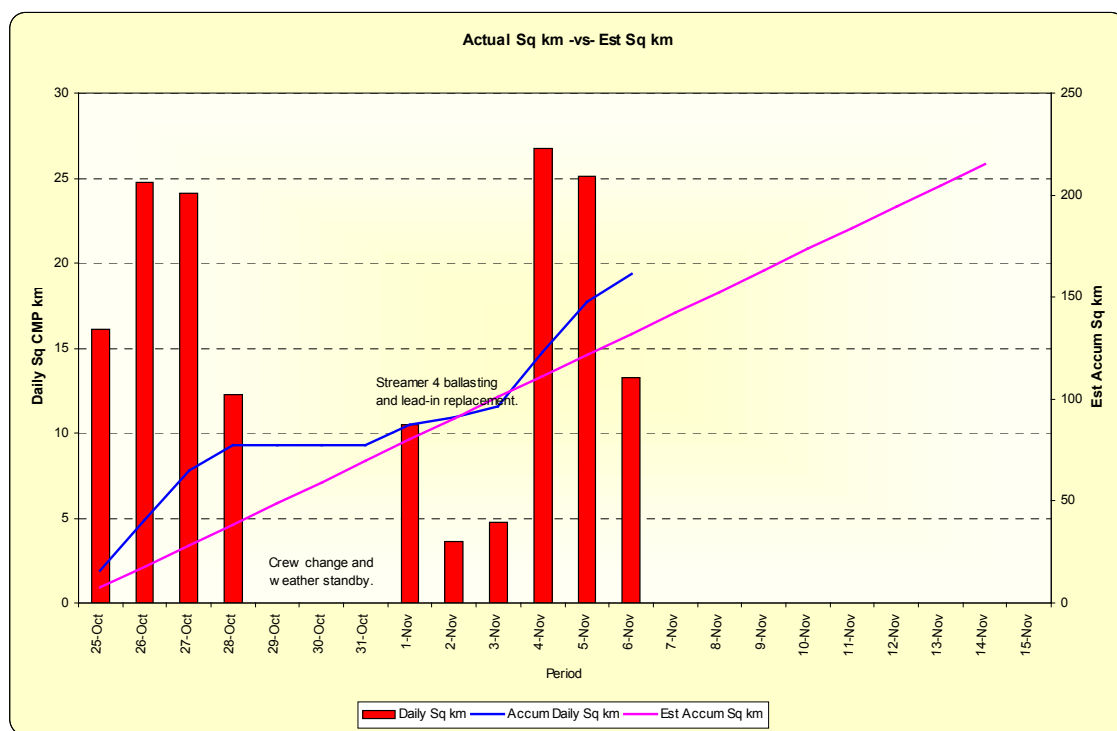


## DAILY OPERATIONS REPORT # 21

### ANTARES 3D MARINE SEISMIC SURVEY

<b>Contractor:</b>	<b>PGS</b>	<b>Vessel:</b>	<b>Orient Explorer</b>
<b>Woodside Reps:</b>	<b>Ken Haig, Stephen Burt</b>	<b>Party Chief:</b>	<b>E. Jettestad</b>
<b>WEL project Manager:</b>	<b>Ralph Weiss</b>	<b>Date:</b>	<b>Thursday 6th Nov 2003</b>



ESTIMATED COMPLETION 10<sup>TH</sup>-11<sup>TH</sup> NOVEMBER 2003

#### 1. PRODUCTION SUMMARY

November 6th, 2003

Seq	Line Name	Hdg	Line Type	Line Status	FcSP	LcSP	Ch Sailed
025	WO3ANT-1196P1	305.0	Prime	Completed	2061	893	21.91875
026	WO3ANT-1020I1	125.0	Infill	Completed	1001	1528	9.90000
026	WO3ANT-1020I1	125.0	N/C Reshoot	Completed	0	0	0.00000
026	WO3ANT-1020I1	125.0	Infill	Completed	1575	2238	12.45000
026	WO3ANT-1020I1	125.0	N/C Reshoot	Completed	0	0	0.00000
026	WO3ANT-1020I1	125.0	Infill	Completed	2282	2944	12.43125
027	WO3ANT-1196I1	305.0	Infill	Scratched	0	0	0.00000
028	WO3ANT-1196I2	305.0	Infill	End of Day	2598	2077	9.78750
Total 11/6/2003 :							66.48750

## 2. STATISTICAL ANALYSIS (DECIMAL HOURS)

### Line Type Analysis

	<b>Period</b>	<b>(%)</b>	<b>Survey</b>	<b>(%)</b>
Prime	21.91875	33	761.49375	94
Infill	44.56875	67	44.56875	6
Infill (% of Prime)	203	-	6	-
Total :	66.48750	100	806.06250	100

### Line Charge Analysis

#### Sailed Kms

	<b>Period</b>	<b>(%)</b>	<b>Survey</b>	<b>(%)</b>
Prime	21.91875	31	764.85000	94
Infill	46.31250	66	46.31250	6
Infill (% of Prime)	211	-	6	-
N/C Reshoot	1.66875	2	2.83125	0
Total :	69.90000	100	813.99375	100

#### Charged Sailed Kms

	<b>Period</b>	<b>(%)</b>	<b>Survey</b>	<b>(%)</b>
Prime	21.91875	33	761.49375	94
Infill	44.56875	67	44.56875	6
Infill (% of Prime)	203	-	6	-
Total :	66.48750	100	806.06250	100

#### CMP Kms

	<b>Period</b>	<b>(%)</b>	<b>Survey</b>	<b>(%)</b>
Prime	175.35000	33	6,091.95000	94
Infill	356.55000	67	356.55000	6
Infill (% of Prime)	203	-	6	-
Total :	531.90000	100	6,448.50000	100

#### Square Kms

	<b>Period</b>	<b>(%)</b>	<b>Survey</b>	<b>(%)</b>
Prime	4.38375	33	152.29875	94
Infill	8.91375	67	8.91375	6
Infill (% of Prime)	203	-	6	-
Total :	13.29750	100	161.21250	100

#### Fullfold Sailed Kms

	<b>Period</b>	<b>(%)</b>	<b>Survey</b>	<b>(%)</b>
Prime	19.89375	32	716.94375	94
Infill	42.54375	68	42.54375	6
Infill (% of Prime)	214	-	6	-
Total :	62.43750	100	759.48750	100

#### Fullfold CMP Kms

	<b>Period</b>	<b>(%)</b>	<b>Survey</b>	<b>(%)</b>
Prime	159.15000	32	5,735.55000	94
Infill	340.35000	68	340.35000	6
Infill (% of Prime)	214	-	6	-
Total :	499.50000	100	6,075.90000	100

#### Fullfold Square Kms

	<b>Period</b>	<b>(%)</b>	<b>Survey</b>	<b>(%)</b>
Prime	3.97875	32	143.38875	94
Infill	8.50875	68	8.50875	6
Infill (% of Prime)	214	-	6	-
Total :	12.48750	100	151.89750	100

### Time Activity Analysis

	<b>Period</b>	<b>(%)</b>	<b>Survey</b>	<b>(%)</b>
Recording	2.850	12	99.650	20
Line Change	2.050	9	46.267	9
Extended L/C	0.000	0	1.900	0
Weather	0.000	0	65.733	13
Instrument	0.217	1	3.250	1
Source	0.000	0	5.200	1
Streamer	11.417	48	47.867	10
Ship	0.000	0	0.500	0
Travel t/f Port	0.000	0	4.250	1
Port/Crew Change	0.000	0	71.917	15
Contractor	0.000	0	3.000	1
Mobilisation	0.000	0	136.000	28
Infill L/C	1.783	7	1.783	0
Infill	5.683	24	5.683	1
Total :	24.000	100	493.000	100

### Time Cause/Reason Analysis

	<b>Period</b>	<b>(%)</b>	<b>Survey</b>	<b>(%)</b>
Production	4.900	20	145.917	30
Infill	7.467	31	7.467	2
Weather	0.000	0	65.733	13
Equip.Fail	11.633	48	56.817	12
MOB/DeMOB	0.000	0	140.250	28
Wside.Reg	0.000	0	35.950	7
Crew Change	0.000	0	35.967	7
PGS	0.000	0	3.000	1
Survey Shape	0.000	0	1.900	0
Total :	24.000	100	493.000	100

### Time Charge Analysis

	<b>Period</b>	<b>(%)</b>	<b>Survey</b>	<b>(%)</b>
Prime	2.850	12	99.650	20
Operations	2.050	9	46.267	9
Standby	0.000	0	103.583	21
Contractor	11.633	48	95.783	19
Mob/Demob	0.000	0	140.250	28
Infill/Stby	7.467	31	7.467	2
Total :	24.000	100	493.000	100

### 3. TIME SUMMARY

November 6th, 2003

Start	End	Hours	Description / Comments	Ch
00:00	02:51	2.850	arge Seq 025 : Line WO3ANT-1196P1	Pri
02:51	04:54	2.050	me Production (Line Change)	Op
04:54	06:09	1.250	erations Seq 026 : Line WO3ANT-1020I1	Infil
06:09	06:16	0.117	I/Stby Seq 026 : Line WO3ANT-1020I1	Co
06:16	07:52	1.600	ntractor Acquire non-chargeable reshoot of data due to a Syntrak lock-up during earlier sequence 020. Seq 026 : Line WO3ANT-1020I1	Infil
07:52	07:58	0.100	I/Stby Seq 026 : Line WO3ANT-1020I1	Co
07:58	09:37	1.650	ntractor Acquire non-chargeable reshoot data due to Syntrak lock-up during sequence 24. Seq 026 : Line WO3ANT-1020I1	Infil
09:37	11:24	1.783	I/Stby Infill (Infill L/C)	Infil
11:24	11:33	0.150	I/Stby Seq 027 : Line WO3ANT-1196I1	Co
11:33	22:49	11.267	ntractor Line aborted just after the start due to failure of streamer 3 - circle and complete repairs. Equip.Fail (Streamer)	Co
22:49	24:00	1.183	ntractor Abandon line attempt - troubleshoot problems with streamer 3. Replace front modules and connectors, programme plugs, and replace 'O' ring seals. Run tests - streamer 3 acceptable. Infill (Infill)	Infil
			I/Stby Progressive infill pass.	
Total :		24.000		

### Chase/Supply Vessel Status:

Southern Salvor and Perfect Lady on site.

### Comments/Problems:

Continue acquisition in fair weather and sea conditions. Cable balance and control has been acceptable throughout the day. Source performance, volume, pressure and timing has been maintained on all lines. Random extraction errors are still being observed..

Complete all close inshore passes in Area 'A' shall continue to completion in areas B and C. At the current progress I do not anticipate any interruptions or problems with the Se-Mac 1 up to completion.

On the run in to infill line 1196, heading 305° - streamer 3 failed and the workboat launched to try and effect repairs. The section was checked and all appeared acceptable. The programme plug and modules were replaced and all connected cleaned and dried to remove any possible moisture. Power was then restored to the streamer. Tests were recorded and all was acceptable. Unfortunately once production continued again some extraction errors were still observed and logged, meaning the problem has not been solved at this time. Shall continue to monitor

### Semac-1

Still on location near Port Campbell.

### Cetacean Report:

No sightings reported.

### Weather Comments:

Swell increased to 2.5m but winds eased less than 5 knots. Swell is expected to be with us till at least Friday afternoon.

### Close of the day and local time updates.

Continuing on line 1212, infill 2, - all streamers operational – weather and sea state are fair with a long side swell making conditions extremely uncomfortable for all. The line has since been completed.

SEQ	COMMENTS
<b>026</b> <b>Dir 125°</b>	<b>W03ANT1020 I1 SP 1001 - 2944 Infill -Complete</b> Data Tape Nos 35708 - 35712 Weather: Winds 3-5 knots , Sea and Swell: 2 metres at times. Noise at SOL: 4-5µB, EOL: 4-5µB (6Hz lo-cut filter applied) Water Depth: SOL: 18.8m, EOL: 53.5m Feather at SOL: -1.4°, EOL : 0.8°, Max: 1.9 ° Streamer Depth: 7.5 to 8 metres - acceptable. Noisy Traces: 204, 300, 299, 312, 13 noisy and 254 intermittent spiking Extraction Errors: 1009, 1010, 1012, 1014, 2181 Gun Volume SOL: 2500 , EOL: 2500. Timing errors above 1.5ms: SP 1542, 2077, 2527, 2843 Missed Shots: 1005, 1006, 1008, 1009, 1010,1012,1014 to be verified by OBP Tape Errors: 2375 No Data Records: 1013, 1011, 1020,1097, 2369,2370,2376,2453,2840 This line was shot a part infill and part acquiring non-chargeable reshoots caused by Syntrak lockups on earlier lines.
<b>027</b> <b>Dir 305°</b>	<b>W03ANT1196 I1 SP 2648 - 2556 Line Aborted due to failure of streamer- TO BE RESHOT</b> Data Tape Nos 35713 – 35714 Not to be processed Weather: Winds 3-5 knots , Sea and Swell: 2 metres at times. Noise at SOL: 4-5µB, EOL: 4-5µB (6Hz lo-cut filter applied) ALL DATA SCRATCHED - NOT TO BE PROCESSED
<b>028</b> <b>Dir 305°</b>	<b>W03ANT1196 I2 SP 2598 - 893 Infill -Complete</b> Data Tape Nos 35715 - 35718 Weather: Winds 4-8 knots , Sea and Swell: 2.5 metres at times. Noise at SOL: 5µB, EOL: 5µB (6Hz lo-cut filter applied) Water Depth: SOL: 47.3m, EOL: 39m Feather at SOL: -1.9°, EOL : 1.6°, Max: 1.9 ° Streamer Depth: 7.5 to 8 metres - acceptable. Extraction Errors (Streamer 3): 1692, 1559, 1528, 1510, 1368, 1314, 1276, 1190, 1091 Gun Volume SOL: 2500 , EOL: 2500. Timing errors above 1.5ms: SP 1926, 1416 Array Spread Errors above 2.0ms: 2488, 2366,2072,1988, 1357,1334,1244,1239,1194,1148,1114,895 Missed Shots: 2518, 2517 to be verified by OBP

## HSE Daily Statistics - 06/11/2003

### Comments:

No accidents or lost time incidents reported. No spillage of oil or loss of containment overboard. Whale watches have been maintained - no sighting.

One STOP card - plotter in Nav Processing is too high. The operator has to stand on a chair or table to replace pens and paper.

**HSE Items:**

	Stop Card Issued - 1 issued.
10:30 - 11:15	<u>Audit/Inspection/Training/Safety . [HSE]</u> PGS HSE Management Refresher Training concerning PTW, Lockout/Tagout and the PGS Drug and Alcohol Policy
13:20 - 13:30	<u>Toolbox Meeting/Debrief [TB]</u> Toolbox meeting prior to launch for repairs to streamer 3.
13:34 - 14:10	<u>Work Boat [WB] - 4 occupants</u> Boat launch to check possible bad section in streamer 3, replace and clean programme plugs.
16:50 - 17:00	<u>Toolbox Meeting/Debrief [TB]</u> Meeting to discuss and clarify forthcoming streamer operations.
17:13 - 18:55	<u>Work Boat [WB] - 4 occupants</u> Streamer maintenance and inspection of streamer 4 - change modules 6 and 7.

Description	Day	Month	Survey
<b>Incidents</b>			
Near Miss Incident (NMI)	0	1	1
First Aid Case (FAC)	0	0	0
Medical Treatment Case (MTC)	0	0	0
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	0	4
Equipment Loss/Damage (ELD)	0	0	0
Non work related illness (NWR)	0	0	1
<b>Events</b>			
Stop Cards Issued ( )	1	19	26
Small Boat Launches ( )	2	6	8
Helicopter Landing/Takeoff (HL)	0	0	0
MOB Drill (MD)	0	0	0
Fire Drill (FD)	0	1	1
Emergency Boat /Towing Drill (EBD)	0	1	8
Safety Meeting (SM)	0	0	2
HSE Induction-Inspection (IT)	0	1	4
Safety Committee Meeting (SCM)	0	1	1
Audit/Inspection/Training/Safety . (HSE)	1	4	9
Toolbox Meeting/Debrief (TB)	2	8	19
Cetacean Sighting (CS)	0	0	0
Bunker and Resupply (BR)	0	0	0
Oil Spill Drill (OR)	0	0	0
Personnel transfer at sea (PT)	0	0	0
<b>Totals</b>			
No. Marine Crew	35	210	731
No. Seismic Crew	22	132	450
No. Contractors	3	18	63
No. Lost Time Injuries	0	0	0
Exposure Hours *	720	4320	14928
Small Boat Hours (Decimal hours)	2.30	6.20	10.68
Small Boat Exposure Hours (Dec. hours)	9.20	24.80	42.73
Fuel Usage (Cubic Metres)	15	62	217
* Exposure hours calculated at 12hrs per day per person.			

**Navigation report submitted by Stephen Burt for Thursday 06th November 2003**

Production limited due to streamer 3 problems.

Compass and acoustic data has improved as from Sequence 018 due to the better sea conditions.

Bathy checks continue to be good as previously reported.

**Progress:**

Shot to Sequence Number 26 Processed to Sequence Number 026 QC'd to Sequence Number 026

**NTBP Sequences:**

001

**Dead/Bad Units:**

RGPS: - Operational

Acoustics – Operational

Compasses: Operational

Regards,  
*Ken Haig and Stephen Burt*  
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