed limit of 60 kms per hour will apply.

(2).. All gates and fences are to be checked behind the line crew, as they pick up the spread behind them. This has been done very efficiently so far this job, as any broken gates have been promptly repaired, and all gates have been put back up when line crew have passed through them.

(3).. Due to the heavy buildust that covers much of the area we are working in. It is essential that all vehicle operators air-blow their vehicles' air-cleaners, radiators, and clear the dusty build-up on top of their batteries. This will give these vehicles a longer life in this engine unfriendly environment.

ABSENTEES : Eric BOWRON

304798

GEOSYSTEMS PTY LTD

CREW NO.. 205 SAFETY MEETING REPORT DATE.....20/7/1992

Client.....	PACIFIC OIL & GAS	Party Manager....	Eric Bowron
Survey Name....	1992 McArthur River Seismic Survey	Client Rep.....	Bill Foster
Area.....	EP'S 18, 23, 24 & 33.	Weather.....	Hot
State.....	N.T.		

CONDUCTED BY : Eric BOWRON
Laurie WILLMOTT

CLIENT REP. PRESENT : Bill FOSTER

TOPICS COVERED : (1).. Special supervision to be taken when burning off the rubbish pit. The water truck and at least two people are to be present, during the course of the burning off operation. The fire can only be lit when there is very little, or preferably no wind present. Before the pit is burnt off the Party Manager, and the Bird-Dog, must be notified. In accordance with Geo-systems strict safety and environmental policies, a fire permit has been obtained from the local Fire Warden, and Amungee Mungee station owner, Mr. Karl Badstuebner.

(2).. Due to the very rough nature of the seismic lines, extra care must be taken when travelling to and from work. No personnel are to travel on the back of utes, and when driving through particularly notorious stretches of bulldust drivers are instructed to turn their headlights on as an extra safety precaution.

ABSENTEES : John JEFFREY
Troy ARNOLD

GEOSYSTEMS PTY LTD

CREW NO.. 205 SAFETY MEETING REPORT DATE.....28/7/1992

Client.....	PACIFIC OIL & GAS	Party Manager....	Eric Bowron
Survey Name....	1992 McArthur River Seismic Survey	Client Rep.....	Bill Foster
Area.....	EP'S 18, 23, 24 & 33.	Weather.....	Hot
State.....	N.T.		

CONDUCTED BY : Eric BOWRON
Laurie WILLMOTT

CLIENT REP. PRESENT : Bill FOSTER

TOPICS COVERED :

(1).. The recent accident on line, involving the Vibe-ops' crew cab, has highlighted the need for extra caution when driving through buildust patches. Drivers must be instructed to slow down when approaching these danger spots. As unfortunately has been demonstrated the buildust can be very treacherous if not approached with caution.
Drivers must also be very careful when travelling in buildust that has been stirred up by a preceding vehicle. In such cases drivers should wait until the dust has settled, and vision is unobscured, before continuing on.

(2).. A rise in the general standards of hygiene on crew, has almost certainly been a key factor in the demise of the flu virus on crew. It has been observed that simple hygenic traits such as rinsing out cups before and after use, have had the most dramatic effects in this particular instance.

(3).. The mechanics' have applauded one and all in the general care and maintenance of the vehicles on crew. This is a good effort on behalf of all concerned, and throws a positive light onto a somewhat dark and dusty area. It is commendable that the dust, and amount of time spent in these fairly oppressive conditions, has'nt dampened the enthusiasm of the crew to see the job finished professionally.

ABSENTEES : Full crew attendance.

GEOSYSTEMS PTY LTD

CREW NO.. 205 SAFETY MEETING REPORT DATE.....15/8/1992

Client.....	PACIFIC OIL & GAS	Party Manager....	Eric Bowron
Survey Name....	1992 McArthur River Seismic Survey	Client Rep.....	Bill Foster
Area.....	EP'S 18, 23, 24 & 33.	Weather.....	Hot
State.....	N.T.		

CONDUCTED BY : Eric BOWRON
Laurie WILLMOTT

CLIENT REP. PRESENT : Bill FOSTER

TOPICS COVERED : (1).. The arrival on crew of a new table tennis set has brought much joy to many would-be Toshiaka Fuwokawa's. To ensure maximum enjoyment and life is gained from the table a few rules must be observed, namely;(1) no putting drinks or leaving burning cigarrettes on the edge of the table.

(2) No food is to be eaten over or left on the table.

(3) Any aggression when losing, is not to be taken out on the table, ball, or bats. Anyone caught not complying with the above, reasonable demands, will be "Cartonized" and left to suffer the wrath of table tennis fanatics.

(2).. It has been noticed that when taking a break from work on line, a few people have taken to sunning themselves on vehicle roofs and bonnets. This of course dents them and chips their paintwork. Thus anyone caught practising this unruly behaviour will be sacked.

(3).. Trips to the Hi-Way Inn have been ceased owing to the fact that everyone has been been rotated in there at least once. It must also be pointed out that Geo-systems have been more than fair in allowing company vehicles to ferry personnel to and from the Hi-Way, as it is not their perogative, but good will in doing so.

(4).. All employees are required by law to fill out the necessary information in the Superannuation Plan booklet provided and initiated by the government.This is a personal and confidential form, and it is totally up to the individual as to how much or little of the form they complete.

ABSENTEES : Jason BOWRON
Ian BOWRON

GEOSYSTEMS PTY LTD

CREW NO.. 205 — SAFETY MEETING REPORT — DATE.....29/8/1992

Client.....	PACIFIC OIL & GAS	Party Manager....	Eric Bowron
Survey Name....	1992 McArthur River Seismic Survey	Client Rep.....	Bill Foster
Area.....	EP'S 18, 23, 24 & 33.	Weather.....	Hot
State.....	N.T.		

CONDUCTED BY : Eric BOWRON, Laurie WILLMOTT

CLIENT REP. PRESENT : Bill FOSTER

TOPICS COVERED :

(1).. The job is expected to be completed on Tuesday afternoon. The usual cleaning of vehicles, and packing up of camp will ensue the completion of field work.

(2).. Personnel who are not working on the Magellan survey will leave on Tuesday afternoon.

(3).. All Government Superannuation Fund books must be returned so they can be sent off. Only a few have yet to be returned.

(4).. Wednesdays' camp move will be a slow and cautious affair. As in all Geo-Systems camp moves, safety takes priority. A maximum of 60km/h will apply to the trucks, and drivers are to make frequent checks of their truck and van tyres and hitches.

(5).. Crew members are notified that there is no consumption of alcohol allowed on the next prospect. This is the clients' (Magellan) policy, and is to be accepted by Geo-Systems (unfortunately) unconditionally.

(6).. Crew members are also not to stray from within a 200 metre radius of the line. This in compliance with the Central Lands Council laws that condition the proposed seismic survey. Any breach of these laws can result in an immediate withdrawal of the contract, and Geo-systems being ordered off the prospect.

(7).. Congratulations and thanks to all crew personnel on a job well done. The many difficulties encountered, have been faced with great spirit, and a determination to see the job executed with the utmost professionalism. It is a credit to all who have toiled on this survey. Once again, many thanks.

ABSENTEES : Full crew attendance.

APPENDIX "H"

SAFETY PERFORMANCE

Crew Number ..... 205 Client ..... PACIFIC OIL & GAS

Month ..... JUNE

Week Ending	Total Employee Exposure Hours	Recordable Work Injuries								Recordable Workdays		Severity
		Perm. Disabilities	Lost Workday Cases	Restricted work Cases	Medical Treatment Cases without lost time	Lost Time Injuries	Total Injuries	Lost Work Days	Restricted Work Days	Lost Time Injuries	Total Recordable Cases	Average Days Away
Column	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
7/6/92	3645	-	-	-	-	-	-	-	-	-	-	-
14/6/92	3532	-	-	-	-	-	-	-	-	-	-	-
21/6/92	3588	-	-	-	-	-	-	-	-	-	-	-
28/6/92	3498	-	-	-	-	-	-	-	-	-	-	-
TOTALS	14263	-	-	-	-	-	-	-	-	-	-	-

Per 1.0m Hours Worked

NOTE: Column 1 = No. Employees * (Total Ch. Hrs + Downtime).

Column 6. = Col 2+3

Column 7. = Col 4+5+6

Column 10. = $\frac{\text{Col 6}}{\text{Col 1}} \times 1{,}000{,}000$

Column 11. = $\frac{\text{Col 7}}{\text{Col 1}} \times 1{,}000{,}000$

Column 12. = $\frac{\text{Col 8}}{\text{Col 2+3}}$

SAFETY PERFORMANCE

Crew Number .....205..... Client .....PACIFIC OIL & GAS.....

Month .....JULY.....

Week Ending	Total Employee Exposure Hours	Recordable Work Injuries								Recordable Workdays		Severity
		Perm. Disabilities	Lost Workday Cases	Restricted work Cases	Medical Treatment Cases without lost time	Lost Time Injuries	Total Injuries	Lost Work Days	Restricted Work Days	Lost Time Injuries	Total Recordable Cases	Average Days Away
Column	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
5/7/92	3431		2			2	2	2	3	583	583	1.0
12/7/92	3375		1			1	1	2	3	296	296	2.0
19/7/92	3431											
26/7/92	3453											
TOTALS	13690		3			3	3	4	6	219	219	1.33

Per 1.0m Hours Worked

NOTE: Column 1 = No. Employees * (Total Ch. Hrs + Downtime).

Column 6. = Col 2+3 Column 7. = Col 4+5+6 Column 10. = $\frac{\text{Col 6}}{\text{Col 1}} \times 1{,}000{,}000$ Column 11. = $\frac{\text{Col 7}}{\text{Col 1}} \times 1{,}000{,}000$ Column 12. = $\frac{\text{Col 8}}{\text{Col 2+3}}$

SAFETY PERFORMANCE

Crew Number .....205..... Client ..PACIFIC OIL & GAS.....

Month ...AUGUST.....

Week Ending	Total Employee Exposure Hours	Recordable Work Injuries								Recordable Workdays		Severity
		Perm. Disabilities	Lost Workday Cases	Restricted work Cases	Medical Treatment Cases without lost time	Lost Time Injuries	Total Injuries	Lost Work Days	Restricted Work Days	Lost Time Injuries	Total Recordable Cases	Average Days Away
Column	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
2/8/92	3566	-	-	-	-	-	-	-	-	-	-	-
9/8/92	3577	-	-	-	-	-	-	-	-	-	-	-
16/8/92	3645	-	-	-	-	-	-	-	-	-	-	-
23/8/92	3588	-	-	-	-	-	-	-	-	-	-	-
20/8/92	3562	-	-	-	-	-	-	-	-	-	-	-
TOTALS	17938	-	-	-	-	-	-	-	-	-	-	-

Per 1.0m Hours Worked

NOTE: Column 1 = No. Employees * (Total Ch. Hrs + Downtime).

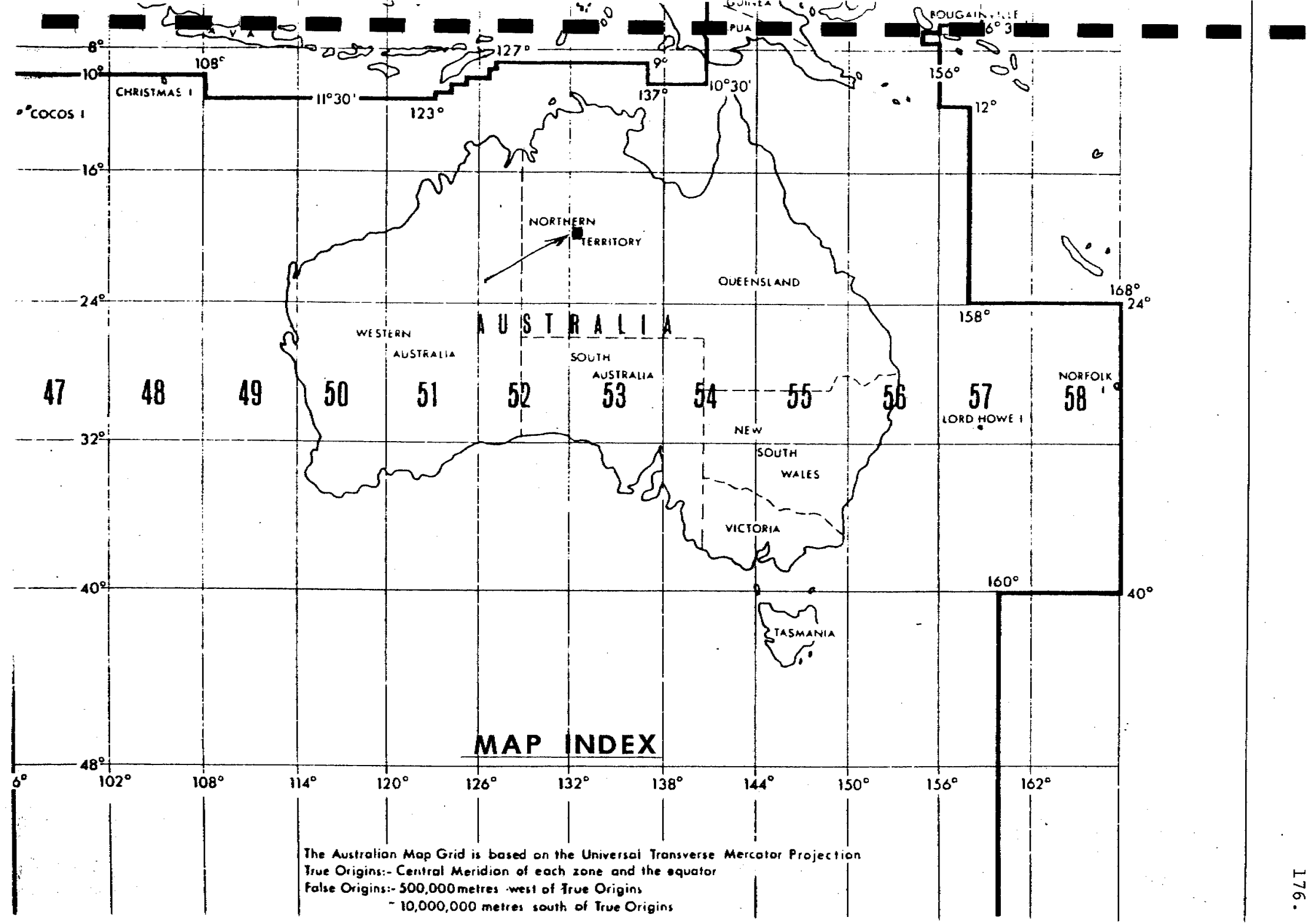
Column 6. = Col 2+3

Column 7. = Col 4+5+6

Column 10. = $\frac{\text{Col 6}}{\text{Col 1}} \times 1{,}000{,}000$

Column 11. = $\frac{\text{Col 7}}{\text{Col 1}} \times 1{,}000{,}000$

Column 12. = $\frac{\text{Col 8}}{\text{Col 2+3}}$

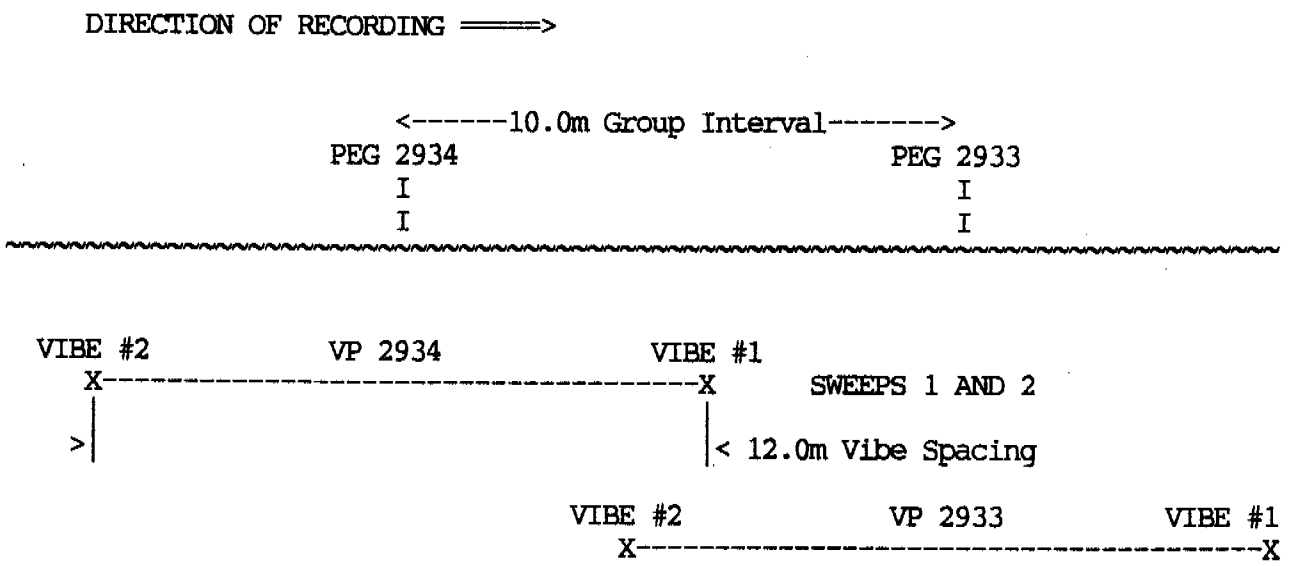


The Australian Map Grid is based on the Universal Transverse Mercator Projection
True Origins:- Central Meridian of each zone and the equator
False Origins:- 500,000 metres west of True Origins
" 10,000,000 metres south of True Origins

SOURCE PARAMETER SUMMARY

LINE NO: MC92-83

SOURCE ARRAY DIAGRAM:

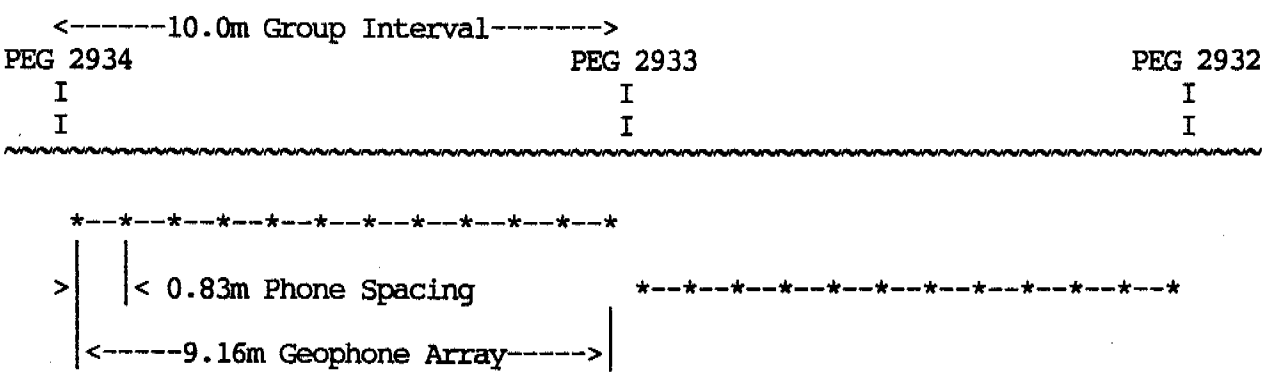


SOURCE ARRAY CENTRED ON THE STATION PEG THUS V.P. 2934 IS POSITIONED AT STATION 2934.

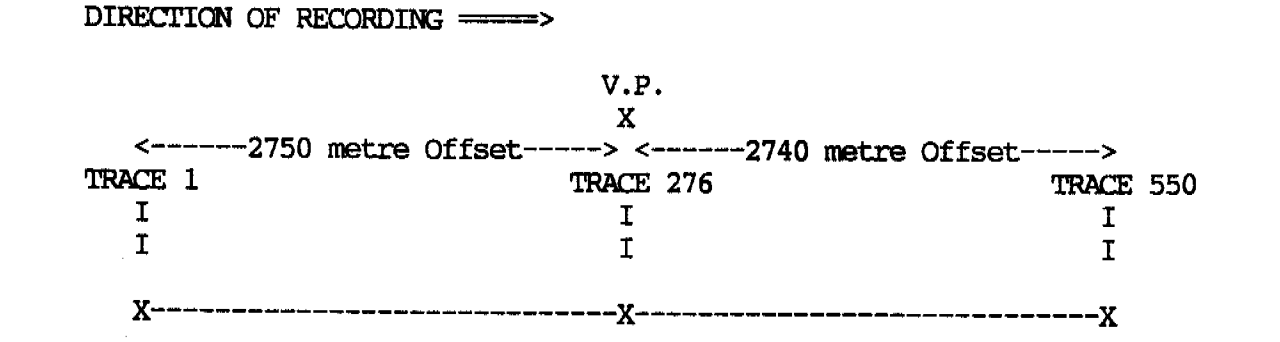
RECEIVER PARAMETER SUMMARY

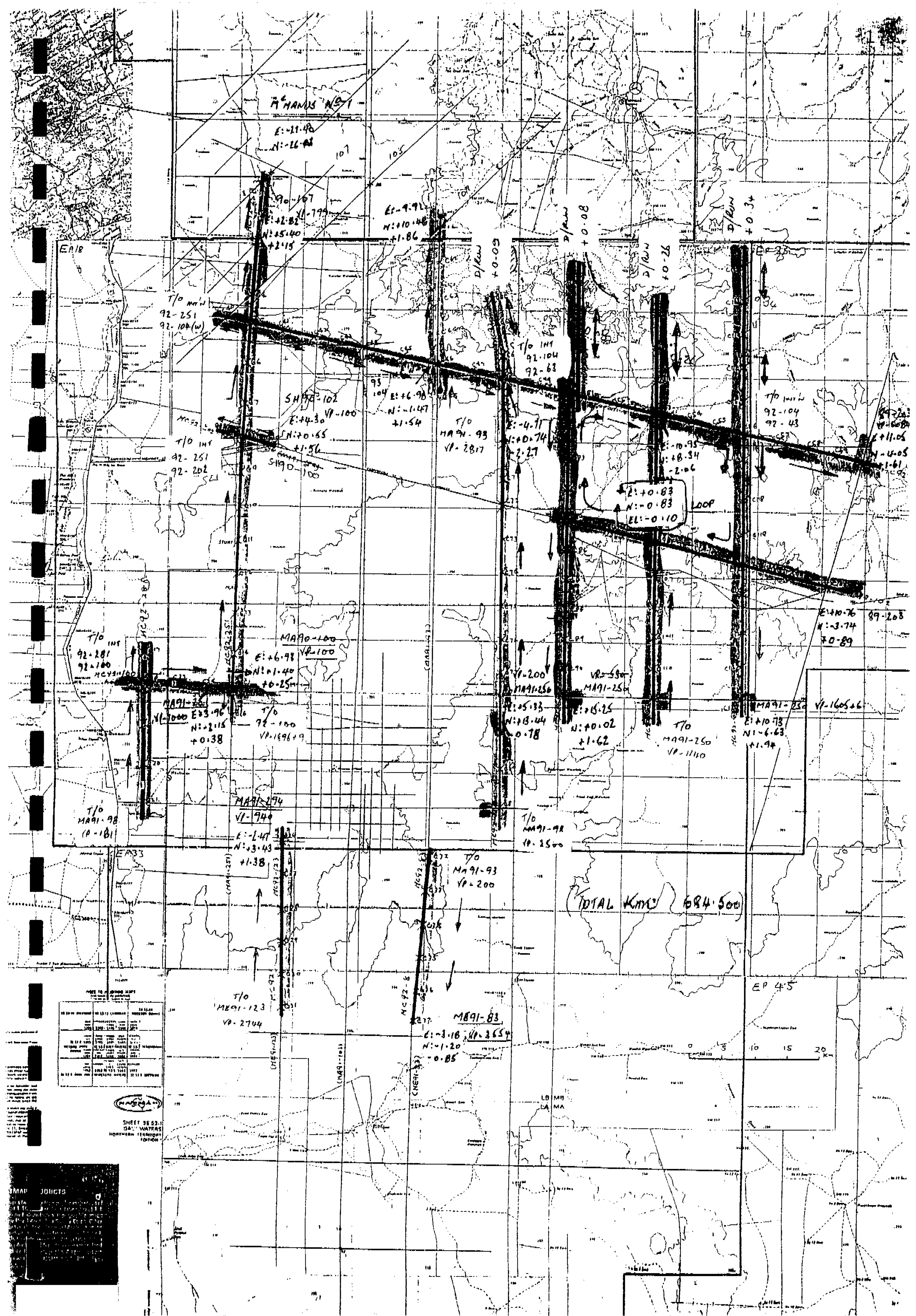
LINE NO: MC92-83

GEOPHONE ARRAY DIAGRAM:

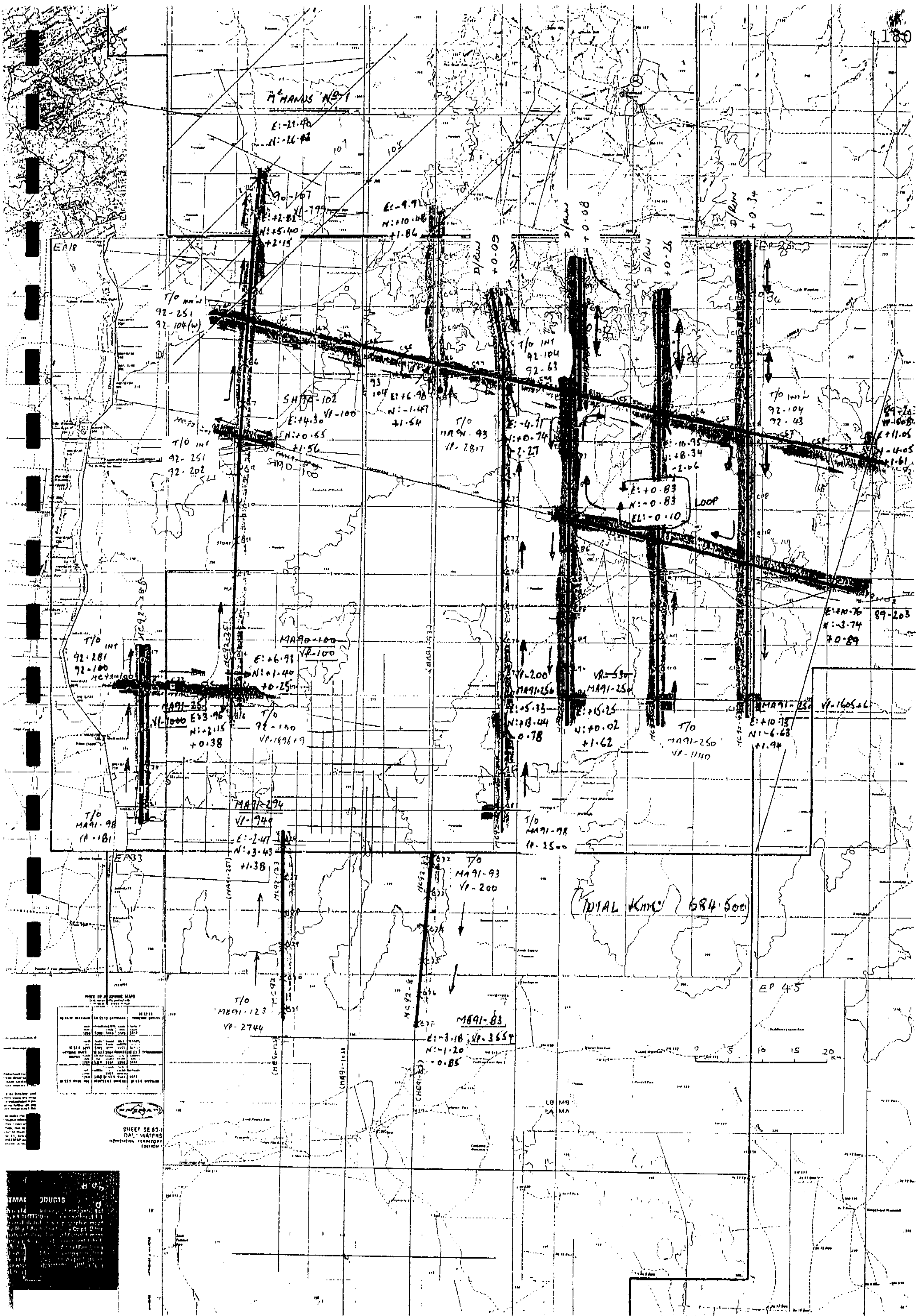


SPREAD DIAGRAM:





McMANUS No 1
E:-21.40
N:-26.82
EP 18
EP 33
EP 45
T/O MA91-93 VP-2817
T/O MA91-98 VP-2500
T/O MA91-250 VP-1140
MA91-294 VP-940
MA90-100 VP-100
MB91-83 VP-3654
T/O MB91-123 VP-2744
T/O MA91-93 VP-200
D/RUN +0.09
D/RUN +0.08
D/RUN +0.26
D/RUN +0.34
E:+0.83
N:-0.83
EL:-0.10
LOOP
E:+10.76
N:-3.74
70-89
E:-3.18
N:-1.20
-0.85
E:-1.47
N:+3.43
+1.38
(TOTAL Kms) (684.500)
0 5 10 15 20 km
SHEET SE 53-1
DALY WATERS
NORTHERN TERRITORY


McMANUS No 1
E: -21.48
N: -26.43
T/O INT
92-251
92-104 (W)
T/O INT
92-251
92-202
SH 92-102
VP-100
E: +4.30
N: +0.65
+1.56
E: +6.98
N: -1.47
+1.54
T/O
MA 91-93
VP-2817
T/O INT
92-104
92-63
D/RUN
+0.09
D/RUN
+0.08
D/RUN
+0.26
D/RUN
+0.34
T/O INT
92-104
92-43
E: -10.95
N: +8.34
-2.06
E: +0.83
N: -0.83
EL: -0.10
LOOP
E: +10.76
N: -3.74
+0.89
89-203
T/O INT
92-281
92-100
MA90-100
VP-100
E: +6.93
N: +1.40
+0.25
MA91-25
VP-1000
E: +3.96
N: +2.15
+0.38
T/O
92-100
VP-1696+9
MA91-256
E: +5.33
N: +13.44
-0.78
MA91-250
E: +15.25
N: +0.02
+1.62
T/O
MA91-250
VP-1140
MA91-250
VP-1605+6
E: +10.75
N: -6.63
+1.94
T/O
MA91-98
VP-1181
MA91-294
VP-940
E: -1.47
N: +3.43
+1.38
T/O
MA91-98
VP-2500
T/O
MA91-93
VP-200
(TOTAL KMS) 684.500
T/O
MA91-123
VP-2744
MA91-83
VP-3654
E: -3.18
N: -1.20
-0.85
EP 45
EP 33
0 5 10 15 20 km
SHEET SE 53-1
DALY WATERS
NORTHERN TERRITORY

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Western Australia 6101

GEOCOR IV
PROCESSING FLOW CHART