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1. List of Key Personnel

1.1. Onboard Personnel

POSITION	Crew 2
Party Chief	Alf Dale
Captain	Simon R. Milwright
Chief Engineer	Ed Seymour
Chief Observer	Jacob Ib
S/L Observer	Peter Wardle
Chief Navigator	Leif Olav Sætenes
Navigation Shift leader	Bent-André Risnes
Chief Mechanic	Tore Nygaard
Shift leader Mechanic	Peter Thompson
QC leader	Håvard Åsli
MMO	Graham Ross
Client Representative	Bob Luff

1.2. Office Support Personnel

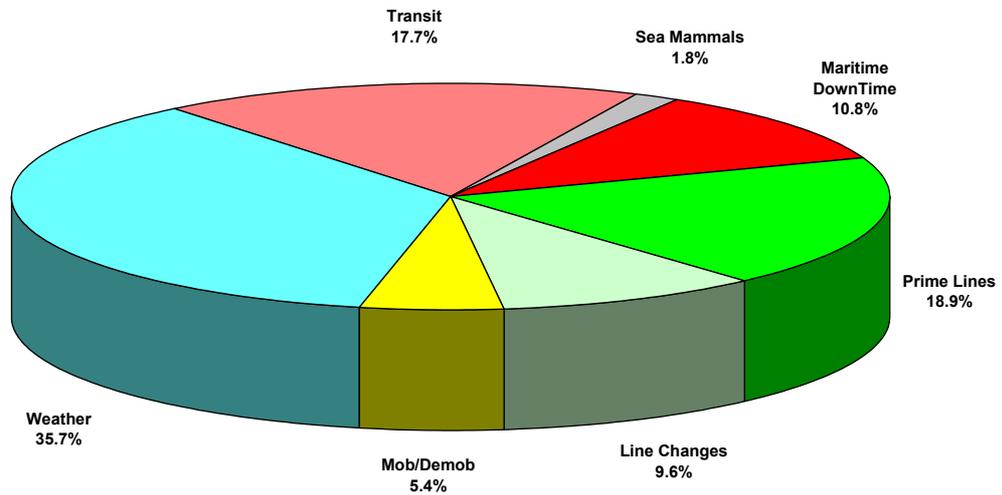
POSITION	NAME
Operation Manager	Atle Jacobsen
Operation Supervisor	Kai Aasebø
Instrument support	Franck Andersen
Navigation support	Willy Forland
Mechanical support	Eivind Haavik
QC support	Christophe Massacand

2. Field Information and Observations

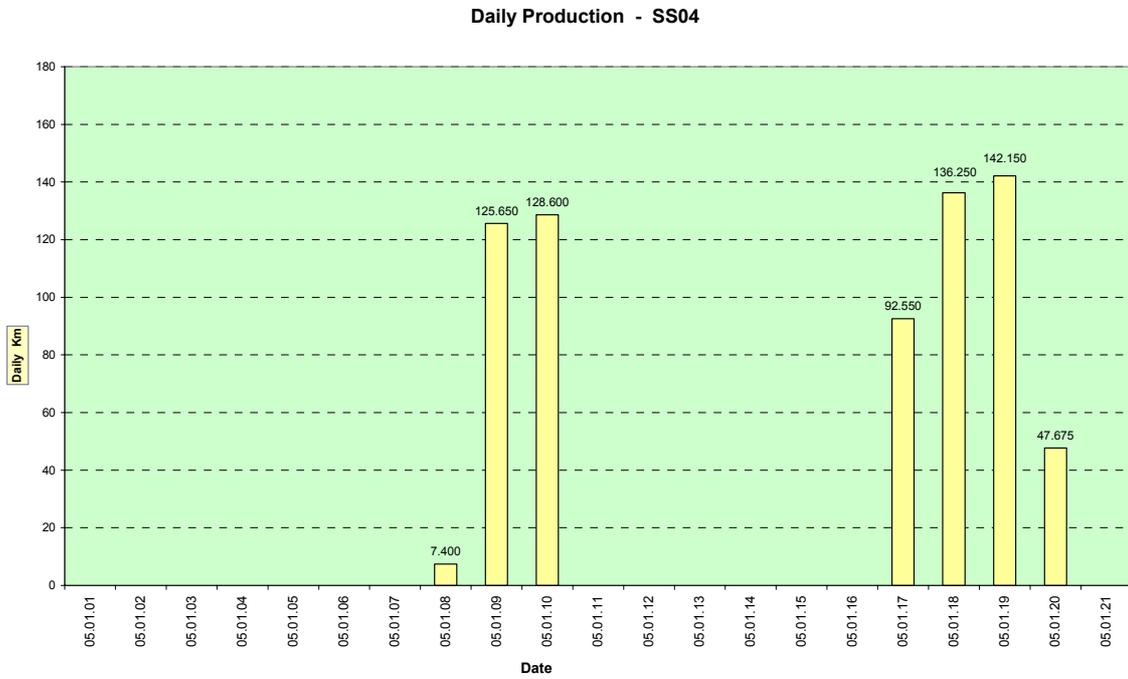
2.1. Timing Statistics

Hours	JOB TOTAL	
444.63	Total Time	100.0%
83.95	Prime Lines	18.9%
42.78	Line Changes	9.6%
0.00	Technical Downtime	0.0%
24.17	Mob/Demob	5.4%
158.88	Weather	35.7%
78.90	Transit	17.7%
7.99	Sea Mammals	1.8%
0.00	Obstructions	0.0%
47.96	Maritime DT	10.8%

TIMING STATISTICS SS04



2.2 Daily Production Statistics



Total Production: 680.275 Km

3. Daily Summary

03rd January 2005

HSE Activity:
Nothing to report.

Daily Summary:
Transit to Tasmania and T/36P job for Santos. Strong wind, gusting 50 knots and heavy seas.

04th January 2005

HSE Activity:
Nothing to report.

Daily Summary:
Storm force 10 from NW and heavy seas causes' slow progress, BSP is down to 7 kn. due to weather.
21:20 UTC: Altering course to Portland for electrical repair to the Galley Stove, Maritime downtime.

05th January 2005

HSE Activity:
1 TBM prior to FRC launch at anchor position (Personnel transfer)
1 TBM prior to FRC launch (Personnel transfer)
1 TBM prior to FRC launch (FRC training)

Daily Summary:
Arrived at anchor position off Portland harbour at 06:00 UTC. Received shore electricians onboard.

06th January 2005

HSE Activity:
1 TBM prior to FRC launch at anchor position (Personnel transfer)
1 TBM prior to FRC launch (Personnel transfer)
1 TBM prior to FRC launch (Personnel transfer)

Daily Summary:
At anchor off Portland harbour, repairing galley stove.
Departed Portland at 12:37 UTC
21:17 Back on Santos time, transiting to Tasmania

07th January 2005

HSE Activity:
1 Safety debrief following the Engine Room Fire alarm.

Daily Summary:
En-Route Santos T/36P Tasmania.

04:00 UTC: Fire alarm in Engine room sounded, all crew mustered.
04:06 UTC: Second Fire alarm sounded, all crew mustered again.
05:00 UTC: Arranged Safety Debrief meeting on bridge as a result of the Engine Room incident.
22:00 Arrived northern part of line -02, continued down line, waiting for weather to moderate to be able to deploy gear.

Section 2: Operation Summary

08th January 2005

HSE Activity:

1TBM prior to Deployment
1TBM prior to Streamer deployment
1TBM prior to Source deployment.

Daily Summary:

Initial deployment on Prospect SS04 / T36P Tasmania started at 02:15 UTC.

Changed 4 active sections due to shark bites and patched in the region of 25 holes due to shark bites.
Several sections had to be topped up with kerosene.
All in-sea gear fully deployed at 23:04 UTC

The total deployment time: 21:07 hours will be split between Santos and Woodside (10.53 each)
Sequence 0001 started before midnight. Only low level swells noise.

09th January 2005

HSE Activity:

1 TBM prior to shooting into un-surveyed area near to the coast. Established a "No-Go zone"
1 TBM prior to approaching shore.

Daily Summary:

Line -02 had to be terminated twice due to sperm whales within the 3000m zone.
Line-019 continued over midnight.

10th January 2005

HSE Activity:

1TBM prior to Source recovery for weather.
1TBM prior to Streamer recovery.

Daily Summary:

Production on lines towards shore. Established a "No Go" zone covering the un-surveyed area close to the shoreline.
Line SS04-011, sequence 0008 was terminated due to weather conditions.
Deteriorating weather from north, bad weather forecast with sea height up to 9 m.
Recovered Source for weather, Source onboard at 23:00, continued with Streamer recovery.

11th January 2005

HSE Activity:

Nothing to report.

Daily Summary:

Streamer was recovered at 03:00 UTC.
Heading for shelter at Hobart
Strong wind from north, Weather forecast indicating strong wind and high seas (9m) for several days ahead.

12th January 2005

HSE Activity:

Nothing to report.

Daily Summary:

Standby alongside at Hobart due to weather.
Weather reports from the Prospect area indicating wind gusting 50 kn.

Section 2: Operation Summary

13th January 2005

HSE Activity:
1 OBS card received (SHL)

Daily Summary:
Standby alongside at Hobart due to weather.
Received 2 spare active Seal sections, remaining 3 sections arrived on the 14th Jan.

14th January 2005

HSE Activity:
1 TBM - safety after new crew situation.

Daily Summary:
Standby alongside at Hobart due to weather.
22:00 Arrived at bunker station Hobart, taking bunker, shipping off bad streamer sections.

15th January 2005

HSE Activity:
Nothing to report.

Daily Summary:
On weather standby alongside bunker station in Hobart.
13:00 Departed bunker station and anchored at Hobart anchorage, waiting on weather to moderate.
21:30 Departed anchorage and headed for the prospect.

16th January 2005

HSE Activity:
1 TBM prior to Streamer deployment

Daily Summary:
Transit to prospect on weather standby. Wind gusting 45 km and heavy seas, slow progress due to weather.
20:07 UTC: Slowed down speed to start deploying streamer 60 km off prospect, weather now moderating slightly.

17th January 2005

HSE Activity:
1 TBM prior to Source deployment

Daily Summary:
Continued deploying streamer.
Streamer out at 05:00, deploying Source
Completed sequence 0009, line -001. Still heavy swell noise from SW swells.
Sequence 0010 continued over midnight UTC.

18th January 2005

HSE Activity:
1 Safety introduction tour

Daily Summary:
Production continued over midnight. The weather and swell conditions slowly moderated. Less swell noise affecting streamer/data. Sequence # 0014 continued over midnight UTC.

Section 2: Operation Summary

19th January 2005

HSE Activity:

1 TBM prior to shooting into un-surveyed area.

Daily Summary:

Sequence # 0015 line -005 had to be terminated early due to a "wave rider buoy" close to line. Turned sharp to port to avoid the buoy.

Sequence # 0017 line -007 was terminated early to avoid un-surveyed area close to coast. Made a quick turn into next line staying away from the un-certain area.

Line -009 continued over midnight.

20th January 2005

HSE Activity:

1 TBM prior to Source recovery

1TBM prior to Streamer recovery

Daily Summary:

Continued on sequence 0018.

Last sequence on prospect : # 0019. This was a continuation of original sequence # 0008 that had been aborted due to weather.

All Prime Lines on Prospect completed.

Recovered Source and Streamer. All onboard at 12:30 UTC, heading for Hobart and crew change.

21st January 2005

Arrived Hobart at 08:00 UTC.

Crew change.

4. Field Information and Encountered Problems

4.1.1. Obstructions / Installations in the Field

The position for the “wave rider” buoy from met office Australia given in the Chart was incorrect. The correct position is the position given on internet for the same buoy.

4.1.2. Traffic / Shipping Lanes

No traffic observed during the SS04 Survey.

4.1.3. Fishing Activity

No fishing activities observed during the SS04 survey.

4.1.4. Seismic Interference and Time Share

None

4.1.5. Environmental Obstacles

Several different types of whales were observed in the area causing down time. Occurrences are described in detail in the log from the MMO.

4.1.6. Operational Observations

Only one “shark bite” observed on the streamer during the SS04 Survey. This caused no severe damage.

5. HSE Summary

There were no accidents during the Survey. Due to shark bites some kerosene were washed out into the sea from the deployed streamer. A separate incident report has been filed on this. The total quantity is estimated to be about 50 litres.

5.1 HSE Meetings

During the duration of the survey (14 days) no HSE meetings were held.

Exposure Hours for the Survey:

Maritime crew: 5616 hrs
 Seismic crew: 5904 hrs
 Total: 11520 hrs

5.2 Observation Cards during the Survey:

Date	Location	Observer	Type	Description	Immediate Action	Corrective Action	Status Description	Suggestions for preventing reoccurrence
13.01.05	Deck	PC	SHL	Person jumping from quay side to Pacific Titan deck. Not using gangway	Informed the individual to use the gangway			Bring the issue up in the next HSE Meeting

6. Shipment List

Following shipments were offloaded and delivered to Beaufort Shipping for further transport to Santos or designated processing centre:

PI Number	Date	Description	Dep.	Destination
PT-2005-012	21.01.05	NAV data Santos SS04	NAV	Santos , Aus.
PT-2005-013	21.01.05	Final NAV data (P190-P294)	NAV	Multiwave
PT-2005-014	21.01.05	Final NAV data (P190-P294)	NAV	Santos , Aus.
PT-2005-015	21.01.05	Santos SS04 Field data cartridges (Org)	INS	Robertson Research PERTH
PT-2005-016	21.01.05	Santos SS04 Field data cartridges(Copy)	INS	Santos, Adelaide.
PT-2005-018	21.01.05	Santos QC data	QC	Robertson Research PERTH

See attached documents on the following pages for details:

7. Production Log

Santos Tasmania T/36P -SS04 - Job 6211								
PACIFIC TITAN		PRODUCTION LOG Santos SS04 / T36P JOB 6211 January 2005						
Date	Line	Seq	Hdg.	FSP	LSP	SP	Kilometers	Comments
05.01.08	SS04-02	0001	147	1001	1296	296	7.400	Continues over midnight UTC.
05.01.09	SS04-02	0001	147	1297	2393	1097	27.425	Terminated, sea mammals
05.01.09	SS04-02A	0002	147	2394	2960	567	14.175	Terminated, sea mammals
05.01.09	SS04-02B	0003	147	2961	5860	2900	72.500	Complete
05.01.09	SS04-019	0004	065	1001	1462	462	11.550	Continues over midnight UTC.
05.01.10	SS04-019	0004	065	1463	1906	444	11.100	Complete
05.01.10	SS04-017	0005	245	1001	2183	1183	29.575	Complete
05.01.10	SS04-015	0006	065	1001	2497	1497	37.425	Complete
05.01.10	SS04-013	0007	244	1001	2610	1610	40.250	Complete
05.01.10	SS04-011	0008	064	1001	1410	410	10.250	Terminated due to weather.
05.01.17	SS04-001	0009	037	1001	3610	2610	65.250	Complete
05.01.17	SS04-010	0010	152	1001	2092	1092	27.300	Continues over midnight UTC.
05.01.18	SS04-010	0010	152	2093	2450	358	8.950	Complete
05.01.18	SS04-012	0011	152	1001	2286	1286	32.150	Complete
05.01.18	SS04-006	0012	332	1001	2737	1737	43.425	Complete
05.01.18	SS04-008	0013	152	1001	2429	1429	35.725	Complete
05.01.18	SS04-004	0014	332	1001	1640	640	16.000	Continues over midnight UTC.
05.01.19	SS04-004	0014	332	1641	2771	1131	28.275	Complete
05.01.19	SS04-005	0015	065	1001	2270	1270	31.750	Terminated early, buoy obstruct
05.01.19	SS04-003	0016	245	1001	2092	1092	27.300	Complete
05.01.19	SS04-007	0017	064	1001	2352	1352	33.800	Terminated due to shallows
05.01.19	SS04-009	0018	243	1001	1841	841	21.025	Continues over midnight UTC.
05.01.20	SS04-009	0018	243	1842	2419	578	14.450	Complete
05.01.20	SS04-011A	0019	064	1411	2739	1329	33.225	Continuation of seq # 008.

Total : 680.275 Km

8. Crew Lists

04. January 2005

Rank	Name	Nationality
Marine		
Master	Simon Milwright	Australian
Chief Officer	Fraser Hamilton	Australian
2nd Officer	Richard Matterson	Australian
Chief Engineer	Ed Seymour	Australian
1st Engineer	Geoff Stanton	Australian
GP	Mark Hooton	Australian
GP	Craig Sutherland	Australian
GP	Troy Willis	Australian
GP	Patty Chamberlain	Australian
Chief Cook	Jason Lee	Australian
Cook	Graeme Callahan	Australian
Steward	John Cogger	Australian
Fitter	Dave Billington	British
Seismic		
Party Chief	Alf Dale	Norwegian
Chief Observer	Jacob Ib	Danish
SL Observer	Peter Wardle	British
Observer	Tyrone Hackett	Canadian
Observer	Virgillio Carreon	Pilipino
Chief Navigator	Leif Olav Saetenes	Norwegian
Navigator	Bent-Andre Risnes	Norwegian
Chief Mechanic	Tore Nygaard	Norwegian
SL Mechanic	Peter Thompson	Australian
Mechanic	William Agcaoili	Pilipino
Mechanic	Alejandro Rojo	Pilipino
QC	Havard Åsli	Norwegian
Client Rep	Robert Luff	Australian
MMO	Graham Ross	Australian

Section 2: **Operation Summary**

Crew List - 15th January 2005

Rank	Name	Nationality
Marine		
Master	Simon Milwright	Australian
Chief Officer	Fraser Hamilton	Australian
2nd Officer	Richard Matterson	Australian
Chief Engineer	Ed Seymour	Australian
1st Engineer	Geoff Stanton	Australian
GP	Mark Hooton	Australian
GP	Craig Sutherland	Australian
GP	Troy Willis	Australian
GP	Robert Mauchlan	Australian
Chief Cook	Jason Lee	Australian
Cook	Graeme Callahan	Australian
Steward	John Cogger	Australian
Fitter	Dave Billington	British
Seismic		
Party Chief	Alf Dale	Norwegian
SL Observer	Peter Wardle	British
Observer	Tyrone Hackett	Canadian
Observer	Virgillio Carreon	Pilipino
Chief Navigator	Leif Olav Saetenes	Norwegian
Navigator	Bent-Andre Risnes	Norwegian
Chief Mechanic	Tore Nygaard	Norwegian
SL Mechanic	Peter Thompson	Australian
Mechanic	William Agcaoili	Pilipino
Mechanic	Alejandro Rojo	Pilipino
QC	Havard Åsli	Norwegian
Client Rep	Robert Luff	Australian
MMO	Graham Ross	Australian