LABATT 3D, PERMIT T/47P, TASMANIA AUSTRALIA

PRE-STACK TIME MIGRATION

SEISMIC DATA PROCESSING REPORT

FOR

TAP OIL LIMITED

SUBMITTED BY

VERITAS GEOPHYSICAL (ASIA PACIFIC) PTE LTD.

CGGVERITAS

9 SERANGOON NORTH, AVENUE 5

SINGAPORE 554531

AUGUST, 2008

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1. INTRODUCTION

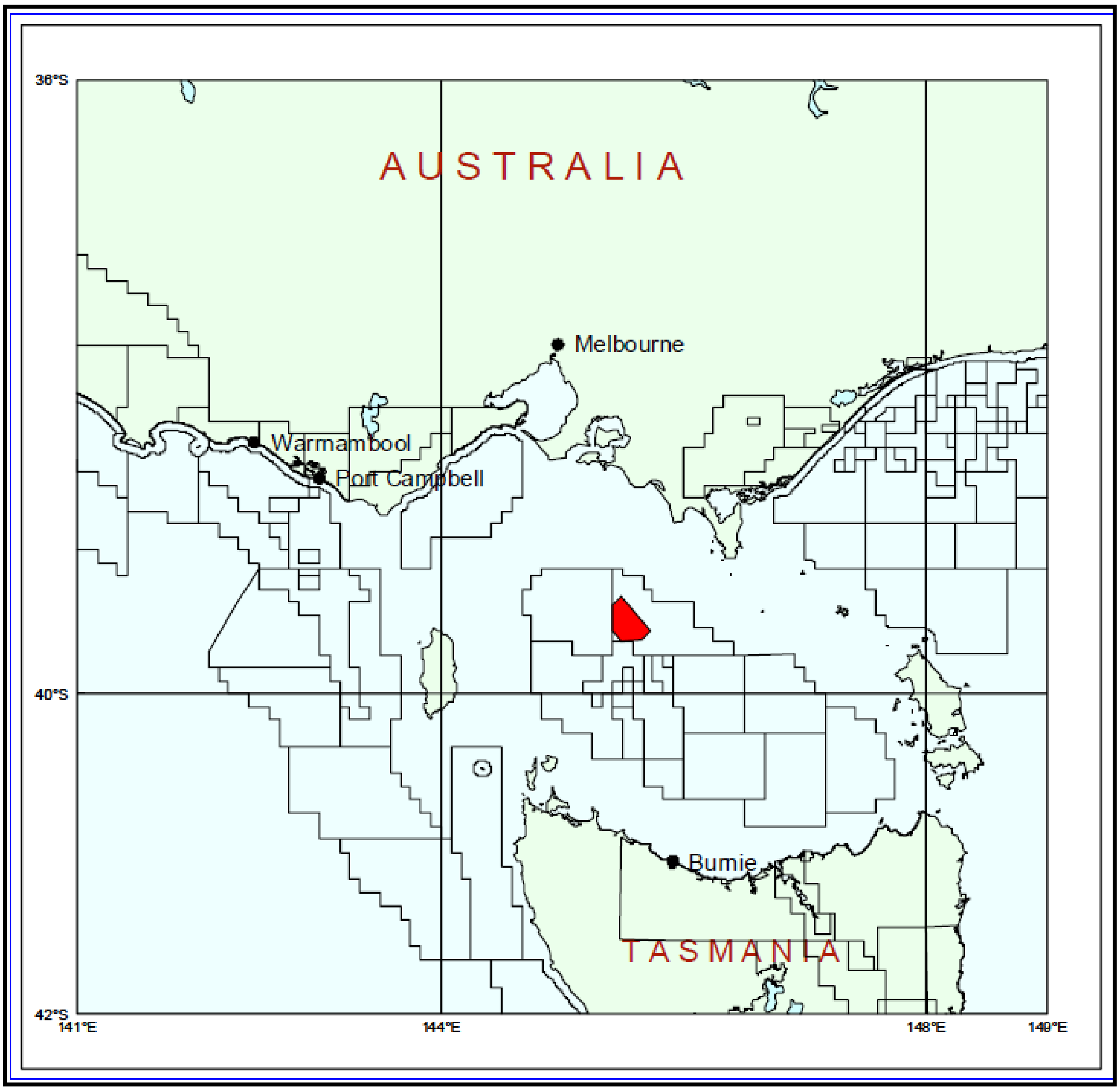
This report describes the processing of marine 3D seismic data over the survey Labatt 3D, Permit T/47P, Tasmania, Australia. The processing covers area of approximately 525 full fold sq km and consisted of 31535.7 km of prime lines and 6086.7 km of infill lines. The field coverage was 80 fold.

The data was acquired by PGS using vessel M/V Pacific Explorer from November 29 2007 to January 1 2008. The Pacific Explorer towed a seismic array comprising six streamers, each 6000m long, 480 channels in each streamer, at a depth of 7m, 8m and 9m. The energy source was comprised of two 3090 cubic inch Bolt Airgun arrays towed astern of the vessel at a depth of 6m. The sources were fired in flip-flop mode such that the two 3090 cubic inch arrays fired alternately every 18.75m along the pre-plotted survey line.

The data were processed by Veritas Geophysical (Asia Pacific) Pte. Ltd. in Singapore centre between February 2008 and August 2008.

1.1 SURVEY LOCATION

The seismic survey area was situated in Permit T/47P, approximately 50 nm south of the mainland between the mainland and Tasmania in the Bass Strait, Australia.



1.1.1 Geodetic Parameters

Acquisition (Satellite Datum)

Survey Datum	GDA94
Ellipsoid	GRS1980
Semi-major Axis	6378137.000 m
1/flattening	298.257222101 (based on AUSLIG 2000)
GPS Datum	WGS84
Ellipsoid	WGS84
Semi-major Axis	6378137.000 m
1/flattening	298.257223563

Mapping projection	ZONE 55 (UTMS)
Origin of Latitude	000° 00' 00.00" N
False Northing	10000000.0 m
False Easting	500000.0 m
Central Meridian	147° 00' 00.00" E
Scale Factor	0.99960

1.1.2 Binning Parameters

Binning Grid

Map Grid Origin Easting	327630.08	(bin centre)
Map Grid Origin Northing	5616652.73	(bin centre)
Map Grid Bearing (°)	-47.92	

	In-line	X-line
Bin Number at Origin	1	1
Bin Number Increment	1	1
Bin Dimensions (m) One	25.0	6.25
Bin Dimensions (m) Two	25.0	12.5

Nominal Offset Distribution

Minimum Offset (m)	145
Maximum Offset (m)	6070
Offset Increment (m)	75 (within a bin)

1.1.3 Four Corner Points

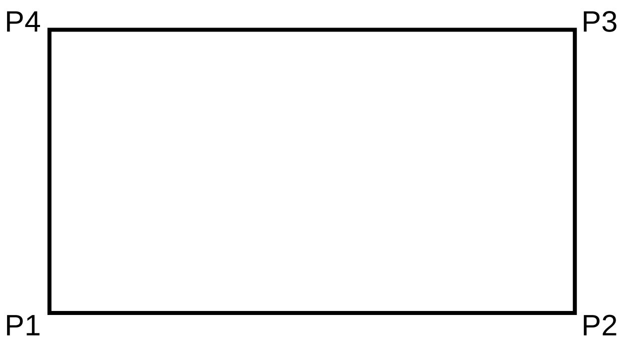
PROCESSING GRID

Processing inline numbering was different from acquisition inline numbering. The relationship between two inline numbering is given below.

Acquisition inline = 2820 – Processing inline

POINT	ACQUISITION INLINE	ACQUISITION CROSSLINE	PROCESSING INLINE	PROCESSING CROSSLINE	NORTH	EAST
P1	1814	900	1006	900	5631729.5000	349923.21875
P2	995	900	1825	900	5645451.0000	365119.96875
P3	995	4800	1825	4800	5609268.5000	397790.62500
P4	1814	4800	1006	4800	5595546.5000	382593.87500

Bin Width (X) : 12.5 m
Bin Width (Y) : 25 m
Nominal Fold : 80



1.2 SURVEY MAP

The block consisted of 93 sail lines and a total of 525 square kilometres.

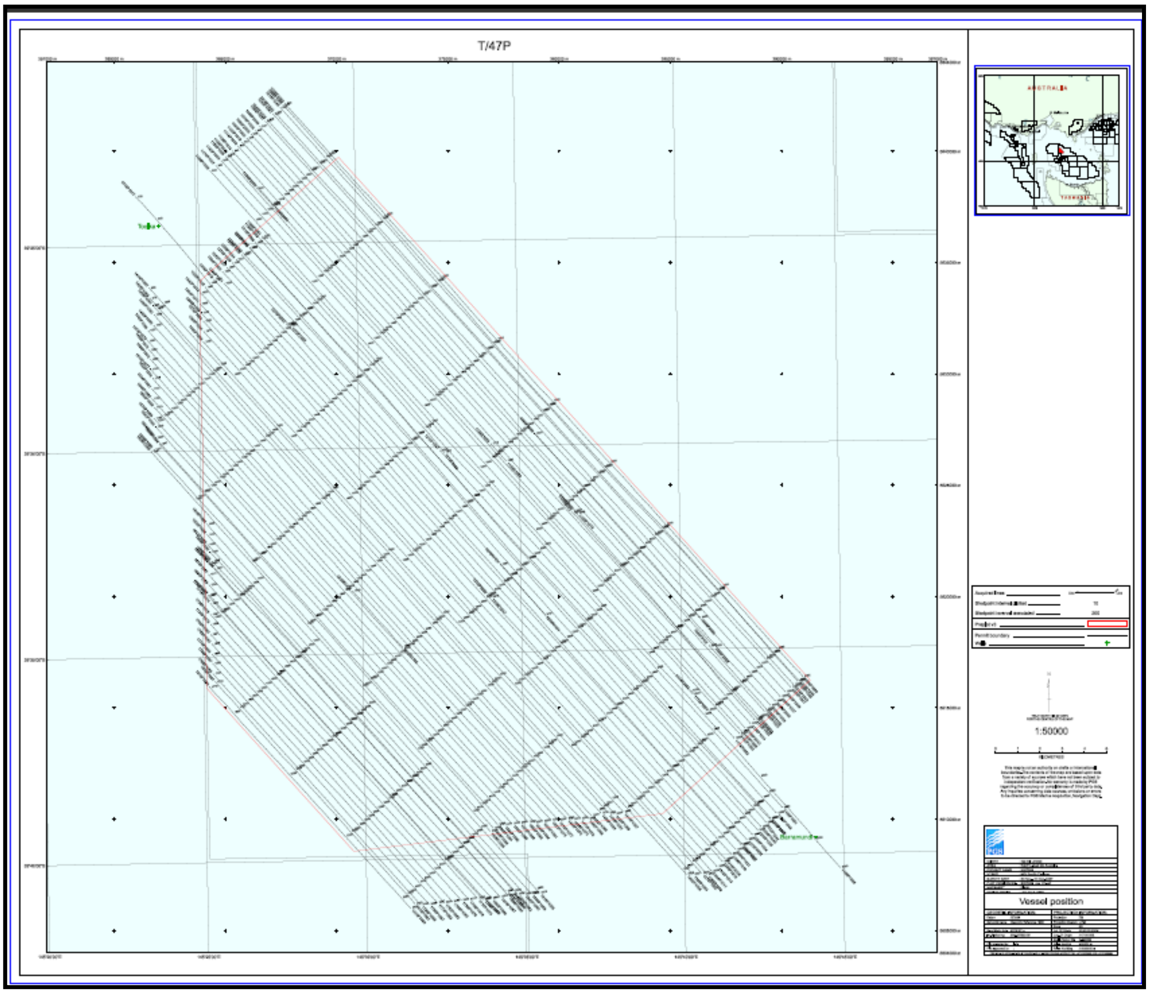


Figure: Acquired sail lines map

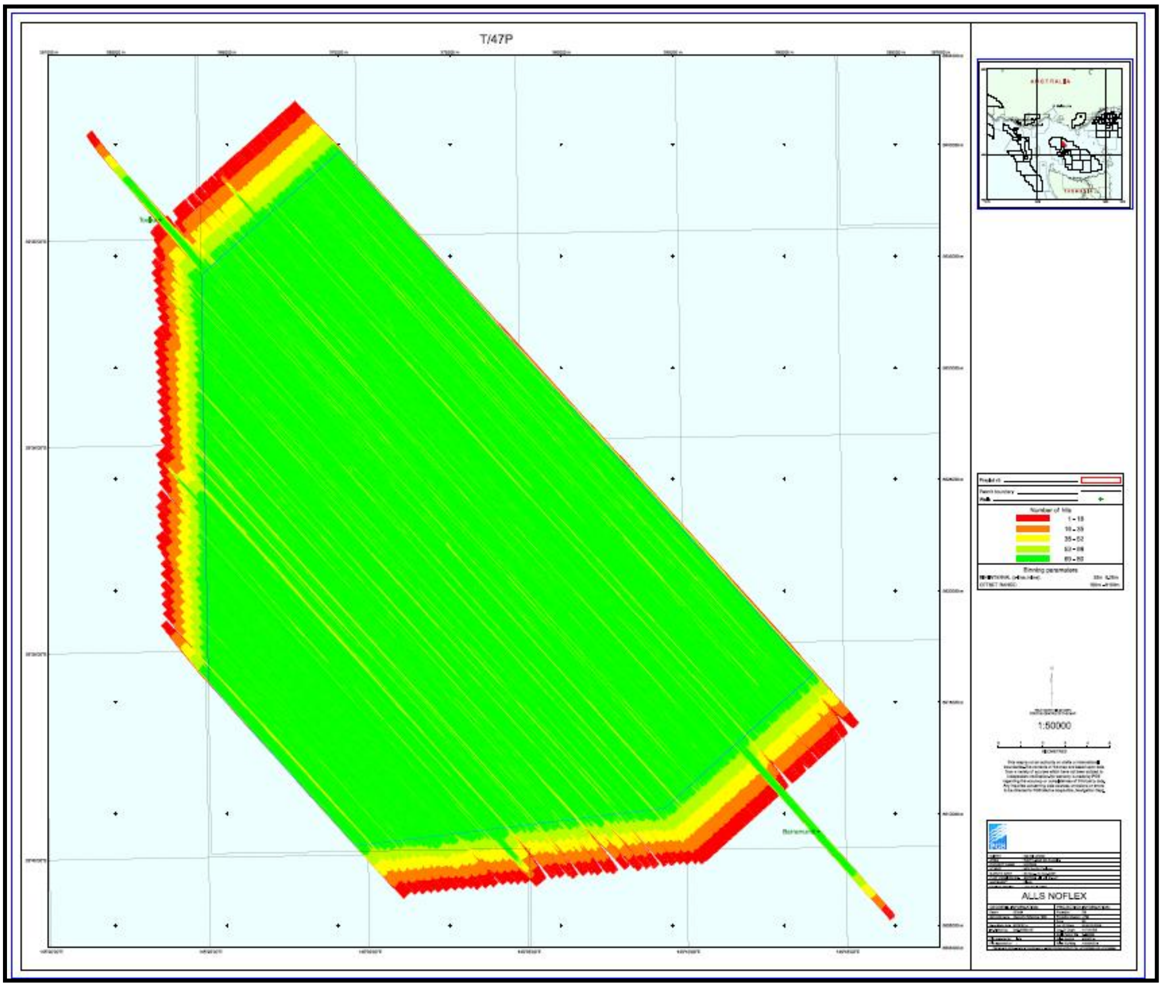


Figure: Fold coverage map

1.3 ACQUISITION SUMMARY

A total of 93 sail lines were processed, comprising of 73 prime lines and 20 infill lines. See Appendix A for list of sail lines.

Acquisition Parameters

Acquisition Contractor	PGS
Main Vessel	Pacific Explorer
Date	December 2007
Field Coverage	80 Fold
Field Bin Size	6.25 x 25 m

Source Parameters

Source Type	Bolt 1900 LLXT air guns
Number of Source Arrays	2
Source Volume	2 x 3090 cu. In.
Source Pressure	2000 psi
Source Depth	6 m ± 1 m
Source Separation	50 m
Shot Point Interval	18.75 m flip/flop

Streamer Parameters

Streamer Type	Teledyne RDH-S
Streamer Length	6000 m
Number of Streamers	6
Streamer Depth	7 m, 8 m and 9 m
Streamer Separation	100 m
Number of Receiver Groups	480 per streamer
Receiver Group Interval	12.5 m

Instrument Parameters

Recording System	NTRS / gAS
Recording Format	8036 SEG-D
Recording Media	IBM 3592
Record Length	6144msec
Sample Interval	2msec
Low Cut Filter	4.60 Hz /6dB/Octave
High Cut Filter	206 Hz /215.2dB/Octave
Filter Delay	-58msec
Deep water Delay	0msec

1.4 PROCESSING CONTRACTOR/CENTRE & START/FINISH DATES

Veritas Geophysical (Asia Pacific) Pte. Ltd processed the data in Singapore using proprietary TANGO software. The processing started in January 2008 and was completed in August 2008. Kick off meeting was held on 14 January 2008.

1.5 PROCESSING OBJECTIVES

The objectives of this 3D PSTM are listed below:

- Imaging of major faults and fault zone
- Target level is between 1.3 – 2.5 secs
- Multiple attenuation

1.6 KEY PERSONNEL

CGGVeritas PERSONNEL

Don Pham	–	Vice President-Processing & Imaging Operations (APAC Processing), responsible for all aspects of seismic data processing and overall control of projects.
Christine Chan	–	Senior Processing Supervisor, responsible for project organisation and overall QC
Jason Sun	–	Processing Supervisor, responsible for the day-to-day management of processing groups and verification of the data produced.
Bindu Mishra	–	Geophysicist, leader for current project.
Chenghai Jiao	–	Geophysicist, responsible for performing processing tasks as directed

Tap Oil Personnel

John Thornton	–	Consultant

2. PROCESSING SUMMARY

2.1 PROCESSING FLOW – BRIEF SUMMARY

2.1.1 Pre Processing Flow

1. Reformat from SEG-D to internal CGGVeritas TANGO format: 6144msec, 2msec, 6x480 channels.
2. Seismic and navigation merge
3. Shot and trace editing based on the observer's log.
4. Low cut filter: 3 Hz 18dB/octave
5. Deterministic dephase filter to convert data to zero phase using far field signature
6. Resample from 2msec to 4msec with anti-alias filter 110Hz 96dB/octave
7. System delay correction -58.0msec
8. Spherical divergence correction: V2T using regional velocity
9. Swell noise attenuation (FXEDIT), 2 passes in shot domain
   First pass is for swell noise.
   Threshold tolerance : 2.25
   Frequency range : 0 to 20 Hz
   Window length : 0 to 6000msec
   Number of traces : 101

   Second pass is for despiking
   Threshold tolerance : 2.0
   Frequency range : 0 to 70 Hz
   Window length : 500
   Number of traces : 31

   Start time for both the passes

Channel	Time
1	1160
75	1500
115	1750
160	2000
480	4700

10. High resolution radon linear noise attenuation

    Velocity range : -1100 to 800
    Signal velocity : -2500 to 2500 m/s
    Frequency range : 1 to 125 Hz
    Start time : WBT + 500msec

11. NMO correction
12. High frequency noise attenuation on selected offset range (2100 to 6100)

13. Reverse NMO

14. Tidal static correction

15. Tau-P transform:
    Negative dips cut off : -400 microsec per meter
    Positive dips cut off : 700 microsec per meter
    Tau-P Deconvolution (24msec gap, operator length 280msec, total operator length 304msec)
    Design windows : 180msec to 3000msec and 2400 to 5000msec
    Application windows : 0 to 2400msec and 2800 to 6000msec
    Transform back to X-T domain

16. First pass velocity picking on 1km x 1km grid

17. NMO correction

18. Alternate trace drop using K filter: Data decimated from 480 channel to 240 channel

19. Interpolate one trace in CDP domain

20. High resolution radon demultiple.

    Transform range : -1000 to 4000msec
    Frequency range : 3 to 90 Hz
    Protection range : -1000 to 500 at 0msec
    -1000 to 420 at 1000msec
    -1000 to 340 at 2000msec
    No demultiple applied from 0 to 700msec, Demult ramped from 700 to 1000msec

    Removable AGC 500

    Radon mute

Offset	Time
200	50
1000	700
3375	1400
6100	2000

21. Remove interpolated trace

22. Channel Scaling

23. Post radon despiking - PRAISE

24. Post radon linear noise attenuation – PRAISE

    ➔ **Output in SEG-Y format on USB disk**

25. 3D binning onto 12.5 x 25 bin

26. Fold regularization and bin centring using Anti Leakage Fourier transform (RALFT3D)

27. Reverse NMO

28. Remove spherical divergence

29. Pre – Stack time migration on target lines

30. 2nd pass velocity analysis on 1km x 1km grid

    ➔ **Output in SEG-Y and WESTERN format on DVD**

31. Pre – Stack time migration

32. Residual velocity analysis on 0.5 x 0.5 km grid

➔ **Output in SEG-Y and WESTERN format on DVD**

33. High resolution radon demultiple – Second pass

Transform range	:	-1000 to 4000msec
Frequency range	:	5 to 90 Hz
Protection range	:	-1000 to 500 at 0msec
	:	-1000 to 220 at 1000msec
	:	-1000 to 160 at 2000msec
	:	-1000 to 80 at 3000msec

No demultiple applied from 0 to 700msec, Demult ramped from 700 to 1000msec

Removable AGC 500

34. PRAISE
35. FLAT3D
36. Acquisition footprint removal
37. Offset Weighting

➔ **Output in SEG-Y format on USB disk**

38. PRAISE to remove radon artifacts
39. Mute 5 to 40 degrees
40. Stack

➔ **Output in SEG-Y format on USB disk**

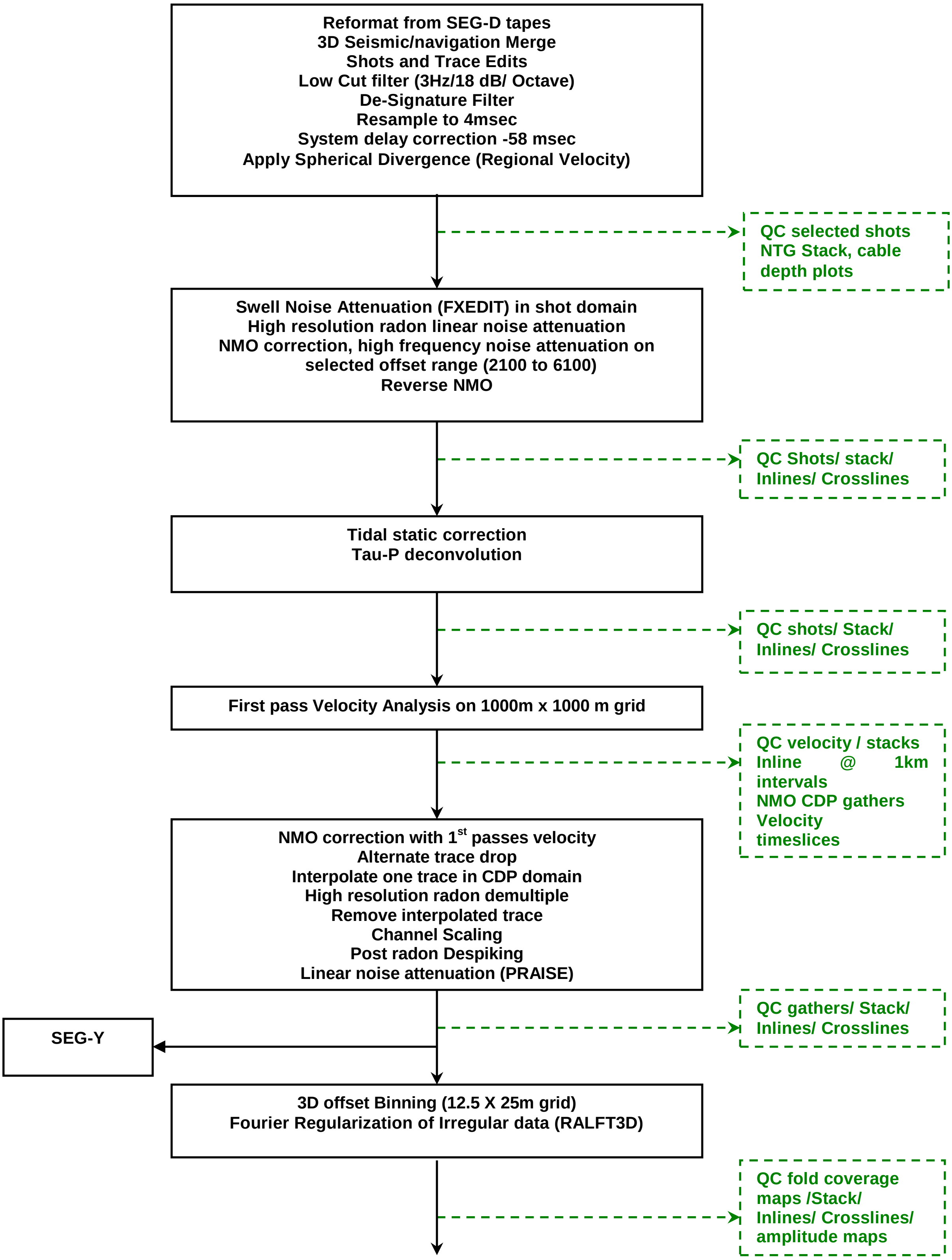
41. Angle stacks, near (5 – 15 degrees) mid (15 – 25 degrees), far (25 – 35 degrees), and ultra far (35 – 45 degrees)

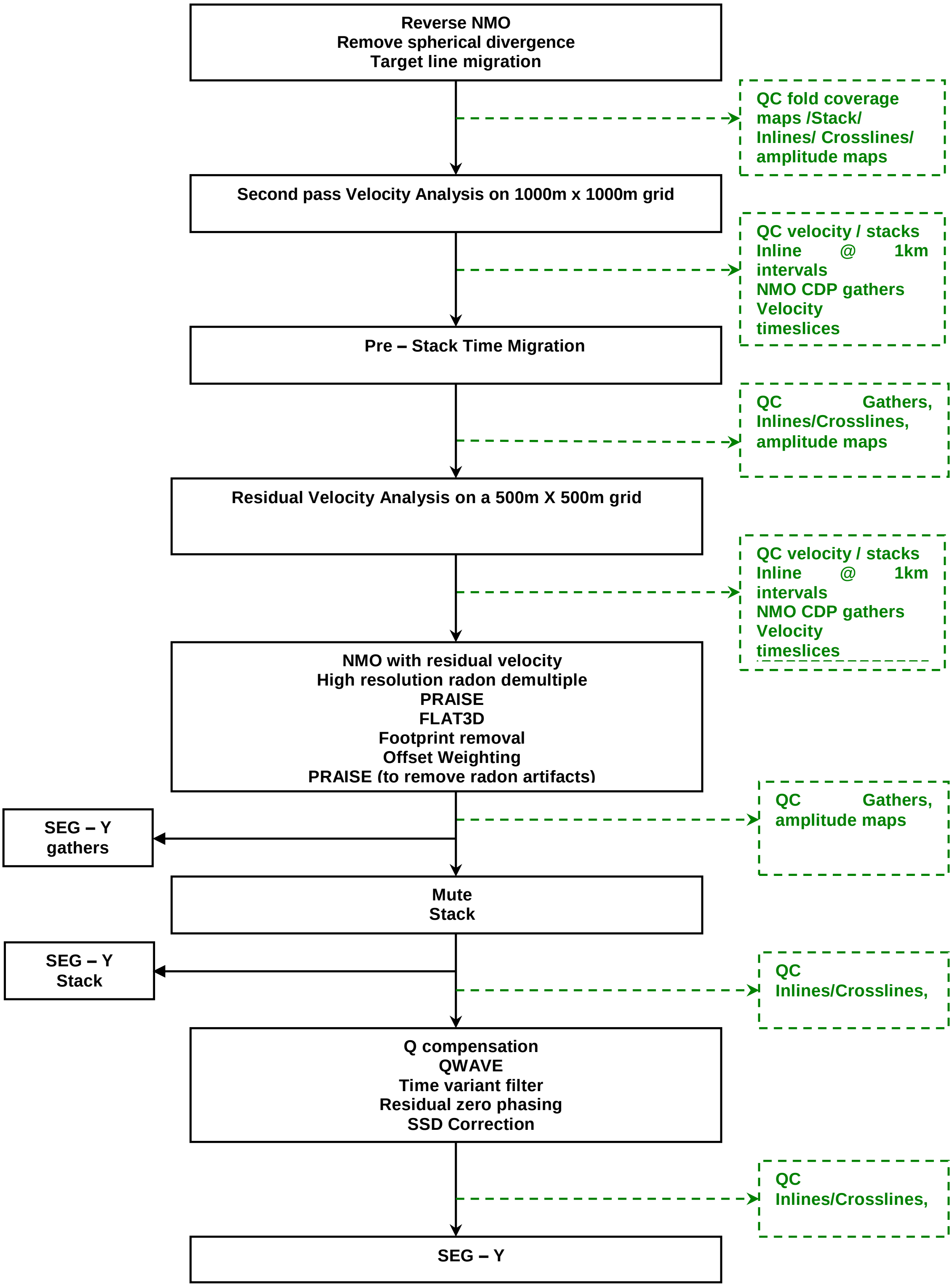
➔ **Output in SEG-Y format on USB disk**

42. Q compensation: Q value 130, reference frequency 125, variable dB boost based on grid value (horizon)
43. QWAVE
44. Time variant filter
45. Residual zero phasing
46. Source and streamer depth correction +9.33
47. SEG-Y

➔ **Output in SEG-Y format on USB disk**

2.2 PROCESSING FLOW – CHART




Reverse NMO
Remove spherical divergence
Target line migration
QC fold coverage maps /Stack/ Inlines/ Crosslines/ amplitude maps
Second pass Velocity Analysis on 1000m x 1000m grid
QC velocity / stacks Inline @ 1km intervals
NMO CDP gathers
Velocity timeslices
Pre – Stack Time Migration
QC Gathers, Inlines/Crosslines, amplitude maps
Residual Velocity Analysis on a 500m X 500m grid
QC velocity / stacks Inline @ 1km intervals
NMO CDP gathers
Velocity timeslices
NMO with residual velocity
High resolution radon demultiple
PRAISE
FLAT3D
Footprint removal
Offset Weighting
PRAISE (to remove radon artifacts)
SEG – Y gathers
QC Gathers, amplitude maps
Mute
Stack
SEG – Y Stack
QC Inlines/Crosslines,
Q compensation
QWAVE
Time variant filter
Residual zero phasing
SSD Correction
QC Inlines/Crosslines,
SEG – Y

3. PROJECT MANAGEMENT

3.1 REPORTING PROCEDURES

Internal project meetings were held on a daily basis for the purpose of monitoring progress and planning the project's future requirements. The project progress, problems and decisions were discussed with Tap Oil's consultant.

A Microsoft Excel spreadsheet was used to monitor the progress of the project on a weekly basis. In addition an interactive project tracking database, Client Portal, was employed in the project. It was updated on a daily basis and contained:

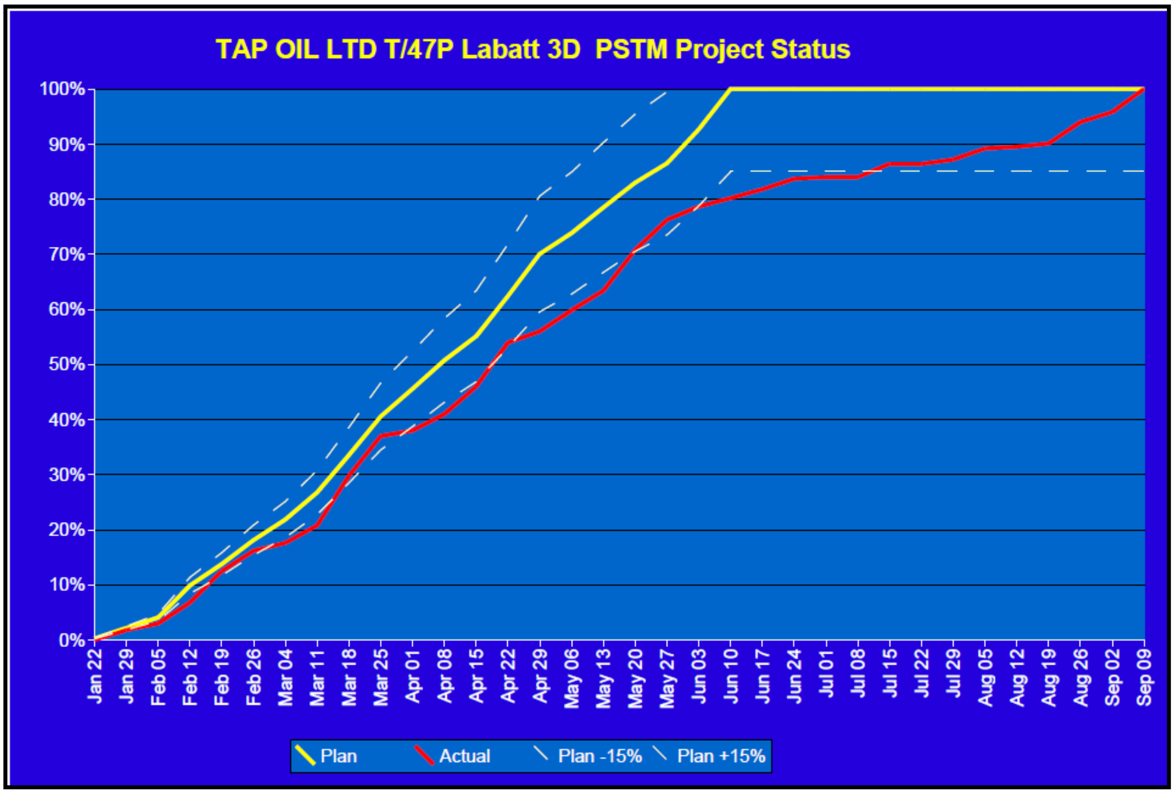
- Email Compilation
- Meeting Minutes
- Production QC
- Project Status Reports
- Testing Reports
- Project Schedule

All the tests were sent to client office in SEG-Y format. Velocity data was made available to Tap Oil's consultant at CGGVeritas Perth office.

3.2 PROJECT TIMING

The start date of the project was January 2008. The actual shipment date of final stack was 30th August 2008.

Project status chart:



Gantt chart

Project : Tap Oil T/47P Labatt 3D PSTM   Client : Tap Oil Ltd
Status Date : 09 September 2008   Project Start : 29 January 2008

Processing Step	Weight	Plan Start Date	Plan End Date
Reformat, trace edit, designature, resample, spherical divergence and navigation merge	6%	Jan 22, 08	Feb 12, 08
Shot processing one: swell noise attenuation, tidal statics, linear noise removal	10%	Feb 6, 08	Feb 23, 08
Deconvolution and 2D SRME	8%	Feb 23, 08	Mar 8, 08
Velocity analysis pass one on 1 x 1 km grid	5%	Mar 7, 08	Mar 15, 08
Shot processing two: adjacent trace sum, Radon demultiple	8%	Mar 15, 08	Mar 21, 08
3D CMP Binning, fold regularization, bin centering (Froid) and footprint removal	10%	Mar 21, 08	Apr 3, 08
Target line migration and 2nd pass velocity analysis with eta on 1 x 1 km grid	10%	Apr 3, 08	Apr 18, 08
3D Kirchhoff PSTM	12%	Apr 18, 08	Apr 28, 08
Residual Velocity Analysis on 0.5 x 0.5 km grid	7%	Apr 28, 08	May 10, 08
Radon demultiple	5%	May 10, 08	May 17, 08
PRAISE, FLAT, Mute and stack	3%	May 17, 08	May 22, 08
Post stack process : TVF, and multi-gate balancing, final stack	4%	May 23, 08	May 30, 08
Archiving	6%	May 30, 08	Jun 10, 08
Report	6%	31-May-08	10-Jun-08
	100%	Overall Duration	140
		#weeks	20

Processing Step	22-Jan-08	29-Jan-08	5-Feb-08	12-Feb-08	19-Feb-08	26-Feb-08	4-Mar-08	11-Mar-08	18-Mar-08	25-Mar-08	1-Apr-08	8-Apr-08	15-Apr-08	22-Apr-08	29-Apr-08	6-May-08	13-May-08
	% comp	% comp	% comp	% comp	% comp	% comp	% comp	% comp	% comp	% comp	% comp	% comp	% comp	% comp	% comp	% comp	% comp
Reformat, trace edit, designature, resample, spherical divergence and navigation merge	0	30	50	80	100	100	100	100	100	100	100	100	100	100	100	100	100
Shot processing one: swell noise attenuation, tidal statics, linear noise removal			0	20	65	90	100	100	100	100	100	100	100	100	100	100	100
Deconvolution and 2D SRME						15	20	60	100	100	100	100	100	100	100	100	100
Velocity analysis pass one on 1 x 1 km grid									100	100	100	100	100	100	100	100	100
Shot processing two: adjacent trace sum, Radon demultiple									10	100	100	100	100	100	100	100	100
3D CMP Binning, fold regularization, bin centering (Froid) and footprint removal										0	10	40	90	100	100	100	100
Target line migration and 2nd pass velocity analysis with eta on 1 x 1 km grid												0	0	70	90	100	100
3D Kirchhoff PSTM														0	0	15	30
Residual Velocity Analysis on 0.5 x 0.5 km grid																15	40
Radon demultiple																	
PRAISE, FLAT, Mute and stack																	
Post stack process : TVF, and multi-gate balancing, final stack																	
Archiving																	
Report																	
Actual Completion	0.01%	1.80%	3.00%	6.80%	12.50%	16.20%	17.60%	20.80%	29.80%	37.00%	38.00%	41.00%	46.00%	54.00%	56.00%	59.85%	63.40%
Planned Completion	0.27%	2.18%	4.09%	9.89%	13.78%	18.13%	21.87%	26.78%	33.57%	40.57%	45.57%	50.75%	55.13%	62.45%	70.08%	73.85%	78.50%

Processing Step	20-May-08	27-May-08	3-Jun-08	10-Jun-08	17-Jun-08	24-Jun-08	1-Jul-08	8-Jul-08	15-Jul-08	22-Jul-08	29-Jul-08	5-Aug-08	12-Aug-08	19-Aug-08	26-Aug-08	2-Sep-08	9-Sep-08
	% comp	% comp	% comp	% comp	% comp	% comp	% comp	% comp	% comp	% comp	% comp	% comp	% comp	% comp	% comp	% comp	% comp
Reformat, trace edit, designature, resample, spherical divergence and navigation merge	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Shot processing one: swell noise attenuation, tidal statics, linear noise removal	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Deconvolution and 2D SRME	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Velocity analysis pass one on 1 x 1 km grid	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Shot processing two: adjacent trace sum, Radon demultiple	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
3D CMP Binning, fold regularization, bin centering (Froid) and footprint removal	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Target line migration and 2nd pass velocity analysis with eta on 1 x 1 km grid	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
3D Kirchhoff PSTM	80	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Residual Velocity Analysis on 0.5 x 0.5 km grid	60	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Radon demultiple		5	50	60	80	100	100	100	100	100	100	100	100	100	100	100	100
PRAISE, FLAT, Mute and stack			5	40	60	90	100	100	100	100	100	100	100	100	100	100	100
Post stack process : TVF, and multi-gate balancing, final stack									60	60	80	100	100	100	100	100	100
Archiving												0	0	10	40	70	100
Report												20	25	25	60	60	100
Actual Completion	70.80%	76.25%	78.65%	80.20%	81.80%	83.70%	84.00%	84.00%	86.40%	86.40%	87.20%	89.20%	89.50%	90.10%	94.00%	95.80%	100.00%
Planned Completion	83.00%	86.50%	92.68%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

4. PROCESSING TESTS

Two designated sail lines were assigned by Tap Oil for testing in pre-processing stage.

4.1 SOURCE DESIGNATURE FILTER

Deterministic zero phasing of data was performed by taking the far field signature and then a filter was designed to shape the wavelet to the desired zero phase equivalent. The filter design was modified to de-bubble the data and applied to the seismic data.

As the data was acquired with different cable depths between 7m to 9m, three zero phase filters were designed for 7m, 8m and 9m cable depths respectively. Source signature filters were provided by Tap Oil for 7m, 8m and 9m cable depths.

desig_test_7m.pdf
designature_design_7m_2.pdf
desig_test_8m.pdf
designature_design_8m_2.pdf
desig_test_9m.pdf
designature_design_9m_2.pdf

Initially cable depth plots were generated to see the variation of cable depth across the survey.

4.2 RESAMPLE TEST

The shotrecords were resampled from 2msec to 4msec with anti-alias filter 110Hz 96dB/octave. Tests were conducted to compare shot, near trace gathers, and stacks before and after resampling to ensure no loss of resolution of useful signals.

Decision: 4msec data selected for production

1198_resample_test.pdf
1378_resample_test.pdf

4.3 LOW CUT FILTER TEST

The selected shot records from test Sailline were filtered with the following low cut parameters:

- Raw shot records, no low cut filter applied
- Low cut filter at 3Hz (18dB/Octave) without DC bias
- Low cut filter at 3Hz (18dB/Octave) with DC bias
- Low cut filter at 4 Hz (18dB/Octave) with DC bias
- Low cut filter at 5 Hz (18dB/Octave) with DC bias

1198_lcfilter_test2.pdf
1378_lcfilter_test2.pdf

Decision: 3Hz 18dB/Octave with DC bias was selected for production as there was no obvious low frequency or DC noise left in data.

4.4 SPHERICAL DIVERGENCE TEST

To compensate for amplitude decay due to spherical spreading, the shot records from the three test sail lines were evaluated with application of spherical divergence correction. Following are the tests conducted:

a) No spherical divergence correction
b) Spherical divergence correction with VT
c) Spherical divergence correction with V*V*T
d) Spherical divergence correction with V*T*T

Where V is a regional velocity function and T is the time of the reflection.

Decision: V*V*T spherical divergence correction was selected for production.

1198_divergence_test.pdf
1378_divergence_test.pdf
divergence_test_2lines.pdf

4.5 SWELL NOISE ATTENUATION TEST

After removal of the low frequency noise, it was observed that the shot records were contaminated with moderate amount of swell noise. Swell noise attenuation test was conducted to pick an optimum threshold value to remove the swell noise. The test was conducted in common shot domain. Four different combinations of tests were conducted and they are as follows:

Test 1: The test is conducted in shot domain

Test set up (Test1)

Frequency range	:	0 to 20 Hz
Trace averaging	:	101
Gate length	:	0 to 6000msec
Start time	:	Time / Channel

Time	Channel
1160	1
1500	75
1750	115
2000	160
4700	480

Following thresholds were tested:
a) Threshold of 2.0
b) Threshold of 2.25
c) Threshold of 2.5

Test 2: The test was conducted in channel domain

Test set up (Test2)

Frequency range	:	0 to 20 Hz
Trace averaging	:	101
Gate length	:	0 to 6000msec
Start time	:	1300msec

Following thresholds were tested:
a) Threshold of 1.25
b) Threshold of 1.5
c) Threshold of 1.75

Test 3: The test was conducted in channel domain + shot domain

Test set up (Test3)

Frequency range	:	0 to 20 Hz
Trace averaging	:	101
Gate length	:	0 to 6000msec
Threshold	:	1.5 for first pass and 2.25 for 2nd pass
Start time for 1st pass	:	1300msec
Start time for 2nd pass	:	Time / Channel

Time	Channel
1160	1
1500	75
1750	115
2000	160
4700	480

Test 4: The test was conducted in shot domain. Two passes of swell noise attenuation was done – 1st pass was for swell noise and 2nd pass was for despiking

Test set up (Test4)

1st pass

Frequency range	:	0 to 20 Hz
Trace averaging	:	101
Gate length	:	0 to 6000msec
Threshold	:	2.25

2nd pass

Frequency range	:	0 to 70 Hz
Trace averaging	:	41
Gate length	:	500msec

Following thresholds were tested:

a) Threshold of 1.75
b) Threshold of 2.0
c) Threshold of 2.25

Start time for both pass	:	Time	Channel
		1160	1
		1500	75
		1750	115
		2000	160
		4700	480

Decision: Test 4 with threshold of 2.0 was found to remove most of the swell noise without hurting the data and selected for production.

1198sht_fxedit_test.pdf
1198stk_fxedit_test.pdf
1378sht_fxedit_test.pdf
1378stk_fxedit_test.pdf

4.6 MATCHING FILTER TEST AFTER FXEDIT

The test was conducted to get a common filter for the entire survey. This test attempted to derive a matching filter to match 7m and 9m cable depth to the 8m cable depth.

The approach was to use the ghost signature of 8m as the target. A matching filter was designed and applied on NTG and shots of three lines (lines were close to each other) with different cable depths.

Decision: Deterministically, it looked fine on the result, however when applied to the seismic, the result was not optimum as the amplitude spectrum showed some inconsistency. Therefore it was decided to proceed without matching filter at this stage and will revisit this issue in later part of processing.

cable_depth_8_9_match_7_4.pdf

4.7 HIGH RESOLUTION LINEAR NOISE ATTENUATION TEST

To suppress linear noise trains, linear noise attenuation program XRLIN was used. A series of tests were conducted:

Test setup – Test 1:

Frequency range	:	3 to 125 Hz
Start time	:	WBT + 500msec
Data dips	:	-1600 to 1200

Following velocities were tested:

2250m/s
2500m/s
2750m/s

1198_xrl_test1.pdf
1378_xrl_test1.pdf

Test setup – Test 2 (with trace interpolation):

Frequency range	:	3 to 125 Hz
Start time	:	WBT + 500msec
Data dips	:	-1200 to 1200
Signal dips	:	-2500 to 2500

1198xrl_test2zoom_fxintp.pdf
1398xrl_test2zoom_fxintp.pdf

As there was not much difference in result between test1 and test2, it was decided to proceed with test1 with velocity 2500m/s. But it was observed that some aliasing noise was left behind after linear noise attenuation and therefore FXEDIT was applied after XRLIN on selected range of far offsets to tackle that noise. The test was conducted in following manner:

a) Input from linear noise attenuation (Test 1)
b) NMO
c) High frequency noise attenuation using program FXEDIT on selected range of offsets (2100 to 6100). Threshold 4.0.
d) Reverse NMO

xrl_test3r2.pdf

Production started with test 1 followed by FXEDIT. While production QC, it was noticed that a significant amount of noise retained below 2.5 second of data in far cables. Also, negative dip noise was not attenuated on some of the sail lines. As a result, production parameters were revised. Two additional tests were conducted on transform range and are as follows:

Test setup – Test 3:

Frequency range	:	1 to 125 Hz
Start time	:	WBT + 500msec
Data dips	:	-1600 to 800
Signal dips	:	-2500 to 2500

Test setup – Test 4:

Frequency range	:	1 to 125 Hz
Start time	:	WBT + 500msec
Data dips	:	-1100 to 800
Signal dips	:	-2500 to 2500

Decision: Test 4 was selected for production, as the linear noise below 2.5 second of data was better taken care off without hurting any primary data.

Xrlin_prod_test4.pdf

4.8 TIDAL STATIC CORRECTION TEST

The test was conducted to correct for static shift caused by tidal variations. Predicted tidal height data supplied by the client was used to correct the data to Mean Sea Level. The test was done on near mid and far offsets.

Decision: To proceed with tidal static application

tdlstaticqc3_timeslice.pdf
tdlstaticqc2_xln_zoom.pdf

4.9 TAU-P DECONVOLUTION AND 2D SRME TEST

Tau-P deconvolution and 2D SRME tests were conducted in order to remove short period reverberation energy mostly generated by water layer. Following combination of tests were performed:

a) Tau-P Deconvolution only
b) SRME only
c) Tau-P Deconvolution + SRME
d) SRME + Tau-P Deconvolution

For Tau-P, operator length 240msec and gap 24 were used for the test
For SRME, filter length 36msec and window length 512msec were used for the test

As there was no any obvious advantage of SRME observed in the test results, it was decided not to go for SRME and hence proceed with Tau-P only. A detailed test was done on Tau-P deconvolution.

Tau-P Deconvolution test

Data were forward transformed to Tau-P domain. Predictive deconvolution is applied in this domain before inverse transform is performed back to X – T domain.

Parameters

Tau-P transform range	:	-400 to 700 microseconds/meter
Design window	:	180 – 3000
		2400 – 5000
Application window	:	0000 – 2400
	:	2800 – 6000

Following operator length and gaps were tested:
a) Operator length 200 and gap of 24msec
b) Operator length 240 and gap of 24msec
c) Operator length 280 and gap of 24msec
d) Operator length 240 and gap of 36msec
e) Operator length 240 and gap of 48msec
f) Operator length 240, gap 24msec and with Tau-P mute. Mute parameter is displayed in attached slide

Decision: Gap of 24msec and operator length 280msec was selected for production.
near_srme_taup_test.pdf
near_srme_taupsht_test.pdf
far_srme_taupsht_test.pdf
far_srme_taupstk_test.pdf

4.10 MATCHING FILTER TEST AFTER TAU-P DECONVOLUTION

A cross correlation was run in crossline direction on a near trace to check the cable depth variation. As the result was not conclusive, it was decided not to apply matching filter at this stage of processing.

matching_filter_corr.pdf

4.11 HIGH RESOLUTION RADON DEMULTIPLE

After the removal of short period multiples by Tau-P deconvolution, it was evident that the data still contained other multiples. These can be discriminated from primaries by velocity, therefore high resolution radon demultiple attenuation was tested.

The input to Radon demultiple test was CDP gathers. Prior to demultiple, NMO correction was performed using velocity functions picked in the first pass velocity analysis on 1km X 1km grid. One trace was interpolated in CDP domain. A time variant Radon demultiple was used.

Test set up

a) Transform range: -1000 to 4000msec
b) Frequency range: 3 to 90 Hz
c) Reference offset: 6100
d) Removable AGC 500
e) Following protection ranges tested:

TIME	TEST1	TEST2	TEST3
0	-1000 to 600	-1000 to 500	-1000 to 500
1000	-1000 to 500	-1000 to 420	-1000 to 360
2000	-1000 to 420	-1000 to 340	-1000 to 280

To avoid the shallow events from being adversely affected, no demultiple was applied from 0 to 700msec. Demultiple ramped from 700msec to 1000msec.

Decision: Parameters in Test 2 were selected for production.

inner_xrmtest.pdf
outer_xrmtest.pdf

While production QC, a low frequency noise was noticed in the stack and gathers. A Radon mute was revised.

radon_test_rv.pdf

4.12 MATCHING FILTER TEST BEFORE BINNING

A common offset migration was run to check the amplitude striping along the different cable depths. All cable depths were corrected to 8m with a differential datum correction of ± 0.667ms.

a) Without differential datum correction before binning followed by PreSTM
b) With differential datum correction before binning followed by PreSTM

Following two amplitude maps were generated to check amplitude striping:
a) RMS amplitude map
b) Absolute peak amplitude map

Decision: With differential datum correction before binning was selected for production.

common_offset_amp2.pdf

4.13 CHANNEL SCALING TEST

Channel scaling test was conducted to normalize amplitude variations associated with acquisition array effects. Tests were conducted using both shallow and deep window to measure amplitude variations.

Decision: To apply channel scaling

channel_scaling_test_new.pdf

4.14 POST RADON DESPIKING TEST (PRAISE)

To remove the high frequency noise left behind on far offsets after linear noise attenuation, CGGVeritas programme PRAISE (pattern removal of anomalous interfering seismic event) was tested.

Decision: PRAISE was successful removing only the high frequency noise without hurting the primary events therefore it was selected for production.

despike.pdf

4.15 POST RADON LINEAR NOISE ATTENUATION TEST (PRAISE)

To remove the linear noise observed on the far offsets after radon, the same programme PRAISE was tested.

Decision: As PRAISE was found very effective in removing the linear noise without damaging the primary events, it was selected for production.

1726_linear.pdf

4.16 3D BINNING AND FOLD REGULARIZATION

A total of 80 offset classes of 75m each were defined. A 3D binning was performed to reduce to a maximum of 1 trace per offset class per bin. Some bins are empty due to fold variations resulting from cable feathering and trace edits. Test was conducted to interpolate the missing data and regularize seismic data using anti-leakage Fourier transform (RALFT3D). Attached file shows the result.

Decision: Apply missing trace restoration with bin centering.

off520r_ralft3d_test.pdf
off3145_ralft3d_test.pdf
off5020_ralft3d_test.pdf

4.17 ANISOTROPIC PSTM TEST

A 2D migration was conducted on one inline and following two eta values were tested:

a) 2%
b) 4%

Decision: The result was not very promising as the gathers were overcorrected in the shallow part hence it was decided not to apply anisotropic PreSTM.

apstm_test.pdf

4.18 HIGH RESOLUTION RADON DEMULTIPLE – 2ND PASS

As residual multiple energy was observed to be present after migration especially on CDP gathers, it was imperative to clean the multiples as much as possible. Therefore a tighter 2nd pass time variant radon was tested. The input to demultiple test was migrated PreSTM gathers. Prior to demultiple, NMO correction was performed using residual velocity functions.

Test set up

Transform range	:	-500 to 4000msec
Frequency range	:	5 to 90 Hz
Removable AGC	:	500
Start time	:	No demult applied from 0 to 700msec Demult ramped from 700 to 1000msec

Following time variant protection range were tested:

TIME	TEST1	TEST2	TEST3
0	-1000 to 500	-1000 to 500	-1000 to 500
1000	-1000 to 340	-1000 to 280	-1000 to 220
2000	-1000 to 260	-1000 to 200	-1000 to 160
3000	-1000 to 160	-1000 to 100	-1000 to 80

Decision: Test 3 was selected for production

1331_2pxrm_test.pdf

4.19 POST RADON LINEAR NOISE ATTENUATION TEST – 2ND PASS

The PRAISE test was repeated after 2nd pass radon process as described in section 5.15.

Decision: PRAISE was selected for production.

postmig_praise.pdf

4.20 RESIDUAL EVENT ALIGMENT (FLAT3D)

The FLAT3D test was conducted to correct the residual NMO by flattening seismic events within a group of traces. It performs a time varying residual correction and it is based on cumulative cross-correlation between adjacent traces.

Two tests were conducted based on maximum pull up and pull down of seismic events. Following are the two test parameters:

Test 1:

TIME	MAXIMUM PULL-UP	MAXIMUM PUSH-DOWN
400	30	30
800	100	100
1000	120	120
1500	140	140
2000	140	140
2500	140	140
3000	80	80
4000	40	40
5000	30	30
6000	20	20

Test 2:

TIME	MAXIMUM PULL-UP	MAXIMUM PUSH-DOWN
400	30	30
800	100	100
1000	120	120
1500	140	140
1800	100	100
2000	40	40
2400	30	30
2700	20	20
3000	20	20
4000	10	10
5000	10	10
6000	10	10

Decision: Test 2 was found effective in flattening the gathers especially at far offsets and therefore selected for production.

flat test_new.pdf

4.21 ACQUISTION FOOTPRINT REMOVAL TEST

The acquisition footprint removal test was conducted to remove the amplitude striping observed in the offsets.

Test parameters:
Smooth 500 meters (diameter) with horizontal mix at 6000 meters.
Scalars were measured from water bottom at every 500msec.

Decision: Amplitude de-striping found to be effective in the test result and hence selected for production.

Footprint_revmoval_test.pdf

4.22 OFFSET WEIGHTING TEST

Offset weighting coefficient was provided by Tap Oil for the test and is given below:
Offset weighting = 1 + (0.0004* offset)

Decision: The test result showed good stack response and therefore selected for production.

offset_wt_test.pdf

4.23 INVERSE Q TEST

Inverse Q filter was tested to compensate the absorption effects of the earth resulting in the increasing loss of amplitude and phase distortion with time observed in seismic data. Intensive test was conducted on inverse Q. Following are the test description.

Test 1: The test 1 was conducted after 3D binning on stack data. The test was done basically to estimate the Q value from seismic data. A Q value of 80 was estimated from the data. Following Q values were tested by applying on the stack:

a) Q = 70
b) Q = 90
c) Q = 110
d) Q = 130

Reference frequency = 60
Both Phase and Amplitude

Test 2: In the test 2, Q value of 80, reference frequency 60 and dB boost 15 were applied prior to migration to see the effect of Q with and without migration. Following tests were done:
a) PreSTM without Q compensation
b) PreSTM with Q compensation, Phase only
c) PreSTM with Q compensation, Phase + Amplitude

Test 3: In the test 3, following frequencies were tested:

a) 80 Hz
b) 100 Hz
c) 125 Hz
d) 150 Hz

Q value = 80 and 15 dB

Test 4: In the test 4, following tests were conducted:
Reference frequency = 125 Hz.

a) Q = 130, Phase only
b) Q = 160, Phase only
c) Q = 130, dB boost 15, Phase + Amplitude
d) Q = 130, dB boost 22, Phase + Amplitude
e) Q = 130, dB boost 30, Phase + Amplitude
f) Q = 160, dB boost 15, Phase + Amplitude
g) Q = 160, dB boost 22, Phase + Amplitude
h) Q = 160, dB boost 30, Phase + Amplitude

Test 5: In the test 5, following tests were conducted:
Reference frequency = 125 Hz

a) Q = 80, Phase only
b) Q = 90, Phase only
c) Q = 100, Phase only
d) Q = 80, Phase + Amplitude, 5 dB boost
e) Q = 80, Phase + Amplitude, 8 dB boost
f) Q = 80, Phase + Amplitude, 12 dB boost
g) Q = 90, Phase + Amplitude, 5 dB boost
h) Q = 90, Phase + Amplitude, 8 dB boost
i) Q = 90, Phase + Amplitude, 12 dB boost
j) Q = 100, Phase + Amplitude, 5 dB boost
k) Q = 100, Phase + Amplitude, 8 dB boost
l) Q = 100, Phase + Amplitude, 12 dB boost

Test 6: In the test 6, two matching filters were designed and applied on stack data.

Filter 1: The average amplitude spectrum over the time zone of interest was derived from stacked auto correlations of the data and this wavelet was then matched to a Ricker wavelet with central frequency of 45 Hz.

Filter 2: Three filters were designed for shallow zone, zone of interest and deep zone and applied in a time variant manner. The first two filters were derived from matching the average amplitude spectrum from auto correlation of shallow zone and zone of interest to a butter-worth wavelet of 10/6 – 90/72 Hz/dB/Octave. While the 3rd filter is the unit filter i.e. not doing anything to the data.

Comparison has been made between stack sections with Q applied and stack section with filter applied.

All the above mentioned tests were viewed at different stages of processing but no decision were made.

After viewing all the above tests, it was clear that Q value 130 seems to be suitable for the data but some more tests were conducted on dB boost parameters. Following tests were performed on dB boost:

Test 7: n the test 7, variable dB boost was tested
Reference frequency = 125 Hz
Q value = 130
dB boost = 15 dB at 1000msec, 12 dB at 2000msec, 5 dB at 3000msec

Test 8: In the test 8, Variable dB boost was applied based on horizon (grid value) provided by Tap Oil.
Reference frequency = 125 Hz
Q value = 130

Following dB boost was applied:

Start time	End time	dB boost
0	Grid value	25
Grid value	Grid value + 300	20
Grid value + 300	Grid value + 600	15
Grid value + 600	Grid value + 1100	12
Grid value + 1100	6000msec	5

Test 9: Test 9 is same as test 8 except the dB boost parameters.
Reference frequency = 125 Hz
Q value = 130

Following dB boost was applied:

Start time	End time	dB boost
0	Grid value	20
Grid value	Grid value + 300	18
Grid value + 300	Grid value + 600	15
Grid value + 600	Grid value + 1100	12
Grid value + 1100	6000msec	5

Decision: After viewing all the tests, Q value 130 and dB boost parameter from test 9 found to give satisfactory result and therefore applied on post stack data.

qmod_test9_horz.pdf

4.24 Q GUIDED WAVELET DOMAIN AMPLITUDE CORRECTION (QWAVE) TEST

QWAVE test was conducted to boost up the amplitude of weak zones. It applies a frequency-dependent, space and time varying, amplitude correction.

Decision: Q wave was selected for production.

qwave_test.pdf

4.25 MUTE TEST

Angle mutes were designed to produce full offset stack, near offset stack, middle offset stack and far offset stack. The incident angles computed from smoothed final stacking velocity were derived to generate the corresponding angle stacks. NMO corrected CDP gathers were applied with angle mutes varying from 5 to 50 degrees.

Decision:	Full angle stack	5 to 40 degrees
	Near angle stack	5 to 15 degrees
	Near-mid angle stack	15 to 25 degrees
	Mid-far angle stack	25 to 35 degrees
	Far angle stack	35 to 45 degrees

mute_test.pdf

4.26 MIGRATION SWING ATTENUATION TEST

After PreSTM, migration swings were observed on the stack volumes especially in the crossline direction. Two tests were conducted. A wavelet transform migration swing elimination (WTMSE) test was conducted.

Decision: As the tests could not give the optimum result, it was not selected for production.

wtmse_test.pdf

4.27 FXY (SIGNAL TO NOISE ENHANCEMENT) TEST

The stack section was found to have weak random noise. To remove such noise, FXY was performed.

Decision: FXY was not selected for production

fxy_test.pdf

4.28 PRAISE TEST TO REMOVE RADON ARTIFACTS

To remove the radon artifacts observed on the gathers after the second pass radon application, the PRAISE application was tested.

Decision: To proceed with PRAISE application with moderate parameter.

praise_dipf_test.pdf

4.29 TIME VARIANT FILTER TEST

A series of bandpass filter panels were produced to enable a time variant filter to be determined.

Bandwidth (Hz)		
OUT	-	5
5	-	10
7.5	-	15
10	-	20
15	-	30
20	-	40
30	-	60
40	-	80
50	-	100
60	-	120
70	-	OUT
80	-	OUT
90	-	OUT
100	-	OUT
110	-	OUT

Following time variant filter was designed by Tap Oil from the above filter panel:

Time (msec)	Low cut (Hz)	High cut (Hz)
0	5	100
700	5	85
1500	5	80
2000	5	55
3000	5	30
4000	5	20

4.30 MULTIGATE BALANCE TEST

To modulate the data in space and time, multi-gate balance test was performed on stack data. Three tests were conducted:

1. Gate 1000msec with overlap of 500msec
2. Gate 1500msec with overlap of 750msec
3. Gate 2000msec with overlap of 1000msec

Decision: Not to apply Multigate balance on the stack data.

balance_test3.pdf

4.31 RESIDUAL ZERO PHASING TEST

The test was conducted in following manner:

1. Selected part of the data where the top of basement is clear and impedance increases with no doubt.
2. Flatten the top of the basement so the event is at the same time everywhere.
3. Stack the traces into one. The wavelet is representative of the reflection at the top of basement.
4. Compute zero phased equivalent of the wavelet.
5. Compute a matching filter.
6. Apply the matching filter to the stack.

zero_phasing_test_I.pdf

4.32 NMO-DESTRETCH TEST

The test was conducted to compensate the moveout stretch and the difference in amplitude loss between near and far offset of seismic data.

Decision: NMO Destretch was selected for production.

sl1331_nmodestretch_test_4.pdf

5. PRODUCTION PROCESSING

5.1 DETAILED PRODUCTION STEPS AND PARAMETERS

1. REFORMAT

Field data recorded on DLT tapes in SEG-D format was reformatted to CGGVeritas' internal format. Data length is 6144msec at a sample rate of 2msec.

2. 3D SEISMIC / NAVIGATION MERGE

The 3D navigation data comprising the receiver and source x-y co-ordinate information and spread definitions were recorded in P190 UKOOA format. Maps of the receiver and shot locations were produced before the co-ordinate information were merged with seismic data. The 3D navigation data is matched with the seismic (based primarily on navigation time and channel) and all the required information written to the trace header. Bin dimensions: 6.25 m (crossline) x 25.00 m (inline).

3. SHOT AND TRACE EDITING

Any bad records or portions of records with anomalous amplitudes and excessively noisy traces were edited. This editing was performed on the basis of comments in the observer's logs and QC notes from the field crew.

4. LOW CUT FILTER

A zero phase Butterworth low cut filter 3 Hz 18 dB/octave with DC bias was selected to attenuate low frequency noise observed on shot records.

5. SOURCE DESIGNATURE FILTER

Deterministic zero phasing of data was performed by taking the far field signature of three cable depths, 7m, 8m and 9m. The filters were designed to shape the wavelet to the desired zero phase equivalent. The filters design was modified to de-bubble the data. The resulted three filters 7m, 8m and 9m were applied to the seismic data 7m, 8m and 9m respectively.

6. RESAMPLE

Data was resampled from 2msec to 4msec with anti-alias filter 110 Hz, 96dB/octave.

7. SPHERICAL DIVERGENCE CORRECTION

This is a correction for amplitude losses due to the spherical spreading of the wave front as it passes downward through the earth and is reflected back. For this project, these losses were compensated by application of a gain function defined as V^2T. T is the two-way travel time and V is the RMS velocity. Regional velocity function was used for RMS velocity.

8. SHIFT

A system delay correction -58msec was applied.

9. SWELL NOISE ATTENUATION USING F-X DECON FOR SIGNAL TO NOISE ENHANCEMENT (FXEDIT)

The module name is FXEDIT. It detects and removes spikes in FX domain.

Two passes of FXEDIT were performed in shot domain. First pass was for swell noise attenuation and second pass was for de-spiking.

Following are the parameters for 1st pass:

Frequency range:	0 – 20 Hz
Window length:	0 to 6000msec
Threshold:	2.25
Trace averaging:	101 traces

Following are the parameters for 2nd pass:

Frequency range:	0 – 70 Hz
Window length:	500msec
Threshold:	2.0
Trace averaging:	31 traces

Start time for both the passes:

Channel	Time (msec)
1	1160
75	1150
115	1750
160	2000
480	4700

10. HIGH RESOLUTION LINEAR NOISE ATTENUATION (XRLIN)

This program performs linear noise removal using a constrained, high-resolution, linear Radon transform. The program is better able to preserve primary amplitudes as a function of offset whilst simultaneously giving a more complete noise removal. It is also resistant to spatial aliasing and therefore reduces the need for trace interpolation before noise removal.

Following are the parameters:

Transform range :	-1100 to 800
Signal Velocity :	-2500 to 2500 m/s
Frequency range:	1 to 125 Hz
Start time :	WBT + 500msec

11. NORMAL MOVEOUT CORRECTION (NMO)

The velocity functions as provided by Tap Oil were used to compute the normal move-out (NMO) corrections.

NMO correction was performed assuming that the energy travelled in a straight ray-path and utilised the following equation:

$$T_x^2 = T_0^2 + x^2/V^2$$

where

T_x	=	Total recorded travel time in seconds
T_0	=	Time of reflector at zero offset in seconds
V	=	RMS velocity
x	=	Offset

Velocity-time knee points were honoured on adjacent control points prior to interpolation of the temporal velocity field. Then the space variant velocity function was derived by linear interpolation between control points.

12. DESPIKING

To remove the high frequency noise left behind after linear noise attenuation on far offsets, FXEDIT program was repeated on offset range 2100 to 6100.

Following are the parameters:

Frequency range	:	0 to 120
Window length	:	450
Average trace	:	201
Threshold	:	4.0
Start time	:	1000

13. REVERSE NMO CORRECTION

The NMO correction applied in step 11 was reversed.

14. TIDAL STATIC CORRECTION

Tidal variations in water depth cause static shifts between sail lines. These can be corrected for by computing static shifts from tidal tables or from measurements at nearby fixed installations.

The tidal static information extracted from tidal static table provided by Tap Oil and computed on sail lines.

15. PREDICTIVE DECONVOLUTION IN TAU-P DOMAIN

In the x-t domain, reverberation energy on shot records is not periodic at non-zero offset because of the effects of move out. To combat this, PreStack deconvolution was applied in the Tau-P domain.

Parameters are given below:

Tau-P transforms range	:	-400 to 670 microseconds/ meter
Active operator Length	:	280msec
Gap	:	24msec
Total operator length	:	280msec + 24msec
Design window	:	200 – 3000
		2400 – 5000
Application window	:	0000 – 2400
	:	2800 – 6000

After deconvolution, the data was transformed back to X – T domain

16. 1ST PASS VELOCITY ANALYSIS ON 1KM X 1KM GRID

The first pass velocity analysis was performed at 1000 m X 1000 m grid using CGGVeritas' interactive software PACESETTER. PACESETTER is an interactive velocity analysis package whose display consists of five components:

1. Display of stack panels corrected with their respective velocity fan functions
2. CMP gathers,
3. Displays of semblance contours
4. Display of Iso-velocities
5. Display of velocities map

17. NORMAL MOVEOUT CORRECTION

First pass velocity functions were used to compute normal move out correction (NMO).

18. ALTERNATE TRACE DROP

Alternate channels were dropped, from 480 to 240 using K filter.

19. HIGH RESOLUTION RADON DEMULTIPLE - XRMULT

XRMULT uses a constrained least squares version of the parabolic transform. The representation of the data in the Radon domain is better focussed than with the conventional Radon transform. It is designed to overcome some of the limitations of the conventional transform. It is able to preserve primary amplitudes better as a function of offset whilst simultaneously giving a more complete multiple attenuation Data was sorted to CDP gathers. One trace was interpolated in CDP domain and was discarded after radon application.
Following parameters were used:

Transform range	:	-1000 to 4000msec
Frequency range	:	3 to 90 Hz
Reference offset	:	6100
Protection range	:	-1000 to 500 at 0msec
		-1000 to 420 at 1000msec
		-1000 to 340 at 2000msec
Start time	:	No demult applied from 0 to 700msec
		Demult ramped from 700 to 1000msec

20. CHANNEL SCALING

Channel Scaling was used to normalize amplitude variations associated with acquisition array effects. This program analyses pre stack data and computed correction factors to compensate for amplitude anomalies related to acquisition effects.

21. PATTERN REMOVAL OF ANOMALOUS INTERFERING SEISMIC EVENT (PRAISE) FOR DESPIKING

PRAISE was applied to remove the high frequency noise left behind after linear noise attenuation. PRAISE models anomalous interfering seismic energies from the input data by intelligently manipulating differences in properties such as amplitudes, dips or frequencies between the anomalies and the seismic primary events and subtracting the model from the input using a least-square adaptive algorithm.

It can be used in any appropriate data order such as shots, CMP or common offsets, where the separations for the chosen properties are largest, and the subtraction could be done over selected time zones.

22. PATTERN REMOVAL OF ANOMALOUS INTERFERING SEISMIC EVENT (PRAISE) FOR LINEAR NOISE ATTENUATION

To remove the linear noise observed on the far offsets after radon, the same programme PRAISE was applied.

23. 3D BINNING

3D offset were binned into 12.5 X 25 m grid to achieve 80 fold bin gathers with bin centre offset range from 145 m to 6070 m incremented by 75 m.

24. MISSING TRACE INTERPOLATION BY ANTI-LEAKAGE FOURIER TRANSFORM

The process was performed over 80 common offset planes, comprising offsets 145 m to 6070 m at increments of 75 m. The anti-leakage Fourier transform (RALFT) was used to interpolate and regularize seismic data as well performs bin centering. Gaps of a maximum width of 11 traces were interpolated.

25. REVERSE NMO CORRECTION

The NMO correction was reversed.

26. REMOVE SPHERICAL DIVERGENCE CORRECTION (V SQUARED T)

The spherical divergence correction was removed before migration. Divergence correction is incorporated in PreSTM, which accounts more accurately for divergence of the wave front within the migration.

27. TARGET LINE PRE STACK TIME MIGRATION

CGGVeritas' Kirchhoff PreStack Time Migration (PreSTM) is a full pre-stack Kirchhoff time migration algorithm that uses ray-traced travel times. It replaces NMO, DMO and zero-offset migration with one processing step. It migrates the data using actual X, Y locations and provides a better and more accurate sub-surface image.

It is possible to output selected CMP gathers for velocity analysis. In 3D, this allows an initial migration with an approximate velocity field to be run. The velocity field used comprised a smoothed version of the interpreted functions from the first pass velocity analyses. The migration velocity field may be picked from these gathers.

Kirchhoff PSTM was run to output gathers at inlines of 1km spacing.

The migration parameters were:

Migration aperture	:	3.5 km
Input grid	:	12.5m X 25m
Output grid	:	12.5m X 25m

28. VELOCITY ANALYSIS (VA II) ON 1KM X 1KM GRID

Second pass velocity was analysed at 1km x 1km grid. Velocities were QC'ed and smoothed, to be used for the final migration.

29. FINAL KIRCHHOFF PRE-STACK TIME MIGRATION

The final migration was performed with following parameters:

Migration aperture	:	3.5 km
Input grid	:	12.5m X 25m
Output grid	:	12.5m X 25m

Kirchhoff pre-stack time migration implementation follows Bleistein's 3D prestack Kirchhoff migration formula, applies amplitude weights according to a complex formulation based on travel time information computed from the supplied velocity field and geometry of the input data. These amplitude weights correct for spherical spreading of wave field propagation effect. Note that these amplitude weights will be computed and applied assuming that the input data does not have geometrical spreading corrections applied. In the course of migration, the programme applies the full, theoretically correct amplitude weighting scheme.

30. RESIDUAL VELOCITY ANALYSIS (VA III) ON 0.5 X 0.5 KM GRID

Residual velocity analysis was performed on 500 x 500m grid.

31. HIGH RESOLUTION RADON DEMULTIPLE (XRMULT)

A second pass radon was applied to remove the residual multiple energy.
Following are the parameters:

Removable AGC	:	500
Maximum traces/ CDP	:	80
Maximum frequency	:	5 - 90Hz
Reference offset	:	6070m
Transform range	:	-1000 to 4000msec
Protection range	:	-1000 to 500 at 0msec
	:	-1000 to 220 at 1000msec
	:	-1000 to 160 at 2000msec
	:	-1000 to 80 at 3000msec
Start time	:	No demult applied from 0 to 700msec
	:	Demult ramped from 700 to 1000msec

32. PATTERN REMOVAL OF ANOMALOUS INTERFERING SEISMIC EVENT (PRAISE) FOR LINEAR NOISE ATTENUATION

To remove the linear noise observed on the far offsets after radon, PRAISE application was repeated.

33. RESIDUAL EVENT ALIGNMENT (FLAT 3D)

The Flat module performs a time-varying residual moveout correction.
It is designed to correct the residual moveout by flattening seismic events within a gathers of traces and is based on cross-correlation between adjacent traces.
This program is not limited by hyperbolic or 4^{th}-order assumption.
Following are the time variant hyperbolic parameters used:

TIME	MAXIMUM PULL-UP	MAXIMUM PUSH-DOWN
400	30	30
800	100	100
1000	120	120
1500	140	140
1800	100	100
2000	40	40
2400	30	30
2700	20	20
3000	20	20
4000	10	10
5000	10	10
6000	10	10

34. RESIDUAL AMPLITUDE SCALING IN COMMON OFFSET DOMAIN (ACQUISITION FOOTPRINT REMOVAL)

The method performs time variant amplitude balancing to seismic traces. Amplitude measurements are computed in user specified layers progressing down the traces by defined intervals. For each layer, the measured amplitude of each trace is compared to the aerial average of the surrounding traces. The result is the scalar for the layer. Scalars are interpolated between the layer centre times.

Following are the parameters used:

Horizontal mix:	6000m (diameter)
Radial smoothing:	500m (diameter)
Measurement window interval:	500msec

35. OFFSET WEIGHTING

Offset weighting coefficient was provided by Tap Oil and is given below:
Offset weighting = 1 + (0.0004* offset)

36. MUTE

Angle mute 5 to 40 degrees was applied for full angle stack.

37. STACK

Stack is the summation of traces within each CDP producing a single stacked trace for each input gather record. The stack was normalised by 1/fold.

38. Q COMPENSATION

An inverse Q filter was applied with the following parameters:

Application	:	Both phase and amplitude
Q	:	130
Reference frequency	:	125Hz

Following variable dB boost was applied based on grid values (horizon):

Start time	End time	dB boost
0	Grid value	20
Grid value	Grid value + 300	18
Grid value + 300	Grid value + 600	15
Grid value + 600	Grid value + 1100	12
Grid value + 1100	6000msec	5

39. QWAVE

QWAVE was applied to boost up the amplitude of weak zones. QWAVE applies a frequency-dependent, space and time varying, amplitude correction. A relative correction to an estimated background trend is computed and applied. The analysis and correction is performed in the wavelet transform domain. The frequency-dependent scalars are computed using the spectral ratio method for Q estimation. In QWAVE relative variations in the attenuation with respect to a background trend are estimated.

40. TIME VARIANT BANDPASS FILTER

The purpose of this process is to remove any unwanted noise that lies outside the frequency range in which an acceptable signal to noise ration exists. The stack data were filtered with a series of band pass filters interpolated in time.

Following time variant filter was applied:

Time (msec)	Frequency (Hz)
0 – 700	5 – 100
700 – 1500	5 – 85
1500 – 2000	5 – 80
2000 – 3000	5 – 55
3000 – 4000	5 – 30
4000 – 6000	5 – 20

41. RESIDUAL ZREO PHASING

A zero phasing filter was designed and applied to the raw stacks, final stacks and angle stacks.

42. SOURCE AND STREAMER DEPTH STATIC CORRECTION

Source and streamer correction of +9.33 was applied

43. ARCHIVING

A full list of archived data is given in the Appendix B.

6. QUALITY CONTROL

Quality control procedures were conducted at every phase of the project. The following is a summary of the QC steps taken on a regular basis for each of the major processing phases.

Reformat from SEG-D format

- Display of selected shot gathers.
- NTG cube QC

Noise Attenuation

- Display of selected shots, inlines, crossline, and offsets

RADON QC

- Display of selected gathers, stack and offsets before and after Radon.

Velocity QC

- Display of updated RMS and Interval inline, crossline and timeslice sections.
- Display of RMS velocities before and after smoothing.
- Display of CMP gathers before and after velocity picking.
- Display of selected inline stacks before and after velocity picking.

3D CMP binning

- Display of selected inlines and crosslines
- Display of selected timeslices.
- Display of fold maps.
- Display of amplitude maps.

RALFT3D

- Display of fold maps of selected offset ranges after RALFT3D.
- Displays of selected crossline and inlines

Final PSTM data QC

- 3D volume QC of PSTM migration.

APPENDIX A – FIELD DATA LINE LIST

A.1 FIELD DATA LINE LIST

SERIAL NO.	LINE ID	FIRST NAVSHOT	LAST NAVSHOT	NO. OF SHOTS	NO. OF KMS
1	LB20071378P1002	1058	2839	1782	534.6
2	LB20071390P1004	1077	2827	1751	525.3
3	LB20071366R1009	1040	2850	1811	543.3
4	LB20071354P1011	1022	2852	1831	549.3
5	LB20071342P1013	1003	2852	1850	555
6	LB20071330P1015	1001	2852	1852	555.6
7	LB20071318P1017	729	2852	2124	637.2
8	LB20071306P1019	1001	2852	1852	555.6
9	LB20071294P1021	1001	2852	1852	555.6
10	LB20071294F1025	1001	2852	1852	555.6
11	LB20071270P1029	1001	1228	228	68.4
12	LB20071270P3032	1196	2852	1657	497.1
13	LB20071258P1034	1001	2852	1852	555.6
14	LB20071318P3036	2001	2852	852	255.6
15	LB20071246P1038	1002	2852	1851	555.3
16	LB20071234P1040	1002	2852	1851	555.3
17	LB20071222P1042	1002	2852	1851	555.3
18	LB20071210P2045	1002	2852	1851	555.3
19	LB20071210F1047	1002	2852	1851	555.3
20	LB20071198P1049	1002	2852	1851	555.3
21	LB20071198F1051	1002	2852	1851	555.3
22	LB20071402P1056	1095	2816	1722	516.6
23	LB20071630P1058	1444	2602	1159	347.7
24	LB20071642P1060	1462	2591	1130	339
25	LB20071654P1062	1480	2580	1101	330.3
26	LB20071666P1064	1499	2563	1065	319.5
27	LB20071678P1066	1517	2557	1041	312.3
28	LB20071678F1067	1517	2557	1041	312.3
29	LB20071690P1069	1536	2546	1011	303.3
30	LB20071702P1072	1554	2535	982	294.6
31	LB20071714P1074	1572	2523	952	285.6
32	LB20071726P1076	1591	2512	922	276.6

SERIAL NO.	LINE ID	FIRST NAVSHOT	LAST NAVSHOT	NO. OF SHOTS	NO. OF KMS
33	LB20071738P1078	1609	2501	893	267.9
34	LB20071750P1080	1627	2489	863	258.9
35	LB20071762P1082	1646	2479	834	250.2
36	LB20071774P1083	1664	2467	804	241.2
37	LB20071618P1085	1425	2613	1189	356.7
38	LB20071786P1087	1682	2456	775	232.5
39	LB20071798P1089	1701	2444	744	223.2
40	LB20071810P1091	1719	2433	715	214.5
41	LB20071810F1093	1719	2433	715	214.5
42	LB20071606P1095	1499	2568	1070	321
43	LB20071702F1097	1554	2353	800	240
44	LB20071210F3099	1002	1677	676	202.8
45	LB20071270R1101	1967	2127	161	48.3
46	LB20071174P1001	2692	842	1851	555.3
47	LB20071162P1003	2692	842	1851	555.3
48	LB20071150P1005	2692	842	1851	555.3
49	LB20071186P1008	3092	842	2251	675.3
50	LB20071138P3012	2692	842	1851	555.3
51	LB20071126P1014	2692	843	1850	555
52	LB20071114P1016	2692	843	1850	555
53	LB20071102P1018	2692	843	1850	555
54	LB20071090P1020	2692	843	1850	555
55	LB20071102P2022	2692	2031	662	198.6
56	LB20071090F2026	2692	843	1850	555
57	LB20071282P1027	2690	2629	62	18.6
58	LB20071078P1028	2691	843	1849	554.7
59	LB20071066P2033	2692	843	1850	555
60	LB20071066P3035	2423	1830	594	178.2
61	LB20071054P1037	2692	843	1850	555
62	LB20071042P1039	2692	843	1850	555
63	LB20071030P1041	2692	843	1850	555
64	LB20071018P1043	2692	843	1850	555
65	LB20071018F1046	2692	843	1850	555
66	LB20071006P1048	2692	843	1850	555
67	LB20071006F1050	2692	843	1850	555
68	LB20071174P2052	2692	2538	155	46.5
69	LB20071138R1053	1832	1778	55	16.5
70	LB20071138R2054	1003	949	55	16.5
71	LB20071414P1057	2645	953	1693	507.9
72	LB20071426P1059	2634	972	1663	498.9

SERIAL NO.	LINE ID	FIRST NAVSHOT	LAST NAVSHOT	NO. OF SHOTS	NO. OF KMS
73	LB20071438P1061	2622	990	1633	489.9
74	LB20071450P1063	2611	1008	1604	481.2
75	LB20071462P1065	2600	1027	1574	472.2
76	LB20071462F1068	2600	1027	1574	472.2
77	LB20071474P1070	2588	1045	1544	463.2
78	LB20071486P1073	2577	1063	1515	454.5
79	LB20071498P1075	2566	1082	1485	445.5
80	LB20071510P1077	2555	1100	1456	436.8
81	LB20071522P1079	2543	1119	1425	427.5
82	LB20071534P1081	2532	1137	1396	418.8
83	LB20071546P1084	2521	1155	1367	410.1
84	LB20071558P1086	2510	1174	1337	401.1
85	LB20071570P1088	2498	1192	1307	392.1
86	LB20071582P1090	2487	1210	1278	383.4
87	LB20071594P1092	2476	1229	1248	374.4
88	LB20071606P1094	2465	1247	1219	365.7
89	LB20071606F1096	2465	1247	1219	365.7
90	LB20071606F1098	2465	1247	1219	365.7
91	LB20071510R1100	1996	1818	179	53.7
92	LB20071090F3102	2692	2487	206	61.8
93	LB20071114F1103	2692	2031	662	198.6
					37622.4

APPENDIX B – DELIVERABLES

SUMMARY OF FINAL DELIVERABLES:

1. PRE RADON SHOT GATHERS
2. PSTM RADON GATHERS
3. PSTM RAW AND FINAL STACKS
4. PSTM 2^{ND} PASS AND 3^{RD} PASS VELOCITIES IN SEG-Y FORMAT
5. PSTM 2^{ND} PASS AND 3^{RD} PASS VELOCITIES IN ASCII FORMAT

USB DISKS:

B.1 PRE RADON SHOT GATHERS IN SEG-Y – 2 USB DISKS

CLIENT	:	TAP (SHELFAL) AUSTRALIA PTY LTD
PROJECT	:	T/47P LABATT 3D PSTM
PROCESS CONTRACTOR	:	VERITAS GEOPHYSICAL (ASIA PACIFIC) PTE. LTD
PROCESS	:	PRE-MIGRATION RADON DEMULTIPLE GATHER
FORMAT	:	SEG-Y/ USB MOBILE DISK WINDOWS FORMAT
MAXTIME	:	6000MSEC
TIME INTERVAL	:	4MSEC
DOMAIN	:	TIME
MEDIA TYPE	:	USB MOBILE DISK
DATE	:	SEP 2008

SEG-Y TRACE HEADERS INFORMATION:

HEADERS	BYTE LOCATIONS
FFID	BYTES 9 – 12
NAVSHOT	BYTES 17 – 20
CDP	BYTES 21 – 24
TRSEQ	BYTES 25 – 28
OFFSET	BYTES 37 – 40
CHANNEL	BYTES 41 – 44
GUNCODE	BYTES 45 – 46
SAILLINE	BYTES 51 – 54
LINESEQ	BYTES 55 – 56
CABLEID	BYTES 59 – 60
WDEPTH	BYTES 61 – 64 (MULTIPLIED BY 10)
CABLE DEPTH	BYTES 65 – 66
SOURCE DEPTH	BYTES 67 – 68
SHOTX	BYTES 73 – 76 (MULTIPLIED BY 100)
SHOTY	BYTES 77 – 80 (MULTIPLIED BY 100)
RECX	BYTES 81 – 84 (MULTIPLIED BY 100)
RECY	BYTES 85 – 88 (MULTIPLIED BY 100)
TIDAL STATIC	BYTES 93 – 96 (UNIT: MICROSECOND)
TIDAL STATIC	BYTES 97 – 100 (UNIT: DECIMETER)
CDPX	BYTES 125 – 128 (MULTIPLIED BY 100)
CDPY	BYTES 129 – 132 (MULTIPLIED BY 100)
MIDX	BYTES 141 – 144 (MULTIPLIED BY 100)
MIDY	BYTES 145 – 148 (MULTIPLIED BY 100)
NAVTIME	BYTES 153 – 156
INLINE	BYTES 181 – 184
CROSSLINE	BYTES 185 – 188
SHOTRECORD	BYTES 215 – 218

Final Delivery Of pre-migration radon demultiple gather (USB windows format).
USB mobile disk containing the PRE-MIGRATION RADON DEMULTIPLE GATHER in SEG-Y format

Time Interval : 4msec
MaxTime : 6000msec

FIRST NAVSHOT	LAST NAVSHOT	ORIGINAL SAILLINE	SAILLINE IN SEG-Y	SEG-Y FILE
843	1093	1174P1001	11741001	PREMIG_SHOTGTH_1174P1001_0843_1093.sgy
1094	1343	1174P1001	11741001	PREMIG_SHOTGTH_1174P1001_1094_1343.sgy
1344	1593	1174P1001	11741001	PREMIG_SHOTGTH_1174P1001_1344_1593.sgy
1594	1843	1174P1001	11741001	PREMIG_SHOTGTH_1174P1001_1594_1843.sgy
1844	2093	1174P1001	11741001	PREMIG_SHOTGTH_1174P1001_1844_2093.sgy
2094	2343	1174P1001	11741001	PREMIG_SHOTGTH_1174P1001_2094_2343.sgy
2344	2547	1174P1001	11741001	PREMIG_SHOTGTH_1174P1001_2344_2547.sgy
1058	1308	1378P1002	13781002	PREMIG_SHOTGTH_1378P1002_1058_1308.sgy
1309	1558	1378P1002	13781002	PREMIG_SHOTGTH_1378P1002_1309_1558.sgy
1559	1808	1378P1002	13781002	PREMIG_SHOTGTH_1378P1002_1559_1808.sgy
1809	2058	1378P1002	13781002	PREMIG_SHOTGTH_1378P1002_1809_2058.sgy
2059	2308	1378P1002	13781002	PREMIG_SHOTGTH_1378P1002_2059_2308.sgy
2309	2558	1378P1002	13781002	PREMIG_SHOTGTH_1378P1002_2309_2558.sgy
2559	2808	1378P1002	13781002	PREMIG_SHOTGTH_1378P1002_2559_2808.sgy
2809	2838	1378P1002	13781002	PREMIG_SHOTGTH_1378P1002_2809_2838.sgy
843	1093	1162P1003	11621003	PREMIG_SHOTGTH_1162P1003_0843_1093.sgy
1094	1343	1162P1003	11621003	PREMIG_SHOTGTH_1162P1003_1094_1343.sgy
1344	1593	1162P1003	11621003	PREMIG_SHOTGTH_1162P1003_1344_1593.sgy
1594	1843	1162P1003	11621003	PREMIG_SHOTGTH_1162P1003_1594_1843.sgy
1844	2093	1162P1003	11621003	PREMIG_SHOTGTH_1162P1003_1844_2093.sgy
2094	2343	1162P1003	11621003	PREMIG_SHOTGTH_1162P1003_2094_2343.sgy
2344	2593	1162P1003	11621003	PREMIG_SHOTGTH_1162P1003_2344_2593.sgy
2594	2692	1162P1003	11621003	PREMIG_SHOTGTH_1162P1003_2594_2692.sgy
1077	1327	1390P1004	13901004	PREMIG_SHOTGTH_1390P1004_1077_1327.sgy
1328	1577	1390P1004	13901004	PREMIG_SHOTGTH_1390P1004_1328_1577.sgy
1578	1827	1390P1004	13901004	PREMIG_SHOTGTH_1390P1004_1578_1827.sgy
1828	2077	1390P1004	13901004	PREMIG_SHOTGTH_1390P1004_1828_2077.sgy
2078	2327	1390P1004	13901004	PREMIG_SHOTGTH_1390P1004_2078_2327.sgy
2328	2577	1390P1004	13901004	PREMIG_SHOTGTH_1390P1004_2328_2577.sgy
2578	2826	1390P1004	13901004	PREMIG_SHOTGTH_1390P1004_2578_2826.sgy
843	1093	1150P1005	11501005	PREMIG_SHOTGTH_1150P1005_0843_1093.sgy
1094	1343	1150P1005	11501005	PREMIG_SHOTGTH_1150P1005_1094_1343.sgy
1344	1593	1150P1005	11501005	PREMIG_SHOTGTH_1150P1005_1344_1593.sgy
1594	1843	1150P1005	11501005	PREMIG_SHOTGTH_1150P1005_1594_1843.sgy
1844	2093	1150P1005	11501005	PREMIG_SHOTGTH_1150P1005_1844_2093.sgy
2094	2343	1150P1005	11501005	PREMIG_SHOTGTH_1150P1005_2094_2343.sgy
2344	2593	1150P1005	11501005	PREMIG_SHOTGTH_1150P1005_2344_2593.sgy

FIRST NAVSHOT	LAST NAVSHOT	ORIGINAL SAILLINE	SAILLINE IN SEG-Y	SEG-Y FILE
2594	2692	1150P1005	11501005	PREMIG_SHOTGTH_1150P1005_2594_2692.sgy
843	1093	1186P1008	11861008	PREMIG_SHOTGTH_1186P1008_0843_1093.sgy
1094	1343	1186P1008	11861008	PREMIG_SHOTGTH_1186P1008_1094_1343.sgy
1344	1593	1186P1008	11861008	PREMIG_SHOTGTH_1186P1008_1344_1593.sgy
1594	1843	1186P1008	11861008	PREMIG_SHOTGTH_1186P1008_1594_1843.sgy
1844	2093	1186P1008	11861008	PREMIG_SHOTGTH_1186P1008_1844_2093.sgy
2094	2343	1186P1008	11861008	PREMIG_SHOTGTH_1186P1008_2094_2343.sgy
2344	2593	1186P1008	11861008	PREMIG_SHOTGTH_1186P1008_2344_2593.sgy
2594	2843	1186P1008	11861008	PREMIG_SHOTGTH_1186P1008_2594_2843.sgy
2844	3092	1186P1008	11861008	PREMIG_SHOTGTH_1186P1008_2844_3092.sgy
1040	1290	1366R1009	13661009	PREMIG_SHOTGTH_1366R1009_1040_1290.sgy
1291	1540	1366R1009	13661009	PREMIG_SHOTGTH_1366R1009_1291_1540.sgy
1541	1790	1366R1009	13661009	PREMIG_SHOTGTH_1366R1009_1541_1790.sgy
1791	2040	1366R1009	13661009	PREMIG_SHOTGTH_1366R1009_1791_2040.sgy
2041	2290	1366R1009	13661009	PREMIG_SHOTGTH_1366R1009_2041_2290.sgy
2291	2540	1366R1009	13661009	PREMIG_SHOTGTH_1366R1009_2291_2540.sgy
2541	2790	1366R1009	13661009	PREMIG_SHOTGTH_1366R1009_2541_2790.sgy
2791	2849	1366R1009	13661009	PREMIG_SHOTGTH_1366R1009_2791_2849.sgy
1022	1272	1354P1011	13541011	PREMIG_SHOTGTH_1354P1011_1022_1272.sgy
1273	1522	1354P1011	13541011	PREMIG_SHOTGTH_1354P1011_1273_1522.sgy
1523	1772	1354P1011	13541011	PREMIG_SHOTGTH_1354P1011_1523_1772.sgy
1773	2022	1354P1011	13541011	PREMIG_SHOTGTH_1354P1011_1773_2022.sgy
2023	2272	1354P1011	13541011	PREMIG_SHOTGTH_1354P1011_2023_2272.sgy
2273	2522	1354P1011	13541011	PREMIG_SHOTGTH_1354P1011_2273_2522.sgy
2523	2772	1354P1011	13541011	PREMIG_SHOTGTH_1354P1011_2523_2772.sgy
2773	2851	1354P1011	13541011	PREMIG_SHOTGTH_1354P1011_2773_2851.sgy
843	1093	1138P3012	11383012	PREMIG_SHOTGTH_1138P3012_0843_1093.sgy
1094	1343	1138P3012	11383012	PREMIG_SHOTGTH_1138P3012_1094_1343.sgy
1344	1593	1138P3012	11383012	PREMIG_SHOTGTH_1138P3012_1344_1593.sgy
1594	1843	1138P3012	11383012	PREMIG_SHOTGTH_1138P3012_1594_1843.sgy
1844	2093	1138P3012	11383012	PREMIG_SHOTGTH_1138P3012_1844_2093.sgy
2094	2343	1138P3012	11383012	PREMIG_SHOTGTH_1138P3012_2094_2343.sgy
2344	2593	1138P3012	11383012	PREMIG_SHOTGTH_1138P3012_2344_2593.sgy
2594	2692	1138P3012	11383012	PREMIG_SHOTGTH_1138P3012_2594_2692.sgy
1003	1253	1342P1013	13421013	PREMIG_SHOTGTH_1342P1013_1003_1253.sgy
1254	1503	1342P1013	13421013	PREMIG_SHOTGTH_1342P1013_1254_1503.sgy
1504	1753	1342P1013	13421013	PREMIG_SHOTGTH_1342P1013_1504_1753.sgy
1754	2003	1342P1013	13421013	PREMIG_SHOTGTH_1342P1013_1754_2003.sgy
2004	2253	1342P1013	13421013	PREMIG_SHOTGTH_1342P1013_2004_2253.sgy
2254	2503	1342P1013	13421013	PREMIG_SHOTGTH_1342P1013_2254_2503.sgy
2504	2753	1342P1013	13421013	PREMIG_SHOTGTH_1342P1013_2504_2753.sgy

FIRST NAVSHOT	LAST NAVSHOT	ORIGINAL SAILLINE	SAILLINE IN SEG-Y	SEG-Y FILE
2754	2851	1342P1013	13421013	PREMIG_SHOTGTH_1342P1013_2754_2851.sgy
844	1094	1126P1014	11261014	PREMIG_SHOTGTH_1126P1014_0844_1094.sgy
1095	1344	1126P1014	11261014	PREMIG_SHOTGTH_1126P1014_1095_1344.sgy
1345	1594	1126P1014	11261014	PREMIG_SHOTGTH_1126P1014_1345_1594.sgy
1595	1844	1126P1014	11261014	PREMIG_SHOTGTH_1126P1014_1595_1844.sgy
1845	2094	1126P1014	11261014	PREMIG_SHOTGTH_1126P1014_1845_2094.sgy
2095	2344	1126P1014	11261014	PREMIG_SHOTGTH_1126P1014_2095_2344.sgy
2345	2594	1126P1014	11261014	PREMIG_SHOTGTH_1126P1014_2345_2594.sgy
2595	2692	1126P1014	11261014	PREMIG_SHOTGTH_1126P1014_2595_2692.sgy
1001	1251	1330P1015	13301015	PREMIG_SHOTGTH_1330P1015_1001_1251.sgy
1252	1501	1330P1015	13301015	PREMIG_SHOTGTH_1330P1015_1252_1501.sgy
1502	1751	1330P1015	13301015	PREMIG_SHOTGTH_1330P1015_1502_1751.sgy
1752	2001	1330P1015	13301015	PREMIG_SHOTGTH_1330P1015_1752_2001.sgy
2002	2251	1330P1015	13301015	PREMIG_SHOTGTH_1330P1015_2002_2251.sgy
2252	2501	1330P1015	13301015	PREMIG_SHOTGTH_1330P1015_2252_2501.sgy
2502	2751	1330P1015	13301015	PREMIG_SHOTGTH_1330P1015_2502_2751.sgy
2752	2851	1330P1015	13301015	PREMIG_SHOTGTH_1330P1015_2752_2851.sgy
844	1094	1114P1016	11141016	PREMIG_SHOTGTH_1114P1016_0844_1094.sgy
1095	1344	1114P1016	11141016	PREMIG_SHOTGTH_1114P1016_1095_1344.sgy
1345	1594	1114P1016	11141016	PREMIG_SHOTGTH_1114P1016_1345_1594.sgy
1595	1844	1114P1016	11141016	PREMIG_SHOTGTH_1114P1016_1595_1844.sgy
1845	2094	1114P1016	11141016	PREMIG_SHOTGTH_1114P1016_1845_2094.sgy
2095	2344	1114P1016	11141016	PREMIG_SHOTGTH_1114P1016_2095_2344.sgy
2345	2594	1114P1016	11141016	PREMIG_SHOTGTH_1114P1016_2345_2594.sgy
2595	2692	1114P1016	11141016	PREMIG_SHOTGTH_1114P1016_2595_2692.sgy
729	979	1318P1017	13181017	PREMIG_SHOTGTH_1318P1017_0729_0979.sgy
980	1229	1318P1017	13181017	PREMIG_SHOTGTH_1318P1017_0980_1229.sgy
1230	1479	1318P1017	13181017	PREMIG_SHOTGTH_1318P1017_1230_1479.sgy
1480	1729	1318P1017	13181017	PREMIG_SHOTGTH_1318P1017_1480_1729.sgy
1730	1979	1318P1017	13181017	PREMIG_SHOTGTH_1318P1017_1730_1979.sgy
1980	2009	1318P1017	13181017	PREMIG_SHOTGTH_1318P1017_1980_2009.sgy
844	1094	1102P1018	11021018	PREMIG_SHOTGTH_1102P1018_0844_1094.sgy
1095	1344	1102P1018	11021018	PREMIG_SHOTGTH_1102P1018_1095_1344.sgy
1345	1594	1102P1018	11021018	PREMIG_SHOTGTH_1102P1018_1345_1594.sgy
1595	1844	1102P1018	11021018	PREMIG_SHOTGTH_1102P1018_1595_1844.sgy
1845	2040	1102P1018	11021018	PREMIG_SHOTGTH_1102P1018_1845_2040.sgy
1001	1251	1306P1019	13061019	PREMIG_SHOTGTH_1306P1019_1001_1251.sgy
1252	1501	1306P1019	13061019	PREMIG_SHOTGTH_1306P1019_1252_1501.sgy
1502	1751	1306P1019	13061019	PREMIG_SHOTGTH_1306P1019_1502_1751.sgy
1752	2001	1306P1019	13061019	PREMIG_SHOTGTH_1306P1019_1752_2001.sgy
2002	2251	1306P1019	13061019	PREMIG_SHOTGTH_1306P1019_2002_2251.sgy

FIRST NAVSHOT	LAST NAVSHOT	ORIGINAL SAILLINE	SAILLINE IN SEG-Y	SEG-Y FILE
2252	2501	1306P1019	13061019	PREMIG_SHOTGTH_1306P1019_2252_2501.sgy
2502	2751	1306P1019	13061019	PREMIG_SHOTGTH_1306P1019_2502_2751.sgy
2752	2851	1306P1019	13061019	PREMIG_SHOTGTH_1306P1019_2752_2851.sgy
844	1094	1090P1020	10901020	PREMIG_SHOTGTH_1090P1020_0844_1094.sgy
1095	1344	1090P1020	10901020	PREMIG_SHOTGTH_1090P1020_1095_1344.sgy
1345	1594	1090P1020	10901020	PREMIG_SHOTGTH_1090P1020_1345_1594.sgy
1595	1844	1090P1020	10901020	PREMIG_SHOTGTH_1090P1020_1595_1844.sgy
1845	2094	1090P1020	10901020	PREMIG_SHOTGTH_1090P1020_1845_2094.sgy
2095	2344	1090P1020	10901020	PREMIG_SHOTGTH_1090P1020_2095_2344.sgy
2345	2594	1090P1020	10901020	PREMIG_SHOTGTH_1090P1020_2345_2594.sgy
2595	2692	1090P1020	10901020	PREMIG_SHOTGTH_1090P1020_2595_2692.sgy
1024	1274	1294P1021	12941021	PREMIG_SHOTGTH_1294P1021_1024_1274.sgy
1275	1524	1294P1021	12941021	PREMIG_SHOTGTH_1294P1021_1275_1524.sgy
1525	1774	1294P1021	12941021	PREMIG_SHOTGTH_1294P1021_1525_1774.sgy
1775	2024	1294P1021	12941021	PREMIG_SHOTGTH_1294P1021_1775_2024.sgy
2025	2274	1294P1021	12941021	PREMIG_SHOTGTH_1294P1021_2025_2274.sgy
2275	2524	1294P1021	12941021	PREMIG_SHOTGTH_1294P1021_2275_2524.sgy
2525	2774	1294P1021	12941021	PREMIG_SHOTGTH_1294P1021_2525_2774.sgy
2775	2851	1294P1021	12941021	PREMIG_SHOTGTH_1294P1021_2775_2851.sgy
2032	2282	1102P2022	11022022	PREMIG_SHOTGTH_1102P2022_2032_2282.sgy
2283	2532	1102P2022	11022022	PREMIG_SHOTGTH_1102P2022_2283_2532.sgy
2533	2692	1102P2022	11022022	PREMIG_SHOTGTH_1102P2022_2533_2692.sgy
1001	1251	1294F1025	12941025	PREMIG_SHOTGTH_1294F1025_1001_1251.sgy
1252	1501	1294F1025	12941025	PREMIG_SHOTGTH_1294F1025_1252_1501.sgy
1502	1751	1294F1025	12941025	PREMIG_SHOTGTH_1294F1025_1502_1751.sgy
1752	2001	1294F1025	12941025	PREMIG_SHOTGTH_1294F1025_1752_2001.sgy
2002	2251	1294F1025	12941025	PREMIG_SHOTGTH_1294F1025_2002_2251.sgy
2252	2501	1294F1025	12941025	PREMIG_SHOTGTH_1294F1025_2252_2501.sgy
2502	2751	1294F1025	12941025	PREMIG_SHOTGTH_1294F1025_2502_2751.sgy
2752	2851	1294F1025	12941025	PREMIG_SHOTGTH_1294F1025_2752_2851.sgy
844	1094	1090F2026	10902026	PREMIG_SHOTGTH_1090F2026_0844_1094.sgy
1095	1344	1090F2026	10902026	PREMIG_SHOTGTH_1090F2026_1095_1344.sgy
1345	1594	1090F2026	10902026	PREMIG_SHOTGTH_1090F2026_1345_1594.sgy
1595	1844	1090F2026	10902026	PREMIG_SHOTGTH_1090F2026_1595_1844.sgy
1845	2094	1090F2026	10902026	PREMIG_SHOTGTH_1090F2026_1845_2094.sgy
2095	2344	1090F2026	10902026	PREMIG_SHOTGTH_1090F2026_2095_2344.sgy
2345	2496	1090F2026	10902026	PREMIG_SHOTGTH_1090F2026_2345_2496.sgy
1001	1251	1282P1027	12821027	PREMIG_SHOTGTH_1282P1027_1001_1251.sgy
1252	1501	1282P1027	12821027	PREMIG_SHOTGTH_1282P1027_1252_1501.sgy
1502	1751	1282P1027	12821027	PREMIG_SHOTGTH_1282P1027_1502_1751.sgy
1752	2001	1282P1027	12821027	PREMIG_SHOTGTH_1282P1027_1752_2001.sgy

FIRST NAVSHOT	LAST NAVSHOT	ORIGINAL SAILLINE	SAILLINE IN SEG-Y	SEG-Y FILE
2002	2251	1282P1027	12821027	PREMIG_SHOTGTH_1282P1027_2002_2251.sgy
2252	2501	1282P1027	12821027	PREMIG_SHOTGTH_1282P1027_2252_2501.sgy
2502	2751	1282P1027	12821027	PREMIG_SHOTGTH_1282P1027_2502_2751.sgy
2752	2851	1282P1027	12821027	PREMIG_SHOTGTH_1282P1027_2752_2851.sgy
844	1094	1078P1028	10781028	PREMIG_SHOTGTH_1078P1028_0844_1094.sgy
1095	1344	1078P1028	10781028	PREMIG_SHOTGTH_1078P1028_1095_1344.sgy
1345	1594	1078P1028	10781028	PREMIG_SHOTGTH_1078P1028_1345_1594.sgy
1595	1844	1078P1028	10781028	PREMIG_SHOTGTH_1078P1028_1595_1844.sgy
1845	2094	1078P1028	10781028	PREMIG_SHOTGTH_1078P1028_1845_2094.sgy
2095	2344	1078P1028	10781028	PREMIG_SHOTGTH_1078P1028_2095_2344.sgy
2345	2594	1078P1028	10781028	PREMIG_SHOTGTH_1078P1028_2345_2594.sgy
2595	2691	1078P1028	10781028	PREMIG_SHOTGTH_1078P1028_2595_2691.sgy
1001	1204	1270P1029	12701029	PREMIG_SHOTGTH_1270P1029_1001_1204.sgy
1196	1446	1270P3032	12703032	PREMIG_SHOTGTH_1270P3032_1196_1446.sgy
1447	1696	1270P3032	12703032	PREMIG_SHOTGTH_1270P3032_1447_1696.sgy
1697	1946	1270P3032	12703032	PREMIG_SHOTGTH_1270P3032_1697_1946.sgy
1947	2196	1270P3032	12703032	PREMIG_SHOTGTH_1270P3032_1947_2196.sgy
2197	2446	1270P3032	12703032	PREMIG_SHOTGTH_1270P3032_2197_2446.sgy
2447	2696	1270P3032	12703032	PREMIG_SHOTGTH_1270P3032_2447_2696.sgy
2697	2851	1270P3032	12703032	PREMIG_SHOTGTH_1270P3032_2697_2851.sgy
844	1094	1066P2033	10662033	PREMIG_SHOTGTH_1066P2033_0844_1094.sgy
1095	1344	1066P2033	10662033	PREMIG_SHOTGTH_1066P2033_1095_1344.sgy
1345	1594	1066P2033	10662033	PREMIG_SHOTGTH_1066P2033_1345_1594.sgy
1595	1844	1066P2033	10662033	PREMIG_SHOTGTH_1066P2033_1595_1844.sgy
1845	2094	1066P2033	10662033	PREMIG_SHOTGTH_1066P2033_1845_2094.sgy
2095	2344	1066P2033	10662033	PREMIG_SHOTGTH_1066P2033_2095_2344.sgy
2345	2594	1066P2033	10662033	PREMIG_SHOTGTH_1066P2033_2345_2594.sgy
2595	2692	1066P2033	10662033	PREMIG_SHOTGTH_1066P2033_2595_2692.sgy
1001	1251	1258P1034	12581034	PREMIG_SHOTGTH_1258P1034_1001_1251.sgy
1252	1501	1258P1034	12581034	PREMIG_SHOTGTH_1258P1034_1252_1501.sgy
1502	1751	1258P1034	12581034	PREMIG_SHOTGTH_1258P1034_1502_1751.sgy
1752	2001	1258P1034	12581034	PREMIG_SHOTGTH_1258P1034_1752_2001.sgy
2002	2251	1258P1034	12581034	PREMIG_SHOTGTH_1258P1034_2002_2251.sgy
2252	2501	1258P1034	12581034	PREMIG_SHOTGTH_1258P1034_2252_2501.sgy
2502	2751	1258P1034	12581034	PREMIG_SHOTGTH_1258P1034_2502_2751.sgy
2752	2851	1258P1034	12581034	PREMIG_SHOTGTH_1258P1034_2752_2851.sgy
1831	2081	1066P3035	10663035	PREMIG_SHOTGTH_1066P3035_1831_2081.sgy
2082	2331	1066P3035	10663035	PREMIG_SHOTGTH_1066P3035_2082_2331.sgy
2332	2423	1066P3035	10663035	PREMIG_SHOTGTH_1066P3035_2332_2423.sgy
2001	2251	1318P3036	13183036	PREMIG_SHOTGTH_1318P3036_2001_2251.sgy
2252	2501	1318P3036	13183036	PREMIG_SHOTGTH_1318P3036_2252_2501.sgy

FIRST NAVSHOT	LAST NAVSHOT	ORIGINAL SAILLINE	SAILLINE IN SEG-Y	SEG-Y FILE
2502	2751	1318P3036	13183036	PREMIG_SHOTGTH_1318P3036_2502_2751.sgy
2752	2851	1318P3036	13183036	PREMIG_SHOTGTH_1318P3036_2752_2851.sgy
844	1094	1054P1037	10541037	PREMIG_SHOTGTH_1054P1037_0844_1094.sgy
1095	1344	1054P1037	10541037	PREMIG_SHOTGTH_1054P1037_1095_1344.sgy
1345	1594	1054P1037	10541037	PREMIG_SHOTGTH_1054P1037_1345_1594.sgy
1595	1844	1054P1037	10541037	PREMIG_SHOTGTH_1054P1037_1595_1844.sgy
1845	2094	1054P1037	10541037	PREMIG_SHOTGTH_1054P1037_1845_2094.sgy
2095	2344	1054P1037	10541037	PREMIG_SHOTGTH_1054P1037_2095_2344.sgy
2345	2594	1054P1037	10541037	PREMIG_SHOTGTH_1054P1037_2345_2594.sgy
2595	2692	1054P1037	10541037	PREMIG_SHOTGTH_1054P1037_2595_2692.sgy
1002	1252	1246P1038	12461038	PREMIG_SHOTGTH_1246P1038_1002_1252.sgy
1253	1502	1246P1038	12461038	PREMIG_SHOTGTH_1246P1038_1253_1502.sgy
1503	1752	1246P1038	12461038	PREMIG_SHOTGTH_1246P1038_1503_1752.sgy
1753	2002	1246P1038	12461038	PREMIG_SHOTGTH_1246P1038_1753_2002.sgy
2003	2252	1246P1038	12461038	PREMIG_SHOTGTH_1246P1038_2003_2252.sgy
2253	2502	1246P1038	12461038	PREMIG_SHOTGTH_1246P1038_2253_2502.sgy
2503	2752	1246P1038	12461038	PREMIG_SHOTGTH_1246P1038_2503_2752.sgy
2753	2851	1246P1038	12461038	PREMIG_SHOTGTH_1246P1038_2753_2851.sgy
844	1094	1042P1039	10421039	PREMIG_SHOTGTH_1042P1039_0844_1094.sgy
1095	1344	1042P1039	10421039	PREMIG_SHOTGTH_1042P1039_1095_1344.sgy
1345	1594	1042P1039	10421039	PREMIG_SHOTGTH_1042P1039_1345_1594.sgy
1595	1844	1042P1039	10421039	PREMIG_SHOTGTH_1042P1039_1595_1844.sgy
1845	2094	1042P1039	10421039	PREMIG_SHOTGTH_1042P1039_1845_2094.sgy
2095	2344	1042P1039	10421039	PREMIG_SHOTGTH_1042P1039_2095_2344.sgy
2345	2594	1042P1039	10421039	PREMIG_SHOTGTH_1042P1039_2345_2594.sgy
2595	2692	1042P1039	10421039	PREMIG_SHOTGTH_1042P1039_2595_2692.sgy
1002	1252	1234P1040	12341040	PREMIG_SHOTGTH_1234P1040_1002_1252.sgy
1253	1502	1234P1040	12341040	PREMIG_SHOTGTH_1234P1040_1253_1502.sgy
1503	1752	1234P1040	12341040	PREMIG_SHOTGTH_1234P1040_1503_1752.sgy
1753	2002	1234P1040	12341040	PREMIG_SHOTGTH_1234P1040_1753_2002.sgy
2003	2252	1234P1040	12341040	PREMIG_SHOTGTH_1234P1040_2003_2252.sgy
2253	2502	1234P1040	12341040	PREMIG_SHOTGTH_1234P1040_2253_2502.sgy
2503	2752	1234P1040	12341040	PREMIG_SHOTGTH_1234P1040_2503_2752.sgy
2753	2851	1234P1040	12341040	PREMIG_SHOTGTH_1234P1040_2753_2851.sgy
844	1094	1030P1041	10301041	PREMIG_SHOTGTH_1030P1041_0844_1094.sgy
1095	1344	1030P1041	10301041	PREMIG_SHOTGTH_1030P1041_1095_1344.sgy
1345	1594	1030P1041	10301041	PREMIG_SHOTGTH_1030P1041_1345_1594.sgy
1595	1844	1030P1041	10301041	PREMIG_SHOTGTH_1030P1041_1595_1844.sgy
1845	2094	1030P1041	10301041	PREMIG_SHOTGTH_1030P1041_1845_2094.sgy
2095	2344	1030P1041	10301041	PREMIG_SHOTGTH_1030P1041_2095_2344.sgy
2345	2594	1030P1041	10301041	PREMIG_SHOTGTH_1030P1041_2345_2594.sgy

FIRST NAVSHOT	LAST NAVSHOT	ORIGINAL SAILLINE	SAILLINE IN SEG-Y	SEG-Y FILE
2595	2692	1030P1041	10301041	PREMIG_SHOTGTH_1030P1041_2595_2692.sgy
1002	1252	1222P1042	12221042	PREMIG_SHOTGTH_1222P1042_1002_1252.sgy
1253	1502	1222P1042	12221042	PREMIG_SHOTGTH_1222P1042_1253_1502.sgy
1503	1752	1222P1042	12221042	PREMIG_SHOTGTH_1222P1042_1503_1752.sgy
1753	2002	1222P1042	12221042	PREMIG_SHOTGTH_1222P1042_1753_2002.sgy
2003	2252	1222P1042	12221042	PREMIG_SHOTGTH_1222P1042_2003_2252.sgy
2253	2502	1222P1042	12221042	PREMIG_SHOTGTH_1222P1042_2253_2502.sgy
2503	2752	1222P1042	12221042	PREMIG_SHOTGTH_1222P1042_2503_2752.sgy
2753	2851	1222P1042	12221042	PREMIG_SHOTGTH_1222P1042_2753_2851.sgy
844	1094	1018P1043	10181043	PREMIG_SHOTGTH_1018P1043_0844_1094.sgy
1095	1344	1018P1043	10181043	PREMIG_SHOTGTH_1018P1043_1095_1344.sgy
1345	1594	1018P1043	10181043	PREMIG_SHOTGTH_1018P1043_1345_1594.sgy
1595	1844	1018P1043	10181043	PREMIG_SHOTGTH_1018P1043_1595_1844.sgy
1845	2094	1018P1043	10181043	PREMIG_SHOTGTH_1018P1043_1845_2094.sgy
2095	2344	1018P1043	10181043	PREMIG_SHOTGTH_1018P1043_2095_2344.sgy
2345	2594	1018P1043	10181043	PREMIG_SHOTGTH_1018P1043_2345_2594.sgy
2595	2692	1018P1043	10181043	PREMIG_SHOTGTH_1018P1043_2595_2692.sgy
1002	1252	1210P2045	12102045	PREMIG_SHOTGTH_1210P2045_1002_1252.sgy
1253	1502	1210P2045	12102045	PREMIG_SHOTGTH_1210P2045_1253_1502.sgy
1503	1752	1210P2045	12102045	PREMIG_SHOTGTH_1210P2045_1503_1752.sgy
1753	2002	1210P2045	12102045	PREMIG_SHOTGTH_1210P2045_1753_2002.sgy
2003	2252	1210P2045	12102045	PREMIG_SHOTGTH_1210P2045_2003_2252.sgy
2253	2502	1210P2045	12102045	PREMIG_SHOTGTH_1210P2045_2253_2502.sgy
2503	2752	1210P2045	12102045	PREMIG_SHOTGTH_1210P2045_2503_2752.sgy
2753	2851	1210P2045	12102045	PREMIG_SHOTGTH_1210P2045_2753_2851.sgy
844	1094	1018F1046	10181046	PREMIG_SHOTGTH_1018F1046_0844_1094.sgy
1095	1344	1018F1046	10181046	PREMIG_SHOTGTH_1018F1046_1095_1344.sgy
1345	1594	1018F1046	10181046	PREMIG_SHOTGTH_1018F1046_1345_1594.sgy
1595	1844	1018F1046	10181046	PREMIG_SHOTGTH_1018F1046_1595_1844.sgy
1845	2094	1018F1046	10181046	PREMIG_SHOTGTH_1018F1046_1845_2094.sgy
2095	2344	1018F1046	10181046	PREMIG_SHOTGTH_1018F1046_2095_2344.sgy
2345	2594	1018F1046	10181046	PREMIG_SHOTGTH_1018F1046_2345_2594.sgy
2595	2692	1018F1046	10181046	PREMIG_SHOTGTH_1018F1046_2595_2692.sgy
1668	1918	1210F1047	12101047	PREMIG_SHOTGTH_1210F1047_1668_1918.sgy
1919	2168	1210F1047	12101047	PREMIG_SHOTGTH_1210F1047_1919_2168.sgy
2169	2418	1210F1047	12101047	PREMIG_SHOTGTH_1210F1047_2169_2418.sgy
2419	2668	1210F1047	12101047	PREMIG_SHOTGTH_1210F1047_2419_2668.sgy
2669	2851	1210F1047	12101047	PREMIG_SHOTGTH_1210F1047_2669_2851.sgy
844	1094	1006P1048	10061048	PREMIG_SHOTGTH_1006P1048_0844_1094.sgy
1095	1344	1006P1048	10061048	PREMIG_SHOTGTH_1006P1048_1095_1344.sgy
1345	1594	1006P1048	10061048	PREMIG_SHOTGTH_1006P1048_1345_1594.sgy

FIRST NAVSHOT	LAST NAVSHOT	ORIGINAL SAILLINE	SAILLINE IN SEG-Y	SEG-Y FILE
1595	1844	1006P1048	10061048	PREMIG_SHOTGTH_1006P1048_1595_1844.sgy
1845	2094	1006P1048	10061048	PREMIG_SHOTGTH_1006P1048_1845_2094.sgy
2095	2344	1006P1048	10061048	PREMIG_SHOTGTH_1006P1048_2095_2344.sgy
2345	2594	1006P1048	10061048	PREMIG_SHOTGTH_1006P1048_2345_2594.sgy
2595	2692	1006P1048	10061048	PREMIG_SHOTGTH_1006P1048_2595_2692.sgy
1002	1252	1198P1049	11981049	PREMIG_SHOTGTH_1198P1049_1002_1252.sgy
1253	1502	1198P1049	11981049	PREMIG_SHOTGTH_1198P1049_1253_1502.sgy
1503	1752	1198P1049	11981049	PREMIG_SHOTGTH_1198P1049_1503_1752.sgy
1753	2002	1198P1049	11981049	PREMIG_SHOTGTH_1198P1049_1753_2002.sgy
2003	2252	1198P1049	11981049	PREMIG_SHOTGTH_1198P1049_2003_2252.sgy
2253	2502	1198P1049	11981049	PREMIG_SHOTGTH_1198P1049_2253_2502.sgy
2503	2752	1198P1049	11981049	PREMIG_SHOTGTH_1198P1049_2503_2752.sgy
2753	2851	1198P1049	11981049	PREMIG_SHOTGTH_1198P1049_2753_2851.sgy
844	1094	1006F1050	10061050	PREMIG_SHOTGTH_1006F1050_0844_1094.sgy
1095	1344	1006F1050	10061050	PREMIG_SHOTGTH_1006F1050_1095_1344.sgy
1345	1594	1006F1050	10061050	PREMIG_SHOTGTH_1006F1050_1345_1594.sgy
1595	1844	1006F1050	10061050	PREMIG_SHOTGTH_1006F1050_1595_1844.sgy
1845	2094	1006F1050	10061050	PREMIG_SHOTGTH_1006F1050_1845_2094.sgy
2095	2344	1006F1050	10061050	PREMIG_SHOTGTH_1006F1050_2095_2344.sgy
2345	2594	1006F1050	10061050	PREMIG_SHOTGTH_1006F1050_2345_2594.sgy
2595	2692	1006F1050	10061050	PREMIG_SHOTGTH_1006F1050_2595_2692.sgy
1002	1252	1198F1051	11981051	PREMIG_SHOTGTH_1198F1051_1002_1252.sgy
1253	1502	1198F1051	11981051	PREMIG_SHOTGTH_1198F1051_1253_1502.sgy
1503	1752	1198F1051	11981051	PREMIG_SHOTGTH_1198F1051_1503_1752.sgy
1753	2002	1198F1051	11981051	PREMIG_SHOTGTH_1198F1051_1753_2002.sgy
2003	2252	1198F1051	11981051	PREMIG_SHOTGTH_1198F1051_2003_2252.sgy
2253	2502	1198F1051	11981051	PREMIG_SHOTGTH_1198F1051_2253_2502.sgy
2503	2752	1198F1051	11981051	PREMIG_SHOTGTH_1198F1051_2503_2752.sgy
2753	2851	1198F1051	11981051	PREMIG_SHOTGTH_1198F1051_2753_2851.sgy
2539	2692	1174P2052	11742052	PREMIG_SHOTGTH_1174P2052_2539_2692.sgy
1779	1832	1138R1053	11381053	PREMIG_SHOTGTH_1138R1053_1779_1832.sgy
950	1003	1138R2054	11382054	PREMIG_SHOTGTH_1138R2054_0950_1003.sgy
1095	1345	1402P1056	14021056	PREMIG_SHOTGTH_1402P1056_1095_1345.sgy
1346	1595	1402P1056	14021056	PREMIG_SHOTGTH_1402P1056_1346_1595.sgy
1596	1845	1402P1056	14021056	PREMIG_SHOTGTH_1402P1056_1596_1845.sgy
1846	2095	1402P1056	14021056	PREMIG_SHOTGTH_1402P1056_1846_2095.sgy
2096	2345	1402P1056	14021056	PREMIG_SHOTGTH_1402P1056_2096_2345.sgy
2346	2595	1402P1056	14021056	PREMIG_SHOTGTH_1402P1056_2346_2595.sgy
2596	2815	1402P1056	14021056	PREMIG_SHOTGTH_1402P1056_2596_2815.sgy
954	1204	1414P1057	14141057	PREMIG_SHOTGTH_1414P1057_0954_1204.sgy
1205	1454	1414P1057	14141057	PREMIG_SHOTGTH_1414P1057_1205_1454.sgy

FIRST NAVSHOT	LAST NAVSHOT	ORIGINAL SAILLINE	SAILLINE IN SEG-Y	SEG-Y FILE
1455	1704	1414P1057	14141057	PREMIG_SHOTGTH_1414P1057_1455_1704.sgy
1705	1954	1414P1057	14141057	PREMIG_SHOTGTH_1414P1057_1705_1954.sgy
1955	2204	1414P1057	14141057	PREMIG_SHOTGTH_1414P1057_1955_2204.sgy
2205	2454	1414P1057	14141057	PREMIG_SHOTGTH_1414P1057_2205_2454.sgy
2455	2645	1414P1057	14141057	PREMIG_SHOTGTH_1414P1057_2455_2645.sgy
1444	1694	1630P1058	16301058	PREMIG_SHOTGTH_1630P1058_1444_1694.sgy
1695	1944	1630P1058	16301058	PREMIG_SHOTGTH_1630P1058_1695_1944.sgy
1945	2194	1630P1058	16301058	PREMIG_SHOTGTH_1630P1058_1945_2194.sgy
2195	2444	1630P1058	16301058	PREMIG_SHOTGTH_1630P1058_2195_2444.sgy
2445	2601	1630P1058	16301058	PREMIG_SHOTGTH_1630P1058_2445_2601.sgy
973	1223	1426P1059	14261059	PREMIG_SHOTGTH_1426P1059_0973_1223.sgy
1224	1473	1426P1059	14261059	PREMIG_SHOTGTH_1426P1059_1224_1473.sgy
1474	1723	1426P1059	14261059	PREMIG_SHOTGTH_1426P1059_1474_1723.sgy
1724	1973	1426P1059	14261059	PREMIG_SHOTGTH_1426P1059_1724_1973.sgy
1974	2223	1426P1059	14261059	PREMIG_SHOTGTH_1426P1059_1974_2223.sgy
2224	2473	1426P1059	14261059	PREMIG_SHOTGTH_1426P1059_2224_2473.sgy
2474	2634	1426P1059	14261059	PREMIG_SHOTGTH_1426P1059_2474_2634.sgy
1462	1712	1642P1060	16421060	PREMIG_SHOTGTH_1642P1060_1462_1712.sgy
1713	1962	1642P1060	16421060	PREMIG_SHOTGTH_1642P1060_1713_1962.sgy
1963	2212	1642P1060	16421060	PREMIG_SHOTGTH_1642P1060_1963_2212.sgy
2213	2462	1642P1060	16421060	PREMIG_SHOTGTH_1642P1060_2213_2462.sgy
2463	2590	1642P1060	16421060	PREMIG_SHOTGTH_1642P1060_2463_2590.sgy
991	1241	1438P1061	14381061	PREMIG_SHOTGTH_1438P1061_0991_1241.sgy
1242	1491	1438P1061	14381061	PREMIG_SHOTGTH_1438P1061_1242_1491.sgy
1492	1741	1438P1061	14381061	PREMIG_SHOTGTH_1438P1061_1492_1741.sgy
1742	1991	1438P1061	14381061	PREMIG_SHOTGTH_1438P1061_1742_1991.sgy
1992	2241	1438P1061	14381061	PREMIG_SHOTGTH_1438P1061_1992_2241.sgy
2242	2491	1438P1061	14381061	PREMIG_SHOTGTH_1438P1061_2242_2491.sgy
2492	2622	1438P1061	14381061	PREMIG_SHOTGTH_1438P1061_2492_2622.sgy
1480	1730	1654P1062	16541062	PREMIG_SHOTGTH_1654P1062_1480_1730.sgy
1731	1980	1654P1062	16541062	PREMIG_SHOTGTH_1654P1062_1731_1980.sgy
1981	2230	1654P1062	16541062	PREMIG_SHOTGTH_1654P1062_1981_2230.sgy
2231	2480	1654P1062	16541062	PREMIG_SHOTGTH_1654P1062_2231_2480.sgy
2481	2579	1654P1062	16541062	PREMIG_SHOTGTH_1654P1062_2481_2579.sgy
1009	1259	1450P1063	14501063	PREMIG_SHOTGTH_1450P1063_1009_1259.sgy
1260	1509	1450P1063	14501063	PREMIG_SHOTGTH_1450P1063_1260_1509.sgy
1510	1759	1450P1063	14501063	PREMIG_SHOTGTH_1450P1063_1510_1759.sgy
1760	2009	1450P1063	14501063	PREMIG_SHOTGTH_1450P1063_1760_2009.sgy
2010	2259	1450P1063	14501063	PREMIG_SHOTGTH_1450P1063_2010_2259.sgy
2260	2509	1450P1063	14501063	PREMIG_SHOTGTH_1450P1063_2260_2509.sgy
2510	2611	1450P1063	14501063	PREMIG_SHOTGTH_1450P1063_2510_2611.sgy

FIRST NAVSHOT	LAST NAVSHOT	ORIGINAL SAILLINE	SAILLINE IN SEG-Y	SEG-Y FILE
1499	1749	1666P1064	16661064	PREMIG_SHOTGTH_1666P1064_1499_1749.sgy
1750	1999	1666P1064	16661064	PREMIG_SHOTGTH_1666P1064_1750_1999.sgy
2000	2249	1666P1064	16661064	PREMIG_SHOTGTH_1666P1064_2000_2249.sgy
2250	2499	1666P1064	16661064	PREMIG_SHOTGTH_1666P1064_2250_2499.sgy
2500	2567	1666P1064	16661064	PREMIG_SHOTGTH_1666P1064_2500_2567.sgy
1028	1278	1462P1065	14621065	PREMIG_SHOTGTH_1462P1065_1028_1278.sgy
1279	1528	1462P1065	14621065	PREMIG_SHOTGTH_1462P1065_1279_1528.sgy
1529	1778	1462P1065	14621065	PREMIG_SHOTGTH_1462P1065_1529_1778.sgy
1779	2028	1462P1065	14621065	PREMIG_SHOTGTH_1462P1065_1779_2028.sgy
2029	2278	1462P1065	14621065	PREMIG_SHOTGTH_1462P1065_2029_2278.sgy
2279	2528	1462P1065	14621065	PREMIG_SHOTGTH_1462P1065_2279_2528.sgy
2529	2600	1462P1065	14621065	PREMIG_SHOTGTH_1462P1065_2529_2600.sgy
1517	1767	1678P1066	16781066	PREMIG_SHOTGTH_1678P1066_1517_1767.sgy
1768	2017	1678P1066	16781066	PREMIG_SHOTGTH_1678P1066_1768_2017.sgy
2018	2267	1678P1066	16781066	PREMIG_SHOTGTH_1678P1066_2018_2267.sgy
2268	2517	1678P1066	16781066	PREMIG_SHOTGTH_1678P1066_2268_2517.sgy
2518	2556	1678P1066	16781066	PREMIG_SHOTGTH_1678P1066_2518_2556.sgy
1517	1767	1678F1067	16781067	PREMIG_SHOTGTH_1678F1067_1517_1767.sgy
1768	2017	1678F1067	16781067	PREMIG_SHOTGTH_1678F1067_1768_2017.sgy
2018	2267	1678F1067	16781067	PREMIG_SHOTGTH_1678F1067_2018_2267.sgy
2268	2517	1678F1067	16781067	PREMIG_SHOTGTH_1678F1067_2268_2517.sgy
2518	2556	1678F1067	16781067	PREMIG_SHOTGTH_1678F1067_2518_2556.sgy
1028	1278	1462F1068	14621068	PREMIG_SHOTGTH_1462F1068_1028_1278.sgy
1279	1528	1462F1068	14621068	PREMIG_SHOTGTH_1462F1068_1279_1528.sgy
1529	1778	1462F1068	14621068	PREMIG_SHOTGTH_1462F1068_1529_1778.sgy
1779	2028	1462F1068	14621068	PREMIG_SHOTGTH_1462F1068_1779_2028.sgy
2029	2278	1462F1068	14621068	PREMIG_SHOTGTH_1462F1068_2029_2278.sgy
2279	2528	1462F1068	14621068	PREMIG_SHOTGTH_1462F1068_2279_2528.sgy
2529	2600	1462F1068	14621068	PREMIG_SHOTGTH_1462F1068_2529_2600.sgy
1536	1786	1690P1069	16901069	PREMIG_SHOTGTH_1690P1069_1536_1786.sgy
1787	2036	1690P1069	16901069	PREMIG_SHOTGTH_1690P1069_1787_2036.sgy
2037	2286	1690P1069	16901069	PREMIG_SHOTGTH_1690P1069_2037_2286.sgy
2287	2536	1690P1069	16901069	PREMIG_SHOTGTH_1690P1069_2287_2536.sgy
1046	1296	1474P1070	14741070	PREMIG_SHOTGTH_1474P1070_1046_1296.sgy
1297	1546	1474P1070	14741070	PREMIG_SHOTGTH_1474P1070_1297_1546.sgy
1547	1796	1474P1070	14741070	PREMIG_SHOTGTH_1474P1070_1547_1796.sgy
1797	2046	1474P1070	14741070	PREMIG_SHOTGTH_1474P1070_1797_2046.sgy
2047	2296	1474P1070	14741070	PREMIG_SHOTGTH_1474P1070_2047_2296.sgy
2297	2546	1474P1070	14741070	PREMIG_SHOTGTH_1474P1070_2297_2546.sgy
2547	2588	1474P1070	14741070	PREMIG_SHOTGTH_1474P1070_2547_2588.sgy
1554	1804	1702P2072	17022072	PREMIG_SHOTGTH_1702P2072_1554_1804.sgy

FIRST NAVSHOT	LAST NAVSHOT	ORIGINAL SAILLINE	SAILLINE IN SEG-Y	SEG-Y FILE
1805	2054	1702P2072	17022072	PREMIG_SHOTGTH_1702P2072_1805_2054.sgy
2055	2304	1702P2072	17022072	PREMIG_SHOTGTH_1702P2072_2055_2304.sgy
2305	2534	1702P2072	17022072	PREMIG_SHOTGTH_1702P2072_2305_2534.sgy
1064	1314	1486P1073	14861073	PREMIG_SHOTGTH_1486P1073_1064_1314.sgy
1315	1564	1486P1073	14861073	PREMIG_SHOTGTH_1486P1073_1315_1564.sgy
1565	1814	1486P1073	14861073	PREMIG_SHOTGTH_1486P1073_1565_1814.sgy
1815	2064	1486P1073	14861073	PREMIG_SHOTGTH_1486P1073_1815_2064.sgy
2065	2314	1486P1073	14861073	PREMIG_SHOTGTH_1486P1073_2065_2314.sgy
2315	2564	1486P1073	14861073	PREMIG_SHOTGTH_1486P1073_2315_2564.sgy
1572	1822	1714P1074	17141074	PREMIG_SHOTGTH_1714P1074_1572_1822.sgy
1823	2072	1714P1074	17141074	PREMIG_SHOTGTH_1714P1074_1823_2072.sgy
2073	2322	1714P1074	17141074	PREMIG_SHOTGTH_1714P1074_2073_2322.sgy
2323	2522	1714P1074	17141074	PREMIG_SHOTGTH_1714P1074_2323_2522.sgy
1083	1333	1498P1075	14981075	PREMIG_SHOTGTH_1498P1075_1083_1333.sgy
1334	1583	1498P1075	14981075	PREMIG_SHOTGTH_1498P1075_1334_1583.sgy
1584	1833	1498P1075	14981075	PREMIG_SHOTGTH_1498P1075_1584_1833.sgy
1834	2083	1498P1075	14981075	PREMIG_SHOTGTH_1498P1075_1834_2083.sgy
2084	2333	1498P1075	14981075	PREMIG_SHOTGTH_1498P1075_2084_2333.sgy
2334	2566	1498P1075	14981075	PREMIG_SHOTGTH_1498P1075_2334_2566.sgy
1591	1841	1726P1076	17261076	PREMIG_SHOTGTH_1726P1076_1591_1841.sgy
1842	2091	1726P1076	17261076	PREMIG_SHOTGTH_1726P1076_1842_2091.sgy
2092	2341	1726P1076	17261076	PREMIG_SHOTGTH_1726P1076_2092_2341.sgy
2342	2511	1726P1076	17261076	PREMIG_SHOTGTH_1726P1076_2342_2511.sgy
1101	1351	1510P1077	15101077	PREMIG_SHOTGTH_1510P1077_1101_1351.sgy
1352	1601	1510P1077	15101077	PREMIG_SHOTGTH_1510P1077_1352_1601.sgy
1602	1851	1510P1077	15101077	PREMIG_SHOTGTH_1510P1077_1602_1851.sgy
1852	2101	1510P1077	15101077	PREMIG_SHOTGTH_1510P1077_1852_2101.sgy
2102	2351	1510P1077	15101077	PREMIG_SHOTGTH_1510P1077_2102_2351.sgy
2352	2555	1510P1077	15101077	PREMIG_SHOTGTH_1510P1077_2352_2555.sgy
1609	1859	1738P1078	17381078	PREMIG_SHOTGTH_1738P1078_1609_1859.sgy
1860	2109	1738P1078	17381078	PREMIG_SHOTGTH_1738P1078_1860_2109.sgy
2110	2359	1738P1078	17381078	PREMIG_SHOTGTH_1738P1078_2110_2359.sgy
2360	2500	1738P1078	17381078	PREMIG_SHOTGTH_1738P1078_2360_2500.sgy
1120	1370	1522P1079	15221079	PREMIG_SHOTGTH_1522P1079_1120_1370.sgy
1371	1620	1522P1079	15221079	PREMIG_SHOTGTH_1522P1079_1371_1620.sgy
1621	1870	1522P1079	15221079	PREMIG_SHOTGTH_1522P1079_1621_1870.sgy
1871	2120	1522P1079	15221079	PREMIG_SHOTGTH_1522P1079_1871_2120.sgy
2121	2370	1522P1079	15221079	PREMIG_SHOTGTH_1522P1079_2121_2370.sgy
2371	2543	1522P1079	15221079	PREMIG_SHOTGTH_1522P1079_2371_2543.sgy
1627	1877	1750P1080	17501080	PREMIG_SHOTGTH_1750P1080_1627_1877.sgy
1878	2127	1750P1080	17501080	PREMIG_SHOTGTH_1750P1080_1878_2127.sgy

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2128	2377	1750P1080	17501080	PREMIG_SHOTGTH_1750P1080_2128_2377.sgy
2378	2488	1750P1080	17501080	PREMIG_SHOTGTH_1750P1080_2378_2488.sgy
1138	1388	1534P1081	15341081	PREMIG_SHOTGTH_1534P1081_1138_1388.sgy
1389	1638	1534P1081	15341081	PREMIG_SHOTGTH_1534P1081_1389_1638.sgy
1639	1888	1534P1081	15341081	PREMIG_SHOTGTH_1534P1081_1639_1888.sgy
1889	2138	1534P1081	15341081	PREMIG_SHOTGTH_1534P1081_1889_2138.sgy
2139	2388	1534P1081	15341081	PREMIG_SHOTGTH_1534P1081_2139_2388.sgy
2389	2532	1534P1081	15341081	PREMIG_SHOTGTH_1534P1081_2389_2532.sgy
1646	1896	1762P1082	17621082	PREMIG_SHOTGTH_1762P1082_1646_1896.sgy
1897	2146	1762P1082	17621082	PREMIG_SHOTGTH_1762P1082_1897_2146.sgy
2147	2396	1762P1082	17621082	PREMIG_SHOTGTH_1762P1082_2147_2396.sgy
2397	2477	1762P1082	17621082	PREMIG_SHOTGTH_1762P1082_2397_2477.sgy
1664	1914	1774P1083	17741083	PREMIG_SHOTGTH_1774P1083_1664_1914.sgy
1915	2164	1774P1083	17741083	PREMIG_SHOTGTH_1774P1083_1915_2164.sgy
2165	2414	1774P1083	17741083	PREMIG_SHOTGTH_1774P1083_2165_2414.sgy
2415	2466	1774P1083	17741083	PREMIG_SHOTGTH_1774P1083_2415_2466.sgy
1156	1406	1546P1084	15461084	PREMIG_SHOTGTH_1546P1084_1156_1406.sgy
1407	1656	1546P1084	15461084	PREMIG_SHOTGTH_1546P1084_1407_1656.sgy
1657	1906	1546P1084	15461084	PREMIG_SHOTGTH_1546P1084_1657_1906.sgy
1907	2156	1546P1084	15461084	PREMIG_SHOTGTH_1546P1084_1907_2156.sgy
2157	2406	1546P1084	15461084	PREMIG_SHOTGTH_1546P1084_2157_2406.sgy
2407	2521	1546P1084	15461084	PREMIG_SHOTGTH_1546P1084_2407_2521.sgy
1425	1675	1618P1085	16181085	PREMIG_SHOTGTH_1618P1085_1425_1675.sgy
1676	1925	1618P1085	16181085	PREMIG_SHOTGTH_1618P1085_1676_1925.sgy
1926	2175	1618P1085	16181085	PREMIG_SHOTGTH_1618P1085_1926_2175.sgy
2176	2425	1618P1085	16181085	PREMIG_SHOTGTH_1618P1085_2176_2425.sgy
2426	2612	1618P1085	16181085	PREMIG_SHOTGTH_1618P1085_2426_2612.sgy
1175	1425	1558P1086	15581086	PREMIG_SHOTGTH_1558P1086_1175_1425.sgy
1426	1675	1558P1086	15581086	PREMIG_SHOTGTH_1558P1086_1426_1675.sgy
1676	1925	1558P1086	15581086	PREMIG_SHOTGTH_1558P1086_1676_1925.sgy
1926	2175	1558P1086	15581086	PREMIG_SHOTGTH_1558P1086_1926_2175.sgy
2176	2425	1558P1086	15581086	PREMIG_SHOTGTH_1558P1086_2176_2425.sgy
2426	2510	1558P1086	15581086	PREMIG_SHOTGTH_1558P1086_2426_2510.sgy
1682	1932	1786P1087	17861087	PREMIG_SHOTGTH_1786P1087_1682_1932.sgy
1933	2182	1786P1087	17861087	PREMIG_SHOTGTH_1786P1087_1933_2182.sgy
2183	2432	1786P1087	17861087	PREMIG_SHOTGTH_1786P1087_2183_2432.sgy
1193	1443	1570P1088	15701088	PREMIG_SHOTGTH_1570P1088_1193_1443.sgy
1444	1693	1570P1088	15701088	PREMIG_SHOTGTH_1570P1088_1444_1693.sgy
1694	1943	1570P1088	15701088	PREMIG_SHOTGTH_1570P1088_1694_1943.sgy
1944	2193	1570P1088	15701088	PREMIG_SHOTGTH_1570P1088_1944_2193.sgy
2194	2443	1570P1088	15701088	PREMIG_SHOTGTH_1570P1088_2194_2443.sgy

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2444	2498	1570P1088	15701088	PREMIG_SHOTGTH_1570P1088_2444_2498.sgy
1701	1951	1798P1089	17981089	PREMIG_SHOTGTH_1798P1089_1701_1951.sgy
1952	2201	1798P1089	17981089	PREMIG_SHOTGTH_1798P1089_1952_2201.sgy
2202	2443	1798P1089	17981089	PREMIG_SHOTGTH_1798P1089_2202_2443.sgy
1211	1461	1582P1090	15821090	PREMIG_SHOTGTH_1582P1090_1211_1461.sgy
1462	1711	1582P1090	15821090	PREMIG_SHOTGTH_1582P1090_1462_1711.sgy
1712	1961	1582P1090	15821090	PREMIG_SHOTGTH_1582P1090_1712_1961.sgy
1962	2211	1582P1090	15821090	PREMIG_SHOTGTH_1582P1090_1962_2211.sgy
2212	2461	1582P1090	15821090	PREMIG_SHOTGTH_1582P1090_2212_2461.sgy
2462	2487	1582P1090	15821090	PREMIG_SHOTGTH_1582P1090_2462_2487.sgy
1719	1969	1810P1091	18101091	PREMIG_SHOTGTH_1810P1091_1719_1969.sgy
1970	2219	1810P1091	18101091	PREMIG_SHOTGTH_1810P1091_1970_2219.sgy
2220	2432	1810P1091	18101091	PREMIG_SHOTGTH_1810P1091_2220_2432.sgy
1230	1480	1594P1092	15941092	PREMIG_SHOTGTH_1594P1092_1230_1480.sgy
1481	1730	1594P1092	15941092	PREMIG_SHOTGTH_1594P1092_1481_1730.sgy
1731	1980	1594P1092	15941092	PREMIG_SHOTGTH_1594P1092_1731_1980.sgy
1981	2230	1594P1092	15941092	PREMIG_SHOTGTH_1594P1092_1981_2230.sgy
2231	2476	1594P1092	15941092	PREMIG_SHOTGTH_1594P1092_2231_2476.sgy
1719	1969	1810F1093	18101093	PREMIG_SHOTGTH_1810F1093_1719_1969.sgy
1970	2219	1810F1093	18101093	PREMIG_SHOTGTH_1810F1093_1970_2219.sgy
2220	2432	1810F1093	18101093	PREMIG_SHOTGTH_1810F1093_2220_2432.sgy
1248	1498	1606P1094	16061094	PREMIG_SHOTGTH_1606P1094_1248_1498.sgy
1499	1748	1606P1094	16061094	PREMIG_SHOTGTH_1606P1094_1499_1748.sgy
1749	1998	1606P1094	16061094	PREMIG_SHOTGTH_1606P1094_1749_1998.sgy
1999	2248	1606P1094	16061094	PREMIG_SHOTGTH_1606P1094_1999_2248.sgy
2249	2465	1606P1094	16061094	PREMIG_SHOTGTH_1606P1094_2249_2465.sgy
1499	1749	1666F1095	16661095	PREMIG_SHOTGTH_1666F1095_1499_1749.sgy
1750	1999	1666F1095	16661095	PREMIG_SHOTGTH_1666F1095_1750_1999.sgy
2000	2249	1666F1095	16661095	PREMIG_SHOTGTH_1666F1095_2000_2249.sgy
2250	2499	1666F1095	16661095	PREMIG_SHOTGTH_1666F1095_2250_2499.sgy
2500	2567	1666F1095	16661095	PREMIG_SHOTGTH_1666F1095_2500_2567.sgy
1248	1498	1606F1096	16061096	PREMIG_SHOTGTH_1606F1096_1248_1498.sgy
1499	1748	1606F1096	16061096	PREMIG_SHOTGTH_1606F1096_1499_1748.sgy
1749	1998	1606F1096	16061096	PREMIG_SHOTGTH_1606F1096_1749_1998.sgy
1999	2248	1606F1096	16061096	PREMIG_SHOTGTH_1606F1096_1999_2248.sgy
2249	2465	1606F1096	16061096	PREMIG_SHOTGTH_1606F1096_2249_2465.sgy
1554	1804	1702F1097	17021097	PREMIG_SHOTGTH_1702F1097_1554_1804.sgy
1805	2054	1702F1097	17021097	PREMIG_SHOTGTH_1702F1097_1805_2054.sgy
2055	2304	1702F1097	17021097	PREMIG_SHOTGTH_1702F1097_2055_2304.sgy
2305	2534	1702F1097	17021097	PREMIG_SHOTGTH_1702F1097_2305_2534.sgy
1248	1498	1606F2098	16062098	PREMIG_SHOTGTH_1606F2098_1248_1498.sgy

FIRST NAVSHOT	LAST NAVSHOT	ORIGINAL SAILLINE	SAILLINE IN SEG-Y	SEG-Y FILE
1499	1748	1606F2098	16062098	PREMIG_SHOTGTH_1606F2098_1499_1748.sgy
1749	1998	1606F2098	16062098	PREMIG_SHOTGTH_1606F2098_1749_1998.sgy
1999	2248	1606F2098	16062098	PREMIG_SHOTGTH_1606F2098_1999_2248.sgy
2249	2465	1606F2098	16062098	PREMIG_SHOTGTH_1606F2098_2249_2465.sgy
1002	1252	1210F3099	12103099	PREMIG_SHOTGTH_1210F3099_1002_1252.sgy
1253	1502	1210F3099	12103099	PREMIG_SHOTGTH_1210F3099_1253_1502.sgy
1503	1676	1210F3099	12103099	PREMIG_SHOTGTH_1210F3099_1503_1676.sgy
1819	1996	1510R1100	15101100	PREMIG_SHOTGTH_1510R1100_1819_1996.sgy
1967	2126	1270R1101	12701101	PREMIG_SHOTGTH_1270R1101_1967_2126.sgy
2488	2692	1090F3102	10903102	PREMIG_SHOTGTH_1090F3102_2488_2692.sgy
2032	2282	1114F1103	11141103	PREMIG_SHOTGTH_1114F1103_2032_2282.sgy
2283	2532	1114F1103	11141103	PREMIG_SHOTGTH_1114F1103_2283_2532.sgy
2533	2692	1114F1103	11141103	PREMIG_SHOTGTH_1114F1103_2533_2692.sgy

B.2 PSTM GATHERS IN SEG-Y FORMAT – 1 USB DISK

CLIENT	:	TAP (SHELFAL) AUSTRALIA PTY LTD
PROJECT	:	T/47P LABATT 3D PSTM
PROCESS CONTRACTOR	:	VERITAS GEOPHYSICAL (ASIA PACIFIC) PTE. LTD
PROCESS	:	POST-MIGRATION RADON DEMULTIPLE GATHER
FORMAT	:	SEG-Y / USB MOBILE DISK WINDOWS FORMAT
GRID	:	12.5 M X 25 M
MAXTIME	:	6000MSEC
TIME INTERVAL	:	4MSEC
DOMAIN	:	TIME
MEDIA TYPE	:	USB MOBILE DISK
DATE	:	SEP 2008

SEG-Y TRACE HEADERS INFORMATION:

HEADERS	BYTE LOCATIONS
CDP	BYTES 21 – 24
TRSEQ	BYTES 25 – 28
FOLD	BYTES 31 – 32
OFFSET	BYTES 37 – 40
WDEPTH	BYTES 61 – 64 (MULTIPLIED BY 10)
SSD CORRECTION	BYTES 91 – 92
OFFSET WEIGHTING	BYTES 95 – 98 (MULTIPLIED BY 1000)
AMUTE05	BYTES 141 – 144 (ANGLE MUTE 5 DEGREE)
AMUTE10	BYTES 145 – 148 (ANGLE MUTE 10 DEGREE)
AMUTE15	BYTES 149 – 152 (ANGLE MUTE 15 DEGREE)
AMUTE20	BYTES 153 – 156 (ANGLE MUTE 20 DEGREE)
AMUTE25	BYTES 157 – 160 (ANGLE MUTE 25 DEGREE)
AMUTE30	BYTES 161 – 164 (ANGLE MUTE 30 DEGREE)
AMUTE35	BYTES 165 – 168 (ANGLE MUTE 35 DEGREE)
AMUTE40	BYTES 169 – 172 (ANGLE MUTE 40 DEGREE)
AMUTE45	BYTES 173 – 176 (ANGLE MUTE 45 DEGREE)
AMUTE50	BYTES 177 – 180 (ANGLE MUTE 50 DEGREE)
CDPX	BYTES 125 – 128 (MULTIPLIED BY 100)
CDPY	BYTES 129 – 132 (MULTIPLIED BY 100)
INLINE	BYTES 181 – 184
CROSSLINE	BYTES 185 – 188

Final Delivery Of post-migration radon demultiple gather (USB windows format).
USB mobile disks containing the POST-MIGRATION RADON DEMULTIPLE GATHER in SEG-Y format

Grid : 12.5M x 25 M
Time Interval : 4MSEC
MaxTime : 6000MSEC

NO.	THE RANGE OF INLINE	SEG-Y FILE
1	1006_1010	POST_MIGRATION_GATHER_IL1006-1010.sgy
2	1011_1012	POST_MIGRATION_GATHER_IL1011-1012.sgy
3	1013_1014	POST_MIGRATION_GATHER_IL1013-1014.sgy
4	1015_1016	POST_MIGRATION_GATHER_IL1015-1016.sgy
5	1017_1018	POST_MIGRATION_GATHER_IL1017-1018.sgy
6	1019_1020	POST_MIGRATION_GATHER_IL1019-1020.sgy
7	1021_1022	POST_MIGRATION_GATHER_IL1021-1022.sgy
8	1023_1024	POST_MIGRATION_GATHER_IL1023-1024.sgy
9	1025_1026	POST_MIGRATION_GATHER_IL1025-1026.sgy
10	1027_1028	POST_MIGRATION_GATHER_IL1027-1028.sgy
11	1029_1030	POST_MIGRATION_GATHER_IL1029-1030.sgy
12	1031_1032	POST_MIGRATION_GATHER_IL1031-1032.sgy
13	1033_1034	POST_MIGRATION_GATHER_IL1033-1034.sgy
14	1035_1036	POST_MIGRATION_GATHER_IL1035-1036.sgy
15	1037_1038	POST_MIGRATION_GATHER_IL1037-1038.sgy
16	1039_1040	POST_MIGRATION_GATHER_IL1039-1040.sgy
17	1041_1042	POST_MIGRATION_GATHER_IL1041-1042.sgy
18	1043_1044	POST_MIGRATION_GATHER_IL1043-1044.sgy
19	1045_1046	POST_MIGRATION_GATHER_IL1045-1046.sgy
20	1047_1048	POST_MIGRATION_GATHER_IL1047-1048.sgy
21	1049_1050	POST_MIGRATION_GATHER_IL1049-1050.sgy
22	1051_1052	POST_MIGRATION_GATHER_IL1051-1052.sgy
23	1053_1054	POST_MIGRATION_GATHER_IL1053-1054.sgy
24	1055_1056	POST_MIGRATION_GATHER_IL1055-1056.sgy
25	1057_1058	POST_MIGRATION_GATHER_IL1057-1058.sgy
26	1059_1060	POST_MIGRATION_GATHER_IL1059-1060.sgy
27	1061_1062	POST_MIGRATION_GATHER_IL1061-1062.sgy
28	1063_1064	POST_MIGRATION_GATHER_IL1063-1064.sgy
29	1065_1066	POST_MIGRATION_GATHER_IL1065-1066.sgy
30	1067_1068	POST_MIGRATION_GATHER_IL1067-1068.sgy
31	1069_1070	POST_MIGRATION_GATHER_IL1069-1070.sgy
32	1071_1072	POST_MIGRATION_GATHER_IL1071-1072.sgy
33	1073_1074	POST_MIGRATION_GATHER_IL1073-1074.sgy
34	1075_1076	POST_MIGRATION_GATHER_IL1075-1076.sgy
35	1077_1078	POST_MIGRATION_GATHER_IL1077-1078.sgy
36	1079_1080	POST_MIGRATION_GATHER_IL1079-1080.sgy

NO.	THE RANGE OF INLINE	SEG-Y FILE
37	1081_1082	POST_MIGRATION_GATHER_IL1081-1082.sgy
38	1083_1084	POST_MIGRATION_GATHER_IL1083-1084.sgy
39	1085_1086	POST_MIGRATION_GATHER_IL1085-1086.sgy
40	1087_1088	POST_MIGRATION_GATHER_IL1087-1088.sgy
41	1089_1090	POST_MIGRATION_GATHER_IL1089-1090.sgy
42	1091_1092	POST_MIGRATION_GATHER_IL1091-1092.sgy
43	1093_1094	POST_MIGRATION_GATHER_IL1093-1094.sgy
44	1095_1096	POST_MIGRATION_GATHER_IL1095-1096.sgy
45	1097_1098	POST_MIGRATION_GATHER_IL1097-1098.sgy
46	1099_1100	POST_MIGRATION_GATHER_IL1099-1100.sgy
47	1101_1102	POST_MIGRATION_GATHER_IL1101-1102.sgy
48	1103_1104	POST_MIGRATION_GATHER_IL1103-1104.sgy
49	1105_1106	POST_MIGRATION_GATHER_IL1105-1106.sgy
50	1107_1108	POST_MIGRATION_GATHER_IL1107-1108.sgy
51	1109_1110	POST_MIGRATION_GATHER_IL1109-1110.sgy
52	1111_1112	POST_MIGRATION_GATHER_IL1111-1112.sgy
53	1113_1114	POST_MIGRATION_GATHER_IL1113-1114.sgy
54	1115_1116	POST_MIGRATION_GATHER_IL1115-1116.sgy
55	1117_1118	POST_MIGRATION_GATHER_IL1117-1118.sgy
56	1119_1120	POST_MIGRATION_GATHER_IL1119-1120.sgy
57	1121_1122	POST_MIGRATION_GATHER_IL1121-1122.sgy
58	1123_1124	POST_MIGRATION_GATHER_IL1123-1124.sgy
59	1125_1126	POST_MIGRATION_GATHER_IL1125-1126.sgy
60	1127_1128	POST_MIGRATION_GATHER_IL1127-1128.sgy
61	1129_1130	POST_MIGRATION_GATHER_IL1129-1130.sgy
62	1131_1132	POST_MIGRATION_GATHER_IL1131-1132.sgy
63	1133_1134	POST_MIGRATION_GATHER_IL1133-1134.sgy
64	1135_1136	POST_MIGRATION_GATHER_IL1135-1136.sgy
65	1137_1138	POST_MIGRATION_GATHER_IL1137-1138.sgy
66	1139_1140	POST_MIGRATION_GATHER_IL1139-1140.sgy
67	1141_1142	POST_MIGRATION_GATHER_IL1141-1142.sgy
68	1143_1144	POST_MIGRATION_GATHER_IL1143-1144.sgy
69	1145_1146	POST_MIGRATION_GATHER_IL1145-1146.sgy
70	1147_1148	POST_MIGRATION_GATHER_IL1147-1148.sgy
71	1149_1150	POST_MIGRATION_GATHER_IL1149-1150.sgy
72	1151_1152	POST_MIGRATION_GATHER_IL1151-1152.sgy
73	1153_1154	POST_MIGRATION_GATHER_IL1153-1154.sgy
74	1155_1156	POST_MIGRATION_GATHER_IL1155-1156.sgy
75	1157_1158	POST_MIGRATION_GATHER_IL1157-1158.sgy
76	1159_1160	POST_MIGRATION_GATHER_IL1159-1160.sgy
77	1161_1162	POST_MIGRATION_GATHER_IL1161-1162.sgy

NO.	THE RANGE OF INLINE	SEG-Y FILE
78	1163_1164	POST_MIGRATION_GATHER_IL1163-1164.sgy
79	1165_1166	POST_MIGRATION_GATHER_IL1165-1166.sgy
80	1167_1168	POST_MIGRATION_GATHER_IL1167-1168.sgy
81	1169_1170	POST_MIGRATION_GATHER_IL1169-1170.sgy
82	1171_1172	POST_MIGRATION_GATHER_IL1171-1172.sgy
83	1173_1174	POST_MIGRATION_GATHER_IL1173-1174.sgy
84	1175_1176	POST_MIGRATION_GATHER_IL1175-1176.sgy
85	1177_1178	POST_MIGRATION_GATHER_IL1177-1178.sgy
86	1179_1180	POST_MIGRATION_GATHER_IL1179-1180.sgy
87	1181_1182	POST_MIGRATION_GATHER_IL1181-1182.sgy
88	1183_1184	POST_MIGRATION_GATHER_IL1183-1184.sgy
89	1185_1186	POST_MIGRATION_GATHER_IL1185-1186.sgy
90	1187_1188	POST_MIGRATION_GATHER_IL1187-1188.sgy
91	1189_1190	POST_MIGRATION_GATHER_IL1189-1190.sgy
92	1191_1192	POST_MIGRATION_GATHER_IL1191-1192.sgy
93	1193_1194	POST_MIGRATION_GATHER_IL1193-1194.sgy
94	1195_1196	POST_MIGRATION_GATHER_IL1195-1196.sgy
95	1197_1198	POST_MIGRATION_GATHER_IL1197-1198.sgy
96	1199_1200	POST_MIGRATION_GATHER_IL1199-1200.sgy
97	1201_1202	POST_MIGRATION_GATHER_IL1201-1202.sgy
98	1203_1204	POST_MIGRATION_GATHER_IL1203-1204.sgy
99	1205_1206	POST_MIGRATION_GATHER_IL1205-1206.sgy
100	1207_1208	POST_MIGRATION_GATHER_IL1207-1208.sgy
101	1209_1210	POST_MIGRATION_GATHER_IL1209-1210.sgy
102	1211_1212	POST_MIGRATION_GATHER_IL1211-1212.sgy
103	1213_1214	POST_MIGRATION_GATHER_IL1213-1214.sgy
104	1215_1216	POST_MIGRATION_GATHER_IL1215-1216.sgy
105	1217_1218	POST_MIGRATION_GATHER_IL1217-1218.sgy
106	1219_1220	POST_MIGRATION_GATHER_IL1219-1220.sgy
107	1221_1222	POST_MIGRATION_GATHER_IL1221-1222.sgy
108	1223_1224	POST_MIGRATION_GATHER_IL1223-1224.sgy
109	1225_1226	POST_MIGRATION_GATHER_IL1225-1226.sgy
110	1227_1228	POST_MIGRATION_GATHER_IL1227-1228.sgy
111	1229_1230	POST_MIGRATION_GATHER_IL1229-1230.sgy
112	1231_1232	POST_MIGRATION_GATHER_IL1231-1232.sgy
113	1233_1234	POST_MIGRATION_GATHER_IL1233-1234.sgy
114	1235_1236	POST_MIGRATION_GATHER_IL1235-1236.sgy
115	1237_1238	POST_MIGRATION_GATHER_IL1237-1238.sgy
116	1239_1240	POST_MIGRATION_GATHER_IL1239-1240.sgy
117	1241_1242	POST_MIGRATION_GATHER_IL1241-1242.sgy
118	1243_1244	POST_MIGRATION_GATHER_IL1243-1244.sgy

NO.	THE RANGE OF INLINE	SEG-Y FILE
119	1245_1246	POST_MIGRATION_GATHER_IL1245-1246.sgy
120	1247_1248	POST_MIGRATION_GATHER_IL1247-1248.sgy
121	1249_1250	POST_MIGRATION_GATHER_IL1249-1250.sgy
122	1251_1252	POST_MIGRATION_GATHER_IL1251-1252.sgy
123	1253_1254	POST_MIGRATION_GATHER_IL1253-1254.sgy
124	1255_1256	POST_MIGRATION_GATHER_IL1255-1256.sgy
125	1257_1258	POST_MIGRATION_GATHER_IL1257-1258.sgy
126	1259_1260	POST_MIGRATION_GATHER_IL1259-1260.sgy
127	1261_1262	POST_MIGRATION_GATHER_IL1261-1262.sgy
128	1263_1264	POST_MIGRATION_GATHER_IL1263-1264.sgy
129	1265_1266	POST_MIGRATION_GATHER_IL1265-1266.sgy
130	1267_1268	POST_MIGRATION_GATHER_IL1267-1268.sgy
131	1269_1270	POST_MIGRATION_GATHER_IL1269-1270.sgy
132	1271_1272	POST_MIGRATION_GATHER_IL1271-1272.sgy
133	1273_1274	POST_MIGRATION_GATHER_IL1273-1274.sgy
134	1275_1276	POST_MIGRATION_GATHER_IL1275-1276.sgy
135	1277_1278	POST_MIGRATION_GATHER_IL1277-1278.sgy
136	1279_1280	POST_MIGRATION_GATHER_IL1279-1280.sgy
137	1281_1282	POST_MIGRATION_GATHER_IL1281-1282.sgy
138	1283_1284	POST_MIGRATION_GATHER_IL1283-1284.sgy
139	1285_1286	POST_MIGRATION_GATHER_IL1285-1286.sgy
140	1287_1288	POST_MIGRATION_GATHER_IL1287-1288.sgy
141	1289_1290	POST_MIGRATION_GATHER_IL1289-1290.sgy
142	1291_1292	POST_MIGRATION_GATHER_IL1291-1292.sgy
143	1293_1294	POST_MIGRATION_GATHER_IL1293-1294.sgy
144	1295_1296	POST_MIGRATION_GATHER_IL1295-1296.sgy
145	1297_1298	POST_MIGRATION_GATHER_IL1297-1298.sgy
146	1299_1300	POST_MIGRATION_GATHER_IL1299-1300.sgy
147	1301_1302	POST_MIGRATION_GATHER_IL1301-1302.sgy
148	1303_1304	POST_MIGRATION_GATHER_IL1303-1304.sgy
149	1305_1306	POST_MIGRATION_GATHER_IL1305-1306.sgy
150	1307_1308	POST_MIGRATION_GATHER_IL1307-1308.sgy
151	1309_1310	POST_MIGRATION_GATHER_IL1309-1310.sgy
152	1311_1312	POST_MIGRATION_GATHER_IL1311-1312.sgy
153	1313_1314	POST_MIGRATION_GATHER_IL1313-1314.sgy
154	1315_1316	POST_MIGRATION_GATHER_IL1315-1316.sgy
155	1317_1318	POST_MIGRATION_GATHER_IL1317-1318.sgy
156	1319_1320	POST_MIGRATION_GATHER_IL1319-1320.sgy
157	1321_1322	POST_MIGRATION_GATHER_IL1321-1322.sgy
158	1323_1324	POST_MIGRATION_GATHER_IL1323-1324.sgy
159	1325_1326	POST_MIGRATION_GATHER_IL1325-1326.sgy

NO.	THE RANGE OF INLINE	SEG -Y FILE
160	1327_1328	POST_MIGRATION_GATHER_IL1327-1328.sgy
161	1329_1330	POST_MIGRATION_GATHER_IL1329-1330.sgy
162	1331_1332	POST_MIGRATION_GATHER_IL1331-1332.sgy
163	1333_1334	POST_MIGRATION_GATHER_IL1333-1334.sgy
164	1335_1336	POST_MIGRATION_GATHER_IL1335-1336.sgy
165	1337_1338	POST_MIGRATION_GATHER_IL1337-1338.sgy
166	1339_1340	POST_MIGRATION_GATHER_IL1339-1340.sgy
167	1341_1342	POST_MIGRATION_GATHER_IL1341-1342.sgy
168	1343_1344	POST_MIGRATION_GATHER_IL1343-1344.sgy
169	1345_1346	POST_MIGRATION_GATHER_IL1345-1346.sgy
170	1347_1348	POST_MIGRATION_GATHER_IL1347-1348.sgy
171	1349_1350	POST_MIGRATION_GATHER_IL1349-1350.sgy
172	1351_1352	POST_MIGRATION_GATHER_IL1351-1352.sgy
173	1353_1354	POST_MIGRATION_GATHER_IL1353-1354.sgy
174	1355_1356	POST_MIGRATION_GATHER_IL1355-1356.sgy
175	1357_1358	POST_MIGRATION_GATHER_IL1357-1358.sgy
176	1359_1360	POST_MIGRATION_GATHER_IL1359-1360.sgy
177	1361_1362	POST_MIGRATION_GATHER_IL1361-1362.sgy
178	1363_1364	POST_MIGRATION_GATHER_IL1363-1364.sgy
179	1365_1366	POST_MIGRATION_GATHER_IL1365-1366.sgy
180	1367_1368	POST_MIGRATION_GATHER_IL1367-1368.sgy
181	1369_1370	POST_MIGRATION_GATHER_IL1369-1370.sgy
182	1371_1372	POST_MIGRATION_GATHER_IL1371-1372.sgy
183	1373_1374	POST_MIGRATION_GATHER_IL1373-1374.sgy
184	1375_1376	POST_MIGRATION_GATHER_IL1375-1376.sgy
185	1377_1378	POST_MIGRATION_GATHER_IL1377-1378.sgy
186	1379_1380	POST_MIGRATION_GATHER_IL1379-1380.sgy
187	1381_1382	POST_MIGRATION_GATHER_IL1381-1382.sgy
188	1383_1384	POST_MIGRATION_GATHER_IL1383-1384.sgy
189	1385_1386	POST_MIGRATION_GATHER_IL1385-1386.sgy
190	1387_1388	POST_MIGRATION_GATHER_IL1387-1388.sgy
191	1389_1390	POST_MIGRATION_GATHER_IL1389-1390.sgy
192	1391_1392	POST_MIGRATION_GATHER_IL1391-1392.sgy
193	1393_1394	POST_MIGRATION_GATHER_IL1393-1394.sgy
194	1395_1396	POST_MIGRATION_GATHER_IL1395-1396.sgy
195	1397_1398	POST_MIGRATION_GATHER_IL1397-1398.sgy
196	1399_1400	POST_MIGRATION_GATHER_IL1399-1400.sgy
197	1401_1402	POST_MIGRATION_GATHER_IL1401-1402.sgy
198	1403_1404	POST_MIGRATION_GATHER_IL1403-1404.sgy
199	1405_1406	POST_MIGRATION_GATHER_IL1405-1406.sgy
200	1407_1408	POST_MIGRATION_GATHER_IL1407-1408.sgy

NO.	THE RANGE OF INLINE	SEG-Y FILE
201	1409_1410	POST_MIGRATION_GATHER_IL1409-1410.sgy
202	1411_1412	POST_MIGRATION_GATHER_IL1411-1412.sgy
203	1413_1414	POST_MIGRATION_GATHER_IL1413-1414.sgy
204	1415_1416	POST_MIGRATION_GATHER_IL1415-1416.sgy
205	1417_1418	POST_MIGRATION_GATHER_IL1417-1418.sgy
206	1419_1420	POST_MIGRATION_GATHER_IL1419-1420.sgy
207	1421_1422	POST_MIGRATION_GATHER_IL1421-1422.sgy
208	1423_1424	POST_MIGRATION_GATHER_IL1423-1424.sgy
209	1425_1426	POST_MIGRATION_GATHER_IL1425-1426.sgy
210	1427_1428	POST_MIGRATION_GATHER_IL1427-1428.sgy
211	1429_1430	POST_MIGRATION_GATHER_IL1429-1430.sgy
212	1431_1432	POST_MIGRATION_GATHER_IL1431-1432.sgy
213	1433_1434	POST_MIGRATION_GATHER_IL1433-1434.sgy
214	1435_1436	POST_MIGRATION_GATHER_IL1435-1436.sgy
215	1437_1438	POST_MIGRATION_GATHER_IL1437-1438.sgy
216	1439_1440	POST_MIGRATION_GATHER_IL1439-1440.sgy
217	1441_1442	POST_MIGRATION_GATHER_IL1441-1442.sgy
218	1443_1444	POST_MIGRATION_GATHER_IL1443-1444.sgy
219	1445_1446	POST_MIGRATION_GATHER_IL1445-1446.sgy
220	1447_1448	POST_MIGRATION_GATHER_IL1447-1448.sgy
221	1449_1450	POST_MIGRATION_GATHER_IL1449-1450.sgy
222	1451_1452	POST_MIGRATION_GATHER_IL1451-1452.sgy
223	1453_1454	POST_MIGRATION_GATHER_IL1453-1454.sgy
224	1455_1456	POST_MIGRATION_GATHER_IL1455-1456.sgy
225	1457_1458	POST_MIGRATION_GATHER_IL1457-1458.sgy
226	1459_1460	POST_MIGRATION_GATHER_IL1459-1460.sgy
227	1461_1462	POST_MIGRATION_GATHER_IL1461-1462.sgy
228	1463_1464	POST_MIGRATION_GATHER_IL1463-1464.sgy
229	1465_1466	POST_MIGRATION_GATHER_IL1465-1466.sgy
230	1467_1468	POST_MIGRATION_GATHER_IL1467-1468.sgy
231	1469_1470	POST_MIGRATION_GATHER_IL1469-1470.sgy
232	1471_1472	POST_MIGRATION_GATHER_IL1471-1472.sgy
233	1473_1474	POST_MIGRATION_GATHER_IL1473-1474.sgy
234	1475_1476	POST_MIGRATION_GATHER_IL1475-1476.sgy
235	1477_1478	POST_MIGRATION_GATHER_IL1477-1478.sgy
236	1479_1480	POST_MIGRATION_GATHER_IL1479-1480.sgy
237	1481_1482	POST_MIGRATION_GATHER_IL1481-1482.sgy
238	1483_1484	POST_MIGRATION_GATHER_IL1483-1484.sgy
239	1485_1486	POST_MIGRATION_GATHER_IL1485-1486.sgy
240	1487_1488	POST_MIGRATION_GATHER_IL1487-1488.sgy
241	1489_1490	POST_MIGRATION_GATHER_IL1489-1490.sgy

NO.	THE RANGE OF INLINE	SEG-Y FILE
242	1491_1492	POST_MIGRATION_GATHER_IL1491-1492.sgy
243	1493_1494	POST_MIGRATION_GATHER_IL1493-1494.sgy
244	1495_1496	POST_MIGRATION_GATHER_IL1495-1496.sgy
245	1497_1498	POST_MIGRATION_GATHER_IL1497-1498.sgy
246	1499_1500	POST_MIGRATION_GATHER_IL1499-1500.sgy
247	1501_1502	POST_MIGRATION_GATHER_IL1501-1502.sgy
248	1503_1504	POST_MIGRATION_GATHER_IL1503-1504.sgy
249	1505_1506	POST_MIGRATION_GATHER_IL1505-1506.sgy
250	1507_1508	POST_MIGRATION_GATHER_IL1507-1508.sgy
251	1509_1510	POST_MIGRATION_GATHER_IL1509-1510.sgy
252	1511_1512	POST_MIGRATION_GATHER_IL1511-1512.sgy
253	1513_1514	POST_MIGRATION_GATHER_IL1513-1514.sgy
254	1515_1516	POST_MIGRATION_GATHER_IL1515-1516.sgy
255	1517_1518	POST_MIGRATION_GATHER_IL1517-1518.sgy
256	1519_1520	POST_MIGRATION_GATHER_IL1519-1520.sgy
257	1521_1522	POST_MIGRATION_GATHER_IL1521-1522.sgy
258	1523_1524	POST_MIGRATION_GATHER_IL1523-1524.sgy
259	1525_1526	POST_MIGRATION_GATHER_IL1525-1526.sgy
260	1527_1528	POST_MIGRATION_GATHER_IL1527-1528.sgy
261	1529_1530	POST_MIGRATION_GATHER_IL1529-1530.sgy
262	1531_1532	POST_MIGRATION_GATHER_IL1531-1532.sgy
263	1533_1534	POST_MIGRATION_GATHER_IL1533-1534.sgy
264	1535_1536	POST_MIGRATION_GATHER_IL1535-1536.sgy
265	1537_1538	POST_MIGRATION_GATHER_IL1537-1538.sgy
266	1539_1540	POST_MIGRATION_GATHER_IL1539-1540.sgy
267	1541_1542	POST_MIGRATION_GATHER_IL1541-1542.sgy
268	1543_1544	POST_MIGRATION_GATHER_IL1543-1544.sgy
269	1545_1546	POST_MIGRATION_GATHER_IL1545-1546.sgy
270	1547_1548	POST_MIGRATION_GATHER_IL1547-1548.sgy
271	1549_1550	POST_MIGRATION_GATHER_IL1549-1550.sgy
272	1551_1552	POST_MIGRATION_GATHER_IL1551-1552.sgy
273	1553_1554	POST_MIGRATION_GATHER_IL1553-1554.sgy
274	1555_1556	POST_MIGRATION_GATHER_IL1555-1556.sgy
275	1557_1558	POST_MIGRATION_GATHER_IL1557-1558.sgy
276	1559_1560	POST_MIGRATION_GATHER_IL1559-1560.sgy
277	1561_1562	POST_MIGRATION_GATHER_IL1561-1562.sgy
278	1563_1564	POST_MIGRATION_GATHER_IL1563-1564.sgy
279	1565_1566	POST_MIGRATION_GATHER_IL1565-1566.sgy
280	1567_1568	POST_MIGRATION_GATHER_IL1567-1568.sgy
281	1569_1570	POST_MIGRATION_GATHER_IL1569-1570.sgy
282	1571_1572	POST_MIGRATION_GATHER_IL1571-1572.sgy

NO.	THE RANGE OF INLINE	SEG-Y FILE
283	1573_1574	POST_MIGRATION_GATHER_IL1573-1574.sgy
284	1575_1576	POST_MIGRATION_GATHER_IL1575-1576.sgy
285	1577_1578	POST_MIGRATION_GATHER_IL1577-1578.sgy
286	1579_1580	POST_MIGRATION_GATHER_IL1579-1580.sgy
287	1581_1582	POST_MIGRATION_GATHER_IL1581-1582.sgy
288	1583_1584	POST_MIGRATION_GATHER_IL1583-1584.sgy
289	1585_1586	POST_MIGRATION_GATHER_IL1585-1586.sgy
290	1587_1588	POST_MIGRATION_GATHER_IL1587-1588.sgy
291	1589_1590	POST_MIGRATION_GATHER_IL1589-1590.sgy
292	1591_1592	POST_MIGRATION_GATHER_IL1591-1592.sgy
293	1593_1594	POST_MIGRATION_GATHER_IL1593-1594.sgy
294	1595_1596	POST_MIGRATION_GATHER_IL1595-1596.sgy
295	1597_1598	POST_MIGRATION_GATHER_IL1597-1598.sgy
296	1599_1600	POST_MIGRATION_GATHER_IL1599-1600.sgy
297	1601_1602	POST_MIGRATION_GATHER_IL1601-1602.sgy
298	1603_1604	POST_MIGRATION_GATHER_IL1603-1604.sgy
299	1605_1606	POST_MIGRATION_GATHER_IL1605-1606.sgy
300	1607_1608	POST_MIGRATION_GATHER_IL1607-1608.sgy
301	1609_1610	POST_MIGRATION_GATHER_IL1609-1610.sgy
302	1611_1612	POST_MIGRATION_GATHER_IL1611-1612.sgy
303	1613_1614	POST_MIGRATION_GATHER_IL1613-1614.sgy
304	1615_1616	POST_MIGRATION_GATHER_IL1615-1616.sgy
305	1617_1618	POST_MIGRATION_GATHER_IL1617-1618.sgy
306	1619_1620	POST_MIGRATION_GATHER_IL1619-1620.sgy
307	1621_1622	POST_MIGRATION_GATHER_IL1621-1622.sgy
308	1623_1624	POST_MIGRATION_GATHER_IL1623-1624.sgy
309	1625_1626	POST_MIGRATION_GATHER_IL1625-1626.sgy
310	1627_1628	POST_MIGRATION_GATHER_IL1627-1628.sgy
311	1629_1630	POST_MIGRATION_GATHER_IL1629-1630.sgy
312	1631_1632	POST_MIGRATION_GATHER_IL1631-1632.sgy
313	1633_1634	POST_MIGRATION_GATHER_IL1633-1634.sgy
314	1635_1636	POST_MIGRATION_GATHER_IL1635-1636.sgy
315	1637_1638	POST_MIGRATION_GATHER_IL1637-1638.sgy
316	1639_1640	POST_MIGRATION_GATHER_IL1639-1640.sgy
317	1641_1642	POST_MIGRATION_GATHER_IL1641-1642.sgy
318	1643_1644	POST_MIGRATION_GATHER_IL1643-1644.sgy
319	1645_1646	POST_MIGRATION_GATHER_IL1645-1646.sgy
320	1647_1648	POST_MIGRATION_GATHER_IL1647-1648.sgy
321	1649_1650	POST_MIGRATION_GATHER_IL1649-1650.sgy
322	1651_1652	POST_MIGRATION_GATHER_IL1651-1652.sgy
323	1653_1654	POST_MIGRATION_GATHER_IL1653-1654.sgy

NO.	THE RANGE OF INLINE	SEG-Y FILE
324	1655_1656	POST_MIGRATION_GATHER_IL1655-1656.sgy
325	1657_1658	POST_MIGRATION_GATHER_IL1657-1658.sgy
326	1659_1660	POST_MIGRATION_GATHER_IL1659-1660.sgy
327	1661_1662	POST_MIGRATION_GATHER_IL1661-1662.sgy
328	1663_1664	POST_MIGRATION_GATHER_IL1663-1664.sgy
329	1665_1666	POST_MIGRATION_GATHER_IL1665-1666.sgy
330	1667_1668	POST_MIGRATION_GATHER_IL1667-1668.sgy
331	1669_1670	POST_MIGRATION_GATHER_IL1669-1670.sgy
332	1671_1672	POST_MIGRATION_GATHER_IL1671-1672.sgy
333	1673_1674	POST_MIGRATION_GATHER_IL1673-1674.sgy
334	1675_1676	POST_MIGRATION_GATHER_IL1675-1676.sgy
335	1677_1678	POST_MIGRATION_GATHER_IL1677-1678.sgy
336	1679_1680	POST_MIGRATION_GATHER_IL1679-1680.sgy
337	1681_1682	POST_MIGRATION_GATHER_IL1681-1682.sgy
338	1683_1684	POST_MIGRATION_GATHER_IL1683-1684.sgy
339	1685_1686	POST_MIGRATION_GATHER_IL1685-1686.sgy
340	1687_1688	POST_MIGRATION_GATHER_IL1687-1688.sgy
341	1689_1690	POST_MIGRATION_GATHER_IL1689-1690.sgy
342	1691_1692	POST_MIGRATION_GATHER_IL1691-1692.sgy
343	1693_1694	POST_MIGRATION_GATHER_IL1693-1694.sgy
344	1695_1696	POST_MIGRATION_GATHER_IL1695-1696.sgy
345	1697_1698	POST_MIGRATION_GATHER_IL1697-1698.sgy
346	1699_1700	POST_MIGRATION_GATHER_IL1699-1700.sgy
347	1701_1702	POST_MIGRATION_GATHER_IL1701-1702.sgy
348	1703_1704	POST_MIGRATION_GATHER_IL1703-1704.sgy
349	1705_1706	POST_MIGRATION_GATHER_IL1705-1706.sgy
350	1707_1708	POST_MIGRATION_GATHER_IL1707-1708.sgy
351	1709_1710	POST_MIGRATION_GATHER_IL1709-1710.sgy
352	1711_1712	POST_MIGRATION_GATHER_IL1711-1712.sgy
353	1713_1714	POST_MIGRATION_GATHER_IL1713-1714.sgy
354	1715_1716	POST_MIGRATION_GATHER_IL1715-1716.sgy
355	1717_1718	POST_MIGRATION_GATHER_IL1717-1718.sgy
356	1719_1720	POST_MIGRATION_GATHER_IL1719-1720.sgy
357	1721_1722	POST_MIGRATION_GATHER_IL1721-1722.sgy
358	1723_1724	POST_MIGRATION_GATHER_IL1723-1724.sgy
359	1725_1726	POST_MIGRATION_GATHER_IL1725-1726.sgy
360	1727_1728	POST_MIGRATION_GATHER_IL1727-1728.sgy
361	1729_1730	POST_MIGRATION_GATHER_IL1729-1730.sgy
362	1731_1732	POST_MIGRATION_GATHER_IL1731-1732.sgy
363	1733_1734	POST_MIGRATION_GATHER_IL1733-1734.sgy
364	1735_1736	POST_MIGRATION_GATHER_IL1735-1736.sgy

NO.	THE RANGE OF INLINE	SEG-Y FILE
365	1737_1738	POST_MIGRATION_GATHER_IL1737-1738.sgy
366	1739_1740	POST_MIGRATION_GATHER_IL1739-1740.sgy
367	1741_1742	POST_MIGRATION_GATHER_IL1741-1742.sgy
368	1743_1744	POST_MIGRATION_GATHER_IL1743-1744.sgy
369	1745_1746	POST_MIGRATION_GATHER_IL1745-1746.sgy
370	1747_1748	POST_MIGRATION_GATHER_IL1747-1748.sgy
371	1749_1750	POST_MIGRATION_GATHER_IL1749-1750.sgy
372	1751_1752	POST_MIGRATION_GATHER_IL1751-1752.sgy
373	1753_1754	POST_MIGRATION_GATHER_IL1753-1754.sgy
374	1755_1756	POST_MIGRATION_GATHER_IL1755-1756.sgy
375	1757_1758	POST_MIGRATION_GATHER_IL1757-1758.sgy
376	1759_1760	POST_MIGRATION_GATHER_IL1759-1760.sgy
377	1761_1762	POST_MIGRATION_GATHER_IL1761-1762.sgy
378	1763_1764	POST_MIGRATION_GATHER_IL1763-1764.sgy
379	1765_1766	POST_MIGRATION_GATHER_IL1765-1766.sgy
380	1767_1768	POST_MIGRATION_GATHER_IL1767-1768.sgy
381	1769_1770	POST_MIGRATION_GATHER_IL1769-1770.sgy
382	1771_1772	POST_MIGRATION_GATHER_IL1771-1772.sgy
383	1773_1774	POST_MIGRATION_GATHER_IL1773-1774.sgy
384	1775_1776	POST_MIGRATION_GATHER_IL1775-1776.sgy
385	1777_1778	POST_MIGRATION_GATHER_IL1777-1778.sgy
386	1779_1780	POST_MIGRATION_GATHER_IL1779-1780.sgy
387	1781_1782	POST_MIGRATION_GATHER_IL1781-1782.sgy
388	1783_1784	POST_MIGRATION_GATHER_IL1783-1784.sgy
389	1785_1786	POST_MIGRATION_GATHER_IL1785-1786.sgy
390	1787_1788	POST_MIGRATION_GATHER_IL1787-1788.sgy
391	1789_1790	POST_MIGRATION_GATHER_IL1789-1790.sgy
392	1791_1792	POST_MIGRATION_GATHER_IL1791-1792.sgy
393	1793_1794	POST_MIGRATION_GATHER_IL1793-1794.sgy
394	1795_1796	POST_MIGRATION_GATHER_IL1795-1796.sgy
395	1797_1798	POST_MIGRATION_GATHER_IL1797-1798.sgy
396	1799_1800	POST_MIGRATION_GATHER_IL1799-1800.sgy
397	1801_1802	POST_MIGRATION_GATHER_IL1801-1802.sgy
398	1803_1804	POST_MIGRATION_GATHER_IL1803-1804.sgy
399	1805_1806	POST_MIGRATION_GATHER_IL1805-1806.sgy
400	1807_1808	POST_MIGRATION_GATHER_IL1807-1808.sgy
401	1809_1810	POST_MIGRATION_GATHER_IL1809-1810.sgy
402	1811_1812	POST_MIGRATION_GATHER_IL1811-1812.sgy
403	1813_1814	POST_MIGRATION_GATHER_IL1813-1814.sgy
404	1815_1816	POST_MIGRATION_GATHER_IL1815-1816.sgy
405	1817_1818	POST_MIGRATION_GATHER_IL1817-1818.sgy

NO.	THE RANGE OF INLINE	SEG-Y FILE
406	1819_1820	POST_MIGRATION_GATHER_IL1819-1820.sgy
407	1821_1822	POST_MIGRATION_GATHER_IL1821-1822.sgy
408	1823_1825	POST_MIGRATION_GATHER_IL1823-1825.sgy

B.3 PSTM STACK IN SEG-Y – 1 USB DISK

CLIENT	:	TAP (SHELFAL) AUSTRALIA PTY LTD
PROJECT	:	T/47P LABATT 3D PSTM
PROCESS CONTRACTOR	:	VERITAS GEOPHYSICAL (ASIA PACIFIC) PTE. LTD
PROCESS	:	PSTM STACK
FORMAT	:	SEG-Y / USB MOBILE DISK WINDOWS FORMAT
GRID	:	12.5 M X 25 M
MAXTIME	:	6000MSEC
TIME INTERVAL	:	4MSEC
DOMAIN	:	TIME
MEDIA TYPE	:	USB MOBILE DISK
DATE	:	SEP 2008

SEG-Y TRACE HEADERS INFORMATION:

HEADERS	BYTE LOCATIONS
CDP	BYTES 21 – 24
TRSEQ	BYTES 25 – 28
FOLD	BYTES 31 – 32
WDEPTH	BYTES 61 – 64 (MULTIPLIED BY 10)
SSD CORRECTION	BYTES 91 – 92
CDPX	BYTES 125 –128 (MULTIPLIED BY 100)
CDPY	BYTES 129 – 132 (MULTIPLIED BY 100)
INLINE	BYTES 181 – 184
CROSSLINE	BYTES 185 – 188

Final Delivery Of PSTM STACKS (USB windows format)
USB mobile disk containing the PSTM STACKS in SEG-Y format

GRID	:	12.5M X 25 M
TIME INTERVAL	:	4MSEC
MAXTIME	:	6000MSEC
FULL ANGLE	:	5 – 45 DEGREES
NEAR ANGLE	:	5 – 15 DEGREES
NEAR-MIDDLE ANGLE	:	15 – 25 DEGREES
MIDDLE-FAR ANGLE	:	25 – 35 DEGREES
FAR ANGLE	:	35 – 45 DEGREES

PSTM STACK	THE RANGE OF INLINE	SEG-Y FILE
RAW_FULL_STACK	1006-1210	RAWSTK_FULL_IL1006-1210.sgy
RAW_FULL_STACK	1211-1410	RAWSTK_FULL_IL1211-1410.sgy
RAW_FULL_STACK	1411-1610	RAWSTK_FULL_IL1411-1610.sgy
RAW_FULL_STACK	1611-1825	RAWSTK_FULL_IL1611-1825.sgy
RAW_FULL_STACK_WITH_ZERO_PHASING	1006-1210	RAWSTK_FULLZP_IL1006-1210.sgy
RAW_FULL_STACK_WITH_ZERO_PHASING	1211-1410	RAWSTK_FULLZP_IL1211-1410.sgy
RAW_FULL_STACK_WITH_ZERO_PHASING	1411-1610	RAWSTK_FULLZP_IL1411-1610.sgy
RAW_FULL_STACK_WITH_ZERO_PHASING	1611-1825	RAWSTK_FULLZP_IL1611-1825.sgy
RAW_NEAR_ANGLE_STACK	1006-1210	RAWSTK_NEAR_IL1006-1210.sgy
RAW_NEAR_ANGLE_STACK	1211-1410	RAWSTK_NEAR_IL1211-1410.sgy
RAW_NEAR_ANGLE_STACK	1411-1610	RAWSTK_NEAR_IL1411-1610.sgy
RAW_NEAR_ANGLE_STACK	1611-1825	RAWSTK_NEAR_IL1611-1825.sgy
RAW_NEAR_MIDDLE_ANGLE_STACK	1006-1210	RAWSTK_NEARMID_IL1006-1210.sgy
RAW_NEAR_MIDDLE_ANGLE_STACK	1211-1410	RAWSTK_NEARMID_IL1211-1410.sgy
RAW_NEAR_MIDDLE_ANGLE_STACK	1411-1610	RAWSTK_NEARMID_IL1411-1610.sgy
RAW_NEAR_MIDDLE_ANGLE_STACK	1611-1825	RAWSTK_NEARMID_IL1611-1825.sgy
RAW_MIDDLE_FAR_ANGLE_STACK	1006-1210	RAWSTK_MIDFAR_IL1006-1210.sgy
RAW_MIDDLE_FAR_ANGLE_STACK	1211-1410	RAWSTK_MIDFAR_IL1211-1410.sgy
RAW_MIDDLE_FAR_ANGLE_STACK	1411-1610	RAWSTK_MIDFAR_IL1411-1610.sgy
RAW_MIDDLE_FAR_ANGLE_STACK	1611-1825	RAWSTK_MIDFAR_IL1611-1825.sgy
RAW_FAR_ANGLE_STACK	1006-1210	RAWSTK_FAR_IL1006-1210.sgy
RAW_FAR_ANGLE_STACK	1211-1410	RAWSTK_FAR_IL1211-1410.sgy
RAW_FAR_ANGLE_STACK	1411-1610	RAWSTK_FAR_IL1411-1610.sgy
RAW_FAR_ANGLE_STACK	1611-1825	RAWSTK_FAR_IL1611-1825.sgy
FINAL_FULL_STACK	1006-1210	FINALSTK_FULL_IL1006-1210.sgy
FINAL_FULL_STACK	1211-1410	FINALSTK_FULL_IL1211-1410.sgy
FINAL_FULL_STACK	1411-1610	FINALSTK_FULL_IL1411-1610.sgy

PSTM STACK	THE RANGE OF INLINE	SEG-Y FILE
FINAL_FULL_STACK	1611-1825	FINALSTK_FULL_IL1611-1825.sgy
FINAL_NEAR_ANGLE_STACK	1006-1210	FINALSTK_NEAR_IL1006-1210.sgy
FINAL_NEAR_ANGLE_STACK	1211-1410	FINALSTK_NEAR_IL1211-1410.sgy
FINAL_NEAR_ANGLE_STACK	1411-1610	FINALSTK_NEAR_IL1411-1610.sgy
FINAL_NEAR_ANGLE_STACK	1611-1825	FINALSTK_NEAR_IL1611-1825.sgy
FINAL_NEAR_MIDDLE_ANGLE_STACK	1006-1210	FINALSTK_NEARMID_IL1006-1210.sgy
FINAL_NEAR_MIDDLE_ANGLE_STACK	1211-1410	FINALSTK_NEARMID_IL1211-1410.sgy
FINAL_NEAR_MIDDLE_ANGLE_STACK	1411-1610	FINALSTK_NEARMID_IL1411-1610.sgy
FINAL_NEAR_MIDDLE_ANGLE_STACK	1611-1825	FINALSTK_NEARMID_IL1611-1825.sgy
FINAL_MIDDLE_FAR_ANGLE_STACK	1006-1210	FINALSTK_MIDFAR_IL1006-1210.sgy
FINAL_MIDDLE_FAR_ANGLE_STACK	1211-1410	FINALSTK_MIDFAR_IL1211-1410.sgy
FINAL_MIDDLE_FAR_ANGLE_STACK	1411-1610	FINALSTK_MIDFAR_IL1411-1610.sgy
FINAL_MIDDLE_FAR_ANGLE_STACK	1611-1825	FINALSTK_MIDFAR_IL1611-1825.sgy
FINAL_FAR_ANGLE_STACK	1006-1210	FINALSTK_FAR_IL1006-1210.sgy
FINAL_FAR_ANGLE_STACK	1211-1410	FINALSTK_FAR_IL1211-1410.sgy
FINAL_FAR_ANGLE_STACK	1411-1610	FINALSTK_FAR_IL1411-1610.sgy
FINAL_FAR_ANGLE_STACK	1611-1825	FINALSTK_FAR_IL1611-1825.sgy

DVDs:

B.4 PSTM VELOCITY – IN SEG-Y FORMAT

CLIENT	:	TAP (SHELFAL) AUSTRALIA PTY LTD
PROJECT	:	T/47P LABATT 3D PSTM
PROCESS CONTRACTOR	:	VERITAS GEOPHYSICAL (ASIA PACIFIC) PTE. LTD
PROCESS	:	RMS VELOCITIES, 2^{ND} AND 3^{RD} PASS
FORMAT	:	SEG-Y / DVD
GRID	:	12.5 M X 25 M
MAXTIME	:	6000MSEC
TIME INTERVAL	:	4MSEC
DOMAIN	:	TIME
MEDIA TYPE	:	DVD
DATE	:	SEP 2008

SEG-Y TRACE HEADERS INFORMATION (SEG-Y FORMAT)

HEADERS	BYTE LOCATIONS
CDP	BYTES 21 – 24
CDPX	BYTES 125 –128 (MULTIPLIED BY 100)
CDPY	BYTES 129 – 132 (MULTIPLIED BY 100)
INLINE	BYTES 181 – 184
CROSSLINE	BYTES 185 – 188

TAPE LABEL	INLINES	CROSSLINE RANGE
VRMSEC2NDPASS_1KMX1KM.SGY	1011 – 1811 (INC 40)	1000– 4680 (INC 40)
VRMA3RDPASS_500X500M.SGY	1011 – 1811 (INC 20)	1000– 4680 (INC 20)

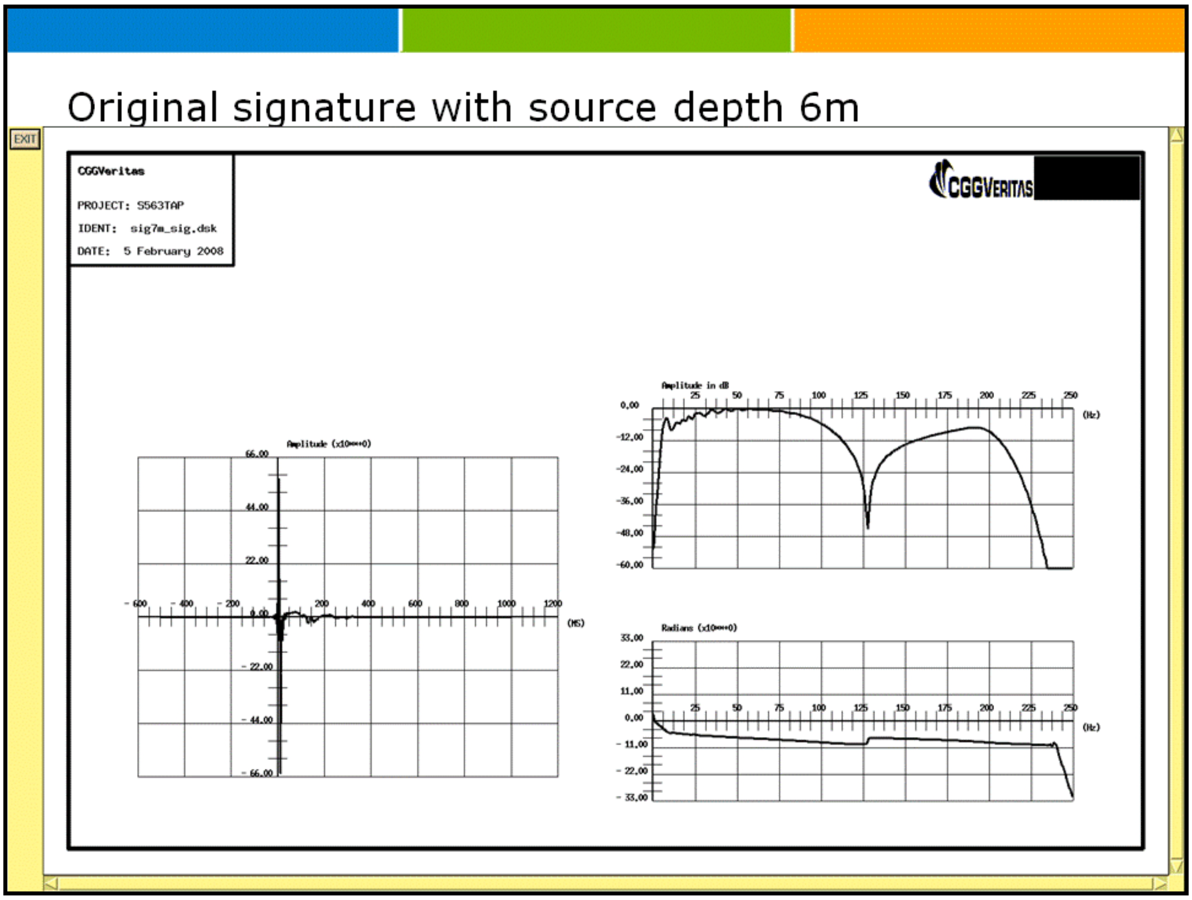
B.5 PSTM VELOCITY– IN ASCII FORMAT

CLIENT	:	TAP (SHELFAL) AUSTRALIA PTY LTD
PROJECT	:	T/47P LABATT 3D PSTM
PROCESS CONTRACTOR	:	VERITAS GEOPHYSICAL (ASIA PACIFIC) PTE. LTD
PROCESS	:	RMS VELOCITIES, 2ND AND 3RD PASS
FORMAT	:	ASCII / DVD
GRID	:	12.5 M X 25 M
MAXTIME	:	6000MSEC
TIME INTERVAL	:	4MSEC
DOMAIN	:	TIME
MEDIA TYPE	:	DVD
DATE	:	SEP 2008

TAPE LABEL	INLINES	CROSSLINE RANGE
VRMS2NDPASS_1KMX1KM.WSTN1	1011 – 1811 (INC 40)	1000– 4680 (INC 40)
VRMA3RDPASS_500X500M.WSTN1	1011 – 1811 (INC 20)	1000– 4680 (INC 20)

APPENDIX C – SOURCE AND DESIGNATURE FILTER

C.1 FAR FIELD SIGNATURE AT SOURCE DEPTH 6M (PROVIDED BY TAP OIL)



Original Far-Field at 2msec: SD = 6M

TIME (MSEC)	AMPL	TIME (MSEC)	AMPL
-500	-2.90553E-07	-484	-1.37173E-07
-498	-4.10938E-08	-482	-5.73939E-08
-496	1.25565E-07	-480	-1.02296E-07
-494	1.96431E-07	-478	-2.91119E-07
-492	6.22891E-07	-476	3.82901E-07
-490	3.07178E-07	-474	5.49628E-07
-488	1.92699E-07	-472	1.76624E-07
-486	7.05586E-07	-470	-1.07135E-07

TIME (MSEC)	AMPL	TIME (MSEC)	AMPL
-468	-3.33861E-07	-388	-1.45332E-07
-466	-1.87732E-07	-386	-3.20843E-07
-464	7.39846E-09	-384	-3.63921E-07
-462	-1.50938E-07	-382	-1.96232E-07
-460	7.99543E-08	-380	-6.39517E-08
-458	-1.49594E-07	-378	3.97296E-07
-456	-1.68753E-08	-376	4.84241E-07
-454	5.57101E-07	-374	1.35647E-06
-452	2.10406E-07	-372	5.45476E-07
-450	-9.33762E-08	-370	2.62579E-07
-448	-8.21979E-08	-368	2.53617E-07
-446	9.14441E-07	-366	1.77844E-07
-444	9.07227E-08	-364	4.00791E-07
-442	2.6908E-07	-362	1.85438E-07
-440	-3.30231E-08	-360	1.20336E-07
-438	-7.27704E-07	-358	-3.73405E-07
-436	-2.46714E-07	-356	3.07903E-08
-434	-3.58895E-07	-354	-4.20059E-08
-432	-2.56839E-07	-352	-2.64005E-07
-430	-3.11652E-08	-350	4.4697E-07
-428	-4.18175E-08	-348	-1.86815E-07
-426	-1.37723E-07	-346	-1.27027E-07
-424	-5.32047E-07	-344	-1.40132E-07
-422	-3.71697E-07	-342	-1.97863E-07
-420	8.43208E-08	-340	-5.6491E-08
-418	-6.55421E-08	-338	2.47963E-08
-416	3.27332E-07	-336	1.07128E-07
-414	2.04943E-07	-334	-4.02425E-07
-412	-3.26831E-07	-332	-4.52812E-07
-410	-9.8742E-08	-330	1.15486E-07
-408	3.62098E-09	-328	-4.13184E-08
-406	-9.35116E-07	-326	3.02932E-07
-404	-1.42978E-07	-324	3.24321E-07
-402	-1.34029E-07	-322	-1.82243E-07
-400	-2.70864E-07	-320	9.72979E-08
-398	2.58312E-08	-318	-2.37637E-07
-396	1.18475E-07	-316	2.49774E-07
-394	2.61768E-08	-314	2.85883E-08
-392	2.11703E-07	-312	-3.6033E-07
-390	-3.89392E-07	-310	-1.46799E-07

TIME (MSEC)	AMPL	TIME (MSEC)	AMPL
-308	-3.92538E-07	-228	2.7749E-07
-306	1.65876E-07	-226	1.71461E-07
-304	2.3331E-07	-224	1.67565E-07
-302	4.58459E-08	-222	-1.14286E-07
-300	-4.06149E-07	-220	-1.30265E-07
-298	-1.27392E-07	-218	-2.58508E-07
-296	2.18397E-07	-216	4.11058E-07
-294	-1.9212E-07	-214	1.22012E-06
-292	1.4148E-07	-212	-4.94286E-09
-290	-4.05611E-09	-210	-6.14287E-08
-288	-1.04373E-07	-208	-1.76527E-07
-286	3.22727E-07	-206	-3.811E-07
-284	7.61981E-08	-204	1.65276E-07
-282	4.15688E-08	-202	7.55321E-08
-280	-1.85419E-07	-200	8.36914E-08
-278	-4.7045E-07	-198	1.93984E-07
-276	-4.09899E-07	-196	-1.24844E-08
-274	-2.05336E-07	-194	2.909E-07
-272	-3.39223E-07	-192	2.47868E-07
-270	-8.36013E-07	-190	5.6279E-07
-268	2.20501E-08	-188	-1.9427E-07
-266	-1.2863E-07	-186	-2.25216E-07
-264	4.76592E-07	-184	2.1114E-07
-262	7.79284E-07	-182	4.60794E-07
-260	4.06972E-07	-180	-1.92097E-07
-258	2.16159E-09	-178	1.09792E-07
-256	3.09847E-08	-176	3.15584E-07
-254	1.17999E-06	-174	-1.28683E-07
-252	2.81751E-07	-172	-1.86945E-07
-250	3.81836E-07	-170	-3.31677E-07
-248	-9.5324E-07	-168	-1.83787E-07
-246	-2.49288E-06	-166	-2.36009E-07
-244	-9.61833E-07	-164	-1.61528E-07
-242	-2.83825E-07	-162	2.8959E-07
-240	-4.1023E-07	-160	-1.54525E-07
-238	-1.70301E-07	-158	-2.92713E-07
-236	-1.10961E-07	-156	3.69396E-08
-234	9.96619E-08	-154	-2.27576E-07
-232	5.4018E-07	-152	4.18253E-07
-230	3.62861E-07	-150	9.52921E-07

TIME (MSEC)	AMPL	TIME (MSEC)	AMPL
-148	1.86643E-07	-68	3.36151E-07
-146	-8.40619E-09	-66	1.61959E-07
-144	1.90833E-07	-64	-1.97105E-08
-142	3.41674E-07	-62	-1.23953E-06
-140	7.84119E-08	-60	-2.57705E-07
-138	1.21037E-07	-58	7.07347E-08
-136	-2.52609E-07	-56	-0.012999912
-134	-7.92951E-07	-54	-0.022000197
-132	-3.84106E-07	-52	-0.022999655
-130	-2.5866E-07	-50	-0.021000197
-128	-7.51872E-07	-48	-0.010000198
-126	-1.37598E-06	-46	-0.013000021
-124	-3.1348E-07	-44	-0.005000062
-122	-1.5649E-07	-42	0.005000116
-120	-1.25843E-07	-40	-0.011000012
-118	5.59573E-08	-38	0.041000314
-116	3.26571E-07	-36	-0.021000318
-114	1.53913E-07	-34	0.005999816
-112	6.22786E-08	-32	0.056999743
-110	7.78731E-08	-30	-0.113999508
-108	2.58632E-07	-28	0.195000201
-106	6.54815E-08	-26	-0.188999861
-104	1.09484E-07	-24	0.122000001
-102	2.69792E-07	-22	0.077999622
-100	3.67874E-07	-20	-0.362000197
-98	6.92613E-08	-18	0.687000155
-96	3.09804E-07	-16	-0.913000047
-94	7.48726E-07	-14	0.944999874
-92	3.47615E-08	-12	-0.597999871
-90	-1.64105E-09	-10	-0.129000276
-88	-2.00823E-07	-8	1.299999833
-86	-3.46493E-08	-6	-2.769998789
-84	-8.42732E-08	-4	4.53399992
-82	3.04694E-09	-2	-7.003999233
-80	-4.68438E-07	0	18.52599907
-78	-1.01201E-06	2	57.33099365
-76	-4.65141E-07	4	22.91999817
-74	-1.12033E-07	6	8.503998756
-72	6.02659E-07	8	-28.25799942
-70	7.88608E-07	10	-64.77999115

TIME (MSEC)	AMPL	TIME (MSEC)	AMPL
12	-23.34699821	92	1.103000283
14	-8.580999374	94	0.890000165
16	-2.835999489	96	0.60400033
18	0.585999012	98	0.288000911
20	-9.617999077	100	0.068000451
22	-0.338000268	102	0.10000024
24	-0.821999967	104	0.360999882
26	-0.199999079	106	0.717999876
28	1.714000344	108	0.94699955
30	-1.375000238	110	0.869999886
32	1.523999929	112	0.581999719
34	0.754000127	114	0.327999592
36	0.977999985	116	0.286000192
38	1.852999687	118	0.315999955
40	0.710999906	120	0.078000031
42	1.575000048	122	-0.559999764
44	1.43200016	124	-1.474999905
46	1.421000481	126	-2.279999733
48	1.727000117	128	-2.63800025
50	1.312999606	130	-2.549001455
52	1.659999251	132	-2.143000364
54	1.664999604	134	-1.580000043
56	1.595999837	136	-0.99799937
58	1.784999847	138	-0.497000068
60	1.689999938	140	-0.176999465
62	1.800999999	142	-0.09399993
64	1.842000008	144	-0.280999631
66	1.876999855	146	-0.740999758
68	2.022000074	148	-1.362999678
70	2.037999868	150	-1.93200016
72	2.097999573	152	-2.276000261
74	2.124999523	154	-2.320000172
76	2.090999603	156	-2.084000111
78	2.076999903	158	-1.718999863
80	2.028999567	160	-1.358000159
82	1.965999007	162	-1.107000232
84	1.839999437	164	-1.014000297
86	1.643999457	166	-0.996999919
88	1.439000487	168	-0.967999756
90	1.261000276	170	-0.844999015

TIME (MSEC)	AMPL	TIME (MSEC)	AMPL
172	-0.624000072	252	-0.419000119
174	-0.397999972	254	-0.40100047
176	-0.196000189	256	-0.384000182
178	-0.031000404	258	-0.353999585
180	0.107999742	260	-0.298999697
182	0.230999947	262	-0.22999981
184	0.319000125	264	-0.15900071
186	0.392000258	266	-0.089001618
188	0.455000013	268	-0.022999978
190	0.511999786	270	0.04199994
192	0.57400018	272	0.087999865
194	0.623001218	274	0.111999206
196	0.663000345	276	0.116000019
198	0.689999878	278	0.094999917
200	0.703999937	280	0.059000053
202	0.714999974	282	1.19209E-08
204	0.715999782	284	-0.082000107
206	0.708999813	286	-0.18099989
208	0.700999737	288	-0.292999893
210	0.701999605	290	-0.401000232
212	0.719999909	292	-0.488000005
214	0.754000187	294	-0.533000112
216	0.800000668	296	-0.529000103
218	0.844000459	298	-0.479999632
220	0.874000072	300	-0.397999823
222	0.883000076	302	-0.300000101
224	0.862999737	304	-0.19400014
226	0.816999614	306	-0.092000112
228	0.746000051	308	1.54972E-07
230	0.649000049	310	0.082999915
232	0.529999793	312	0.15000008
234	0.393999904	314	0.198999807
236	0.247999907	316	0.229999736
238	0.096000314	318	0.243999913
240	-0.056999922	320	0.242000252
242	-0.203999922	322	0.225000486
244	-0.326000065	324	0.197000429
246	-0.408000082	326	0.156000212
248	-0.439999729	328	0.118999951
250	-0.434999615	330	0.088000059

TIME (MSEC)	AMPL	TIME (MSEC)	AMPL
332	0.052000083	412	2.02656E-07
334	0.025999939	414	1.19209E-08
336	0.002999723	416	3.39746E-07
338	-0.018999875	418	8.34465E-07
340	-0.029999984	420	4.70877E-07
342	-0.047999777	422	2.68221E-07
344	4.47035E-07	424	-3.51667E-07
346	2.26498E-07	426	-1.2219E-06
348	-1.07288E-07	428	-9.47714E-07
350	1.19209E-08	430	-1.98185E-07
352	-2.77162E-07	432	3.06964E-07
354	-1.2368E-07	434	1.15484E-07
356	-2.08616E-08	436	2.48849E-07
358	2.13459E-07	438	5.21541E-08
360	1.11759E-07	440	-5.58794E-07
362	-1.99676E-07	442	-7.10785E-07
364	-5.96046E-09	444	1.07288E-07
366	-1.43051E-07	446	6.85453E-08
368	1.69873E-07	448	-8.9407E-09
370	-3.54648E-07	450	4.61936E-07
372	1.2666E-07	452	-6.55651E-08
374	1.2219E-07	454	2.32458E-07
376	-1.37836E-07	456	-2.5034E-07
378	8.64267E-08	458	-5.90086E-07
380	-2.20537E-07	460	-4.61936E-07
382	1.19209E-08	462	-3.93391E-07
384	-5.96046E-08	464	-1.81794E-07
386	-1.90735E-07	466	-5.57303E-07
388	-1.43051E-07	468	-1.04308E-07
390	-2.563E-07	470	-2.20537E-07
392	3.27826E-07	472	4.26173E-07
394	1.48416E-06	474	2.05636E-07
396	3.43472E-07	476	1.19209E-07
398	5.01052E-07	478	-1.78814E-08
400	5.46873E-07	480	2.83122E-07
402	-3.27826E-08	482	2.23517E-07
404	8.34465E-08	484	5.96046E-08
406	-4.17233E-07	486	-1.2517E-07
408	-3.21865E-07	488	-3.11434E-07
410	-5.48363E-07	490	-3.27826E-08

TIME (MSEC)	AMPL	TIME (MSEC)	AMPL
492	2.86102E-07	572	3.08959E-07
494	4.29153E-07	574	1.96037E-07
496	3.69549E-07	576	-1.14651E-07
498	1.07288E-07	578	-3.92941E-07
500	-1.43051E-07	580	-1.02275E-07
502	0	582	-2.35096E-07
504	-4.05312E-07	584	-3.63766E-07
506	-4.76837E-07	586	-3.3625E-07
508	-2.86102E-07	588	-2.4124E-07
510	9.53674E-08	590	1.0523E-07
512	-7.62939E-07	592	-2.59366E-07
514	-1.52588E-06	594	4.09185E-08
516	-3.8147E-07	596	8.84702E-08
518	-5.72205E-07	598	2.89833E-08
520	0	600	1.84708E-08
522	1.52588E-06	602	-3.65851E-07
524	3.8147E-07	604	-5.48854E-07
526	5.72205E-07	606	6.82126E-08
528	4.29153E-07	608	-8.16286E-08
530	2.5034E-07	610	-2.13544E-07
532	0	612	-5.78755E-08
534	-2.14577E-07	614	-1.10144E-07
536	-4.0133E-08	616	1.81397E-07
538	2.95926E-08	618	-6.42025E-07
540	2.80954E-07	620	-7.20113E-09
542	-2.7526E-07	622	-1.87947E-07
544	-1.60695E-07	624	5.58334E-08
546	4.4324E-07	626	5.6173E-07
548	4.4725E-07	628	2.69524E-07
550	2.92689E-07	630	4.67628E-07
552	-1.18888E-07	632	-2.17764E-07
554	-8.49225E-07	634	-1.31983E-06
556	-7.27813E-08	636	3.32069E-08
558	1.06483E-08	638	-1.49619E-07
560	-1.19384E-07	640	3.23825E-07
562	-6.06483E-07	642	1.89015E-06
564	-6.40897E-07	644	3.5736E-07
566	-3.74708E-07	646	-4.75503E-08
568	1.20187E-07	648	-4.17885E-07
570	7.23806E-07	650	-1.17374E-06

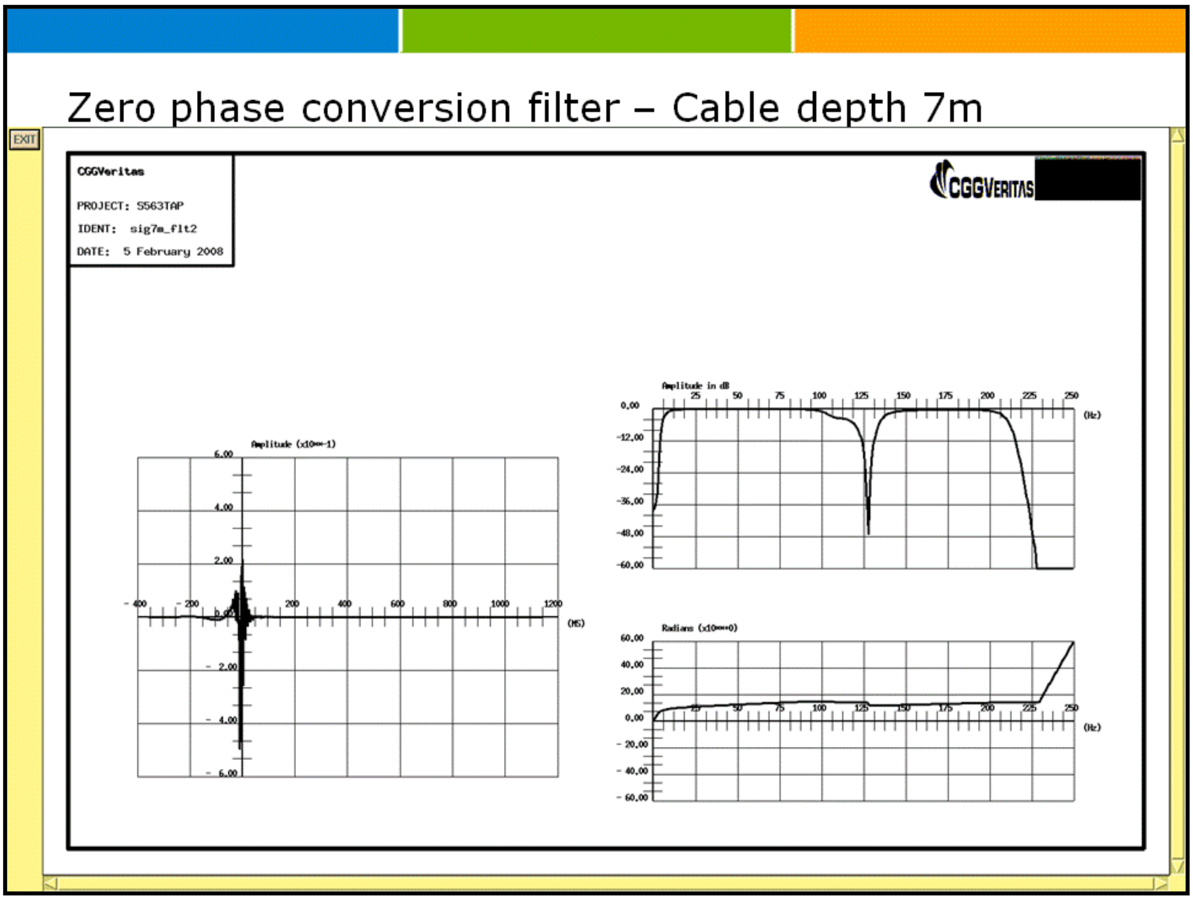
TIME (MSEC)	AMPL	TIME (MSEC)	AMPL
652	-3.16494E-07	732	4.16564E-07
654	-2.0998E-08	734	-2.20024E-07
656	-2.6026E-07	736	3.28946E-08
658	-2.87291E-07	738	-4.45706E-10
660	-2.42313E-07	740	1.5957E-07
662	-1.78943E-07	742	2.21957E-07
664	3.00885E-07	744	-1.68865E-07
666	5.03787E-07	746	-1.30357E-07
668	4.81432E-07	748	-2.79144E-07
670	1.61208E-07	750	-1.01632E-07
672	2.76434E-07	752	-2.07391E-07
674	-2.41765E-07	754	1.8356E-07
676	-3.65109E-07	756	1.49744E-07
678	-5.77265E-08	758	8.91556E-08
680	1.96366E-08	760	1.40896E-07
682	1.16191E-06	762	-2.49957E-07
684	2.40936E-07	764	-5.16475E-09
686	1.5345E-07	766	-5.11469E-08
688	1.86466E-10	768	3.96256E-08
690	3.81435E-08	770	4.42355E-07
692	3.06214E-07	772	-2.01985E-07
694	2.71609E-07	774	3.33891E-08
696	-2.66187E-07	776	9.43223E-07
698	-6.3798E-07	778	9.32226E-07
700	-2.26482E-07	780	3.12348E-07
702	-1.64547E-07	782	-1.92002E-07
704	1.25678E-07	784	2.14011E-07
706	-3.17752E-07	786	2.05506E-07
708	3.13673E-07	788	1.09748E-07
710	-1.24092E-08	790	-2.41964E-07
712	-6.47565E-08	792	-1.19439E-07
714	1.85309E-07	794	-2.41092E-07
716	-2.02372E-08	796	-1.60208E-08
718	-1.26075E-07	798	-1.19224E-07
720	-2.01008E-07	800	-3.67192E-07
722	-6.76941E-07	802	-2.8104E-07
724	-3.65971E-07	804	7.04869E-09
726	4.89356E-07	806	1.04291E-07
728	4.6477E-07	808	2.39583E-07
730	-3.38636E-07	810	2.63678E-07

TIME (MSEC)	AMPL	TIME (MSEC)	AMPL
812	4.57599E-08	892	-2.4144E-07
814	1.73019E-08	894	-2.90777E-07
816	2.03594E-07	896	-5.02119E-08
818	4.57873E-07	898	1.21159E-07
820	3.98642E-07	900	3.7242E-07
822	4.8768E-08	902	2.6928E-07
824	-5.51207E-07	904	-1.21271E-07
826	-4.96971E-07	906	5.06967E-08
828	-1.73736E-07	908	-7.22843E-07
830	-1.17546E-08	910	-2.54385E-07
832	-3.08482E-08	912	-2.17385E-07
834	4.45624E-07	914	-4.32164E-07
836	-1.59626E-07	916	-2.05573E-07
838	-3.3071E-07	918	3.33645E-08
840	-1.10398E-07	920	5.84834E-08
842	-2.06819E-07	922	4.82712E-07
844	3.06752E-07	924	1.82385E-07
846	1.44436E-07	926	-1.7481E-07
848	-1.93971E-07	928	1.37847E-07
850	-5.93945E-08	930	4.70656E-08
852	4.38938E-08	932	-1.23963E-07
854	2.55344E-07	934	-7.8327E-08
856	5.6984E-07	936	-8.2876E-08
858	3.77478E-07	938	8.17855E-07
860	5.98683E-08	940	-1.79062E-07
862	-1.87576E-09	942	-7.62408E-08
864	2.30393E-09	944	2.3825E-07
866	1.46215E-07	946	5.93772E-07
868	1.92795E-09	948	5.21549E-07
870	9.2726E-08	950	3.13243E-07
872	-1.51447E-07	952	-8.0602E-09
874	-7.3194E-07	954	-1.13743E-07
876	-1.78201E-07	956	-1.53497E-07
878	2.81796E-07	958	-9.06242E-08
880	3.10193E-07	960	3.17732E-08
882	4.80475E-07	962	-1.0917E-06
884	5.53713E-07	964	-1.87004E-07
886	-2.7614E-08	966	1.64743E-07
888	-2.90259E-07	968	3.19484E-07
890	-4.31266E-07	970	-8.38783E-07

TIME (MSEC)	AMPL
970	-8.38783E-07
972	1.8348E-07
974	-1.37505E-07
976	-6.74203E-08
978	-6.60273E-08
980	-1.53648E-07
982	1.94503E-07
984	7.00081E-08
986	1.9261E-07
988	-2.43783E-07
990	1.58688E-07
992	2.846E-07
994	1.53965E-07
996	4.27982E-07
998	8.33165E-08
1000	1.06141E-07

C.2 ZERO PHASE ANTI-ALIAS FILTER

C.2.1 7M Cable Depth



SAMPLE #	VALUE	SAMPLE #	VALUE
1	-1.79E-04	25	-2.39E-04
3	-4.78E-05	27	-1.44E-04
5	-2.57E-04	29	-1.52E-04
7	-5.80E-05	31	-6.26E-05
9	-2.70E-04	33	-9.90E-06
11	-1.00E-04	35	6.45E-05
13	-2.97E-04	37	1.68E-04
15	-1.65E-04	39	2.17E-04
17	-3.09E-04	41	3.70E-04
19	-1.93E-04	43	3.93E-04
21	-2.89E-04	45	5.96E-04
23	-1.84E-04	47	5.93E-04

SAMPLE #	VALUE	SAMPLE #	VALUE
49	8.44E-04	129	-9.42E-03
51	8.10E-04	131	-9.64E-03
53	1.10E-03	133	-9.08E-03
55	1.03E-03	135	-9.26E-03
57	1.37E-03	137	-8.61E-03
59	1.26E-03	139	-7.52E-03
61	1.64E-03	141	-5.80E-03
63	1.49E-03	143	-1.31E-03
65	1.91E-03	145	1.62E-04
67	1.70E-03	147	6.86E-03
69	2.15E-03	149	5.86E-03
71	1.89E-03	151	1.57E-02
73	2.35E-03	153	1.40E-02
75	2.00E-03	155	2.53E-02
77	2.47E-03	157	4.01E-02
79	2.04E-03	159	2.92E-02
81	2.48E-03	161	6.94E-02
83	1.90E-03	163	1.82E-02
85	2.28E-03	165	8.09E-02
87	1.59E-03	167	-1.40E-02
89	1.94E-03	169	8.68E-02
91	1.16E-03	171	3.88E-02
93	1.41E-03	173	-9.90E-03
95	4.49E-04	175	-4.42E-01
97	5.64E-04	177	-1.07E-01
99	-4.94E-04	179	2.17E-01
101	-5.06E-04	181	-1.01E-02
103	-1.68E-03	183	7.54E-02
105	-1.75E-03	185	-8.58E-02
107	-3.03E-03	187	2.99E-02
109	-3.18E-03	189	-3.42E-02
111	-4.55E-03	191	2.87E-02
113	-4.73E-03	193	1.18E-02
115	-6.10E-03	195	1.79E-04
117	-6.28E-03	197	1.76E-03
119	-7.59E-03	199	-1.13E-02
121	-7.87E-03	201	5.70E-03
123	-9.03E-03	203	-4.05E-03
125	-9.16E-03	205	6.11E-03
127	-9.82E-03	207	3.54E-03

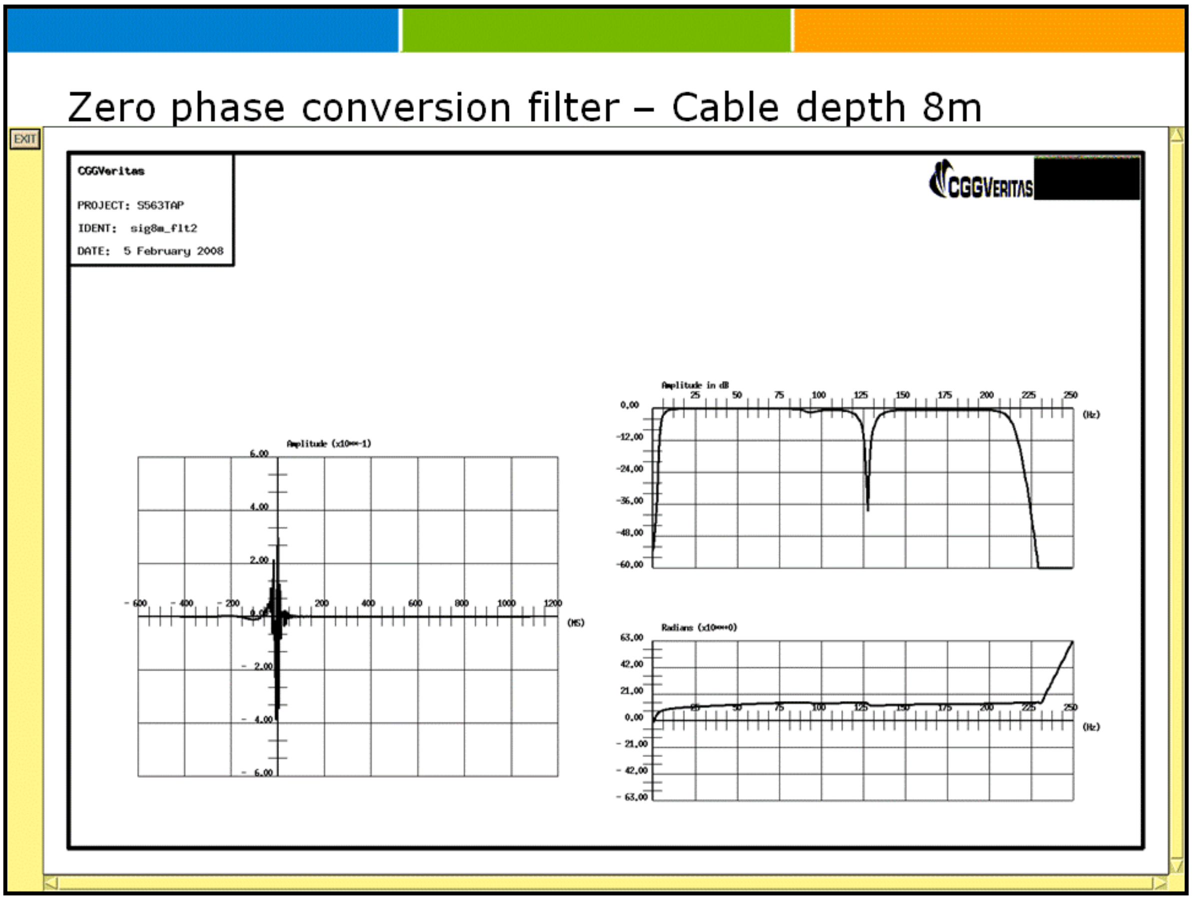
SAMPLE #	VALUE	SAMPLE #	VALUE
209	1.30E-03	289	-4.60E-05
211	2.08E-03	291	9.70E-06
213	-1.47E-03	293	-9.40E-06
215	1.33E-03	295	-2.41E-05
217	-6.76E-05	297	1.14E-05
219	1.85E-03	299	-5.76E-05
221	7.12E-04	301	2.56E-05
223	1.51E-03	303	-8.63E-05
225	-2.68E-04	305	3.47E-05
227	1.39E-03	307	-1.08E-04
229	-8.37E-04	309	4.44E-05
231	1.77E-03	311	-1.21E-04
233	-8.16E-04	313	5.50E-05
235	1.79E-03	315	-1.25E-04
237	-8.53E-04	317	6.67E-05
239	1.39E-03	319	-1.25E-04
241	-7.94E-04	321	7.11E-05
243	1.12E-03	323	-1.25E-04
245	-6.01E-04	325	7.59E-05
247	9.78E-04	327	-1.17E-04
249	-5.45E-04	329	7.83E-05
251	7.78E-04	331	-1.11E-04
253	-5.66E-04	333	6.94E-05
255	5.94E-04	335	-1.09E-04
257	-5.58E-04	337	5.74E-05
259	5.12E-04	339	-9.87E-05
261	-4.48E-04	341	6.09E-05
263	4.00E-04	343	-7.48E-05
265	-4.17E-04	345	6.89E-05
267	2.42E-04	347	-6.13E-05
269	-3.79E-04	349	6.51E-05
271	1.79E-04	351	-5.81E-05
273	-2.85E-04	353	4.86E-05
275	1.33E-04	355	-5.59E-05
277	-2.28E-04	357	3.41E-05
279	9.63E-05	359	-4.60E-05
281	-1.55E-04	361	2.85E-05
283	6.86E-05	363	-3.14E-05
285	-9.63E-05	365	2.50E-05
287	3.84E-05	367	-2.04E-05

SAMPLE #	VALUE	SAMPLE #	VALUE
369	1.74E-05	449	-1.10E-05
371	-1.26E-05	451	7.60E-06
373	1.45E-05	453	-1.04E-05
375	-3.40E-06	455	5.50E-06
377	1.30E-05	457	-8.80E-06
379	4.00E-06	459	4.20E-06
381	9.30E-06	461	-6.60E-06
383	7.80E-06	463	3.10E-06
385	4.40E-06	465	-4.60E-06
387	1.06E-05	467	1.90E-06
389	7.00E-07	469	-3.00E-06
391	1.39E-05	471	4.00E-07
393	-1.90E-06	473	-1.70E-06
395	1.65E-05	475	-1.10E-06
397	-4.90E-06	477	-5.00E-07
399	1.77E-05	479	-2.40E-06
401	-8.20E-06	481	7.00E-07
403	1.81E-05	483	-3.40E-06
405	-1.11E-05	485	1.80E-06
407	1.85E-05	487	-4.20E-06
409	-1.29E-05	489	2.70E-06
411	1.94E-05	491	-5.00E-06
413	-1.34E-05	493	3.40E-06
415	2.04E-05	495	-5.70E-06
417	-1.34E-05	497	4.00E-06
419	2.09E-05	499	-6.00E-06
421	-1.36E-05	501	4.50E-06
423	2.03E-05	503	-6.20E-06
425	-1.42E-05	505	5.00E-06
427	1.89E-05	507	-6.20E-06
429	-1.45E-05	509	5.20E-06
431	1.74E-05	511	-6.00E-06
433	-1.40E-05	513	5.40E-06
435	1.62E-05	515	-5.80E-06
437	-1.29E-05	517	5.50E-06
439	1.50E-05	519	-5.40E-06
441	-1.18E-05	521	5.40E-06
443	1.31E-05	523	-4.90E-06
445	-1.12E-05	525	5.30E-06
447	1.04E-05	527	-4.40E-06

SAMPLE #	VALUE	SAMPLE #	VALUE
529	4.90E-06	609	-2.30E-06
531	-3.90E-06	611	2.10E-06
533	4.40E-06	613	-2.10E-06
535	-3.50E-06	615	2.00E-06
537	3.80E-06	617	-1.90E-06
539	-3.00E-06	619	1.90E-06
541	3.20E-06	621	-1.70E-06
543	-2.40E-06	623	1.60E-06
545	2.70E-06	625	-1.60E-06
547	-1.80E-06	627	1.40E-06
549	2.10E-06	629	-1.40E-06
551	-1.20E-06	631	1.20E-06
553	1.50E-06	633	-1.10E-06
555	-7.00E-07	635	9.00E-07
557	9.00E-07	637	-9.00E-07
559	-2.00E-07	639	6.00E-07
561	3.00E-07	641	-8.00E-07
563	4.00E-07	643	3.00E-07
565	0.00E+00	645	-5.00E-07
567	9.00E-07	647	0.00E+00
569	-4.00E-07	649	-2.00E-07
571	1.40E-06	651	-1.00E-07
573	-8.00E-07	653	1.00E-07
575	1.70E-06	655	-3.00E-07
577	-1.30E-06	657	5.00E-07
579	1.80E-06	659	-6.00E-07
581	-1.70E-06	661	9.00E-07
583	1.90E-06	663	-8.00E-07
585	-2.00E-06	665	1.30E-06
587	2.10E-06	667	-1.20E-06
589	-2.20E-06	669	1.60E-06
591	2.30E-06	671	-1.90E-06
593	-2.30E-06	673	2.00E-06
595	2.30E-06	675	-2.50E-06
597	-2.40E-06	677	3.30E-06
599	2.20E-06	679	-2.90E-06
601	-2.50E-06	681	2.40E-06
603	2.20E-06	683	-2.30E-06
605	-2.50E-06	685	1.90E-06
607	2.10E-06	687	-1.50E-06

SAMPLE #	VALUE
689	1.40E-06
691	-1.00E-06
693	9.00E-07
695	-9.00E-07
697	7.00E-07
699	-6.00E-07
701	5.00E-07
703	-4.00E-07
705	4.00E-07
707	-3.00E-07
709	2.00E-07
711	-2.00E-07
713	1.00E-07
715	-1.00E-07
717	1.00E-07
719	0.00E+00
721	0.00E+00
723	0.00E+00
725	0.00E+00
727	0.00E+00
729	0.00E+00
731	0.00E+00
733	0.00E+00
735	0.00E+00
737	0.00E+00
739	0.00E+00
741	0.00E+00
743	0.00E+00
745	0.00E+00
747	0.00E+00
749	0.00E+00
751	0.00E+00

C.2.2 8M Cable Depth



SAMPLE #	VALUE	SAMPLE #	VALUE
1	-1.57E-04	29	-5.63E-04
3	-6.73E-05	31	-6.65E-04
5	-1.96E-04	33	-6.18E-04
7	-1.25E-04	35	-7.43E-04
9	-2.16E-04	37	-6.04E-04
11	-1.82E-04	39	-7.61E-04
13	-2.84E-04	41	-5.34E-04
15	-2.79E-04	43	-7.57E-04
17	-3.86E-04	45	-4.77E-04
19	-3.82E-04	47	-7.50E-04
21	-4.58E-04	49	-4.08E-04
23	-4.75E-04	51	-6.93E-04
25	-5.03E-04	53	-2.77E-04
27	-5.64E-04	55	-5.64E-04

SAMPLE #	VALUE	SAMPLE #	VALUE
57	-9.27E-05	137	-3.68E-03
59	-3.92E-04	139	-4.13E-03
61	1.12E-04	141	-5.29E-03
63	-1.88E-04	143	-5.81E-03
65	3.45E-04	145	-7.19E-03
67	5.89E-05	147	-7.28E-03
69	6.12E-04	149	-8.53E-03
71	3.46E-04	151	-8.66E-03
73	9.04E-04	153	-9.18E-03
75	6.55E-04	155	-1.01E-02
77	1.20E-03	157	-1.02E-02
79	9.68E-04	159	-1.08E-02
81	1.48E-03	161	-1.10E-02
83	1.28E-03	163	-9.45E-03
85	1.76E-03	165	-8.97E-03
87	1.59E-03	167	-7.88E-03
89	2.02E-03	169	-4.94E-03
91	1.89E-03	171	-7.16E-03
93	2.26E-03	173	-2.64E-03
95	2.16E-03	175	-1.80E-03
97	2.43E-03	177	1.17E-03
99	2.39E-03	179	1.19E-02
101	2.55E-03	181	1.64E-02
103	2.54E-03	183	2.31E-02
105	2.58E-03	185	3.41E-02
107	2.58E-03	187	1.36E-02
109	2.50E-03	189	3.42E-02
111	2.51E-03	191	4.22E-02
113	2.20E-03	193	2.63E-02
115	2.20E-03	195	1.09E-01
117	1.69E-03	197	4.57E-02
119	1.71E-03	199	7.27E-02
121	1.09E-03	201	2.22E-02
123	1.04E-03	203	-1.28E-01
125	2.09E-04	205	-3.81E-01
127	5.51E-05	207	1.04E-01
129	-1.03E-03	209	2.37E-01
131	-1.12E-03	211	-3.49E-01
133	-2.39E-03	213	1.24E-01
135	-2.51E-03	215	2.46E-02

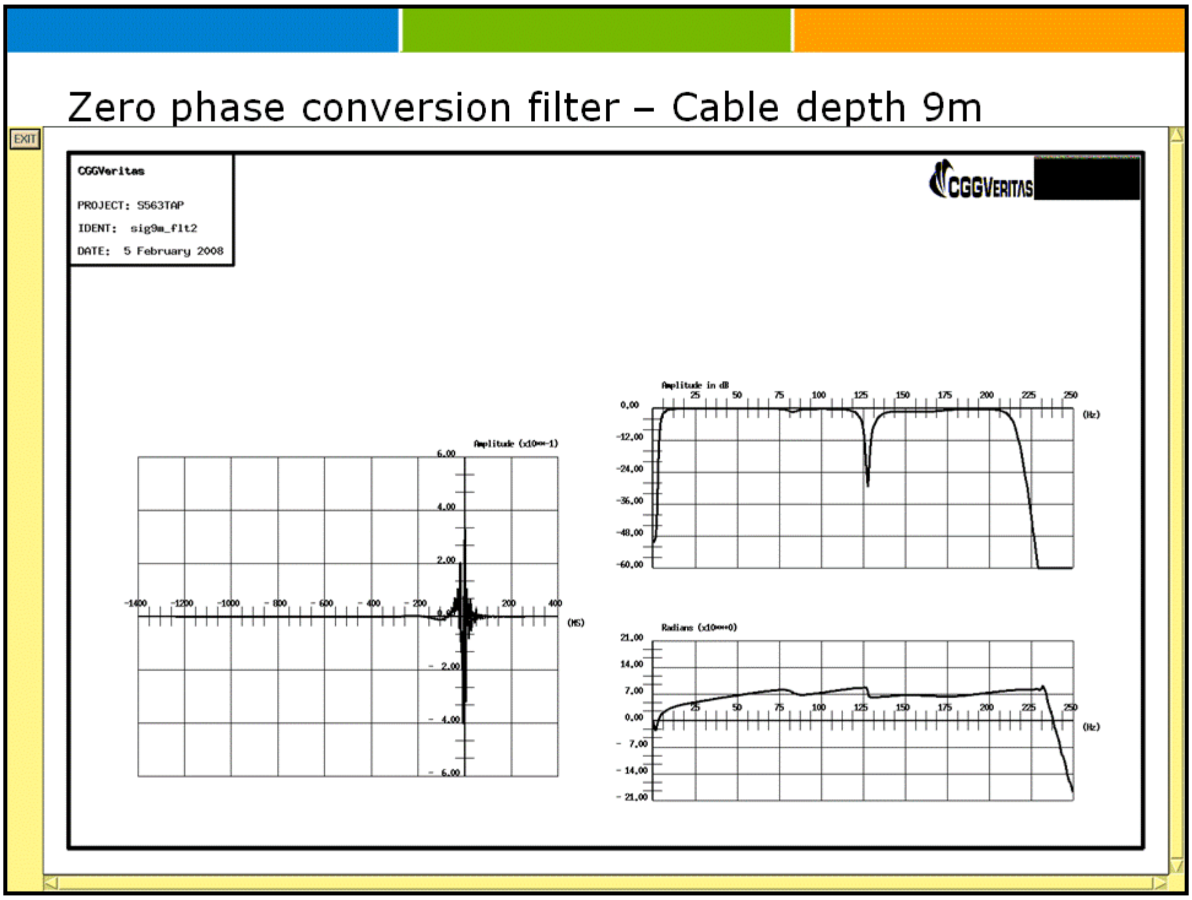
SAMPLE #	VALUE	SAMPLE #	VALUE
217	6.10E-03	297	6.25E-04
219	1.97E-02	299	-7.29E-04
221	1.48E-02	301	7.10E-04
223	-3.76E-02	303	-7.75E-04
225	2.26E-02	305	7.21E-04
227	-3.16E-02	307	-7.27E-04
229	1.72E-02	309	6.37E-04
231	5.19E-03	311	-6.50E-04
233	-2.16E-03	313	6.11E-04
235	7.81E-03	315	-6.25E-04
237	-1.39E-03	317	6.00E-04
239	-5.36E-03	319	-5.86E-04
241	5.28E-03	321	5.48E-04
243	-2.16E-03	323	-5.17E-04
245	1.28E-03	325	4.67E-04
247	5.08E-03	327	-4.62E-04
249	-3.13E-03	329	3.96E-04
251	3.64E-03	331	-4.21E-04
253	-1.03E-03	333	3.32E-04
255	5.25E-05	335	-3.73E-04
257	1.24E-03	337	2.59E-04
259	5.93E-04	339	-3.16E-04
261	1.41E-04	341	1.89E-04
263	1.98E-03	343	-2.60E-04
265	-7.20E-04	345	1.34E-04
267	1.08E-03	347	-2.04E-04
269	2.83E-04	349	9.11E-05
271	-1.09E-04	351	-1.48E-04
273	9.93E-04	353	4.45E-05
275	-3.10E-05	355	-9.87E-05
277	6.49E-04	357	1.70E-06
279	1.80E-04	359	-5.83E-05
281	4.30E-04	361	-3.53E-05
283	-2.25E-04	363	-2.34E-05
285	7.33E-04	365	-6.35E-05
287	-6.46E-04	367	8.70E-06
289	8.79E-04	369	-8.42E-05
291	-5.93E-04	371	3.81E-05
293	7.31E-04	373	-9.39E-05
295	-5.78E-04	375	6.64E-05

SAMPLE #	VALUE	SAMPLE #	VALUE
377	-1.02E-04	457	1.09E-05
379	8.73E-05	459	-4.20E-06
381	-1.18E-04	461	1.53E-05
383	1.04E-04	463	-1.03E-05
385	-1.29E-04	465	1.94E-05
387	1.12E-04	467	-1.50E-05
389	-1.37E-04	469	2.29E-05
391	1.14E-04	471	-1.89E-05
393	-1.39E-04	473	2.53E-05
395	1.16E-04	475	-2.28E-05
397	-1.31E-04	477	2.61E-05
399	1.20E-04	479	-2.64E-05
401	-1.18E-04	481	2.61E-05
403	1.20E-04	483	-2.91E-05
405	-1.07E-04	485	2.61E-05
407	1.14E-04	487	-3.01E-05
409	-9.75E-05	489	2.62E-05
411	1.05E-04	491	-2.99E-05
413	-8.66E-05	493	2.62E-05
415	9.72E-05	495	-2.90E-05
417	-7.48E-05	497	2.56E-05
419	8.79E-05	499	-2.79E-05
421	-6.39E-05	501	2.41E-05
423	7.73E-05	503	-2.66E-05
425	-5.37E-05	505	2.22E-05
427	6.65E-05	507	-2.49E-05
429	-4.38E-05	509	2.00E-05
431	5.57E-05	511	-2.28E-05
433	-3.46E-05	513	1.78E-05
435	4.48E-05	515	-2.03E-05
437	-2.61E-05	517	1.54E-05
439	3.46E-05	519	-1.77E-05
441	-1.75E-05	521	1.28E-05
443	2.59E-05	523	-1.50E-05
445	-8.70E-06	525	1.01E-05
447	1.82E-05	527	-1.22E-05
449	-7.00E-07	529	7.50E-06
451	1.05E-05	531	-9.30E-06
453	5.70E-06	533	5.10E-06
455	2.80E-06	535	-6.30E-06

SAMPLE #	VALUE	SAMPLE #	VALUE
537	2.70E-06	617	-1.70E-06
539	-3.40E-06	619	1.40E-06
541	5.00E-07	621	-9.00E-07
543	-6.00E-07	623	8.00E-07
545	-1.70E-06	625	-4.00E-07
547	2.10E-06	627	4.00E-07
549	-3.70E-06	629	-3.00E-07
551	4.70E-06	631	1.00E-07
553	-5.60E-06	633	-1.00E-07
555	7.10E-06	635	-3.00E-07
557	-7.50E-06	637	1.00E-07
559	9.20E-06	639	-3.00E-07
561	-9.60E-06	641	4.00E-07
563	1.11E-05	643	-2.00E-07
565	-1.14E-05	645	6.00E-07
567	1.33E-05	647	-1.00E-07
569	-1.33E-05	649	8.00E-07
571	1.52E-05	651	-1.00E-07
573	-1.58E-05	653	7.00E-07
575	1.67E-05	655	-3.00E-07
577	-1.82E-05	657	5.00E-07
579	1.91E-05	659	-4.00E-07
581	-1.95E-05	661	4.00E-07
583	2.25E-05	663	-4.00E-07
585	-1.95E-05	665	4.00E-07
587	1.54E-05	667	-5.00E-07
589	-1.42E-05	669	1.00E-07
591	1.24E-05	671	-7.00E-07
593	-1.08E-05	673	-1.00E-07
595	1.08E-05	675	-8.00E-07
597	-8.40E-06	677	-2.00E-07
599	8.90E-06	679	-7.00E-07
601	-6.70E-06	681	-1.00E-07
603	6.50E-06	683	-5.00E-07
605	-4.40E-06	685	0.00E+00
607	4.50E-06	687	-3.00E-07
609	-3.00E-06	689	1.00E-07
611	3.20E-06	691	-1.00E-07
613	-2.50E-06	693	2.00E-07
615	2.20E-06	695	0.00E+00

SAMPLE #	VALUE
697	2.00E-07
699	0.00E+00
701	1.00E-07
703	0.00E+00
705	2.00E-07
707	-2.00E-07
709	0.00E+00
711	1.00E-07
713	1.00E-07
715	0.00E+00
717	1.00E-07
719	0.00E+00
721	0.00E+00
723	1.00E-07
725	0.00E+00
727	1.00E-07
729	0.00E+00
731	1.00E-07
733	0.00E+00
735	0.00E+00
737	0.00E+00
739	1.00E-07
741	0.00E+00
743	1.00E-07
745	0.00E+00
747	0.00E+00
749	0.00E+00
751	0.00E+00

C.2.3 9M Cable Depth



SAMPLE #	VALUE	SAMPLE #	VALUE
1	0.00E+00	29	4.00E-07
3	0.00E+00	31	4.00E-07
5	0.00E+00	33	5.00E-07
7	0.00E+00	35	5.00E-07
9	1.00E-07	37	6.00E-07
11	0.00E+00	39	6.00E-07
13	1.00E-07	41	7.00E-07
15	1.00E-07	43	7.00E-07
17	1.00E-07	45	8.00E-07
19	1.00E-07	47	9.00E-07
21	2.00E-07	49	9.00E-07
23	2.00E-07	51	1.00E-06
25	3.00E-07	53	1.00E-06
27	3.00E-07	55	1.10E-06

SAMPLE #	VALUE	SAMPLE #	VALUE
29	4.00E-07	109	-1.80E-06
31	4.00E-07	111	-1.60E-06
33	5.00E-07	113	-2.50E-06
35	5.00E-07	115	-2.10E-06
37	6.00E-07	117	-3.00E-06
39	6.00E-07	119	-2.60E-06
41	7.00E-07	121	-3.50E-06
43	7.00E-07	123	-3.10E-06
45	8.00E-07	125	-4.10E-06
47	9.00E-07	127	-3.60E-06
49	9.00E-07	129	-4.70E-06
51	1.00E-06	131	-4.00E-06
53	1.00E-06	133	-5.00E-06
55	1.10E-06	135	-4.30E-06
57	1.10E-06	137	-5.30E-06
59	1.20E-06	139	-4.50E-06
61	1.10E-06	141	-5.50E-06
63	1.30E-06	143	-4.70E-06
65	1.10E-06	145	-5.50E-06
67	1.30E-06	147	-4.60E-06
69	1.10E-06	149	-5.30E-06
71	1.40E-06	151	-4.40E-06
73	1.10E-06	153	-4.90E-06
75	1.30E-06	155	-4.00E-06
77	1.00E-06	157	-4.20E-06
79	1.20E-06	159	-3.40E-06
81	8.00E-07	161	-3.30E-06
83	1.10E-06	163	-2.60E-06
85	6.00E-07	165	-2.20E-06
87	9.00E-07	167	-1.60E-06
89	3.00E-07	169	-8.00E-07
91	6.00E-07	171	-4.00E-07
93	0.00E+00	173	8.00E-07
95	3.00E-07	175	1.00E-06
97	-4.00E-07	177	2.70E-06
99	-1.00E-07	179	2.50E-06
101	-8.00E-07	181	4.80E-06
103	-5.00E-07	183	4.10E-06
105	-1.30E-06	185	7.20E-06
107	-1.00E-06	187	5.70E-06

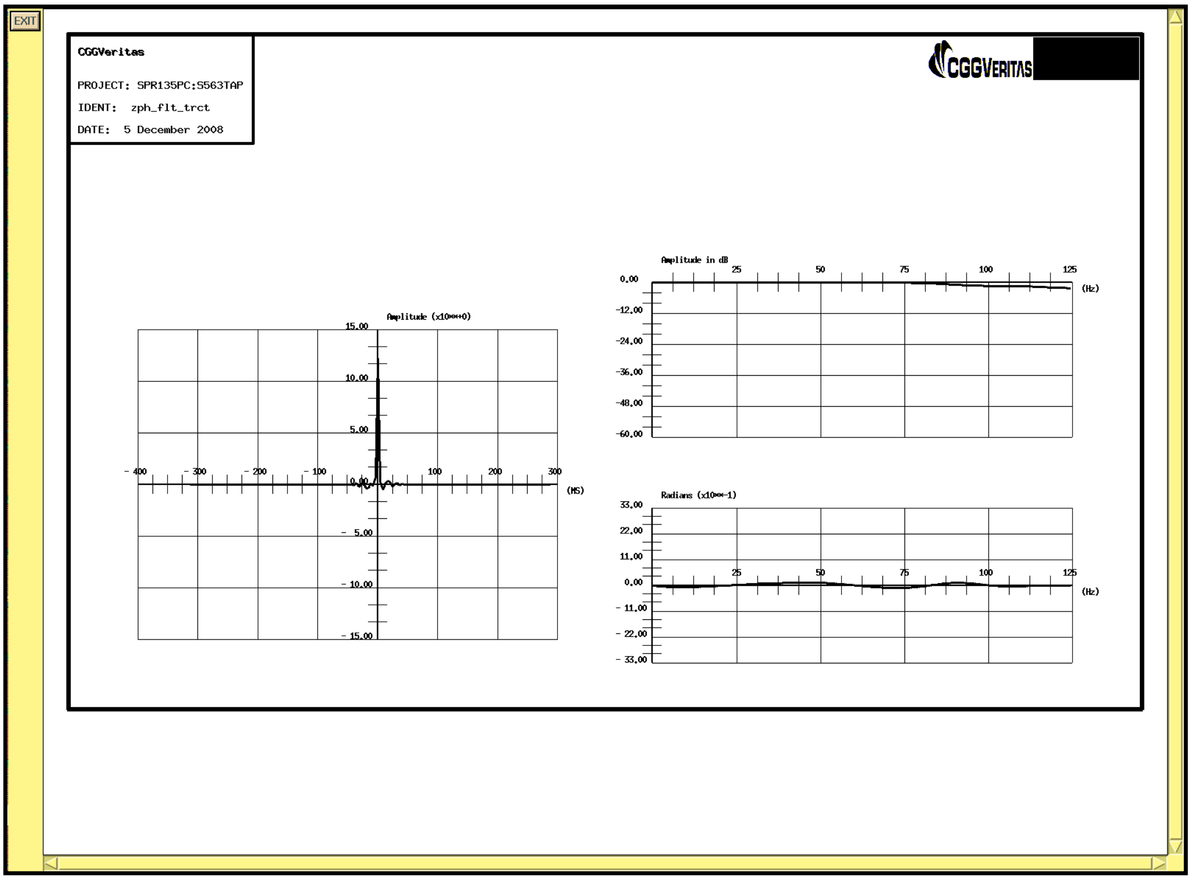
SAMPLE #	VALUE	SAMPLE #	VALUE
189	9.70E-06	269	-3.97E-05
191	7.40E-06	271	-4.00E-05
193	1.23E-05	273	-4.94E-05
195	9.00E-06	275	-4.57E-05
197	1.49E-05	277	-5.78E-05
199	1.04E-05	279	-5.13E-05
201	1.76E-05	281	-6.56E-05
203	1.15E-05	283	-5.58E-05
205	2.02E-05	285	-7.24E-05
207	1.24E-05	287	-5.90E-05
209	2.25E-05	289	-7.73E-05
211	1.26E-05	291	-6.10E-05
213	2.46E-05	293	-8.05E-05
215	1.23E-05	295	-6.10E-05
217	2.64E-05	297	-8.19E-05
219	1.15E-05	299	-5.90E-05
221	2.80E-05	301	-8.07E-05
223	9.90E-06	303	-5.47E-05
225	2.87E-05	305	-7.66E-05
227	7.00E-06	307	-4.77E-05
229	2.87E-05	309	-6.97E-05
231	3.50E-06	311	-3.80E-05
233	2.88E-05	313	-5.96E-05
235	-3.00E-07	315	-2.56E-05
237	2.83E-05	317	-4.62E-05
239	-5.90E-06	319	-1.04E-05
241	2.53E-05	321	-2.95E-05
243	-1.35E-05	323	7.90E-06
245	1.99E-05	325	-9.10E-06
247	-1.07E-05	327	2.94E-05
249	7.70E-06	329	1.51E-05
251	-1.20E-05	331	5.36E-05
253	-9.00E-07	333	4.21E-05
255	-1.86E-05	335	7.95E-05
257	-9.90E-06	337	7.08E-05
259	-2.27E-05	339	1.06E-04
261	-2.04E-05	341	1.00E-04
263	-2.75E-05	343	1.32E-04
265	-3.00E-05	345	1.30E-04
267	-3.41E-05	347	1.57E-04

SAMPLE #	VALUE	SAMPLE #	VALUE
349	1.60E-04	429	-5.57E-04
351	1.81E-04	431	-8.36E-04
353	1.89E-04	433	-6.32E-04
355	2.03E-04	435	-9.23E-04
357	2.15E-04	437	-7.07E-04
359	2.21E-04	439	-9.89E-04
361	2.38E-04	441	-7.47E-04
363	2.33E-04	443	-9.95E-04
365	2.55E-04	445	-7.43E-04
367	2.39E-04	447	-9.61E-04
369	2.67E-04	449	-7.27E-04
371	2.38E-04	451	-9.10E-04
373	2.72E-04	453	-7.13E-04
375	2.30E-04	455	-8.05E-04
377	2.69E-04	457	-6.48E-04
379	2.12E-04	459	-6.32E-04
381	2.58E-04	461	-5.20E-04
383	1.83E-04	463	-4.20E-04
385	2.35E-04	465	-3.74E-04
387	1.41E-04	467	-1.73E-04
389	2.01E-04	469	-1.98E-04
391	8.72E-05	471	1.14E-04
393	1.55E-04	473	4.69E-05
395	2.22E-05	475	4.57E-04
397	9.96E-05	477	3.30E-04
399	-5.42E-05	479	8.42E-04
401	3.27E-05	481	6.22E-04
403	-1.44E-04	483	1.22E-03
405	-4.58E-05	485	9.40E-04
407	-2.42E-04	487	1.59E-03
409	-1.31E-04	489	1.25E-03
411	-3.45E-04	491	1.99E-03
413	-2.18E-04	493	1.54E-03
415	-4.52E-04	495	2.33E-03
417	-3.10E-04	497	1.84E-03
419	-5.62E-04	499	2.63E-03
421	-4.05E-04	501	2.07E-03
423	-6.69E-04	503	2.93E-03
425	-4.87E-04	505	2.24E-03
427	-7.56E-04	507	3.12E-03

SAMPLE #	VALUE	SAMPLE #	VALUE
509	2.42E-03	591	1.50E-02
511	3.21E-03	593	1.41E-02
513	2.43E-03	595	2.50E-02
515	3.26E-03	597	1.89E-02
517	2.29E-03	599	7.00E-02
519	3.08E-03	601	2.14E-02
521	2.17E-03	603	6.72E-02
523	2.72E-03	605	4.65E-02
525	1.67E-03	607	4.05E-02
527	2.26E-03	609	-4.46E-02
529	9.24E-04	611	2.00E-01
531	1.43E-03	613	-7.01E-02
533	2.68E-04	615	-5.49E-02
535	3.71E-04	617	-4.02E-01
537	-9.44E-04	619	-1.01E-01
539	-5.80E-04	621	3.27E-01
541	-2.38E-03	623	-1.04E-01
543	-2.18E-03	625	2.93E-02
545	-3.64E-03	627	4.93E-02
547	-3.95E-03	629	-8.22E-02
549	-5.57E-03	631	7.05E-03
551	-4.97E-03	633	2.87E-02
553	-7.41E-03	635	-2.43E-02
555	-6.68E-03	637	1.97E-02
557	-8.35E-03	639	1.45E-02
559	-8.47E-03	641	-2.47E-02
561	-1.08E-02	643	8.52E-03
563	-8.68E-03	645	1.65E-03
565	-1.25E-02	647	-1.25E-02
567	-9.51E-03	649	8.77E-03
569	-1.09E-02	651	8.46E-03
571	-9.13E-03	653	-7.58E-03
573	-1.20E-02	655	4.71E-03
575	-6.09E-03	657	3.72E-03
577	-1.33E-02	659	-8.30E-03
579	-5.84E-03	661	4.27E-03
581	-6.70E-03	663	2.23E-03
583	-1.13E-04	665	-2.23E-03
585	-2.95E-03	667	1.78E-03
587	1.39E-02	669	4.15E-03
589	-7.72E-04	671	-4.48E-03

SAMPLE #	VALUE
673	3.18E-03
675	2.73E-04
677	-4.62E-04
679	1.84E-04
681	2.99E-03
683	-2.41E-03
685	2.27E-03
687	6.77E-05
689	1.10E-04
691	-1.54E-04
693	1.72E-03
695	-1.32E-03
697	1.20E-03
699	6.49E-05
701	4.79E-05
703	-4.72E-05
705	7.76E-04
707	-6.23E-04
709	3.89E-04
711	1.77E-04
713	-2.00E-04
715	1.45E-04
717	1.70E-04
719	-9.42E-05
721	-3.39E-05
723	3.71E-04
725	-3.22E-04
727	3.40E-04
729	-1.03E-04
731	2.23E-04
733	-2.06E-04
735	4.25E-04
737	-3.28E-04
739	3.35E-04
741	-1.87E-04
743	2.24E-04
745	-2.10E-04
747	2.89E-04
749	-1.80E-04
751	1.53E-04

C.3 ZERO PHASING FILTER APPLIED TO FINAL DATA



SAMPLE #	VALUE	SAMPLE #	VALUE
1	-6.99E-05	79	1.22E+01
3	-6.60E-04	81	-4.75E-01
5	2.19E-04	83	3.42E-01
7	-9.64E-04	85	-1.96E-01
9	9.06E-04	87	1.22E-01
11	-4.58E-04	89	4.42E-02
13	-2.60E-04	91	1.44E-03
15	1.42E-04	93	1.51E-03
17	1.97E-03	95	8.21E-04
19	3.11E-04	97	3.56E-03
21	-1.33E-03	99	-1.22E-03
23	7.23E-04	101	6.67E-03
25	5.21E-04	103	3.90E-04
27	-8.11E-04	105	-6.31E-03
29	3.96E-04	107	2.33E-03
31	1.68E-03	109	1.01E-03
33	-1.05E-03	111	2.29E-03
35	-3.28E-04	113	-2.36E-03
37	1.28E-03	115	-1.27E-03
39	-3.57E-03	117	3.42E-05
41	1.51E-04	119	3.41E-03
43	1.43E-03	121	-1.60E-03
45	2.08E-03	123	8.34E-04
47	-2.25E-03	125	9.88E-04
49	-1.27E-03	127	-1.84E-03
51	-1.96E-03	129	-1.85E-04
53	7.04E-03	131	8.72E-04
55	-1.55E-03	133	-7.73E-04
57	-6.53E-03	135	-5.17E-04
59	2.05E-03	137	1.51E-03
61	-2.04E-03	139	-6.31E-04
63	-6.34E-03	141	-1.84E-03
65	-8.25E-03	143	-1.50E-04
67	1.51E-02	145	2.62E-04
69	-8.69E-02	147	3.35E-04
71	-2.15E-01	149	-2.33E-03
73	1.62E-01	151	-4.22E-04
75	-3.26E-01		
77	-1.52E-01		