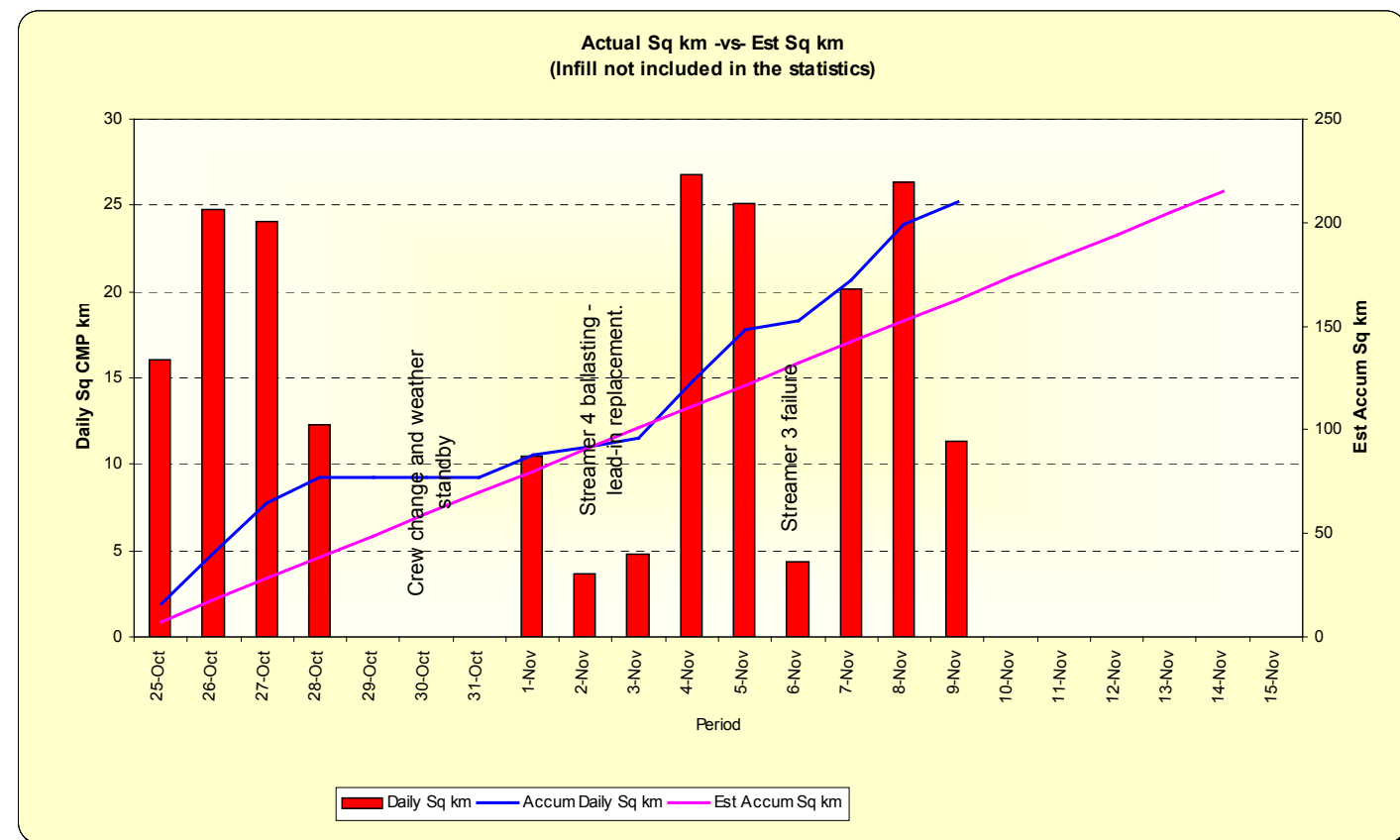


## DAILY OPERATIONS REPORT # 24

### ANTARES 3D MARINE SEISMIC SURVEY

**Contractor:** PGS  
**Woodside Reps:** Ken Haig, Stephen Burt  
**WEL project Manager:** Ralph Weiss

**Vessel:** Orient Explorer  
**Party Chief:** E. Jettestad  
**Date:** Sunday 09<sup>th</sup> Nov 2003



**ESTIMATED COMPLETION : NOON ON TUESDAY 11<sup>TH</sup> NOVEMBER**

#### 1. PRODUCTION SUMMARY

November 9th, 2003

Seq	Line Name	Hdg	Line Type	Line Status	FcSP	LcSP	Ch Sailed
036	WO3ANT-1228P1	305.0	Prime	Completed	2425	893	28.74375
037	WO3ANT-108411	305.0	Infill	Completed	1001	2944	36.45000
038	WO3ANT-1236P1	305.0	Prime	Completed	2372	893	27.75000
039	WO3ANT-111611	305.0	Infill	Completed	1001	2944	36.45000
Total 11/9/2003 :							129.39375

## 2. STATISTICAL ANALYSIS (DECIMAL HOURS)

<u>Line Type Analysis</u>				
	<b>Period</b>	<b>(%)</b>	<b>Survey</b>	<b>(%)</b>
Prime	56.49375	44	1,050.76875	88
Infill	72.90000	56	139.66875	12
Infill (% of Prime)	129	-	13	-
Total :	129.39375	100	1,190.43750	100

<u>Line Charge Analysis</u>				
<u>Sailed Kms</u>	<b>Period</b>	<b>(%)</b>	<b>Survey</b>	<b>(%)</b>
Prime	56.49375	44	1,058.43750	88
Infill	72.90000	56	141.41250	12
Infill (% of Prime)	129	-	13	-
N/C Reshoot	0.00000	0	2.83125	0
Total :	129.39375	100	1,202.68125	100

<u>Charged Sailed Kms</u>	<b>Period</b>	<b>(%)</b>	<b>Survey</b>	<b>(%)</b>
Prime	56.49375	44	1,050.76875	88
Infill	72.90000	56	139.66875	12
Infill (% of Prime)	129	-	13	-
Total :	129.39375	100	1,190.43750	100

<u>CMP Kms</u>	<b>Period</b>	<b>(%)</b>	<b>Survey</b>	<b>(%)</b>
Prime	451.95000	44	8,406.15000	88
Infill	583.20000	56	1,117.35000	12
Infill (% of Prime)	129	-	13	-
Total :	1,035.15000	100	9,523.50000	100

<u>Square Kms</u>	<b>Period</b>	<b>(%)</b>	<b>Survey</b>	<b>(%)</b>
Prime	11.29875	44	210.15375	88
Infill	14.58000	56	27.93375	12
Infill (% of Prime)	129	-	13	-
Total :	25.87875	100	238.08750	100

<u>Fullfold Sailed Kms</u>	<b>Period</b>	<b>(%)</b>	<b>Survey</b>	<b>(%)</b>
Prime	52.44375	43	987.99375	88
Infill	68.85000	57	131.56875	12
Infill (% of Prime)	131	-	13	-
Total :	121.29375	100	1,119.56250	100

<u>Fullfold CMP Kms</u>	<b>Period</b>	<b>(%)</b>	<b>Survey</b>	<b>(%)</b>
Prime	419.55000	43	7,903.95000	88
Infill	551.40000	57	1,053.15000	12
Infill (% of Prime)	131	-	13	-
Total :	970.95000	100	8,957.10000	100

<u>Fullfold Square Kms</u>	<b>Period</b>	<b>(%)</b>	<b>Survey</b>	<b>(%)</b>
Prime	10.48875	43	197.59875	88
Infill	13.78500	57	26.32875	12
Infill (% of Prime)	131	-	13	-
Total :	24.27375	100	223.92750	100

### Time Activity Analysis

	<b>Period</b>	<b>(%)</b>	<b>Survey</b>	<b>(%)</b>
Recording	7.233	30	136.550	24
Line Change	4.933	21	64.233	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	8
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	24
Infill L/C	2.417	10	6.217	1
Infill	9.417	39	17.817	3
<b>Total :</b>	<b>24.000</b>	<b>100</b>	<b>565.000</b>	<b>100</b>

### Time Cause/Reason Analysis

	<b>Period</b>	<b>(%)</b>	<b>Survey</b>	<b>(%)</b>
Production	12.167	51	200.783	36
Infill	11.833	49	24.033	4
Weather	0.000	0	65.733	12
Equip.Fail	0.000	0	57.383	10
MOB/DeMOB	0.000	0	140.250	25
Wside.Reg	0.000	0	35.950	6
Crew Change	0.000	0	35.967	6
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>565.000</b>	<b>100</b>

### Time Charge Analysis

	<b>Period</b>	<b>(%)</b>	<b>Survey</b>	<b>(%)</b>
Prime	7.233	30	136.550	24
Operations	4.933	21	64.233	11
Standby	0.000	0	103.583	18
Contractor	0.000	0	96.350	17
Mob/Demob	0.000	0	140.250	25
Infill/Stby	11.833	49	24.033	4
<b>Total :</b>	<b>24.000</b>	<b>100</b>	<b>565.000</b>	<b>100</b>

### 3. TIME SUMMARY

November 9th, 2003

<b>Start</b>	<b>End</b>	<b>Hours</b>	<b>Description / Comments</b>	<b>Charge</b>
00:00	00:52	0.867	Production (Line Change)	Operations
00:52	04:26	3.567	Seq 036 : Line WO3ANT-1228P1	Prime
04:26	06:28	2.033	Production (Line Change)	Operations
06:28	11:05	4.617	Seq 037 : Line WO3ANT-1084I1	Infill/Stby
11:05	13:24	2.317	Infill (Infill L/C)	Infill/Stby
			Line Change after infill chargeable as standby.	
13:24	17:04	3.667	Seq 038 : Line WO3ANT-1236P1	Prime
17:04	19:06	2.033	Production (Line Change)	Operations
19:06	23:54	4.800	Seq 039 : Line WO3ANT-1116I1	Infill/Stby
			Acquire infill chargeable at standby rate.	
23:54	24:00	0.100	Infill (Infill L/C)	Infill/Stby
			Chargeable line change after infill acquisition.	
	<b>Total :</b>	<b>24.000</b>		

### Chase/Supply Vessel Status:

Southern Salvor and Perfect Lady on site.

### Comments/Problems:

Reduced swell – good data quality. Acquiring prime and infill passes to close swath boundaries.  
Extraction errors and tapes errors minimal during this period. – good data quality throughout.  
Continue with final prime passes in area C and infill acquisition in area B.

### Completion

Due to final reshoots caused by Syntrak problems earlier we will not complete the survey til Tuesday morning at approximately midday, barring any unforeseen breakdowns or problems.

### Fishing Activity

No fishing activity reported for this period.

### Semac-1

The SeMac 1 started moving today – by mid-morning it had moved 100 metres. It will not interrupt or interfere with any of our remaining line changes.

### Cetacean Report:

No sightings reported.

### Weather Comments:

Swell has eased slightly though the night and early morning making conditions more pleasant for all concerned. Good production and data has also benefited from the conditions.

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

On line change – all full passes in area B have now been completed

SEQ	COMMENTS
<b>Seq 036 Dir 305°</b>	<b>W03ANT1228 P1 SP 2425 - 893 Complete</b> Data Tape Nos 35750 - 35752 Weather: Winds 8-12 knots , Sea and Swell: 2 to 2.25metres 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: 41.9m, EOL: 41.1m Feather at SOL: -2.6°, EOL : -2.1°, Max: -2.6 ° Streamer Depth: 8 metres - acceptable. Gun Volume SOL: 2500 , EOL: 2500. Extraction Errors : NIL Timing errors above 1.5ms and Spread Errors: SP 2382, 2057, 1524, 1492 No Data Records: 2322, 1322, 1319 (to be checked and confirmed)
<b>Seq 037 Dir 125°</b>	<b>W03ANT1084 I1 SP 1001 - 2944 Complete</b> Data Tape Nos 35753 – 35756 Weather: Winds 8-10 knots , Sea and Swell: 2.0 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 large side swell Water Depth: SOL: 35.5m, EOL: 63.0 m Feather at SOL: -1.7°, EOL : -0.9°, Max: -1.7 ° Streamer Depth: 8 metres - acceptable. Noisy Channel: 300, 123, 299, 312 Gun Volume SOL: 2500 , EOL: 2500. Timing errors above 1.5ms/Misfires/Delta Spread Errors above 2.1ms: 1285, 1757 No data records: 2102, 2103
<b>Seq 038 305°</b>	<b>W03ANT 1236 P1 SP 2372 - 893 Complete</b> Data Tape Nos 35757 – 35759 Weather: Winds 6knots , Sea and Swell: 1.5 to 2.0 metres 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: 48.2m, EOL: 39 m Feather at SOL: -0.8°, EOL : 0.4°, Max: -0.9 ° Streamer Depth: 8 metres - acceptable. Noisy Channel: 300, 123, 299, 312 Gun Volume SOL: 2500 , EOL: 2500. Timing errors above 1.5ms and Spread Errors: SP 2152
<b>Seq 039 125°</b>	<b>W03ANT 1236 I1 SP 1001 - 2948 Complete</b> Data Tape Nos 35760 – 35763 Weather: Winds 8-12 knots , Sea and Swell: 1.5 to 2.0 metres 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: 39.5m, EOL: 54.2 m Feather at SOL: -1.4°, EOL : -2.2°, Max: -2.2 ° Streamer Depth: 8 metres - acceptable. Noisy Channel: 300, 123, 299, 312 Gun Volume SOL: 2500 , EOL: 2500. Timing errors above 1.5ms and Spread Errors: SP 1061 No Data Records: SP 2655-2939, 2942. 1129, (to be checked and confirmed by OBP)
--	--

### HSE Daily Statistics - 09/11/2003

#### 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

Is there a Gas Detector onboard, is it regularly calibrated, does it have a certificate

General House keeping would like to congratulate crew for cleaning up after themselves, whilst caterer's are off duty.

Extremely slippery galley deck. Especially when wet. Mention to catering to use caution. Approached Safety Officer, Bosun, Mate to source. Extra non slip product to be place on deck as when vessel rolls extremely dangerous.

Person using fingers to lift salad food & replacing unwanted food in press.

#### HSE Items:

Stop Card Issued - 4 issued.

09:30 - 10:30 Audit/Inspection/Training/Safety . [HSE]  
STOP Card training for Russian personnel  
13:00 - 13:30 Fire Drill [FD]  
Fire Drill and Emergency Evacuation training.  
13:30 - 13:45 Toolbox Meeting/Debrief [TB]  
Debrief after fire drill.  
13:45 - 14:30 Safety Meeting [SM]  
General Crew Safety Meeting

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	29	30
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 ()	4	30	37
Small Boat Launches ()	0	6	8
Helicopter Landing/Takeoff (HL)	0	0	0
MOB Drill (MD)	0	0	0
Fire Drill (FD)	1	2	2
Emergency Boat /Towing Drill (EBD)	0	1	8
Safety Meeting (SM)	1	1	3
HSE Induction-Inspection (IT)	0	1	4
Safety Committee Meeting (SCM)	0	1	1
Audit/Inspection/Training/Safety . (HSE)	1	6	11
Toolbox Meeting/Debrief (TB)	1	9	20
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	315	836
No. Seismic Crew	22	198	516
No. Contractors	3	27	72
No. Lost Time Injuries	0	0	0
Exposure Hours *	720	6480	17088
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)	18.4	112.05	267.05
* Exposure hours calculated at 12hrs per day per person.			

**Navigation report submitted by Stephen Burt for Sunday**

Front-end streamer separations between S2 and S3 have varied between 86 – 94m through the week the remaining front end separations have been good. Separations on the 306 dg have been around 86-89m and 90 to 94m on the 126 dg heading. Separations between the remaining front streamers have been good.

Noted improvement in the acoustic and compass data as the sea conditions including the swell have improved.

**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)*