

Seismic Data Processing Report

For

Central Petroleum Limited

Location: Amadeus and Pedirka Basins

Exploration Permits: 82, 93, 97, 107, 112, 115, 118

Surveys processed: Johnstone, Magee, New Ghan, NW Mereenie, Parrara, Stone Plains (Amadeus Basin)

Colson Track, Flat Top, Hale River, Madigan, McDonnell Range, Vivien (Pedirka Basin)

Surveys reprocessed: Blamore Track, 2008; Mt Kitty and Ooraminna, 2006

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Contents

1. Introduction	4
2. Acquisition parameters	5
3. Johnstone survey	6
4. NW Mereenie survey	7
5. Magee and New Ghan surveys	8
6. Stone Plains survey	9
7. Parrara survey	10
8. Colson Track, Flat Top, Hale River, Madigan, McDonnell Range and Vivien surveys	11
9. Line Summary.....	12
9.1 Johnstone (EP-115)	12
9.2 Magee (EP-82).....	12
9.3 New Ghan (EP-82)	12
9.4 NW Mereenie (EP-115)	13
9.5 Parrara (EP-118).....	13
9.6 Stone Plains (EP-112)	13
9.7 Colson Track (EP-93)	13
9.8 Flat Top (EP-93).....	13
9.9 Hale River (EP-97)	14
9.10 Madigan (EP-93, EP-97).....	14
9.11 McDonnell Range (EP-93, EP-107)	14
9.12 Vivien (EP-93).....	14
9.13 Reprocessed lines (EP-93, EP-125, EP-82/RL-4)	14
10. Parameter Testing.....	15
11. Processing sequence	15
11.1 Transcription	15
11.2 Phase conversion	15
11.3 Geometry	15
11.4 Gain recovery	15
11.5 CDP gather	15
11.6 TFDN.....	15
11.7 SWNA	15
11.8 Deconvolution.....	15
11.9 Refraction statics	16

11.10 First pass velocity analysis	16
11.11 First pass residual statics	16
11.12 Second pass velocity analysis.....	16
11.13 Second pass residual statics.....	16
11.14 SCAMP	16
11.15 Pre-stack time migration (PSTM)	16
11.16 Final velocity analysis.....	17
11.17 NMO correction	17
11.18 Mute.....	17
11.19 Pre-stack equalisation.....	17
11.20 statics	17
11.21 CDP Trim statics	17
11.22 Common depth point stack.....	17
11.23 IQFILT	18
11.24 Band pass filter.....	18
11.25 Post-stack scaling	18
11.26 Processing sequence displays	18
11.27 Processing sequence diagram.....	21
11.28 Final displays	22
11.29 Archives.....	22
12. Data disposition to Central Petroleum	23
13. Conclusion.....	27

1. Introduction

The 2009 Central Petroleum 2D seismic survey in the Amadeus and Pedirka basins was processed by Fugro Seismic Imaging at its Perth office from January to October 2010. A total of 1246.975 km of new data were acquired. The surveys were made up in the following way.

Survey	Basin	No of lines	Line km	Exploration permit	Date acquired
Johnstone ¹	Amadeus	20	163.9	EP-115	Feb.–Mar. 2010
Magee	Amadeus	7	114.05	EP-82	Feb.–Mar. 2010
New Ghan	Amadeus	1	54.225	EP-82	Jun.–Aug. 2010
NW Mereenie	Amadeus	7	68.075	EP-115	Feb.–Mar. 2010
Parrara	Amadeus	4	120.35	EP-118	Feb.–Mar. 2010
Stone Plains	Amadeus	6	138	EP-112	Feb.–Mar. 2010
Colson Track	Pedirka	1	93.8	EP-93	Jun.–Aug. 2010
Flat Top	Pedirka	5	70.85	EP-93	Jun.–Aug. 2010
Hale River	Pedirka	4	79.975	EP-97	Jun.–Aug. 2010
Madigan	Pedirka	11	236.75	EP-93, 97	Jun.–Aug. 2010
McDonnell Range	Pedirka	1	65.775	EP-93, 107	Jun.–Aug. 2010
Vivien	Pedirka	5	41.225	EP-93	Jun.–Aug. 2010
		72	1246.975		

With new upholes, four older lines were also reprocessed.

Survey	Survey	Exploration permit	Line km
CB08-01	Blamore Track, 2008	EP-93	68.37
CMK06-08	Mt Kitty, 2006	EP-125	39.78
CO06-01	Ooraminna, 2006	EP-82/RL-4	25.78
CO06-04	Ooraminna, 2006	EP-82/RL-4	21.83
Total			155.76
Combined total			1477.975

- A line summary is given in Section 9.
- Field data were acquired by Terrex seismic crew 403 during January to September 2010. There was a break between end of March and end of June due to flooding in the area.
- There were four Johnstone 2009 lines that overlapped the Johnstone 2008 lines². These were merged at the beginning and processed as one line each (ie. CJ09-23 & CJ08-06; CJ09-23 & CJ08-12; CJ09-33 & CJ08-02; CJ09-35 & CJ08-09).
- The three Steel Gap lines proposed in the original acquisition program were not acquired.
- The uphole crew pulled out at the start of November 2010 so that the Pedirka Basin surveys were halted, thereby archiving the reprocessing with uphole statics of the Flat Top, Vivien and Colson Track survey to a latter date. Also, In May 2012, it was decided that no further

¹ Note: one line was acquired across the Black Range Anticline and one over the Wells Anticline.

² Note: The Johnstone lines acquired in 2010 have been referred to as part of the Johnstone survey, 2009, as these lines were shot in the 2009 budget year.

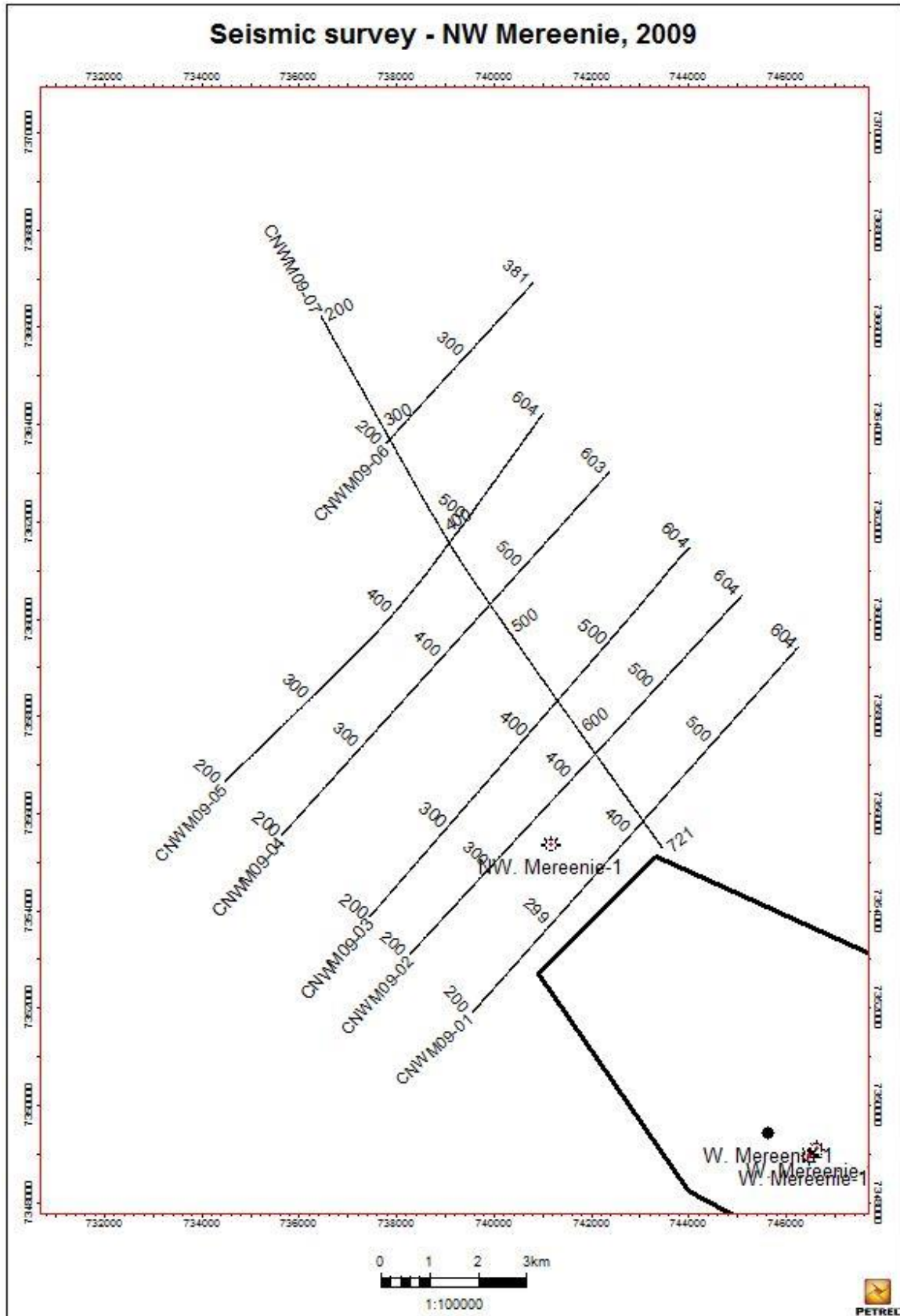
upholes would be forth-coming, thereby the Madigan survey processed data files were archived.

2. Acquisition parameters

2009 Central Petroleum 2D seismic survey	
Data recorded by	Terrex seismic crew 401
Date recorded	Jan. – Aug. 2010
Seismic source	Vibroseis
Source array	3 inline over 25 m
Vibe spacing	12.5 m pad-to-pad
Vibe move-up	Standing sweeps no move up
Sweeps per vp	1
Sweep frequency	5–85 Hz
Sweep type	Mono, 200 ms taper
VP interval	25 m
Recording system	Sercel 388 – 24 bit telemetry
Record length	12 sec sweep + 6 sec listen
Sample rate	2 ms
Tape format	SEGD revision zero phase
Field filters	0.8 to NQ
Data channels	480
Coverage	240 fold
Geophone type	SM24 10 hz
Geophone array	12 inline centered on station
Element spacing	2.08 m
Group interval	25 m
Split spread	5987.5-12.5-vp-12.5-5987.5

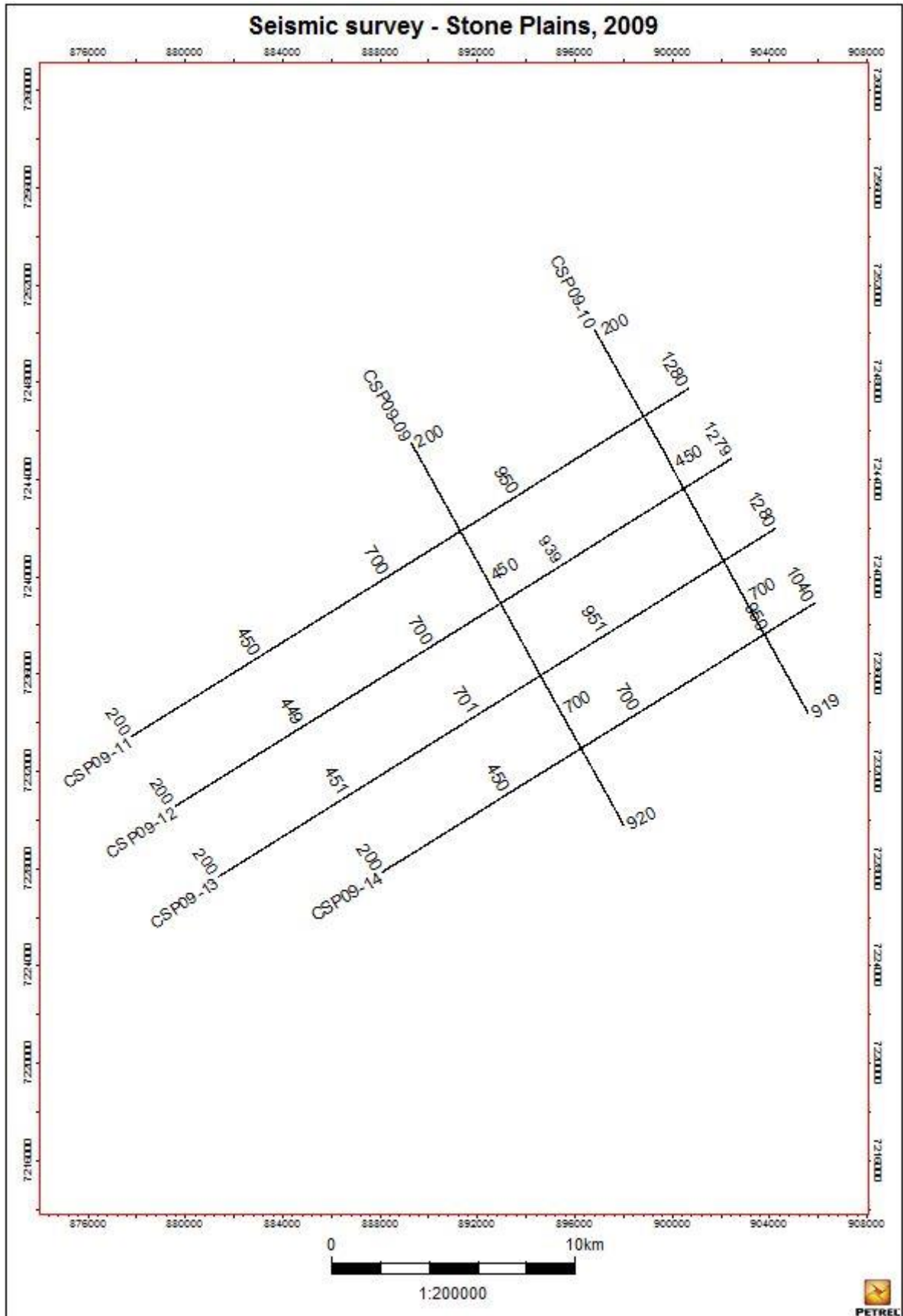
4. NW Mereenie survey

(EP-115; Datum GDA94, zone 52)



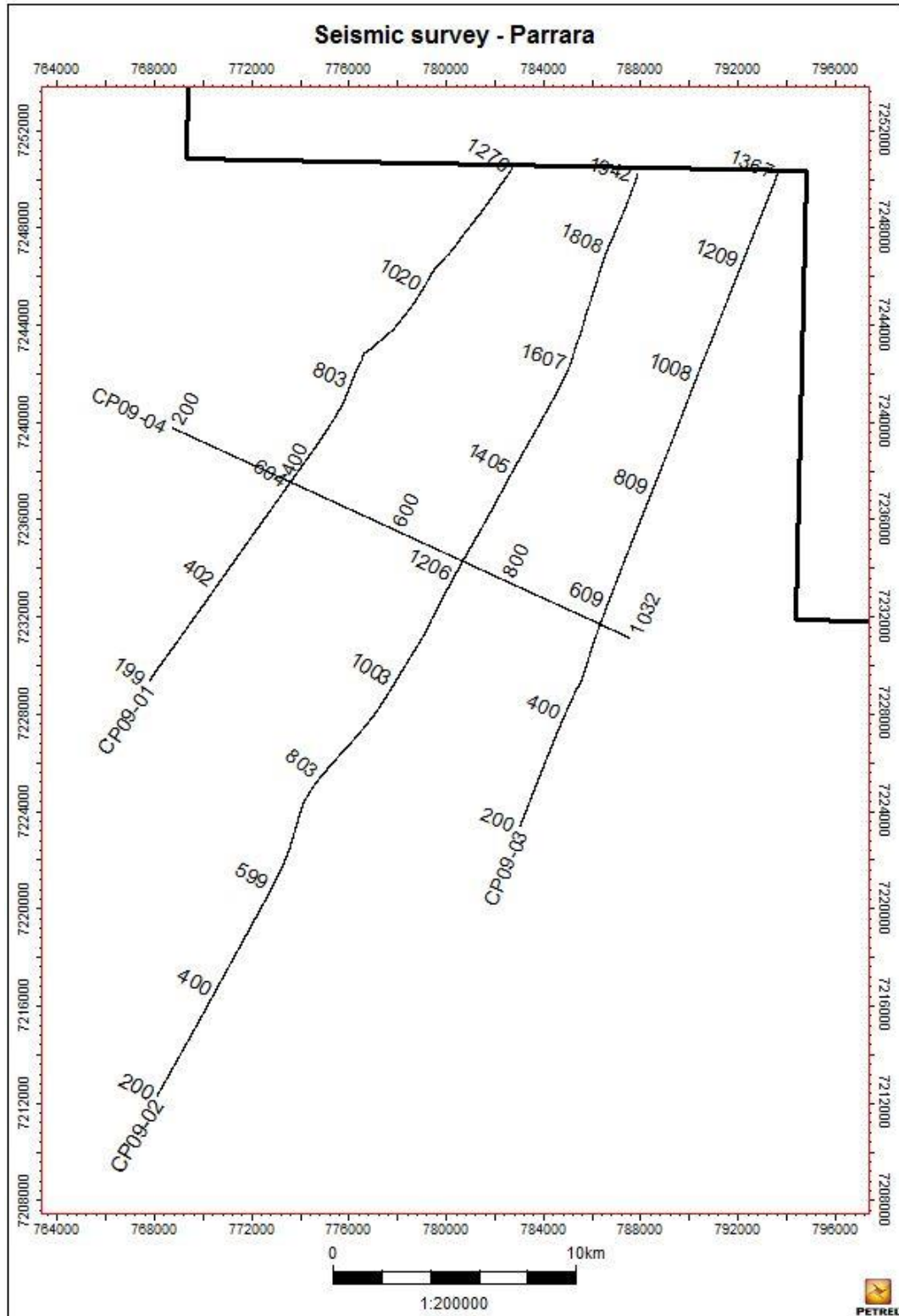
6. Stone Plains survey

(EP-112; Datum GDA94, zone 53)



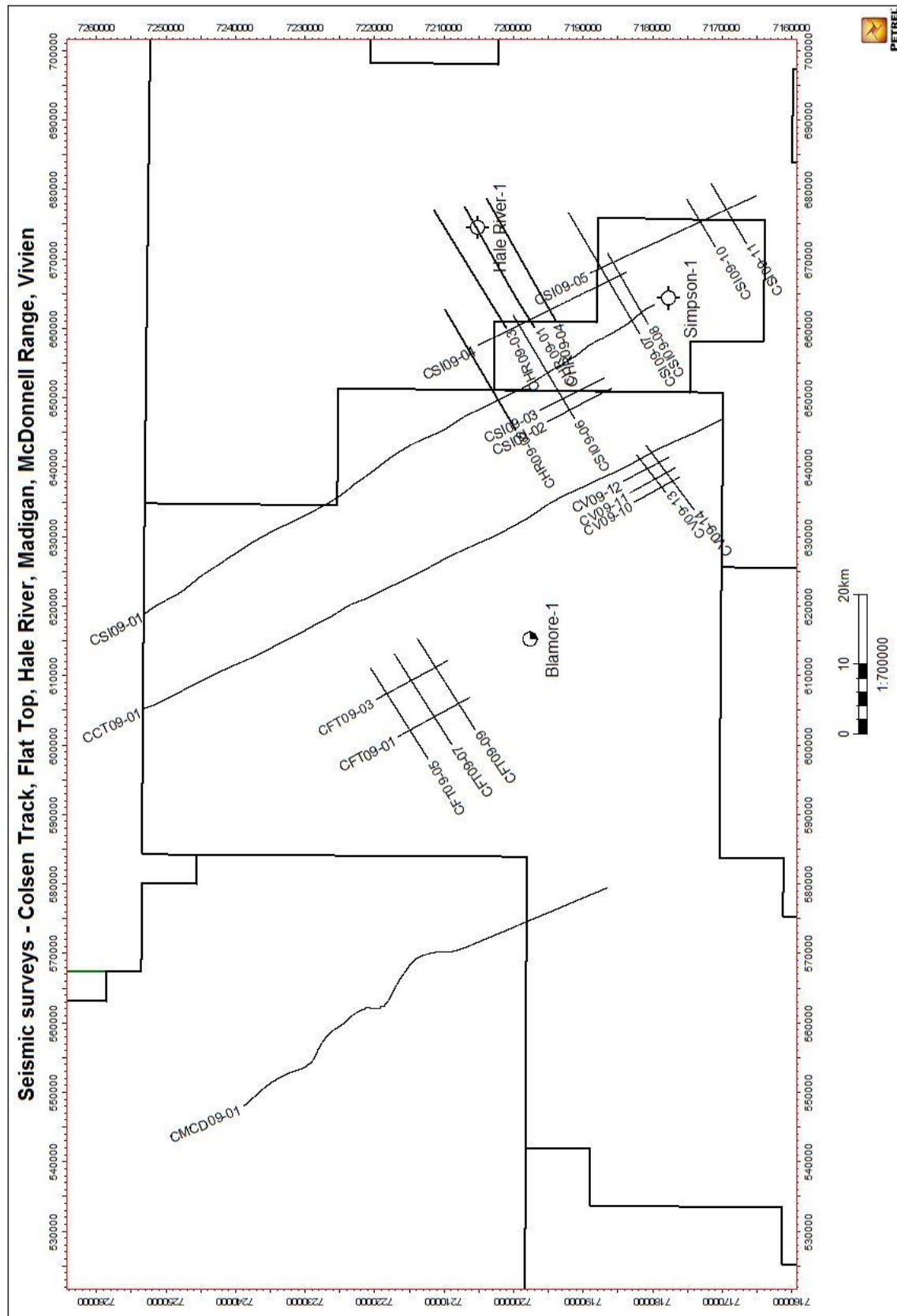
7. Parrara survey

(EP-118; Datum GDA94, zone 53)



8. Colson Track, Flat Top, Hale River, Madigan, McDonnell Range and Vivien surveys

(EP-93, -97 and -107; Datum GDA94, zone 53)



9. Line Summary

Sections 9.1 to 9.6 refer to the acquisition of lines in the Amadeus Basin, sections 9.7 to 9.12 to lines acquired in the Pedirka Basin. Section 9.13 refers to reprocessed lines.

9.1 Johnstone (EP-115)

Line	sp	cdp	Length (km)
CJ09-18	200-488	1-575	7.2
CJ09-19	200-486	1-572	7.15
CJ09-20	200-499	1-598	7.475
CJ09-21	200-426	1-450	5.65
CJ09-22	200-418	1-436	5.45
CJ09-23	200-811	1-1205	7.875
CJ09-24	200-600	1-799	10
CJ09-25	200-503	1-606	7.575
CJ09-26	200-604	1-809	10.1
CJ09-27	200-559	1-717	8.975
CJ09-28	200-561	1-721	9.025
CJ09-29	200-739	1-1068	5.85
CJ09-30	200-527	1-654	8.175
CJ09-31	200-486	1-572	7.15
CJ09-32	200-474	1-547	6.85
CJ09-33	200-930	1-1456	2.825
CJ09-34	200-337	1-273	3.425
CJ09-35	200-799	1-1195	6.6
CW09-05	200- 725	1-1050	13.125
CBR09-01	200- 1137	1-1874	23.425
			163.900

9.2 Magee (EP-82)

Line	sp	cdp	Length (km)
CML09-01	200-637	2-856	10.925
CML09-02	200-640	2-881	11
CML09-03	200-640	1-881	11
CML09-04	200-801	1-1199	15.025
CML09-05	200-763	1-1116	14.075
CM09-15	202-600	1-797	9.95
CAR09-01	200-1883	2-3352	42.075
			114.05

9.3 New Ghan (EP-82)

Line	sp	cdp	Length (km)
CCR09-01	345-2514	1-4340	54.225
			54.225

9.4 NW Mereenie (EP-115)

Line	sp	cdp	Length (km)
CNWM09-01	200–604	1–806	10.1
CNWM09-02	200–604	1–806	10.1
CNWM09-03	200–604	1–806	10.1
CNWM09-04	200–604	1–806	10.1
CNWM09-05	200–604	1–806	10.1
CNWM09-06	200–381	1–381	4.525
CNWM09-07	200–722	1–722	13.05
			68.075

9.5 Parrara (EP-118)

Line	sp	cdp	Length (km)
CP09-01	199–1270	1–2144	26.775
CP09-02	200–1943	1–3488	43.575
CP09-03	200–1368	1–2338	29.2
CP09-04	200–1032	1–1666	20.8
			120.35

9.6 Stone Plains (EP-112)

Line	sp	cdp	Length (km)
CSP09-09	200–920	2–1440	18
CSP09-10	200–920	2–1441	18
CSP09-11	200–1280	1–2161	27
CSP09-12	200–1280	1–2161	27
CSP09-13	200–1280	1–2159	27
CSP09-14	200–1040	1–1682	21
			138

9.7 Colson Track (EP-93)

Line	sp	cdp	Length (km)
CCT09-01	200–3952	1–7506	93.8
			93.8

9.8 Flat Top (EP-93)

Line	sp	cdp	Length (km)
CFT09-01	200–680	1–957	12
CFT09-03	200–679	1–955	11.975
CFT09-05	200–825	1–1246	15.625
CFT09-07	200–825	1–1246	15.625
CFT09-09	200–825	1–1246	15.625
			70.85

9.9 Hale River (EP-97)

Line	sp	cdp	Length (km)
CHR09-01	200–999	1–1598	19.975
CHR09-02	200–1000	1–1599	20
CHR09-03	200–1000	1–1599	20
CHR09-04	200–1000	1–1598	20
			79.975

9.10 Madigan (EP-93, EP-97)

Line	sp	cdp	Length (km)
CSI09-01	200–3691	2–6880	87.275
CSI09-02	200–620	2–840	10.5
CSI09-03	200–620	2–841	10.5
CSI09-04	200–1158	2–1916	23.95
CSI09-05	200–1258	2–2117	26.45
CSI09-06	200–900	1–1399	17.5
CSI09-07	200–1016	1–1632	20.4
CSI09-08	200–678	1–951	11.95
CSI09-09	200–605	1–805	10.125
CSI09-10	200–521	1–638	8.025
CSI09-11	200–603	1–802	10.075
			236.75

9.11 McDonnell Range (EP-93, EP-107)

Line	sp	cdp	Length (km)
CMCD09-01	200–2831	2–5119	65.775
			65.775

9.12 Vivien (EP-93)

Line	sp	cdp	Length (km)
CV09-10	200–500	2–597	7.5
CV09-11	200–500	2–599	7.5
CV09-12	200–500	2–597	7.5
CV09-13	200–479	1–554	6.975
CV09-14	200–670	1–939	11.75
			41.225

9.13 Reprocessed lines (EP-93, EP-125, EP-82/RL-4)

Line	Survey	sp	cdp	Length (km)
CB08-01	Blamore Track	176–2910	3–5428	68.35
CMK06-08	Mt Kitty	200–1790	1–3152	39.75
CO06-01	Ooraminna	200–1250	1–1974	25.75
CO06-04	Ooraminna	200–1072	1–1590	21.80
				155.65

10. Parameter Testing

The client was very keen to do extensive testing and as the acquisition parameters were similar to the 2008 data, lines CJ08-05 and CJ08-17 were tested prior to the new data arriving. The processing test sequence included review of the following standard processing phases and parameter choices:

- Initial gain correction to compensate for spherical divergence and absorption losses;
- Mutes were selected by inspecting a series of stacked panels with increasing offsets; selected mute was checked by displaying a range of NMO corrected CDP gathers with the mute annotated but not applied; and,
- Filter panels were run to confirm the range and times of the final filters.

As the testing was to be quite extensive, Simon Stewart completed the task while Mike Curran worked on the preliminary data preparation.

11. Processing sequence

The processing sequence enclosed as a flow chart; additionally, images of stacks at different stages in the processing are also shown.

11.1 Transcription

Field data were converted from SEG-D format to Fugro's internal format.

11.2 Phase conversion

Convert zero to minimum phase.

11.3 Geometry

Geometry was assigned and survey data used to update trace positions and offsets stored in data trace header.

11.4 Gain recovery

Spherical divergence gain function was used (ie. $\text{Gain (db)} = 1.0t + 20\text{Log}(t)$).

11.5 CDP gather

Shot records were sorted into CDP gathers. Nominal fold = 240. CDP interval = 12.5 m.

11.6 TFDN

Time frequency DE-noise

11.7 SWNA

Surface wave noise attenuation

11.8 Deconvolution

Surface consistent deconvolution using one window, as follows;

Operator – 300 ms; Gap – 12 ms; White noise – 0.1%

Design	12.5 m	300–3000 ms
	2887.5 m	1100–3200 ms
	5987.5 m	1800–3500 ms

11.9 Refraction statics

Refraction first breaks were picked using Green Mountain's Refraction Statics Delay Time Method, which estimates the refractor velocities to model the weathering thickness. A constant weathering velocity of 1000 m/s was used for statics computation of lines where there were no upholes. For the lines with upholes, the weathering velocity was calculated and used in a static computation. Raw refraction statics were tied at intersections by averaging the two intersecting raw values and used as calibration points. Lines and upholes were calibrated to the uphole static calculated.

An intermediate datum of just below the lowest elevation in each area was used and then a final datum back to mean sea level was calculated using a velocity of 2000 m/s.

11.10 First pass velocity analysis

First pass velocities were interpreted using Fugro's interactive velocity analyses program 'MVIVA'. Each analysis comprised a 20 CDP stacked panel, repeated 15 times with a different NMO velocity function. The velocity function was displayed at $\pm 3\%$, $\pm 6\%$, $\pm 9\%$, $\pm 12\%$, $\pm 16\%$, $\pm 20\%$ and $\pm 25\%$ increments from a central velocity function, the latter based on a regional velocity function. The MGIVA velocity analysis is a map-driven package, where the user can instantly see modifications to the velocity field in map or section view. Neighbouring velocity functions are superimposed on the current location for easy recognition of velocity trends. The velocity interpretation is performed on the pre-computed stack suite, or on a colour contoured semblance display. The semblance interpretation is assisted with markers illustrating the position of potential multiples, and with an interval velocity curve. Analyses were performed at 1 km intervals.

11.11 First pass residual statics

Fugro's 'NEBULA' surface-consistent residual statics package computes statics based on summed cross-correlations at source and receiver locations. A pilot trace is constructed at each CDP using a weighted mix of stacked traces. Cross-correlations of the pilot trace with traces in the respective CDP gather are summed into buffers for each source and receiver station number before being resampled and picked to derive a static value.

11.12 Second pass velocity analysis

Second pass velocity analysis was performed on gathers with first pass residuals statics applied. The first pass velocity field was used as centre function for Fugro's interactive velocity analysis package, MGIVA. Analyses were performed at 0.5 km intervals.

11.13 Second pass residual statics

Second pass residual statics was run using picked second pass velocity field as input to NMO corrections.

11.14 SCAMP

Surface consistent amplitude corrections

11.15 Pre-stack time migration (PSTM)

A Kirchhoff pre-stack time migration was initially output using smoothed second pass velocities on 240 equal offset planes from 12.5 m to 5987.5 m with curved ray tracing option. These gathers were

then input to final pass velocities analysis for velocity picking. Kirchhoff pre-stack time migration was then rerun using smoothed third pass velocities.

11.16 Final velocity analysis

Third pass velocity analysis was performed on PSTM gathers with both first and second pass residuals statics applied. The second pass velocity field was used as centre function for Fugro's interactive velocity analysis package, MGIVA. Analyses were performed at 0.5 km intervals.

11.17 NMO correction

NMO correction was performed using the final velocity functions.

11.18 Mute

A post-NMO outer trace mute was applied for two reasons:

- To remove any coherent noise on the outer traces; and,
- To reduce contamination from the effect of NMO stretch on the far offsets.

For Johnstone, Magee and Stone Plains

Outer trace mute

Offset (m):	280	300	500	900	1800	6000
Time (ms):	0	100	200	350	700	1600

For Colson Track and Vivien

Outer trace mute

Offset (m):	150	200	600	1300	2300	6000
Time (ms):	0	200	550	1200	1900	1400

For Madigan

Outer trace mute

Offset (m):	100	300	700	900	1800	2500	6000
Time (ms):	0	200	400	600	1000	2000	2500

11.19 Pre-stack equalisation

A single window, base levelling, trace-by-trace scale was applied to the data.

11.20 statics

The floating datum to final seismic reference component of the statics is applied prior to stack. This floating datum corrects the data from floating datum to a final datum (see refraction statics, Section 11.9). To avoid losing data above datum, data was time-shifted by 500 ms prior to static correction to datum, and a new time origin of -500 ms was established.

11.21 CDP Trim statics

Fugro's 'PASTA' package was used to compute CDP consistent residual statics. 'PASTA' is an automatic residual statics program that applies static shifts on a CDP consistent basis, using cross-correlations of NMO-corrected CDP gather traces with a CDP pilot trace for each depth point.

11.22 Common depth point stack

The traces within each CDP gather were summed using a Shell style weighted stack as requested and written by the programming department. Fold coverage – 240; CDP interval – 12.5 m.

11.23 IQFILT

Full inverse Q-filtering

11.24 Band pass filter

Unwanted noise that lay outside the frequency range of the desired reflection and diffraction data were removed by the application of a series of time variant filters.

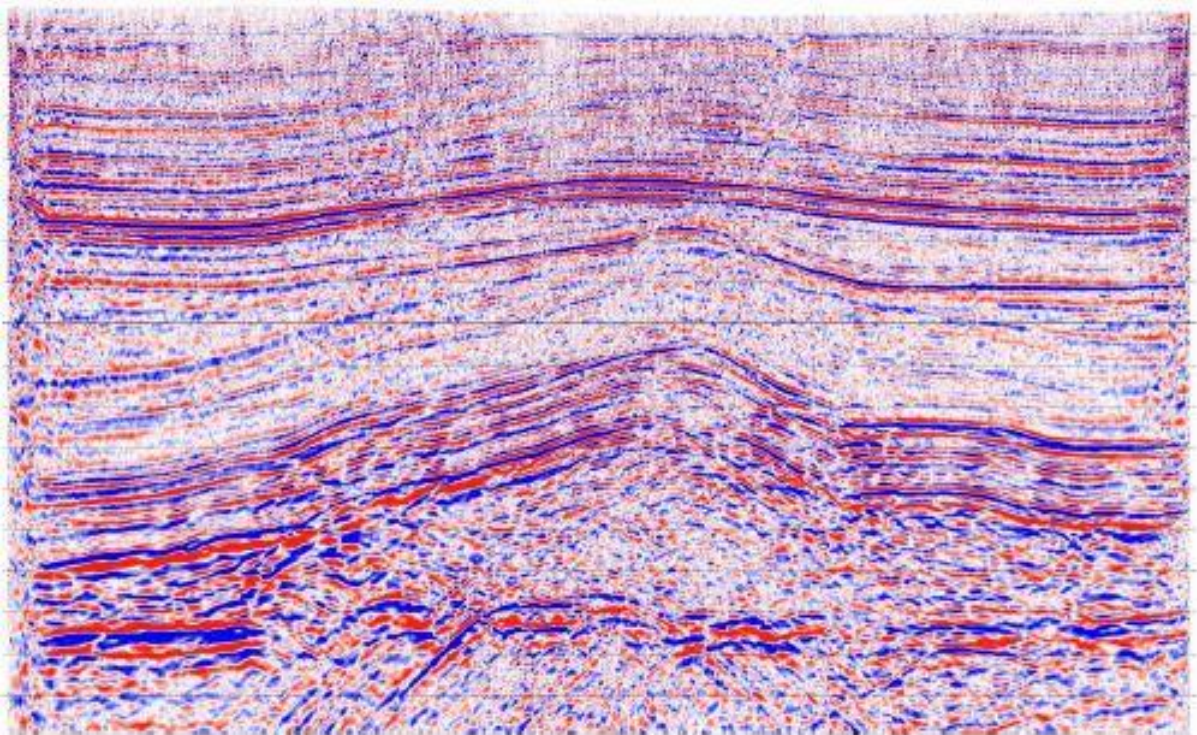
Time (ms)	Frequency (Hz)
1500	8/12 – 70/85
4000	8/12 – 50/65

11.25 Post-stack scaling

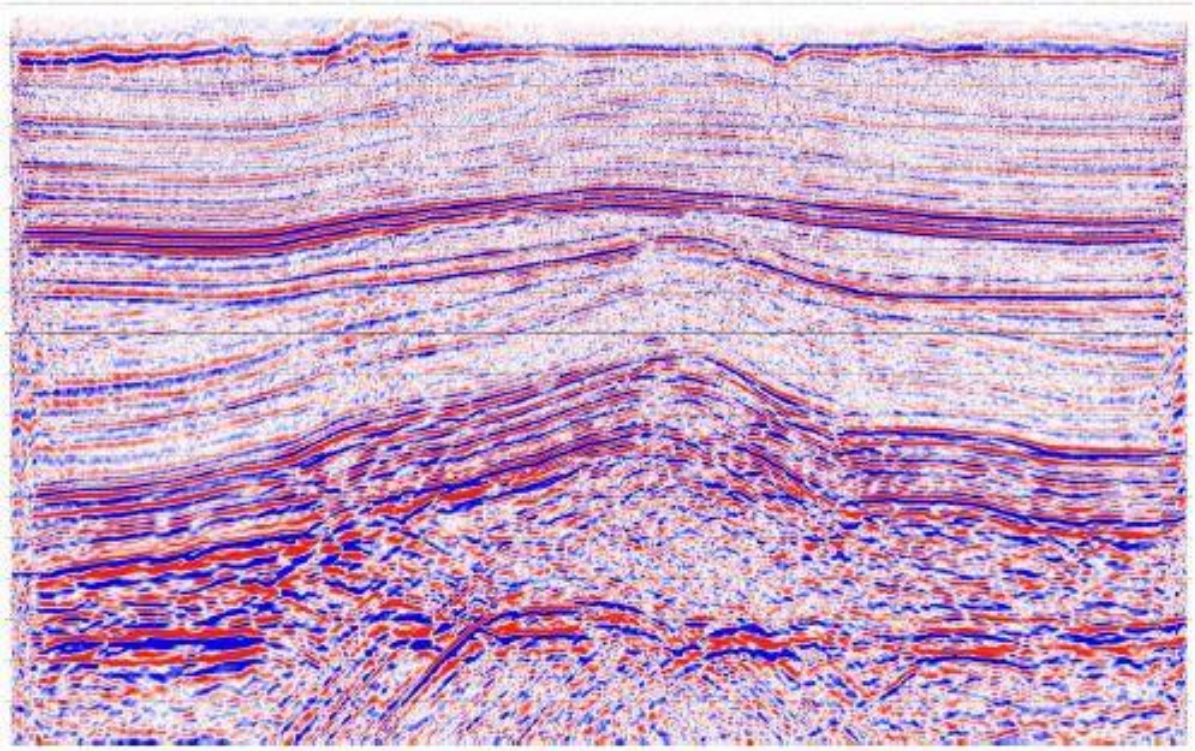
Dual window AGC with window lengths of 1000 ms and 400 ms. Equalisation applied – 50%.

11.26 Processing sequence displays

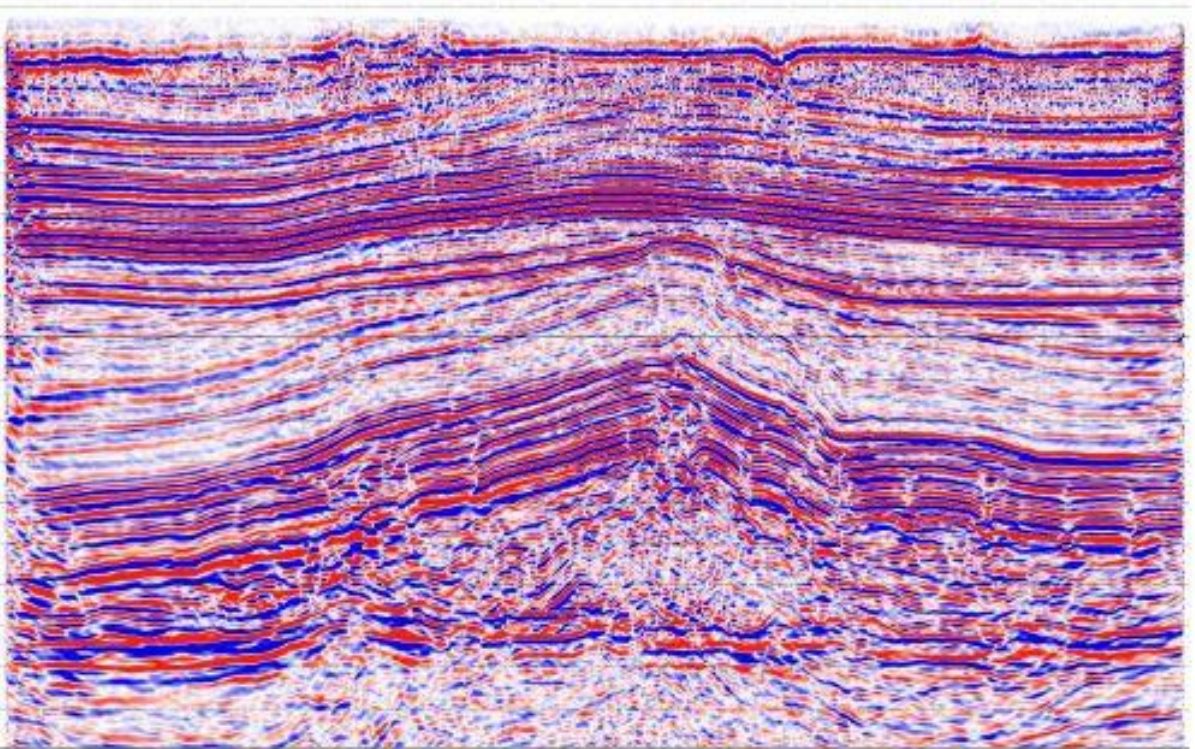
CML09-04, brute stack



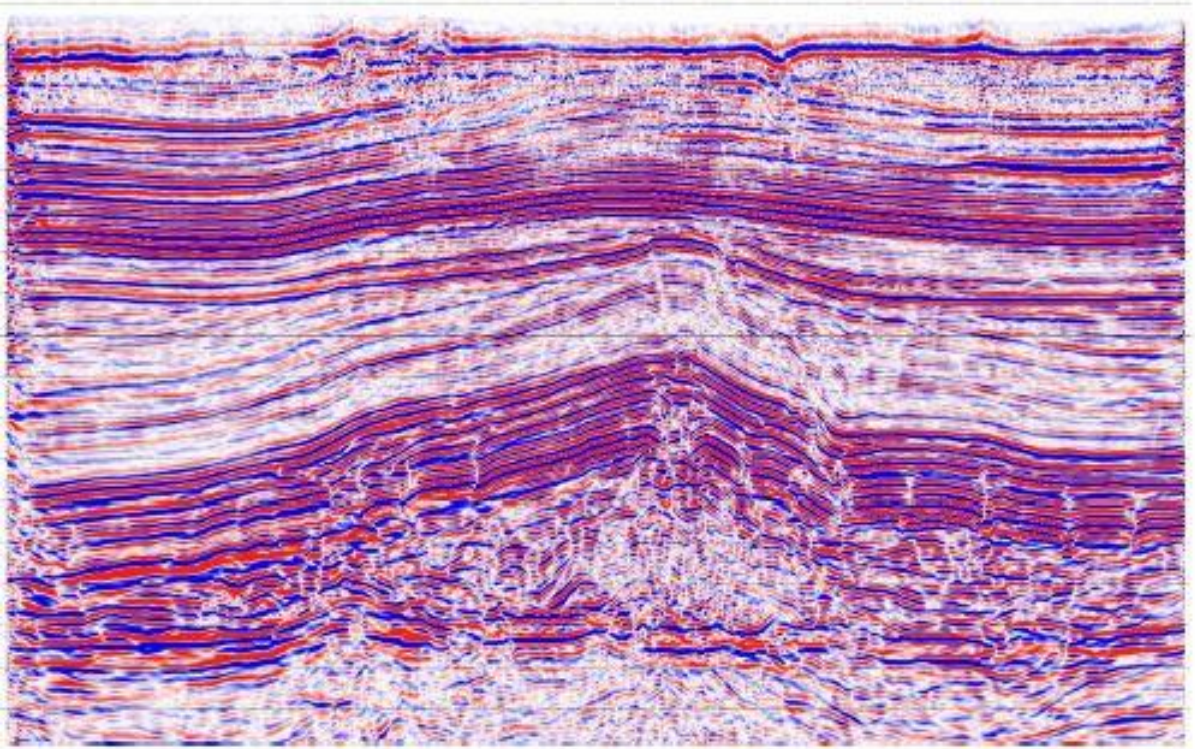
CML09-04, second pass residuals stack



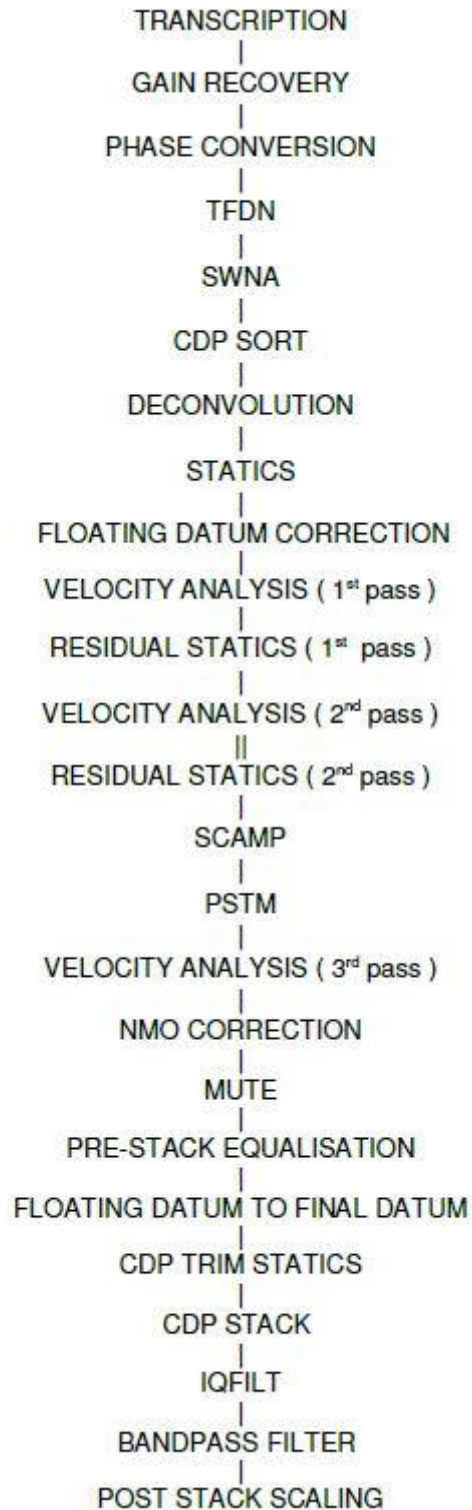
CML09-04, preliminary final stack



CML09-04, final stack



11.27 Processing sequence diagram



11.28 Final displays

- Final displays of final filtered stacks were produced in CGM+ format.
- Horizontal scale: 1:40, 000 (50 traces per inch)
- Vertical scale: 10 cm/sec

11.29 Archives

For all lines on CD

- Final filtered PSTM stacks in SEG-Y format
- Raw final PSTM stacks in SEG-Y format
- Final velocities in western format
- Final velocities in SEG-Y format
- CDP/SP coordinate listings
- Weathering velocity listings

For all lines on DVD

- Raw NMO gathers
- Each area was archived separately

12. Data disposition to Central Petroleum

Surveys: Johnstone and NW Mereenie (Amadeus Basin, EP-115, includes lines over the Black Range and Wells Anticlines)

QUANTITY	TAPE #	DATA	LINE	MEDIA
1	902MV001DVD	2 nd pass MGIVA velocities	All lines	DVD
1	902MV002DVD	2 nd pass MGIVA velocities	All lines	DVD
1	902MV005DVD	3 rd pass MGIVA velocities	All lines	DVD
1	902RS006CD	Raw final stacks & final stacks (CDP's: 1–806, 1–808, 1–808, 1–806, 1–808, 1–362, 1–1045)	CNWM09-01 to 7	DVD
1	902RS007CD	Raw final stacks & final stacks	CJ09-18 to 35, CBR09-01, CW09-05	DVD
1	902FS008CD	Final stack, raw final stack, CGM of final stack, velocities in SEG Y & western format	CJ09-18 to 35	DVD
1	902AT009DVD	AVO tests (11 files)	CJ08-05	DVD
1	902AT010DVD	AVO tests (1 file)	CJ08-05B	DVD
1	902AT011DVD	AVO tests (14 files)	CJ08-17	DVD
1	902AG012DVD	NMO gathers (CDP range: 1 to 576, 572, 598, 451, 437)	CJ09-18 to 22	DVD
1	902AG013DVD	NMO gathers (CDP's: 1 to 206, 800)	CJ09-23, 24	DVD
1	902AG014DVD	NMO gathers (CDP's: 1 to 607, 810, 717)	CJ09-25 to 27	DVD
1	902AG015DVD	NMO gathers (CDP's: 1 to 722, 1069, 573)	CJ09-28, 29, 31	DVD
1	902AG016DVD	NMO gathers (CDP's: 1 to 654, 548, 1456)	CJ09-30, 32, 33	DVD
1	902AG017DVD	NMO gathers (CDP's: 1 to 274, 1195)	CJ09-34, 35	DVD
1	902FS018DVD	Raw final stack, final stack, CGM of final stack, raw NMO gathers & velocities in SEG Y & Western format	CW09-05	DVD
1	902FS019DVD	Raw final stack, final stack, CGM of final stack, raw NMO gathers, (CDP's 1–1000) & final velocities in SEG Y & Western format	CBR09-01	DVD
1	902FS020DVD	Raw NMO gathers (CDP's 1001–1874)	CBR09-01	DVD
1	902WI021DVD	Weathering information for Johnstone & NW Mereenie surveys	All lines	DVD
1	902RS022DVD	Raw final stack, final stack, CGM of final stack, raw NMO gathers & velocities in SEG Y & Western format	CNW09-01, 06	DVD
1	902RS023DVD	Raw final stack, final stack, CGM of final stack, raw NMO gathers & velocities in SEG Y & Western format	CNW09-03, 04	DVD
1	902RS024DVD	Raw final stack, final stack, CGM of final stack, raw NMO gathers & velocities in SEG Y & Western format	CNW09-02, 05	DVD
1	902RS025DVD	Raw final stack, final stack, CGM of final stack, raw NMO gathers & velocities in SEG Y & Western format	CNW09-07	DVD
1	902RS080DVD	Raw shots with geometry applied to headers	CJ09-27	DVD

Surveys: Magee and New Ghan (Amadeus Basin, EP-82)

QUANTITY	TAPE #	DATA	LINE	MEDIA
1	902MV003DVD	3 rd pass MGIVA velocities	All lines	DVD
1	902MV004DVD	3 rd pass MGIVA velocities	All lines	DVD
1	902RG046DVD	Raw NMO gathers (CDP range: 2 to 1100)	CAR09-01	DVD
1	902RG047DVD	Raw NMO gathers (CDP range: 1101 to 2200)	CAR09-01	DVD
1	902RG048DVD	Raw NMO gathers (CDP range: 2201 to 3352)	CAR09-01	DVD
1	902RG049DVD	Raw NMO gathers (CDP range: 1 to 1400)	CCR09-01	DVD
1	902RG050DVD	Raw NMO gathers (CDP range: 1401 to 2800)	CCR09-01	DVD
1	902RG051DVD	Raw NMO gathers (CDP range: 2801 to 4247)	CCR09-01	DVD
1	902RG052DVD	Raw NMO gathers (CDP range: 1 to 796)	CM09-15	DVD
1	902RG053DVD	Raw NMO gathers (CDP range: 1 to 856)	CML09-01	DVD
1	902RG054DVD	Raw NMO gathers (CDP range: 1 to 880)	CML09-02	DVD
1	902RG055DVD	Raw NMO gathers (CDP range: 1 to 880)	CML09-03	DVD
1	902RG056DVD	Raw NMO gathers (CDP range: 1 to 1198)	CML09-04	DVD
1	902RG057DVD	Raw NMO gathers (CDP range: 1 to 1115)	CML09-05	DVD
1	902FS058CD	Raw final stack, final stack, CGM of final stack, CDP coordinate listing, final velocities in Western & SEG Y format & weathering velocities listing	All lines	DVD

Survey: Parrara (Amadeus Basin, EP-118)

QUANTITY	TAPE #	DATA	LINE	MEDIA
1	902FS026CD	Final PSTM stack, raw final PSTM stack, final velocities in SEG Y & western format, weathering & refraction velocity listing & CDP coordinates listings (CDP range: 1 to 2090, 3464, 2317, 1664)	CP09-01 to 4	DVD
1	902RG027DVD	Raw NMO gathers (CDP range: 1 to 1000)	CP09-01	DVD
1	902RG028DVD	Raw NMO gathers (CDP range: 1001 to 2090)	CP09-01	DVD
1	902RG029DVD	Raw NMO gathers (CDP range: 1 to 1200)	CP09-02	DVD
1	902RG030DVD	Raw NMO gathers (CDP range: 1201 to 2400)	CP09-02	DVD
1	902RG031DVD	Raw NMO gathers (CDP range: 2401 to 3464)	CP09-02	DVD
1	902RG032DVD	Raw NMO gathers (CDP range: 1 to 1000)	CP09-03	DVD
1	902RG033DVD	Raw NMO gathers (CDP range: 1001 to 2317)	CP09-03	DVD
1	902RG034DVD	Raw NMO gathers (CDP range: 1 to 1664)	CP09-04	DVD

Survey: Stone Plains (Amadeus Basin, EP-112)

QUANTITY	TAPE #	DATA	LINE	MEDIA
1	902RG036DVD	Raw NMO gathers (CDP range: 2 to 1440)	CSP09-09	DVD
1	902RG037DVD	Raw NMO gathers (CDP range: 2 to 1141)	CSP09-10	DVD
1	902RG038DVD	Raw NMO gathers (CDP range: 1 to 1000)	CSP09-11	DVD
1	902RG039DVD	Raw NMO gathers (CDP range: 1001 to 2160)	CSP09-11	DVD
1	902RG040DVD	Raw NMO gathers (CDP range: 1 to 1000)	CSP09-12	DVD
1	902RG041DVD	Raw NMO gathers (CDP range: 1001 to 2160)	CSP09-12	DVD
1	902RG042DVD	Raw NMO gathers (CDP range: 1 to 1000)	CSP09-13	DVD

1	902RG043DVD	Raw NMO gathers (CDP range: 1001 to 2158)	CSP09-13	DVD
1	902RG044DVD	Raw NMO gathers (CDP range: 1 to 1681)	CSP09-14	DVD
1	902FS045CD	Velocities in Western & SEG Y format, CDP coordinates, raw final stack, final stack & weathering velocity listing	CSP09-09 to 14	DVD

Surveys: Hale River, Madigan and McDonnell Range (Pedirka Basin, EP-93, EP-97, EP-107)

QUANTITY	TAPE #	DATA	LINE	MEDIA
1	902FS082CD	Final stacks with new statics	CMA08-02, 4, 5, 6, 7 & 10, CSI09-01, 2, 3 & 6	DVD
1	902NG083USB	Raw NMO gathers	CSI09-01 to 11, CHR09-01 to 4, CMC09-01	Hard drive
1	902FS084DVD	Raw final stack, final stack, CGM of final stack, CDP coordinate listing, final velocities in SEG Y format, final velocities in Western format & statics & weathering listing	CSI09-01 to 11, CHR09-01 to 4, CMC09-01	DVD

Surveys: Colson Track, Flat top and Vivien (Pedirka Basin, EP-93)

QUANTITY	TAPE #	DATA	LINE	MEDIA
1	902NG062DVD	Raw NMO gathers in SEG Y (CDP's: 2-957)	CFT09-01	DVD
1	902NG063DVD	Raw NMO gathers in SEG Y (CDP's: 2-955)	CFT09-03	DVD
1	902NG064DVD	Raw NMO gathers in SEG Y (CDP's: 1-1245)	CFT09-05	DVD
1	902NG065DVD	Raw NMO gathers in SEG Y (CDP's: 1-1245)	CFT09-07	DVD
1	902NG066DVD	Raw NMO gathers in SEG Y (CDP's: 1-1245)	CFT09-09	DVD
1	902NG067DVD	Raw NMO gathers in SEG Y (CDP's: 1-597, 599, 597, 554)	CV09-10 to 13	DVD
1	902NG068DVD	Raw NMO gathers in SEG Y (CDP's: 2-1500)	CCT09-01	DVD
1	902NG069DVD	Raw NMO gathers in SEG Y (CDP's: 1501-3000)	CCT09-01	DVD
1	902NG070DVD	Raw NMO gathers in SEG Y (CDP's: 3001-4500)	CCT09-01	DVD
1	902NG071DVD	Raw NMO gathers in SEG Y (CDP's: 4501-6000)	CCT09-01	DVD
1	902NG072DVD	Raw NMO gathers in SEG Y (CDP's: 6001-7489)	CCT09-01	DVD
1	902FS073DVD	Raw final stacks, final stacks (CDP's: 2-957, 2-955, 1-1245, 1-1245, 1-1245, 3-5425)	CFT09-01, 3, 5, 7, 9, CB08-01	DVD
1	902FS074CD	Raw final stacks, final stacks (CDP's: 2-7489, 2-597, 2-599, 2-597, 1-554, 1-939)	CCT09-01, CV09-10 to 14	DVD
1	902NG075DVD	Raw NMO gathers in SEG Y (CDP's: 1-939)	CV09-14	DVD
1	902CV076CD	CDP coordinate listing, CGM of final PSTM stack, final velocities in SEG Y, weathering velocity listing (CDP's: 2-957, 2-597, 1-1245, 1-1245, 1-1245, 3-5425)	CFT09-01, 3, 5, 7, 9, CB08-01	DVD
1	902CV077CD	CDP coordinate listing, CGM of final PSTM stack, final	CCT09-	DVD

		velocities in SEGY, weathering velocity listing, final velocities in Western format, uphole listings (CDP's: 2-7489, 2-597, 2-599, 2-597, 1-554, 1-939)	01, CV09-10 to 14	
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Reprocessing: Ooraminna survey, 2006 (Amadeus Basin, EP-82/RL-4)

QUANTITY	TAPE #	DATA	LINE	MEDIA
1	902FS035DVD	Final stack, raw final stack, raw NMO gathers, CGM of final stack, CDP coordinate listing, weathering velocities listing & final velocities in western & SEGY format (CDP's: 1 to 1974, 2 to 1590)	CO06-01, 04	DVD
1	902MD078CD	MGIVA files	C006-04	DVD

Reprocessing: Mt Kitty survey, 2006 (Amadeus Basin, EP-125)

QUANTITY	TAPE #	DATA	LINE	MEDIA
1	919RG001DVD	Raw NMO gathers (CDP's: 1 to 2434)	CMK06-01	DVD
1	919RG002DVD	Raw NMO gathers (CDP's: 1 to 2352)	CMK06-02	DVD
1	919RG003DVD	Raw NMO gathers (CDP's: 1 to 1664)	CMK06-03	DVD
1	919RG004DVD	Raw NMO gathers (CDP's: 1 to 1700)	CMK06-04	DVD
1	919RG005DVD	Raw NMO gathers (CDP's: 1 to 1733)	CMK06-05	DVD
1	919RG006DVD	Raw NMO gathers (CDP's: 1 to 1661)	CMK06-06	DVD
1	919RG007DVD	Raw NMO gathers (CDP's: 1 to 1500)	CMK06-07	DVD
1	919RG008DVD	Raw NMO gathers (CDP's: 1501 to 3019)	CMK06-07	DVD
1	919RG009DVD	Raw NMO gathers (CDP's: 1 to 1500)	CMK06-08	DVD
1	919RG010DVD	Raw NMO gathers (CDP's: 1501 to 3152)	CMK06-08	DVD
1	919RG011DVD	Raw NMO gathers (CDP's: 3 to 1500)	CMK06-09	DVD
1	919RG012DVD	Raw NMO gathers (CDP's: 1501 to 3443)	CMK06-09	DVD
1	919RG013DVD	Raw NMO gathers (CDP's: 1 to 1800)	CMK06-10	DVD
1	919RG014DVD	Raw NMO gathers (CDP's: 1801 to 3711)	CMK06-10	DVD
1	919FS015DVD	Raw final stack, final stack, CGM final stack, CDP coordinate listing, final velocities in Western format, final velocities in SEGY format & weathering velocity listing	All lines	DVD
1	902MV081DVD	MGIVA files	CMK06-08	DVD

Reprocessing: Blamore Track survey, 2008 (Pedirka Basin, EP-93)

QUANTITY	TAPE #	DATA	LINE	MEDIA
1	902NG059DVD	Raw NMO gathers in SEGY (CDP's: 3-2000)	CB08-01	DVD
1	902NG060DVD	Raw NMO gathers in SEGY (CDP's: 2001-4000)	CB08-01	DVD
1	902NG061DVD	Raw NMO gathers in SEGY (CDP's: 4001-5425)	CB08-01	DVD

13. Conclusion

The 2009 Amadeus and Pedirka data began arriving in January 2010 and the final archives and processing report (for all but the Madigan survey) was sent at the end of November 2010. There were instances that caused some delays in the turnaround time. In the early stages, acquisition was delayed and shooting orders rearranged due to flooding in the area.

In September, although the uphole acquisition was continuing, the crew lost their VSAT and were unable to send the uphole information for interpretation. All-in-all, three weeks were lost due to the absence of the uphole data. The uphole acquisition did not eventuate for the lines of the Madigan survey and this area was archived in May 2012.

Having a range of surveys spread over two basins made the data varied and this in-turn made processing the job both interesting and enjoyable. The results surprised and pleased everyone concerned and we would like to thank originally Jason storey and later Jacques Sayers for their prompt replies to any queries that arose and for providing feedback as to whether the results were as expected or surpassed expectations.