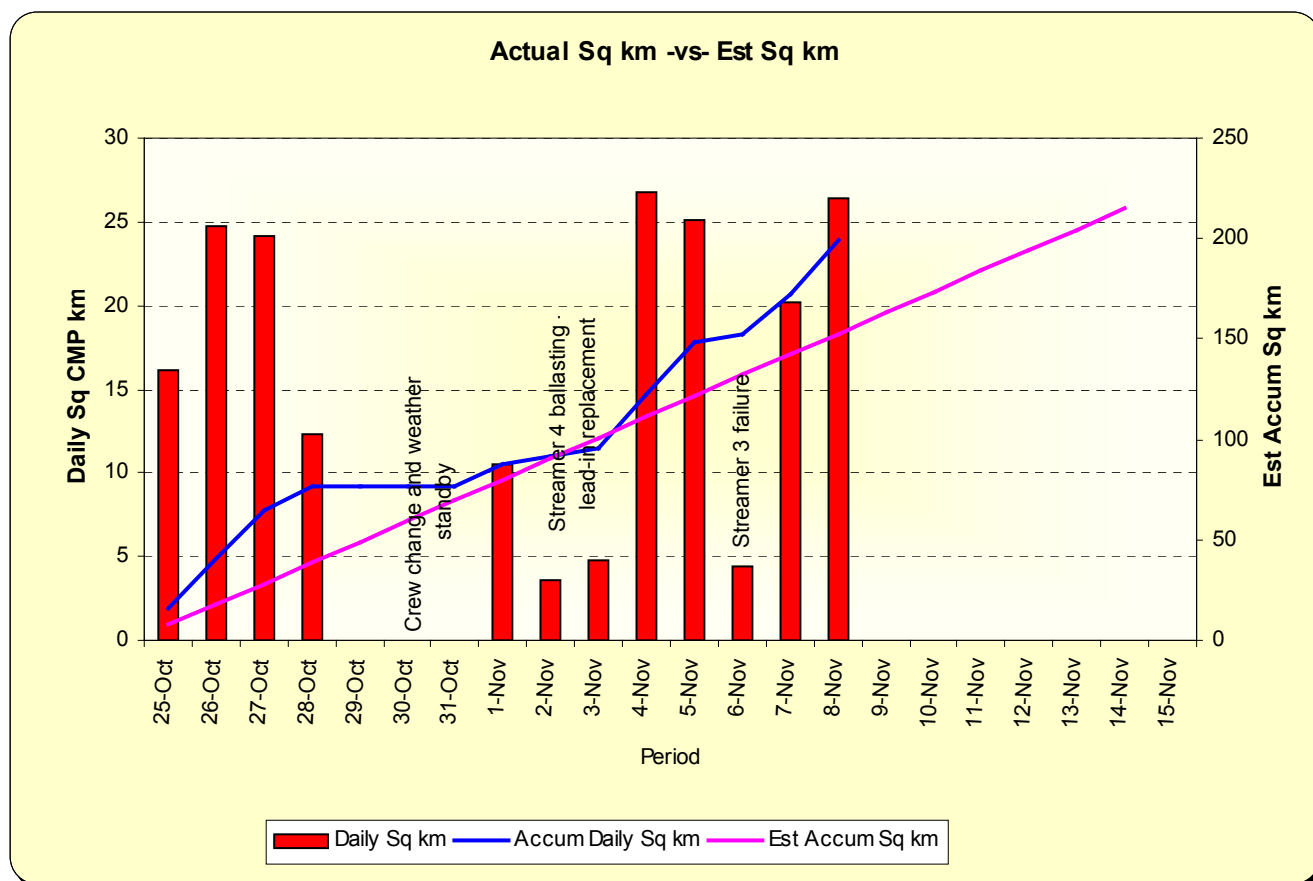


## CORRECTED - DAILY OPERATIONS REPORT # 23

### 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>Saturday 08th Nov 2003</b>



**Estimated Completion: Late 10<sup>th</sup> early 11th November 2003**

#### 1. PRODUCTION SUMMARY

November 8th, 2003

Seq	Line Name	Hdg	Line Type	Line Status	FcSP	LcSP	Ch Sailed
032	WO3ANT-1212P1	305.0	Prime	Completed	2452	893	29.25000
033	WO3ANT-1076P1	125.0	Prime	Completed	1003	2944	36.41250
034	WO3ANT-1220P1	305.0	Prime	Completed	2478	893	29.73750
035	WO3ANT-1084P1	125.0	Prime	Completed	1001	2944	36.45000
Total 11/8/2003 :							131.85000

#### 2. STATISTICAL ANALYSIS (DECIMAL HOURS)

		<u>Line Type Analysis</u>			
	Period	(%)	Survey	(%)	
Prime	131.85000	100	994.27500	94	
Infill	0.00000	0	66.76875	6	
Infill (% of Prime)	0	-	7	-	
Total : 131.85000		100	1,061.04375	100	

#### Line Charge Analysis

### Sailed Kms

	<b>Period</b>	<b>(%)</b>	<b>Survey</b>	<b>(%)</b>
Prime	131.85000	100	1,001.94375	93
Infill	0.00000	0	68.51250	6
Infill (% of Prime)	0	-	7	-
N/C Reshoot	0.00000	0	2.83125	0
Total :	131.85000	100	1,073.28750	100

### Charged Sailed Kms

	<b>Period</b>	<b>(%)</b>	<b>Survey</b>	<b>(%)</b>
Prime	131.85000	100	994.27500	94
Infill	0.00000	0	66.76875	6
Infill (% of Prime)	0	-	7	-
Total :	131.85000	100	1,061.04375	100

### CMP Kms

	<b>Period</b>	<b>(%)</b>	<b>Survey</b>	<b>(%)</b>
Prime	1,054.80000	100	7,954.20000	94
Infill	0.00000	0	534.15000	6
Infill (% of Prime)	0	-	7	-
Total :	1,054.80000	100	8,488.35000	100

### Square Kms

	<b>Period</b>	<b>(%)</b>	<b>Survey</b>	<b>(%)</b>
Prime	26.37000	100	198.85500	94
Infill	0.00000	0	13.35375	6
Infill (% of Prime)	0	-	7	-
Total :	26.37000	100	212.20875	100

### Fullfold Sailed Kms

	<b>Period</b>	<b>(%)</b>	<b>Survey</b>	<b>(%)</b>
Prime	123.75000	100	935.55000	94
Infill	0.00000	0	62.71875	6
Infill (% of Prime)	0	-	7	-
Total :	123.75000	100	998.26875	100

### Fullfold CMP Kms

	<b>Period</b>	<b>(%)</b>	<b>Survey</b>	<b>(%)</b>
Prime	990.00000	100	7,484.40000	94
Infill	0.00000	0	501.75000	6
Infill (% of Prime)	0	-	7	-
Total :	990.00000	100	7,986.15000	100

### Fullfold Square Kms

	<b>Period</b>	<b>(%)</b>	<b>Survey</b>	<b>(%)</b>
Prime	24.75000	100	187.11000	94
Infill	0.00000	0	12.54375	6
Infill (% of Prime)	0	-	7	-
Total :	24.75000	100	199.65375	100

### Time Activity Analysis

	<b>Period</b>	<b>(%)</b>	<b>Survey</b>	<b>(%)</b>
Recording	16.700	70	129.317	24
Line Change	7.300	30	59.300	11
Extended L/C	0.000	0	1.900	0
Weather	0.000	0	65.733	12
Instrument	0.000	0	3.817	1
Source	0.000	0	5.200	1
Streamer	0.000	0	47.867	9
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	13
Contractor	0.000	0	3.000	1
Mobilisation	0.000	0	136.000	25
Infill L/C	0.000	0	3.800	1
Infill	0.000	0	8.400	2
<b>Total :</b>	<b>24.000</b>	<b>100</b>	<b>541.000</b>	<b>100</b>

### Time Cause/Reason Analysis

	<b>Period</b>	<b>(%)</b>	<b>Survey</b>	<b>(%)</b>
Production	24.000	100	188.617	35
Infill	0.000	0	12.200	2
Weather	0.000	0	65.733	12
Equip.Fail	0.000	0	57.383	11
MOB/DeMOB	0.000	0	140.250	26
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
<b>Total :</b>	<b>24.000</b>	<b>100</b>	<b>541.000</b>	<b>100</b>

### Time Charge Analysis

	<b>Period</b>	<b>(%)</b>	<b>Survey</b>	<b>(%)</b>
Prime	16.700	70	129.317	24
Operations	7.300	30	59.300	11
Standby	0.000	0	103.583	19
Contractor	0.000	0	96.350	18
Mob/Demob	0.000	0	140.250	26
Infill/Stby	0.000	0	12.200	2
<b>Total :</b>	<b>24.000</b>	<b>100</b>	<b>541.000</b>	<b>100</b>

### 3. TIME SUMMARY

November 8th, 2003

<b>Start</b>	<b>End</b>	<b>Hours</b>	<b>Description / Comments</b>	<b>Charge</b>
00:00	03:41	3.683	Seq 032 : Line WO3ANT-1212P1	Prime
03:41	05:41	2.000	Production (Line Change)	Operations
05:41	10:15	4.567	Seq 033 : Line WO3ANT-1076P1	Prime
			Missed the first 2 SP's of the line due to a Syntrak lock-up just prior to SOL.	
10:15	12:23	2.133	Production (Line Change)	Operations
12:23	16:06	3.717	Seq 034 : Line WO3ANT-1220P1	Prime
16:06	18:02	1.933	Production (Line Change)	Operations
18:02	22:46	4.733	Seq 035 : Line WO3ANT-1084P1	Prime
22:46	24:00	1.233	Production (Line Change)	Operations

### Chase/Supply Vessel Status:

Southern Salvor and Perfect Lady on site.

### Comments/Problems:

Swell remains and causing some slight swell noise bursts, but still very good data quality over the last 3 days.  
Data logger and tape error problems have been observed, and extraction errors are random. Continue logging and monitoring.

### Fishing Activity

No fishing activity reported for this period.

### Semac-1

Still on location near Port Cambell.

### Cetacean Report:

No sightings reported.

### Weather Comments:

The swell is forecast to ease marginally and then to come up again on Monday.  
Swell continues up to 2.5m running inshore. Winds 5-12 knots. Some relief late afternoon, early evening.

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

On line change to 1228 heading 305° - weather fine – swell acceptable.

SEQ	COMMENTS
<b>Seq 033 Dir 125°</b>	<b>W03ANT1076 P1 SP 1002 - 2944 Complete</b> Missed the first shotpoint due to a Syntrak lock-up at the SOL Data Tape Nos 35737 - 35741 Weather: Winds 6-12 knots , Sea and Swell: 2 to 2.5metres at times. Noise at SOL: 4-5µB, EOL: 4-5µB (6Hz lo-cut filter applied) Low level tugging on all streamers observed in large side swell Water Depth: SOL: 37.6m, EOL: 53.6m Feather at SOL: -1.2°, EOL : 0.4°, Max: 1.3 ° Streamer Depth: 8 metres - acceptable. Gun Volume SOL: 2500 , EOL: 2500. Extraction Errors Streamer 4: 2406 Timing errors above 1.5ms and Spread Errors: SP 1114, 1133, 1406, 1491, 2407 No Data Records: 1542. 1579-1577(to be checked and confirmed)
<b>Seq 034 Dir 305°</b>	<b>W03ANT 1220 P1 SP 2478 - 893 Complete</b> Data Tape Nos 35742 – 35745 Weather: Winds 6-12 knots , Sea and Swell: 1.5 to 2.5 metres at times. Noise at SOL: 4-5µB, EOL: 4-5µB (6Hz lo-cut filter applied) Low level tugging on all streamers observed in side swell Water Depth: SOL: 42.7m, EOL: 40.7 m Feather at SOL: -0.5°, EOL : 1.1°, Max: 1.1 ° Streamer Depth: 8 metres - acceptable. Noisy Channel: 300, 123, 299, 312 Gun Volume SOL: 2500 , EOL: 2500. Sp 2457-2456 guns firing out of sequence SP 1513 array volume change Extraction Errors Streamer 4: SP 2054 SP 1515 shot navigation header. Timing errors above 1.5ms and Spread Errors: SP 2237, 1644, 1615, 1584,
<b>Seq 035 125°</b>	<b>W03ANT 1084 P1 SP 1001 - 2944 Complete</b> Data Tape Nos 35746 – 35749 Weather: Winds 8-12 knots , Sea and Swell: 1.75 to 2.5 metres at times. Noise at SOL: 4-5µB, EOL: 4-5µB (6Hz lo-cut filter applied) Low level tugging on all streamers observed in side swell Water Depth: SOL: 31.1m, EOL: 53.9 m Feather at SOL: -1.0°, EOL : -1.0°, Max: -1.0 ° Streamer Depth: 8 metres - acceptable. Noisy Channel: 300, 123, 299, 312 Gun Volume SOL: 2500 , EOL: 2500. Sp 1253-1254 guns firing out of sequence Extraction Errors Streamer 4: SP 1602, 1722. SP 2043 incorrect file no. Syntrak log,1199 should be 1193 Timing errors above 1.5ms and Spread Errors: SP 2237, 1644, 1615, 1584, No Data Records: 2272, 2426, 2607-2726 (to be confirmed by OBP – probably data logger error)

### HSE Daily Statistics - 08/11/2003

### Comments:

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

#### STOP CARD Details

QC Department moved all tape drivers out of their working area into separate room. Very high frequent noise source (copy tape drivers) placed next to observers desk. Observer's sitting next to this noise source for 12 hours each shift. Tape drives should be moved or at least mounted into a proper rack, same as recording tape drives or better.

Diesel Compressor emergency shut down buttons are located in Diesel Compressors Room. In case of thick smoke or fire in this room or if access is impossible for some other reason, we have no chance of shutting down these units. It is necessary to arrange additional emergency buttons somewhere outside Diesel Compressor room.

#### HSE Items:

Stop Card Issued - 2 issued.

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	20	21
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 ( )	2	26	33
Small Boat Launches ( )	0	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)	0	5	10
Toolbox Meeting/Debrief (TB)	0	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	280	801
No. Seismic Crew	22	176	494
No. Contractors	3	24	69
No. Lost Time Injuries	0	0	0
Exposure Hours *	720	5760	16368
Small Boat Hours (Decimal hours)	0.00	6.20	10.68
Small Boat Exposure Hours (Dec. hours)	0.00	24.80	42.73
Fuel Usage (Cubic Metres)	13.96	93.65	248.65
* Exposure hours calculated at 12hrs per day per person.			

#### Navigation report submitted by Stephen Burt for Saturday 08<sup>th</sup> November 2003

The online solution was poor around SP 1512 during sequence 033 due to the affects of reflections on the front network the line was successfully processed in SPRINT after allowing for the reflections.

Lines shot at the irregular boundary edge are continued to be shot early to obtain full coverage.

Height aiding stabilised the positioning during sequence 031 after the Number of Satellites in view around 07:00 hrs UTC plots were taken to highlight the affect of the low number of satellites at this point.

Bathy checks continue to be good as previously reported.

**Progress:**

Shot to Sequence Number 35 Processed to Sequence Number 034 QC'd to Sequence Number 034

**NTBP Sequences:**

001 and 027

**Dead/Bad Units:**

RGPS: - Operational

Acoustics – Operational

Compasses: Operational

Regards,

*Ken Haig and Stephen Burt*

*Woodside Energy Limited Client Representatives*

*Phone: ++47 6751 5154 Office Direct*

*Fax: ++47 6751 5156 Recording Room*

*e-mail: [oriclient@pgs.com](mailto:oriclient@pgs.com)*