

DAILY OPERATIONS REPORT # 10

ANTARES 3D MARINE SEISMIC SURVEY

Contractor:	PGS	Vessel:	Orient Explorer
Woodside Reps:	Ken Haig, Stephen Burt	Party Chief:	Stephen Beer
WEL project Manager:	Ralph Weiss	Date:	Sunday 26th Oct 2003

1. PRODUCTION SUMMARY

October 26th, 2003

Seq	Line Name	Hdg	Line Type	Line Status	FcSP	LcSP	Ch Sailed
004	WO3ANT-1108P1	125.0	Prime	Completed	2183	2944	14.28750
005	WO3ANT-1148P1	305.0	Prime	Completed	2836	893	36.45000
006	WO3ANT-1036P1	126.0	Prime	Completed	1001	2944	36.45000
007	WO3ANT-1140P1	305.0	Prime	Completed	2836	893	36.45000
Total 10/26/2003 :							123.63750

2. STATISTICAL ANALYSIS (DECIMAL HOURS)

Line Type Analysis

	Period	(%)	Survey	(%)
Prime	123.63750	100	204.05625	100
Total :	123.63750	100	204.05625	100

Line Charge Analysis

Sailed Kms

	Period	(%)	Survey	(%)
Prime	123.63750	100	207.41250	100
Total :	123.63750	100	207.41250	100

Charged Sailed Kms

	Period	(%)	Survey	(%)
Prime	123.63750	100	204.05625	100
Total :	123.63750	100	204.05625	100

CMP Kms

	Period	(%)	Survey	(%)
Prime	989.10000	100	1,632.45000	100
Total :	989.10000	100	1,632.45000	100

Square Kms

	Period	(%)	Survey	(%)
Prime	24.72750	100	40.81125	100
Total :	24.72750	100	40.81125	100

Fullfold Sailed Kms

	Period	(%)	Survey	(%)
Prime	115.53750	100	191.90625	100
Total :	115.53750	100	191.90625	100

Fullfold CMP Kms

	Period	(%)	Survey	(%)
Prime	924.30000	100	1,535.25000	100
Total :	924.30000	100	1,535.25000	100

Fullfold Square Kms

	Period	(%)	Survey	(%)
Prime	23.10750	100	38.38125	100
Total :	23.10750	100	38.38125	100

Time Activity Analysis

	Period	(%)	Survey	(%)
Recording	16.133	67	27.833	12
Line Change	7.283	30	11.783	5
Extended L/C	0.583	2	1.000	0
Weather	0.000	0	46.000	20
Instrument	0.000	0	0.217	0
Source	0.000	0	1.917	1
Travel t/f Port	0.000	0	4.250	2
Mobilisation	0.000	0	136.000	59
Total :	24.000	100	229.000	100

Time Cause/Reason Analysis

	Period	(%)	Survey	(%)
Production	23.417	98	39.617	17
Weather	0.000	0	46.000	20
Equip.Fail	0.000	0	2.133	1
MOB/DeMOB	0.000	0	140.250	61
Obstruction	0.000	0	0.183	0
Survey Shape	0.583	2	0.817	0
Total :	24.000	100	229.000	100

Time Charge Analysis

	Period	(%)	Survey	(%)
Prime	16.133	67	27.833	12
Operations	7.283	30	11.783	5
Standby	0.583	2	47.000	21
Contractor	0.000	0	2.133	1
Mob/Demob	0.000	0	140.250	61
Total :	24.000	100	229.000	100

3. TIME SUMMARY

October 26th, 2003

Start	End	Hours	Description / Comments	Charge
00:00	02:13	2.217	Seq 004 : Line WO3ANT-1108P1 Line continued through midnight. Time change to local summer time, (+1 hour) hence the apparent slow speed. on this line. Recover array 3 for repairs and maintenance.	Prime
02:13	04:28	2.250	Production (Line Change) Nominal line change at northern end of survey area.	Operations
04:28	04:32	0.067	Survey Shape (Extended L/C) Extended line change - tear drop turn due to survey shape and shooting restrictions.	Standby
04:32	08:55	4.383	Seq 005 : Line WO3ANT-1148P1	Prime
08:55	11:10	2.250	Production (Line Change) Nominal line change at southern end	Operations
11:10	11:27	0.283	Survey Shape (Extended L/C) Extend line change due to survey shape and choice limitations	Standby
11:27	16:24	4.950	Seq 006 : Line WO3ANT-1036P1	Prime
16:24	18:39	2.250	Production (Line Change)	Operations
18:39	18:53	0.233	Survey Shape (Extended L/C) Tear drop turn due to line limitations and survey shape	Standby
18:53	23:28	4.583	Seq 007 : Line WO3ANT-1140P1	Prime
23:28	24:00	0.533	Production (Line Change)	Operations
Total :		24.000		

Chase/Supply Vessel Status:

Southern Salvor on site with Orient Explorer.

Perfect Lady in Port Fairy on site.

17:10 – 23:59 Perfect Lady was released to assist with search and rescue operations for a reported downed aircraft south of Warrnambool. No survivors at this stage located.

Feedback Required

Is it approved if we acquire the lines adjacent to the coast in the opposite direction to those outside of the designated close passes.

Simply put - can we acquire the inshore lines in either direction – we would maintain a swathe of lines all in the same direction. It probably will not happen but we would like the option clarified if need be, rather than late night panic calls to Perth if we have no-where to shoot..

Can you please check with PGS and come to an agreement if we need to delay departure due to Woodside Inductions etc, who this would be chargeable to...Woodside completely or 50/50 as part of the normal crew change.?

Problems / Comments:

Continue acquisition in marginal to fair weather and sea conditions.

All recording systems operating well. Cable balance and control has been slightly erratic in the swell but under the conditions and time constraints it is acceptable.

Source performance remains stable after an initial slow start. with good pressure, volume timing and control being maintained.

During sequence 005 lost GPS positioning of inner gun strings of both arrays. Centre of both sources could still be determined via GPS and acoustics. Both arrays were repaired during the following line change.

Conditions began improving mid-morning and the first of the close inshore passes was completed without incident – line 1036 – heading 305°

SEMAC 1

Arrived on location and preparing to anchor off Port Campbell. Communications between vessel has been made and will be maintained.

It should be on location by 07:00 in the morning of 27th October.

Crew change for Orient

Vessel is scheduled to be in Portland at 06:00 hours on Wednesday 29th Oct. We should be alongside at approximately 07:15 hours local time. Crew are NOT staying overnight in Portland, but will spend the night in Melbourne before flying on to Portland by a charter arranged by PGS. The crew hand will be a maximum of 2 hours so, I am told as they have to return to Melbourne to catch International flights.

HSE & Audit Issues

Crew have been addressed again as to general house-keeping expectations and clearance of work areas of rubbish and debris.

Medical Treatment Case

Medical Treatment Case:- Patient's condition has improved and he is scheduled to go to the Mount Gambier Hospital on Monday for further check. To date they cannot detect any symptoms which may have been the cause of his fainting.

General Weather Comments:

Conditions marginal with wind up to 25 knots at time and swell approaching 2 metres. Sea conditions, swell direction inshore are quite confused., but gradually improved as the day continued.

Close of the day.

Heading to the start of line 1140, heading southeast. Conditions fair. Unsure of next line at this time due to Semac location as we get to the end of line and what we can expect. Communications between all vessel is very good.

Winds: SW 20 knots

Swell: SSW 1.5m - confused

SEQ	COMMENTS
001 Dir 125°	W03ANT1116 P1 SP 1001-1080 Line aborted – Not to be processed. Missed SP 1001 – 1080 due to incorrect baud rate into Syntrak and forced to reboot the system at the FSP. At SP 1258 – last SP of the line an autofire on array occurred and the line was terminated. All data scratched – not to be processed.
002 Dir 125°	W03ANT1116 P2 SP 1782 - 2944 Line portion complete Data Tape Nos: 35612 - 35613 Restart of previous line sequence – this line portion is complete. Shotpoints 1001-1781 to be reshot. Streamer depths slightly erratic due to the sea and swell conditions. Weather: Winds SE 20-22 Knots , Sea and Swell: S 2m. Noise at SOL: 5µB, EOL: 5µB (6Hz lo-cut filter applied) Water Depth: SOL: 39.3m, EOL: 53.7m Feather at SOL: -0.4°, EOL : 1.7-°, Max: -2.2° Streamer Depth: 7.8 – 8.0m due to prevailing swell – acceptable depth control. Noisy Traces: Nil logged – random swell bursts throughout the line - acceptable Gun Volume @ SOL: 2500 , EOL: 2500 SP 2148 Gun 5-4 disabled, gun 4-7 enabled. No valume variation. Gun edits: SP 2146, 2156 mifires Missed Shots: SP 2132, 2382 No data recorded.
003 Dir 305°	W03ANT1156 P1 SP 2836-893 Complete Data Tape Nos: 35614 - 35617 Streamer depths slightly erratic due to the sea and swell conditions. Streamer depth set to 8.5m to reduce effects of swell interference. Random swell noise bursts observed throughout the line. SP 1311, file number – incorrect SP number in header, should read 1318 Weather: Winds SE 20 Knots , Sea and Swell: SSW 2m. Noise at SOL: 6-7µB, EOL: 7-8µB (6Hz lo-cut filter applied) Water Depth: SOL: 56.2m, EOL: 36.8m Feather at SOL: -1.9°, EOL : -1.07°, Max: -3.0° Streamer Depth: 8.5 metres due to prevailing swell – acceptable depth control. Noisy Traces: Nil logged – random swell bursts observed throughout the line. Gun Volume @ SOL: 2500 , EOL: 2500 Gun edit logged : 2 timing errors above 1.5ms, 4 spread errors above 2ms Missed Shots: 2623, 2356, 2355 due to vessel speed variation in swell.
004 Dir 125°	W03ANT1108 P1 SP 1001 - 2944 Complete Data Tape Nos: 35618 - 35621 Streamer depths slightly erratic due to the sea and swell conditions. Streamer depth set to 8.5m to reduce effects of swell interference. Random swell noise bursts observed throughout the line. Weather: Winds SE 25-30 Knots , Sea and Swell: S 2-3m. Noise at SOL: 5µB, EOL: 5-6µB (6Hz lo-cut filter applied) Water Depth: SOL:38.2m, EOL: 53.6m Feather at SOL: -2.1°, EOL : -3.2°, Max: -3.2° Streamer Depth: 8.5 metres due to prevailing swell – acceptable depth control. Noisy Traces: Nil logged – random moderate to strong swell bursts throughout the line. Gun Volume @ SOL: 2500 , EOL: 2500 Gun edits logged : 3 timing errors above 1.5ms – 3 spread errors above 2ms Missed Shots: 1127, 2863 due to vessel speed variation in swell. From SOL to EOL depth controller 4 – no communications
005 Dir 305°	W03ANT1148 P1 SP 2836 - 893 Complete Data Tape Nos: 35622 - 35625 Streamer depths erratic due to the sea and swell conditions. Streamer depth set to 8.5m to reduce effects of swell interference. Random swell noise bursts observed throughout the line. Weather: Winds SE 18-25 Knots , Sea and Swell: S 2-3m. Noise at SOL: 5µB, EOL: 5µB (6Hz lo-cut filter applied) Water Depth: SOL: 56.9m, EOL: 38.96m Feather at SOL: -0.2°, EOL : 0.5°, Max: -2.2° Streamer Depth: 8.5 metres due to prevailing swell – acceptable depth control. Noisy Traces: Nil logged – random moderate swell bursts throughout the line. Gun Volume SOL: 2500 , EOL: 2500. Spread timing error: 2770, 2652, 2614, 2220, 1992, 1702, 1178,898 Gun edits logged : 3 timing errors above 1.5ms – 3 spread errors above 2ms Missed Shots: SP 1197, 1735.
006 Dir 125°	W03ANT1036 P1 SP 1001 - 2944 Complete Data Tape Nos: 35626 - 35629 Reasonable balance and control some random swell bursts observed. Fair balance areas were depth control does go out of spec – see below. Max depth 11.2m.

	<p>Weather: Winds SE 18-25 Knots , Sea and Swell: S 2-3m. Noise at SOL: 5µB, EOL: 5-6µB (6Hz lo-cut filter applied) Water Depth: SOL: 33.6m, EOL: 52.6m Feather at SOL: -1.1°, EOL : -2.0°, Max: -2.3° Streamer Depth: 8.5 metres due to prevailing swell – acceptable depth control. SP 2453-2920 bird 5 deep to 11.2m on streamer 1. Lost comms on bird 4 streamer 2 from SOL to EOL Noisy Traces: Nil logged – random swell bursts throughout the line. Gun Volume SOL: 2500 , EOL: 2500 Good pressure and control. Gun edits logged : 3 spread errors above 2ms SP 1136, 1618, 1662 Missed Shots: SP 1266, 1727 .</p>
007 Dir 305°	<p>W03ANT1140 P1 SP 2836 - 893 Complete Data Tape Nos: 35630 - 35633 Acceptable swell noise, balance and control on line. Weather: Winds SE 18 Knots , Sea and Swell: S 2m. Noise at SOL: 7µB, EOL: 7µB (6Hz lo-cut filter applied) Water Depth: SOL: 56.9m, EOL: 38.96m Feather at SOL: -0.2°, EOL : 0.5°, Max: -2.2° Streamer Depth: 7.5 metres acceptable depth control. Noisy Traces: Nil logged – random swell bursts throughout the line. Gun Volume SOL: 2500 , EOL: 2500. Good pressure and control. Gun edits logged : – 3 spread errors above 2ms SP 2252, 1700, 908 Missed Shots: 2003</p>

HSE Daily Statistics - 26/10/2003

Comments:

No accidents or lost time incidents reported. No spillage of oil or loss of containment overboard. Whale watches have been maintained - no sightings. 17:10-23:59 Perfect Lady released to search for reported downed aircraft, south of Warrnambool

HSE Items:

13:00 - 13:25

Emergency Boat Drill/Tow Drill [EBD]

Conduct emergency helicopter crash drill. Cover communications, emergency response, radio, equipment and fire-fighting systems.

Description	Day	Month	Survey
Incidents			
Near Miss Incident (NMI)	0	0	0
First Aid Case (FAC)	0	0	0
Medical Treatment Case (MTC)	0	1	1
Restricted Work Case (RWC)	0	0	0
Fatality (FT)	0	0	0
Lost time Injury (LTI)	0	0	0
Oil Spill (OS)	0	0	0
Illness/Ailment (IA)	0	0	0
Environmental Incident (EI)	0	0	0
Hazard Report (HR)	0	0	0
Positive Observation (PO)	0	2	2
Non work related illness	0	0	0
Events			
Stop Cards Issued ()	1	4	4
Small Boat Launches ()	0	2	2
Helicopter Landing/Takeoff (HL)	0	0	0
MOB Drill (MD)	0	0	0
Fire Drill (FD)	0	0	0
Emergency Boat Drill/Tow Drill (EBD)	1	4	4
Safety Meeting (SM)	0	2	2
Inspection Tour (IT)	0	2	2
Safety Committee Meeting (SCM)	0	0	0
Inspection/Tour/Safety Check (HSE)	0	5	5
Toolbox Meeting/Debrief (TB)	0	9	9
Cetacean Sighting (CS)	0	0	0
Bunker and Resupply (BR)	0	0	0
Oil Recovery (OR)	0	0	0
Abandon Ship (AS)	0	0	0
Totals			
No. Marine Crew	34	349	349
No. Seismic Crew	21	210	210
No. Contractors	3	30	30
No. Lost Time Injuries	0	0	0
Exposure Hours *	696	7068	7068
Small Boat Hours (Decimal hours)	0.00	4.48	4.48
Small Boat Exposure Hours (Dec. hours)	0.00	17.93	17.93
Fuel Usage (Cubic Metres)	14	70	70
* Exposure hours calculated at 12hrs per day per person.			

Navigation report submitted by Stephen Burt for Sunday 26th Oct

Navigation General:

General:

Seas have improved slightly over the past 24 hours but a swell is affecting the acoustics and compasses data but the data has been acceptable on those lines checked. Rotation angles have been good to date.

Continue to notice seabed reflections as previously reported the acoustics are also affected by the swell. The hull pinger was lowered from 0.7m to 1.2m prior to Sequence 004 to try and improve the quality of the vessel ranges the crew did note that some ranges have improved since lowering the pinger.

During sequence 006 the swell did affect the rGPS starboard centre gun array and it has been prone to update slowly will continue to monitor this.

Noticed an increase in the Pdop around 23:45 hrs GMT during Sequence 002 the MRDGPS and Seadiff systems were less affected than MultiFix. Prime positioning during this period was acceptable.

No TSP dip was carried out today.

Progress:

Shot to Sequence: #007 Processed to Sequence #003 QC'd to Sequence #003

NTBP Sequences:

001

Dead/Bad Units:

RGPS - During sequence 005 the Starboard Inner Pod-was inactive and the Port Inner was inactive from SP2133-1696 and intermittent to SP# 1559, the starboard inner gun pod was replaced during the line change.

Acoustics - All pods are operational.

Compasses – S4C4 inactive from Sequence 004.

Regards,

Ken Haig and Stephen Burt

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