



SURVEY L154  
YILGARN 2001

LINE : 01AGS-NY3

AREA : OFFICER BASIN  
NEALE JUNCTION (WA)

STATIONS : 1040 - 2794

MIGRATION

0 - 16 S

NORTHEAST

## RECORDING PARAMETERS

DATE : AUGUST-SEPTEMBER 2001  
ACQUIRED BY : TRACE ENERGY SERVICES FOR ANSIR  
REF : S. SHARROCK, FINAL REPORT-OPERATIONS, 2001  
SYSTEM TYPE : ANSIR  
TAPE FORMAT : 16MM SEC-I  
TAPE HEADS : 3000 & 5 00 E-010  
RECORD LENGTH : 10 SECONDS  
SAMPLE RATE : 2 HZ  
FILTERS : LOW-HIGH-CUT 3-200 HZ NOTCH OUT  
FIELD FILES : 5007 TO 6002  
FIELD PROFS : L15401000 TO L15401003

SOURCE TYPE : THREE 1V1 HEN-00 VIBES  
SWEPT TYPE : 3 X 8 SEC WAYSKEEPS  
8-12 HZ, 10-100 HZ & 6-60 HZ  
SOURCE ARRAY : 50 M, CENTERED ON PEG  
VIBE CONFIG : 15M PREPARED, 10 M HENSLIP  
VF INTERVAL : 30 M AND 60 M  
SPREAD PATTERN : 1....100 X 101....240  
OFFSETS (M) : -2000....-15 X 150....5000  
CONTAINED BETWEEN PEGS  
GROUP INTERVAL : 30 M  
COVERAGE : 60 M AND 120 FOLD (OVERHEAD)  
GRAVITY & MAGNETIC DATA FROM NATIONAL COVERAGE

## PROCESSING SEQUENCE

- (1) LINE GEOMETRY AND CROOKED LINE DEFINITION (FIXED COP INT)
- (2) FIELD SEG-Y TO 'DISCO' FORMAT
- (3) QUALITY CONTROL DISPLAYS AND TRACE EDITS
- (4) SPECTRAL EQUALIZATION (WITH REMOVABLE 1000 MS AGC)
- (5) CMP SORT (BIN WIDE OPEN)
- (6) GAIN RECOVERY (SPHERICAL DIVERGENCE OPTION)
- (7) TRACE AMPLITUDE BALANCE ACROSS USER DEFINED GATES
- (8) SURGICAL AIR WAVE MUTE
- (9) BULK SHIFT +100 MS
- (10) APPLICATION OF REFRACTION STATICS (DATUM 350M, REPLACEMENT VELOCITY 4000 M/S)
- (11) APPLICATION OF AUTOMATIC RESIDUAL STATICS
- (12) BANDPASS FILTER  
TIME (SEC) BANDPASS (HZ) / SLOPE (DB/OCTAVE)  
0.0 - 1.5 10/36 - 100/36  
2.0 10/36 - 80/36  
6.0 - 16.0 10/36 - 60/36
- (13) VELOCITY ANALYSIS USING VELEX, 1ST PASS AFTER REFRACTION STATICS, 2ND PASS AFTER AUTOMATIC RESIDUAL STATICS
- (14) NORMAL MOVEOUT CORRECTION (15% STRETCH MUTE)
- (15) COMMON MID POINT STACK (ALPHA TRIMMED MEAN)
- (16) TRACE AMPLITUDE BALANCE
- (17) FINITE DIFFERENCE MIGRATION WITH 90% STACKING VELOCITIES
- (18) BANDPASS FILTER  
TIME (SEC) BANDPASS (HZ) / SLOPE (DB/OCTAVE)  
0.0 - 1.5 10/36 - 100/36  
2.0 - 6.5 10/36 - 70/36  
10.0 10/36 - 60/36  
16.0 10/36 - 40/36
- (19) SIGNAL ENHANCEMENT (DIGISTACK 0.8)
- (20) TRACE AMPLITUDE SCALING

ACQUIRED BY:

**ANSIR**

AUSTRALIAN  
NATIONAL  
NATURAL RESOURCES  
RESEARCH

DAVID JOHNSTONE, LEONIE JONES

PROCESSED BY:

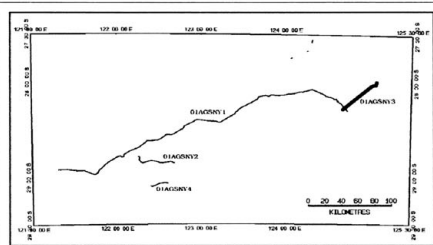
GEOSCIENCE AUSTRALIA (WWW.GA.GOV.AU)  
CANBERRA, A.C.T.

PROCESSING: LEONIE JONES, ED CHUDYK

POTENTIAL FIELD DATA: BEN BELL

BOUGER REDUCED GRAVITY: REGIONAL SUBTRACTED FROM MAGNETICS

HORIZONTAL SCALE : 1:100000 (VERTICAL STACK OF 2)  
VERTICAL SCALE : 1.011 INCHES/SEC  
V/H = 1:1 USING AVERAGE VELOCITY 6000 M/S  
NB: 100 MS CORRESPONDS TO 350 M DATUM



LOCATION MAP

PRODUCED BY DAVID JOHNSTONE

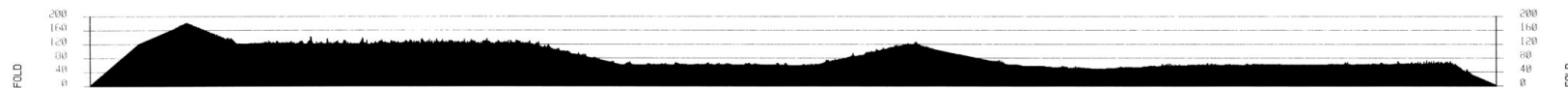
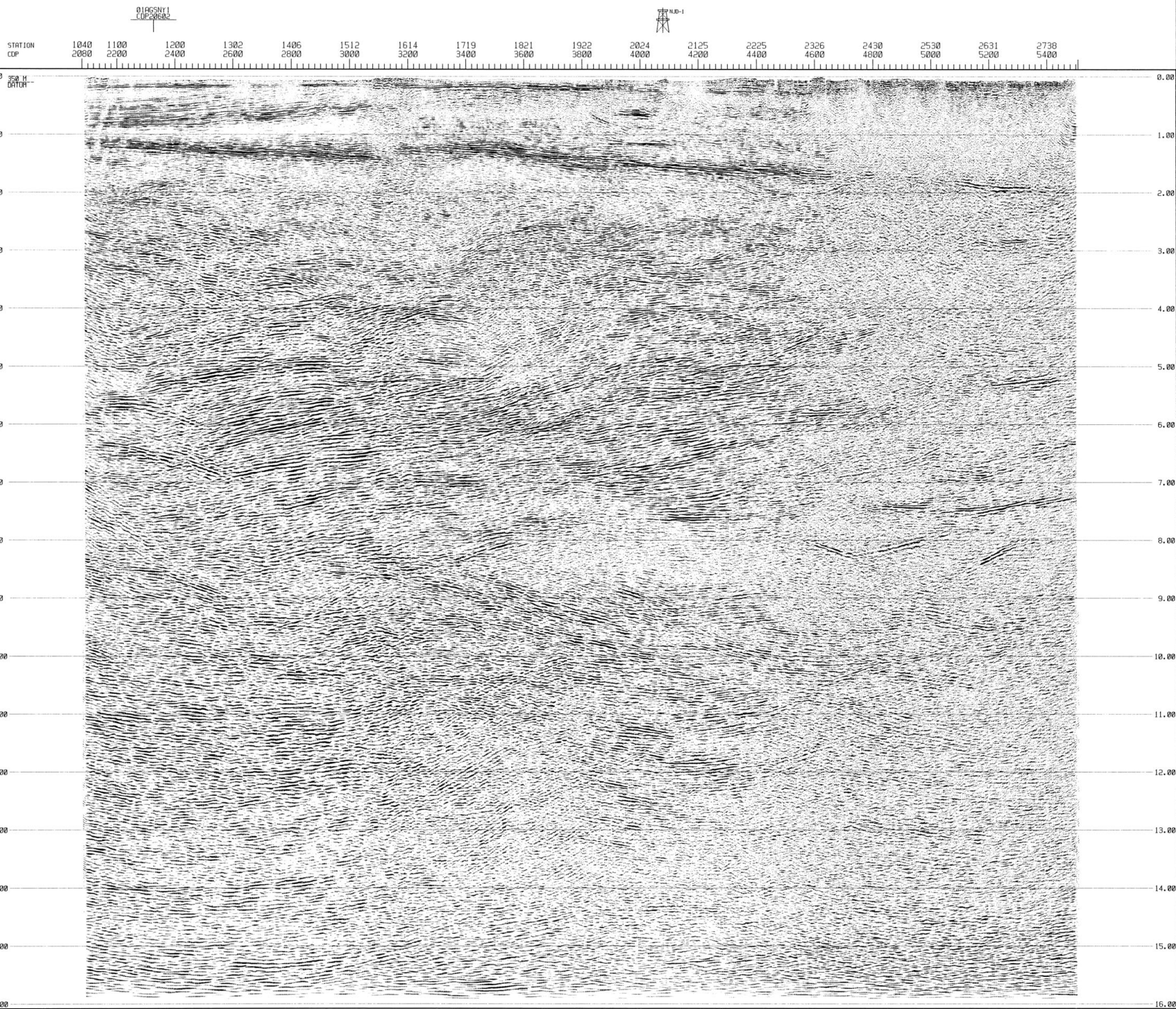
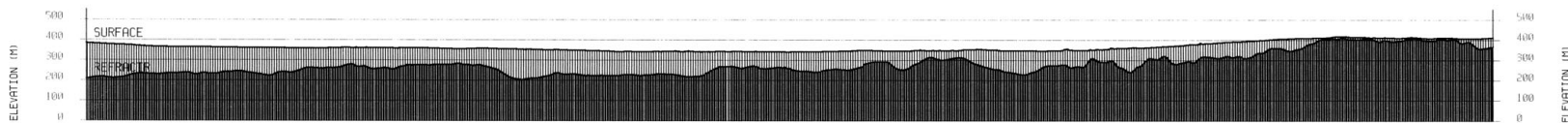
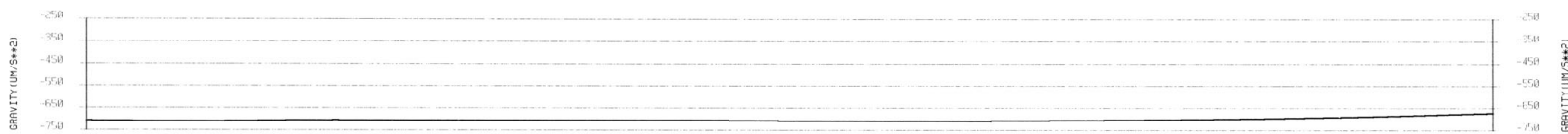
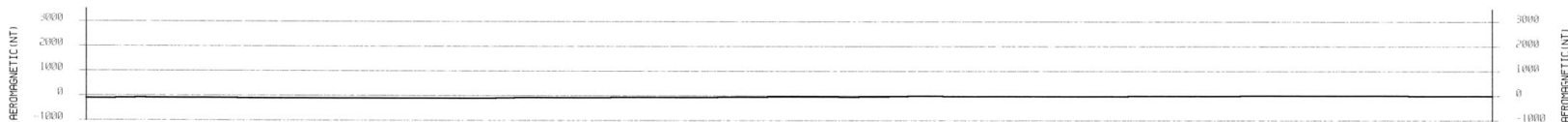
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**NORTHEASTERN YILGARN 2001 SEISMIC SURVEY L154**  
**LINE 01AGSNY3**  
**0-16 S MIGRATION**  
**ACQUISITION AND PROCESSING**

**GENERAL SURVEY PARAMETERS**

SURVEY NUMBER	L154
SURVEY NAME	NORTHEASTERN YILGARN
SURVEY AREA	OFFICER BASIN - LAKE YEO
TOTAL NUMBER OF LINES IN SURVEY	4
THIS LINE NAME	01AGSNY3
DATE ACQUIRED	AUGUST-SEPTEMBER 2001
STATION RANGE	1040 - 2794
ACQUIRED BY	TRACE ENERGY SERVICES FOR ANSIR
REFERENCE - ACQUISITION	S.BARBOUR, FINAL REPORT-OPERATIONS, 2001
REFERENCE - PROCESSING	L.E.A. JONES, B.R. GOLEBY AND T.J. BARTON, SEISMIC PROCESSING – 2001 NORTHERN YILGARN SEISMIC REFLECTION SURVEY (L154)
REFERENCE - INTERPRETATION	NORTHEASTERN YILGARN SEISMIC WORKSHOP, AUGUST 2002 - WORKSHOP NOTES, GEOSCIENCE AUSTRALIA
GRAVITY & MAGNETIC DATA ALONG LINE	FROM GEOSCIENCE AUSTRALIA'S NATIONAL COVERAGE

**ACQUISITION PARAMETERS**

ACQUISITION SYSTEM TYPE	ARAM24
TAPE FORMAT	ARAM SEG-Y
TAPE MEDIA	3490E MAGNETIC TAPE AND 5 GBYTE EXABYTE
RECORD LENGTH	16 SECONDS
SAMPLE RATE	2 MSEC
FILTERS	LOW/HIGH-CUT 3/205 HZ; NOTCH OUT
FIELD FILES	5387 TO 6612
FIELD REELS	L15401069 TO L15401082
SOURCE TYPE	THREE IVI HEMI-60 VIBES
SWEEP TYPE	3 X 8 SEC VARISWEEPS 8-72 HZ, 12-100 HZ & 6-80 HZ
SOURCE ARRAY	50 M, CENTRED ON PEG
VIBE CONFIG	15M PAD/PAD, 10 M MOVEUP
VP INTERVAL	30 M & 60 M
SPREAD PATTERN	1....120 X 121....240
OFFSETS (M)	-3585....-15 X 15....3585
GROUP PATTERN	12 IN-LINE, 2.5 M SPACING
	CENTRED BETWEEN PEGS
GROUP INTERVAL	30 M
COVERAGE	60 & 120 FOLD (NOMINAL)

## PROCESS SEQUENCE

[1]	LINE GEOMETRY AND CROOKED LINE DEFINITION (FIXED CDP INT)
[2]	FIELD SEG Y TO 'DISCO' FORMAT; RESAMPLE TO 4 MS
[3]	QUALITY CONTROL DISPLAYS AND TRACE EDITS
[4]	SPECTRAL EQUALIZATION (WITH REMOVABLE 1000 MS AGC)
[5]	CMP SORT (BIN WIDE OPEN)
[6]	GAIN RECOVERY (SPHERICAL DIVERGENCE OPTION)
[7]	TRACE AMPLITUDE BALANCE ACROSS USER DEFINED GATES
[8]	SURGICAL AIR WAVE MUTE
[9]	BULK SHIFT +100 MS
[10]	APPLICATION OF REFRACTION STATICS, DATUM 350 M (AHD), REPLACEMENT VELOCITY: 4000 M/S
[11]	APPLICATION OF AUTOMATIC RESIDUAL STATICS
[12]	BANDPASS FILTER TIME (SEC) BANDPASS(HZ)/SLOPE(DB/OCTAVE) 0.0 - 1.5      16/36 - 100/36 2.0            10/36 - 80/36 6.0 - 16.0    10/36 - 60/36
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[19]	SIGNAL ENHANCEMENT (DIGISTACK 0.8)
[20]	TRACE AMPLITUDE SCALING

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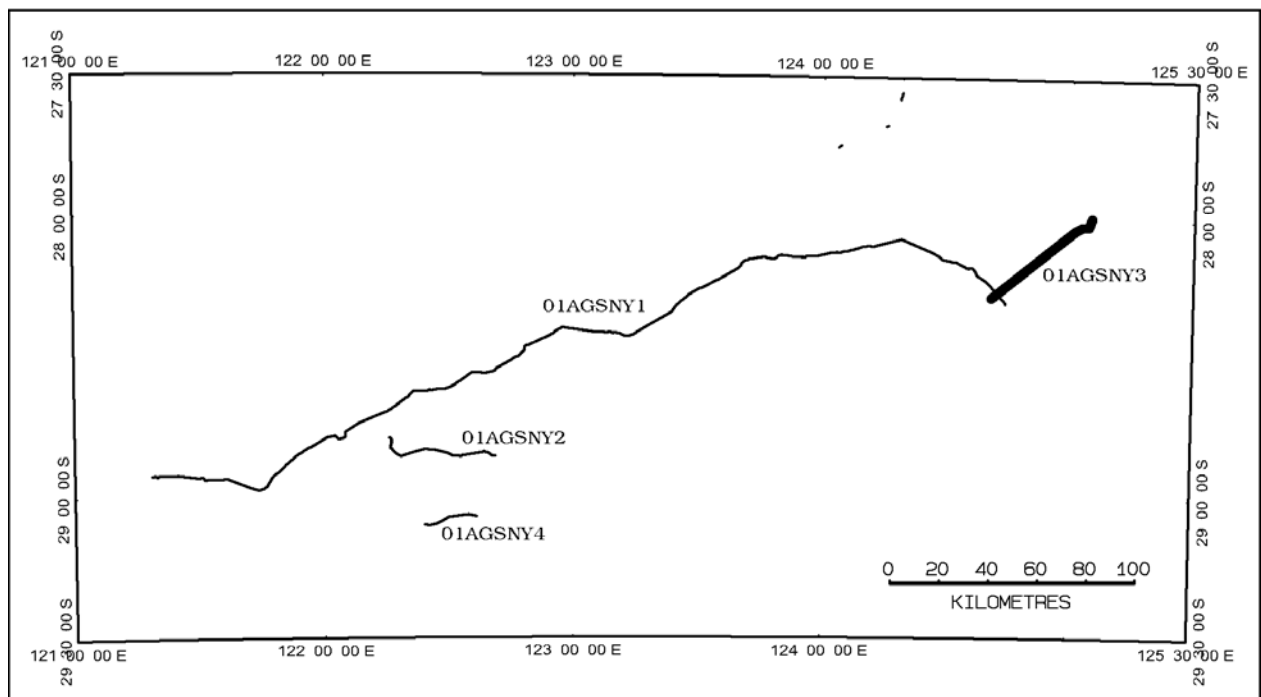
AUSTRALIAN NATIONAL SEISMIC IMAGING RESOURCE (ANSIR)

## PROCESSED BY

LEONIE JONES

GEOSCIENCE AUSTRALIA ([www.ga.gov.au](http://www.ga.gov.au))  
CANBERRA, A.C.T.

## LOCATION MAP



LOCATION MAP SHOWING POSITION OF LINE 01AGSNY3

## **PUBLICATION NOTE**

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