



AGSO MARINE RV Rig Seismic

SURVEY 180

Heard Is/Kerguelen Plateau Pt 2

VOLUME 1 LINE SEQ 180/0101 - 180/1001

Original Copy

Line Name	Line #	Line Name	Line #
KP-N	180/0101	KP-M	180/0701
KIP-13A	180/0201	KP-T	180/0801
KP-J	180/0301	KP-O	180/0901
KP-J1	180/0401	KP-P	180/1001
KP-K	180/0501		
KP-L	180/0601		

SURVEY 180

KERGUELEN PLATEAU

Start and stop times and positions refer to FSP and LSP

[illegible]

SURVEY 180

KERGUELEN PLATEAU

LINE NAME	SEQ.NO	REMARKS/TIE POINTS
KP-N	180/0101	Shot Point resynchs: @ SP 4159, 6417 & 8762. Doglegs: @ SP 6317 & SP 12587. Stbd guns off @ SP 3274 back on @ 12853. Tow leader shortened by 10m. @ SP 12879. Bird 1 intermittently deep, mainly SP 12587 to 13273. Sonobouys SP 1633, 3723. 4ms sample rate.
KIP-13A	180/0201	Changed to 2ms. sample rate. Streamer depth 10m. ODP drill site @ SP 1711. Sonar Bouy @ SP 1715.
KP-J	180/0301	Line terminated due to gun failure. Pt guns turned off at SP 2137. SP 2450 missing due to dogleg. Evasive dogleg due to iceberg @ SP 2741. Sonobuoy deployed at SP2927. 2ms sample rate.
KP-J1	180/0401	Streamer depth 14m. Stbd gun array only. Dogleg @ SP 1573. Sonar bouy @ SP 1515. 2ms sample rate.
KP-K	180/0501	Ch 9 set as bad in trace header @ SP 2514. Sonobouys @ SP 1347, 2705 & 4821. 2 ms sample rate.
KP-L	180/0601	1600 m cable used. Only Stbd array SP 1001 to SP 1343. Streamer from 12 to 14 m @ SP 1229, back to 12m @ SP4533. Sonobuoy deployed @ SP 1667, 3566, 6076. Dogleg @ SP 3311. Bathy cont. from Eol to 2500m Isobath @ 58° 41.632s 83° 13.156e. 4ms sample rate.
KP-M	180/0701	Streamer set from 12 to 14m at SP 1745, set to 12m at SP 3633, back to 14m @ SP 5681. Towleader set to 100m at SP 2370. Starboard array switched off at SP 5905. 4ms sample rate. Sonobouys SP 4971 & 5470.
KP-T	180/801	Stbd. array only. Tow leader changed from 95 to 100m @ SP 1200. Sonobouy deployed @ SP 1402. From SP 3096 to 3260 cable out of control, on surface at times. Dogleg @ SP 1238. 4ms sample rate.
KP-O	180/901	Bathymetry only was recorded for the line.
KP-P	180/1001	Bathymetry only was recorded for the line.



AGSO MARINE RV Rig Seismic

SURVEY 180

Heard Is/Kerguelen Plateau Pt2

LINE # 180/0101

LINE NAME KP-N

Line Summary log

Seismic line log

Shot edit log

Offset shot diagram

Gun fault log

Tape log

Navigation line log

Transit / Line change log



LINE SUMMARY LOG

R/V RIG SEISMIC

Client: AGSO

Survey no: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 0101

Line Name KP-N

Sheet 1 of 15

Direction 223°

Date 14/3/97

Observers SHLP, TH
DP, PA, DWS

THIS FOLIO OF LINE LOG SHEETS HAS BEEN CHECKED BY

T Hunter

Line Information	Time (UTC)	Shot Point	Tape Number	Box No.
Acquisition start	<u>072:002525</u>	<u>969</u>	<u>180/001</u>	<u>1</u>
SOL Noise test	<u>073:003312</u>	<u>993</u>		
First shot point (FSP)	<u>073:003548</u>	<u>1001</u>	<u>180/001</u>	<u>1</u>
First chargeable SP (FCSP)	<u>073:003548</u>	<u>1001</u>		
Last chargeable SP (LCSP)	<u>074:113252</u>	<u>15429</u>		
Last shot point (LSP)	<u>074:113252</u>	<u>15429</u>	<u>180/092</u>	<u>4</u>
EOL Noise test	<u>074:114330</u>	<u>15460</u>		
Acquisition stop	<u>074:114427</u>	<u>15462</u>	<u>180/093</u>	<u>4</u>

Line Details	Start of Line (FSP)	End of Line (LSP)
Wind direction and speed	<u>SW 12 kn</u>	<u>NW @ 27 kn.</u>
Swell direction and height	<u>SW/S 3m.</u>	<u>NW @ 4m.</u>
Average noise (µBar)	<u>14.9 µB FILTERED/14.8 µB UNFILTERED</u>	<u>14.6 µB FILTERED/13.7 µB UNFILTERED</u>
Near 16 trace noise (µBar)	<u>14.1 µB FILTERED/12.8 µB UNFILTERED</u>	<u>23.3 µB FILTERED/75.2 µB UNFILTERED</u>
Feather angle (degrees)	<u>-5°</u>	<u>-4°</u>
Water depth (m)	<u>3828 m.</u>	<u>3824 m.</u>
Latitude	<u>55° 37.433 S</u>	<u>56° 39.895 S</u>
Longitude	<u>85° 06.908 E</u>	<u>80° 58.412 E</u>
Source volume (cu ins)	<u>3000</u>	<u>3000</u>
Disabled guns from full array	<u>0</u>	<u>0</u>
Bad cable depths (bird no.)	<u>0</u>	<u>0</u>
Bad traces	<u>196 low amp.</u>	<u>5, 143, 196, 197, 231 - low amp</u> <u>56 int. noise spikes</u> <u>90, 163 Bad.</u>

Source to near trace offset (m)	<u>184m and 174m.*</u>	Number of non-recorded SPs	<u>0</u>
Operating streamer depth (m)	<u>12</u>	Number of gun misfire SPs	<u>286</u>
Seismic Filters, LC & HC (Hz)	<u>5 1 103</u>	Number of parity error SPs	<u>0</u>
Primary navigation	<u>Racal 1 DGPS</u>	Percentage of bad SPs	<u>4.7%</u>
Secondary navigation	<u>Racal 2 DGPS</u>	Chargeable kilometres	<u>305.85 km.</u>
Racal 1 DGPS tape no.	<u>7</u>	Gravity Y/N	<u>Y</u>
Racal 2 DGPS tape no.	<u>2</u>	DAS tape no.	<u>6</u>
Echo sounder 12 kHz Y/N	<u>Y</u>	Transducer depth	<u>5.1</u>
Echo sounder 3.5 kHz Y/N	<u>Y</u>	Transducer depth	<u>4.9</u>
Exabyte Tape no.	<u>001</u>	12 kHz chart no.	<u>01</u>
		3.5 kHz chart no.	<u>01</u>

Comments: Shot Point # resynch @ SP 4519 (jump of 2157), SP 6417
(jump of 2331) and SP 8762 (jump of 3824) See attached sheet.

Doglegs: 15° @ SP 6317, 23° @ SP 12587 to avoid icebergs.

Stbd gun array turned off @ SP 3274 back on @ SP 12853

* Tow leader shortened by 10m. (from 100m to 90m) @ SP 12879

Sonarbuys: #1 SP 1633 to 2080, #2 SP 3723 to 6350, #3 SP 14045 to 14473

Bird #1 running intermittently deep, mainly from SP 12587 to 13273

FA > 10° from SP 6383 to 12622, and from SP 12851 to 13331

Note: All times on this page should be formatted as DDD.HHMM.SS

Ch 90, 163, 56 may need editing
4 ms sample rate.

Sonarbuoy Ch 257

SEISMIC LINE LOG

R/V RIG SEISMIC

Client: AGSO.

Survey no: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 0101

Line Name KP-N

Sheet 2 of 15

Time (UTC)	Shot Point	Tape Number	Event Details/Comments
072:0025	969	180/001	Acquisition Start
073:0025	969		SOL system tests
073:0033	993		SOL Noise test
073:0036	1001	180/001	FSP SOL 55° 37.433 S
			85° 06.908 E
			FA: -5° WD 3828m
			CRSE: 223° CLE: 5.3m
073:0104	1089		Noise test 43.7 unfilt.
			31.1 (filt 4) 17.5 (filt 8)
073:0112	1113		Air Pressure 1850 PSI
073:0138	1198		Noise test 48.8 μ B (unfilt)
			44.9 μ B (filt 4)
			41.1 μ B (filt 8)
073:0148	1230		Air Pressure 1900 PSI
073:0207	1287		Noise test (unfilt) 45.6 μ B (4hz) 37.8 (8hz) 28.8
073:0227	1350		Air Pressure 2039 psi.
073:0246	1414		Noise test (unfilt) 44.7 μ B (4hz) 36.4 μ B (8hz) 34
073:0304	1469		Air Pressure 2000 PSI
073:0306	1478		Noise test (unfilt) 53.4 μ B
			(4hz) 44.7 (8hz) 36.9
073:0310	1490		Sonobuoy deployed
073:0325	1537		Air Pressure 1880 PSI
073:0326	1542		Noise test (unfilt) 38.9 μ B
			(4hz) 30.6 μ B (8hz) 24.4 μ B
073:0346	1607		Noise test (unfilt) 39.7 μ B
			(4hz) 32.6 μ B (8hz) 26.1 μ B
073:0355	1633		Sonobuoy deployed
073:0359	1649		Air Pressure 1850 PSI
073:0427	1739		NOISE TEST: 47.6 UNFILT, 37.9 μ B (4Hz), 29.6 μ B (8Hz)
073:0431	1755		AIR PRESSURE: 1880 PSI
073:0447	1806		NOISE TEST: 44.0 μ B (UNFILT), 39.2 μ B (4Hz), 32.4 μ B (8Hz)

SEISMIC LINE LOG

R/V RIG SEISMIC

Line Number 180/ 0601

Line Name KP-N

Sheet 3 of 15

Client: AGSO.

Survey no: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Time (UTC)	Shot Point	Tape Number	Event Details/Comments
073:0500	1869		AIR PRESSURE 1830
073:0507	1872		NOISE TEST: 48.1 μ B (UNFILT), 32.2 μ B (4Hz), 32.2 μ B (8Hz)
073:0527	1939		Air Pressure: 1859 psi
073:0527	1939		Noise test: 43.9 (unfilt), 37.8 μ B, 30.6 μ B (8Hz)
073:0547	202006		Air Pressure: 1809 psi
073:0547	7006		Noise test: 41.7 (unfilt), 39.2 μ B (4Hz), 32.12 μ B (8Hz)
073:0610	2080	180/017	Sonobuoy turned off No signal
073:0607	2072		Cable Noise unfilt 50.6 μ B filt. 33.5 μ B
073:0627	2138		Noise test: 43.7 μ B (unfilt), 38.2 μ B (4), 33.0 μ B (8Hz)
073:0627	2138		Air Pressure: 2040 psi
073:0658	2237		Cable Noise: 41.4 μ B, 34.2 μ B (4Hz), 30.0 μ B (8Hz)
073:0658	2237		Air Pressure: 1960 psi
073:0728	2336		Cable Noise: 46.2 μ B, 39.0 μ B (4Hz) 32.5 μ B (8Hz)
073:0728	2336		Air Pressure: 1901 psi
073:0758	2436		CABLE NOISE: 43.2 μ B unfilt 33.0 μ B (8Hz)
073:0820	2499		Air Pressure 1844 PSI
073:0828	2536		Cable Noise 41.1 μ B unfilt 27.4 (8Hz)
073:0910	2678		Air Pressure 1639
073:0858	2637		Cable Noise 36 unfilt 22.0 μ B (8Hz)
073:0928	2737		Cable Noise 43 μ B unfilt 29.8 μ B (8Hz)
073:0933	2751		Air Pressure 1600 PSI
073:0958	2830		Cable Noise: 39.4 μ B, 31.0 μ B (4), 23.3 μ B (8Hz)
073:0958	2830		Air Pressure: 1985 psi
073:1028	2919		Cable Noise: 46.8 μ B, 34.8 μ B (4Hz) 28.8 μ B (8Hz)
073:1028	2919		Air Pressure: 2101 psi
073:1058	3009		Cable Noise: 49.0 μ B, 40.4 μ B (8Hz)
073:1058	3009		Air Pressure: 1808
073:1128	3101		Cable Noise: 54.0 μ B, 37.7 μ B (8Hz)
073:1128	3101		Air Pressure: 1865 psi
073:1158	3197		Cable Noise: 56.2 μ B, 37.7 μ B (8Hz)
073:1158	3197		Air Pressure: 1962
073:1223	3274		Starboard Array turn off
073:1253	3372		TRACE 163 SET BAD IN TAPE HEADERS
073:1255	3374		AIR PRESSURE: 1800 PSI
073:1259	3390		CABLE NOISE: 41.8 μ B (UNFILT), 34.0 μ B (4Hz), 25.4 μ B (8Hz)
073:1328	3480		AIR PRESSURE: 2180 PSI

SEISMIC LINE LOG

R/V RIG SEISMIC

Client: AGSO.

Survey no: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 0101
 Line Name KP-N
 Sheet 4 of 15

Time (UTC)	Shot Point	Tape Number	Event Details/Comments
073:1359	3580		Cable Noise 42.4 μ B unfilt 25 μ B (8 Hz)
073:1406	3602		Air Pressure 2010 PSI
073:1429	3670		Cable Noise: 46.8 μ B, 22.8 μ B (8 Hz)
073:1429	3670		Air Pressure: 2034 psi
073:144609	3723		Sonobuoy deployed @ 56°30.883S 83°37.080E
073:1459	3764		Cable Noise: 33.1 μ B, 23.3 μ B (8 Hz)
073:1459	3764		Air pressure: 2000 psi
073:1229	3294		Cable Noise: 39.6 μ B, 20.9 μ B (8 Hz)
073:1229	3294		Air Pressure: 2096 psi
073:1552	3898		FA > 10°
073:1559	3922		Cable Noise 47.6 μ B unfilt 25 μ B (8 Hz)
073:1624	3990		Air Pressure 2100 psi
073:1629	4005		Cable Noise 39.2 unfilt 18.8 (8 Hz)
073:1659	4086		Air Pressure 2100 psi
073:1659	4086		Cable Noise 39.3 μ B unfilt 20.7 μ B (8 Hz)
073:1725	4159		Shot Number Resynched 4159 to 6316
073:1727	6317		Dogleg due to icebergs 56°39.431S 83 22.364E WD 4691.1m FA: -10° → 6° Dir 223° → 238° cce max 1775m at SP 6320
* 073:1729	6324		Noise test 42.5 (unfilt) 23.1 (8 Hz)
073:1758	6383		Air Pressure 2070 psi
073:1754	6383		FA > 10°
073:1804	6408		FA < 10°
073:1808	6417		Shot NO. resynched 6417 to 8748
073:1814	8762		" " 8762 to 12586
073:1815	12587		Dogleg due to icebergs 56°41.04S 83°17.470E WD: 4656.4m FA -20 → 24° Dir 238° → 271° cce max 2941m
073:1829	12616		Noise test 39.6 μ B (unfilt) 22.3 (8 Hz)
073:1837	12632		FA < 10°
073:1800	12679		Cable Noise 41.9 μ B (unfilt) 20.3 μ B (8 Hz)

* Sonobuoy signal lost at SP 6350, 073:1740

SEISMIC LINE LOG

R/V RIG SEISMIC

Line Number 180/ 0101

Line Name KP - N

Sheet 5 of 15

Client: AGSO.

Survey no: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Time (UTC)	Shot Point	Tape Number	Event Details/Comments
073.1901	12681		Air pressure 2014 psi
073.1930	12745		Noise 39.8 (unfilt) 26.9 μ B (4hz) 15.9 μ B (8hz filt)
073.2022	12853		Std Guns back on.
073.2030	12869		Noise 36.5 μ B (unfilt) 29.9 μ B (4hz) 22.9 μ B (8hz filt)
073.2030	12870		FA > 10°
* 073.2035	12879		tow leader shortened by 10m. now 90m.
073.2100	12927		Noise test 45.3 μ B (unfilt) 38 μ B (4hz) 34 μ B (8hz)
073.2112	12950		Air Pressure 2100 psi
073.2130	12984		Noise 46.9 μ B unfilt. 39.8 μ B (4hz) 33.7 μ B (8hz)
073.2160	13039		Noise 37.7 μ B unfilt. 27.3 μ B (4hz) 20.3 μ B (8hz)
073.2209	13058		Air Pressure 2150 psi
073.2230	13097		Noise 33.5 μ B (unfilt) 25.2 μ B (4hz) 20 μ B (8hz)
073.2259	13150		Air Pressure 2167 psi.
073.2331	13207		Noise 50.3 μ B (unfilt) 39.7 μ B (4hz) 26.2 (8hz)
* 074.0000	13265		Noise 51.5 μ B (unfilt) 39.5 μ B (4hz) 32.4 μ B (8hz)
074.0030	13347		Noise 36.1 μ B (unfilt) 26.6 μ B (4hz) 18.2 μ B (8hz)
074.0057	13415		Air pressure 2000 psi
074.0100	13437		Noise 38.7 μ B (unfilt) 28.9 μ B (4hz) 21.3 (8hz)
074.0112	13470		Air Pressure 2050 psi
074.0130	13528		Noise 57.5 unfilt. 46.2 (4hz) 31.9 (8hz)
074.0201	13616		Noise 54 μ B (unfilt) 43.5 μ B (4hz) 31.7 μ B (8hz filt)
074.0213	13650		Air Pressure 2111 PSI.
074.0231	13702		Noise 36.9 μ B (unfilt) 29.7 μ B (4hz) 25.7 μ B (8hz)
074.0350	13712		Air pressure 2025 psi.
074.0301	13791		Noise 49.7 μ B (unfilt) 39.5 μ B (4hz) 28.6 μ B (8hz)
074.0302	13793		Air pressure 1956 psi
074.0331	13883		Noise 54.5 μ B (unfilt) 45.2 μ B (4hz) 31.2 μ B (8hz)
074.0332	13884		Air pressure 1907 psi
074.0401	13978		Cable Noise. 52.1 μ B, 30.9 μ B (8hz)
074.0401	13978		Air Pressure: 1706
074.04230	14045		Sonobuoy Deployed @ 56° 40.379'S 82° 06.127'E
074.0431	14071		Cable Noise: 39.0 μ B, 24.1 μ B (8hz)
074.0431	14071		Air Pressure: 1943 psi
* 074.0026	13331		FA < 10°

SEISMIC LINE LOG

R/V RIG SEISMIC

Line Number 180/ 0(0(

Line Name KP-N

Sheet 6 of 15

Client:AGSO.

Survey no:180

Survey Name: HEARD IS./KERG. PLAT. PT2

[illegible]

SHOT EDIT LOG

R/V RIG SEISMIC

Client: AGSO

Survey No: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/0101

Line Name KP-N

Sheet 7 of 15

1001	N	2390 T	2771 T	12723 T	13047 T	13655 T
1002	N	2394 T	2850 T	12739 T	13096 T	13676 T
1003	N	2409 T	2861 T	12740 T	13101 T	13714 T
1004	B	2423 T	3075 T	12744 T	13121 T	13780 T
1028	T	2488 T	3163 T	12746 T	13122 T	13782 T
1414	T	2501 M	3338 T	12749 T	13138 T	13815 T
1472	M	2509 M	3415 T	12750 T	13139 T	13854 T
1513	T	2512 T	3416 T	12754 T	13143 T	13856 T
1666	T	2546 B	3417 T	12773 T	13155 T	13857 T
1690	A	2547 B	3418 T	12776 T	13156 T	13903 T
1700	T	2548 B	3423 T	12800 T	13167 T	13915 T
1744	T	2550 T	3426 T	12801 B	13169 T	13920 T
1775	T	2551 T	3428 T	12802 B	13191 T	13938 T
1789	T	2600 T	3429 T	12803 B	13274 T	13939 M
1816	A	2601 T	3470 T	12804 B	13278 T	13940 M
1848	T	2602 A	3491 T	12805 T	13279 T	13943 M
1925	T	2603 A	3515 T	12806 T	13280 N	13952 M
1942	T	2604 A	3559 T	12807 T	13281 N	13954 M
1943	T	2605 A	3658 T	12808 T	13284 N	13958 T
1947	T	2606 T	3665 T	12809 T	13286 T	13959 T
1951	T	2608 T	3713 T	12810 T	13287 T	13962 T
1956	T	2669 T	3718 T	12815 T	13288 T	13963 T
1970	T	2681 T	3755 T	12834 T	13289 T	13964 M
2027	A	2733 N	3890 T	12842 T	13290	13978 T
2060	A	2734 T	3930 T	12853 B	13293 T	13979 T
2128	T	2735 N	3962 T	12854 B	13295 T	14005 T
2136	T	2736 N	4033 T	12907 T	13303 T	14031 T
2216	T	2737 N	4060 T	12908 T	13304 T	14032 T
2326	T	2738 N	4085 T	12930 T	13318 T	14066 T
2338	T	2739 A	4105 T	12937 T	13321 T	14077 T
2339	T	2742 B	4105 A	12950 T	13355 T	14104 T
2363	A	2747 T	4115 A	12997 T	13356 T	14125 T
2366	A	2756 T	6362 T	12998 A *	13413 T	14142 T
2367	A	2758 T	6373 T	12999 A *	13432 T	14150 T
2373	A	2759 T	6410 T	13020 T	13485 T	14255 T
2389	T	2761 M	12614 T	13042 T	13560 T	14261 T

A: Autofire M: Minor Timing Error 1ms to 2 ms T: Timing Error > 2.0 ms B: Timing Error > 4.0 ms N: No-Fire P: Parity Error

F: Frame Parity Error R: Not Recorded FS: Frames per Shot error

A SHOT POINT MARKED WITH A * INDICATES A FALSE ERROR



SHOT EDIT LOG

R/V RIG SEISMIC

Client: AGSO
 Survey No: 180
 Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 0101
 Line Name KP-N
 Sheet 8 of 15

14286 T		14655 T									
14295 T		14656 T									
14298 T		14674 T									
14312 T		14695 T									
14314 T		14826 T									
14327 T		14940 T									
14337 T		14944 T									
14348 T		14860 FS									
14351 T		14867 N									
14396 T		14868 N									
14403 T		14869 N									
14414 T		14870 N									
14415 T		14871 B									
14416 T		14872 B									
14424 T		14873 B									
14428 A		14874 B									
14430 T		14875 T									
14446 T		14876 T									
14447 T		14877 T									
14448 T		14986 T									
14450 T		14992 T									
14460 T		15019 T									
14461 T A		15024 T									
14461 A		15039 T									
14473 T		15040 T									
14477 T		15048 T									
14486 T		15049 T									
14487 T		15050 A									
14488 T		15077 T									
14449 T		15078 T									
14500 T		15079 T									
14524 T		15193 T									
14641 T		15368 T									
14642 T		15371 T									
14643 T		15399 T									
14654 T		15414 F/S									

A: Autofire M: Minor Timing Error 1ms to 2 ms T: Timing Error > 2.0 ms B: Timing Error > 4.0 ms N: No-Fire P: Parity Error

F: Frame Parity Error R: Not Recorded FS: Frames per Shot error

A SHOT POINT MARKED WITH A * INDICATES A FALSE ERROR

180/0101

KP-N

RESYNCHED SHOTS

Actual:	1001	4158	4159	4160	6317	6318	6319	6410	6411	6412
Required:	1001	4158	4159	4160	4161	4162	8749	8750	8751	8752
Actual:	6413	6414	6415	6416	6417	8758	8759	8760	8761	8762
Required:	4256	4257	4258	4259	4260	4261	4262	4263	4264	4265
Actual:	8754	8755	8756	8757	8758	8759	8760	8761	8762	12587
Required:	4266	4267	4268	4269	4270	4271	4272	4273	4274	4275
Actual:	12588	12589	12590	12591	12592	12593	12594	12595	12596	12597
Required:	4276	4277	4278	4279	4280	4281	4282	4283	4284	4285

GUN OFFSET CALCULATIONS

Cable Length (m)=	3000	Water Temperature (C°)=	2.2	Speed of sound in water=	1,458 m/s
Sample Interval (ms)=	4	Salinity (p	34		
Sequence Number:-	180/101	Line Name :-	KP-N	Tape:-	92/93

Port 1 @ S.P. 15446-48

	Channel	Time (msecs)	DELTA t (msecs)	Distance (m)
Ch 1	1	315	131	190.4
WB	241	451	139	203.1
S1	244	197	13	19.4
S15	247	200	16	23.3
P1	248	184	---	---
P15	251	200	16	23.3

Stbd 1 @ S.P. 15433-35

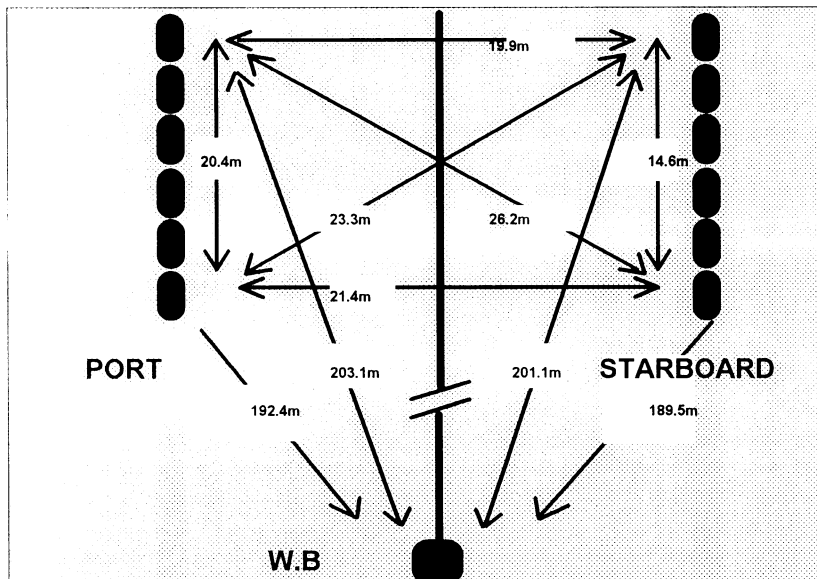
	Channel	Time (msecs)	DELTA t (msecs)	Distance (m)
Ch 1	1	312	128	186.6
WB	241	450	138	201.1
S1	244	184	---	---
S15	247	193	9	13.6
P1	248	198	14	20.4
P16	251	200	16	23.3

Port 16 @ S.P. 15452-54

	Channel	Time (msecs)	DELTA t (msecs)	Distance (m)
Ch 1	1	305	121	176.8
WB	241	444	132	192.4
S1	244	200	16	23.3
S15	247	197	13	19.4
P1	248	196	12	17.5
P16	251	184	---	---

Stbd 16 @ S.P. 15440-42

	Channel	Time (msecs)	DELTA t (msecs)	Distance (m)
Ch 1	1	310	126	183.6
WB	241	442	130	189.5
S1	244	195	11	15.5
S15	247	184	---	---
P1	248	204	20	29.2
P15	251	200	16	23.3



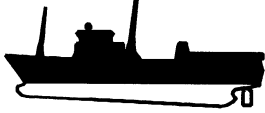
CENTRE OF SOURCE TO WATERBREAK = 196.5m
CENTRE OF SOURCE TO NEAR TRACE OFFSET (from WB) = 192.8m
CENTRE OF SOURCE TO NEAR TRACE OFFSET (from Ch1) = 184.4m

OFFSET SHOTS FOR LIN 180/101

GUN ON	S.P.	CH1	WB-241	S1-244	S16-247	P1-248	P16-251
S1	15433	312	450	184	196	196	200
S1	15434	312	450	184	192	200	200
S1	15435	312	450	184	192	198	200
AVERAGE		312	450	184	193	198	200
GUN ON	S.P.	CH1	WB-241	S1-244	S16-247	P1-248	P16-251
S16	15440	312	446	192	184	204	200
S16	15441	314	442	196	184	204	200
S16	15442	304	438	196	184	204	200
AVERAGE		310	442	195	184	204	200
GUN ON	S.P.	CH1	WB-241	S1-244	S16-247	P1-248	P16-251
P1	15446	312	450	196	200	184	200
P1	15447	316	450	196	200	184	200
P1	15448	316	454	200	200	184	200
AVERAGE		315	451	197	200	184	200
GUN ON	S.P.	CH1	WB-241	S1-244	S16-247	P1-248	P16-251
P16	15452	308	446	200	200	196	184
P16	15453	304	442	200	196	196	184
P16	15454	304	444	200	196	196	184
AVERAGE		305	444	200	197	196	184

SEISMIC TAPE LOG

R/V RIG SEISMIC



Client: AGSO Law of the Sea
 Survey no: 180
 Survey Name: HEARD-KERG-1

Line Number: 180/00101

Line Name: KP-N

Sheet 11 of 15

Tape Number	Start Shot	Start Time	End Shot	End Time
180/00001	969	73.002525	1035	73.004701
180/00002	1036	73.004701	1102	73.010835
180/00003	1103	73.010835	1169	73.012940
180/00004	1170	73.012940	1236	73.015030
180/00005	1237	73.015030	1303	73.021143
180/00006	1304	73.021143	1370	73.023256
180/00007	1371	73.023256	1437	73.025404
180/00008	1438	73.025404	1504	73.031509
180/00009	1505	73.031509	1571	73.033555
180/00010	1572	73.033555	1638	73.035627
180/00011	1639	73.035627	1705	73.041640
180/00012	1706	73.041640	1772	73.043656
180/00013	1773	73.043656	1839	73.045716
180/00014	1840	73.045716	1906	73.051730
180/00015	1907	73.051730	1973	73.053751
180/00016	1974	73.053751	2040	73.055756
180/00017	2041	73.055756	2107	73.061819
180/00018	2108	73.061819	2174	73.063841
180/00019	2175	73.063841	2241	73.065910
180/00020	2242	73.065910	2308	73.071946
180/00021	2309	73.071946	2375	73.073954
180/00022	2376	73.073954	2442	73.075945
180/00023	2443	73.075945	2509	73.081958
180/00024	2510	73.081958	2576	73.083951
180/00025	2577	73.083951	2643	73.090005
180/00026	2644	73.090005	2710	73.092013
180/00027	2711	73.092013	2777	73.094112
180/00028	2778	73.094112	2844	73.100311
180/00029	2845	73.100311	2911	73.102556
180/00030	2912	73.102556	2978	73.104825
180/00031	2979	73.104825	3045	73.111041
180/00032	3046	73.111041	3112	73.113228
180/00033	3113	73.113228	3179	73.115319
180/00034	3180	73.115319	3246	73.121428
180/00035	3247	73.121428	3313	73.123440
180/00036	3314	73.123440	3380	73.125601
180/00037	3381	73.125601	3447	73.131722
180/00038	3448	73.131722	3514	73.133827
180/00039	3515	73.133827	3581	73.135926
180/00040	3582	73.135926	3648	73.142135
180/00041	3649	73.142135	3715	73.144338
180/00042	3716	73.144338	3782	73.150531
180/00043	3783	73.150531	3849	73.153101
180/00044	3850	73.153101	3916	73.155649
180/00045	3917	73.155649	3983	73.162137
180/00046	3984	73.162137	4050	73.164557

SEISMIC TAPE LOG

R/V RIG SEISMIC



Client: AGSO Law of the Sea
 Survey no: 180
 Survey Name: HEARD-KERG-1

Line Number: 180/00101

Line Name: KP-N

Sheet 12 of 15

Tape Number	Start Shot	Start Time	End Shot	End Time
180/00047	4051	73.164557	4117	73.171052
180/00048	4118	73.171052	6341	73.173644
180/00049	6342	73.173644	6408	73.180439
180/00050	6409	73.180439	12629	73.183530
180/00051	12630	73.183530	12695	73.190720
180/00052	12696	73.190720	12762	73.193729
180/00053	12763	73.193729	12829	73.200912
180/00054	12830	73.200912	12896	73.204357
180/00055	12897	73.204357	12963	73.211909
180/00056	12964	73.211909	13030	73.215501
180/00057	13031	73.215501	13097	73.223001
180/00058	13098	73.223001	13164	73.230624
180/00059	13165	73.230624	13231	73.234343
180/00060	13232	73.234343	13298	74.001318
180/00061	13299	74.001318	13365	74.003653
180/00062	13366	74.003653	13432	74.005907
180/00063	13433	74.005907	13499	74.012048
180/00064	13500	74.012048	13566	74.014403
180/00065	13567	74.014403	13633	74.020711
180/00066	13634	74.020711	13700	74.023021
180/00067	13701	74.023021	13767	74.025316
180/00068	13768	74.025316	13834	74.031539
180/00069	13835	74.031539	13901	74.033658
180/00070	13902	74.033658	13968	74.035819
180/00071	13969	74.035819	14035	74.041951
180/00072	14036	74.041951	14102	74.044059
180/00073	14103	74.044059	14169	74.050126
180/00074	14170	74.050126	14236	74.052140
180/00075	14237	74.052140	14303	74.054147
180/00076	14304	74.054147	14370	74.060133
180/00077	14371	74.060133	14437	74.062142
180/00078	14438	74.062142	14504	74.064118
180/00079	14505	74.064118	14571	74.070125
180/00080	14572	74.070125	14638	74.072154
180/00081	14639	74.072154	14705	74.074230
180/00082	14706	74.074230	14772	74.080233
180/00083	14773	74.080233	14839	74.082233
180/00084	14840	74.082233	14906	74.084246
180/00085	14907	74.084246	14973	74.090320
180/00086	14974	74.090320	15040	74.092425
180/00087	15041	74.092425	15107	74.094624
180/00088	15108	74.094624	15174	74.100757
180/00089	15175	74.100757	15241	74.102940
180/00090	15242	74.102940	15308	74.105145
180/00091	15309	74.105145	15375	74.111424
180/00092	15376	74.111424	15442	74.113714

SEISMIC TAPE LOG

R/V RIG SEISMIC



Client: AGSO Law of the Sea
Survey no: 180
Survey Name: HEARD-KERG-1

Line Number: 180/00101
Line Name: KP-N
Sheet 13 of 15

Tape Number	Start Shot	Start Time	End Shot	End Time
180/00093	15443	74.113714	15462	74.114427



NAV LINE LOG

R/V RIG SEISMIC

Client: AGSO

Survey no: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 0101

Line Name KP-N

Sheet 14 of 15

Date 14 March '97

Observers LPTH

Time (UTC)	Shot Point	Event Details/Comments
073.003548	1001	FSP SOL
		Lat: 55°37.433'S Long: 85°06.908'E
		WD: 3828.7m DIR: 223° FA: -5°
073.031040	1490	sonobuoy deployed
073.0339		changed mag console to 2nd unit
073.0332	1559	Sonobuoy dead
073.0355	1633	sonobuoy deployed
073:061006	2080	SONOBVOY DEAD @ 55°58.602'S, 84°31.549'E
073:144609	3723	SONOBVOY DEPLOYED @ 56°30.883'S 83°37.030'E
073.172541	4158	High CCE >25m due to change in way points. CCE max at SP 6320 of 177.5m. NOTE:
		Shot resynched 4158 to 6317
073.172656	6317	Dogleg due to icebergs.
		Lat: 56°39.431'S Long: 83°22.364'E
		WD: 4691.1m FA: -10° → 6°
		DIR: 223° → 238° CCE max 177.5m at SP 6320
073.181544	12587	Dogleg due to icebergs.
		Lat: 56°41.041'S Long: 83°17.470'E
		WD: 4656.4 m FA: -20° → 24°
		DIR: 238° → 271° CCE max 294.1m at SP 12594.
		Shot resynch 8762 to 12586
073.184029	12639	CCE <25m
074.042300	14045	SONOBVOY DEPLOYED @ 56°40.379'S 82°06.127'E
074:063200	14473	SONOBVOY DEAD @ 56°40.241'S 81°45.136'E
074:113252	15429	EOL Lat: 56°39.895' Long: 80°58.412'
		FA: -4 WD: 3824m DIR: 273

* SP 6417 → 8749 Shot Resynch

[illegible]



AGSO MARINE RV Rig Seismic

SURVEY 180

Heard Is/Kerguelen Plateau Pt2

LINE # 180/0201

LINE NAME KIP-13A

Line Summary log

Seismic line log

Shot edit log

Offset shot diagram

Gun fault log

Tape log

Navigation line log

Transit / Line change log



LINE SUMMARY LOG

R/V RIG SEISMIC

Client: AGSO

Survey no: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/0201

Line Name KIP-13A

Sheet 1 of 9

Direction 148°

Date 17 March 97

Observers SH, LP

THIS FOLIO OF LINE LOG SHEETS HAS BEEN CHECKED BY

T Hunter

Line Information	Time (UTC)	Shot Point	Tape Number	Box No.
Acquisition start	<u>075:173623</u>	<u>983</u>	<u>94</u>	<u>4</u>
SOL Noise test	<u>075:173806</u>	<u>985</u>		
First shot point (FSP)	<u>075:180006</u>	<u>1023</u>	<u>95</u>	<u>4</u>
First chargeable SP (FCSP)	<u>075:180006</u>	<u>1023</u>		
Last chargeable SP (LCSP)	<u>076:021444</u>	<u>2557</u>		
Last shot point (LSP)	<u>076:021444</u>	<u>2557</u>	<u>141</u>	<u>5</u>
EOL Noise test	<u>076:021748</u>	<u>2566</u>		
Acquisition stop	<u>076:021848</u>	<u>2569</u>	<u>142</u>	<u>5</u>

Line Details	Start of Line (FSP)	End of Line (LSP)
Wind direction and speed	<u>18kn NW</u>	<u>ENE 20kn</u>
Swell direction and height	<u>W 4m</u>	<u>SW 3m + E 1m</u>
Average noise (µBar)	<u>13.4 µB FILTERED / 39 µB UNFILTERED</u>	<u>14.5 µB FILTERED / 34 µB UNFILTERED</u>
Near 16 trace noise (µBar)	<u>28.3 µB FILTERED / 6.9 µB UNFILTERED</u>	<u>8.3 µB FILTERED / 24.8 µB UNFILTERED</u>
Feather angle (degrees)	<u>1°</u>	<u>-9°</u>
Water depth (m)	<u>1714m</u>	<u>2197m</u>
Latitude	<u>59° 29.217 S</u>	<u>60° 04.406 S</u>
Longitude	<u>84° 0.850 E</u>	<u>84° 43.759 E</u>
Source volume (cu ins)	<u>3000</u>	<u>3000</u>
Disabled guns from full array	<u>0</u>	<u>0</u>
Bad cable depths (bird no.)	<u>0</u>	<u>0</u>
Bad traces	<u>47, 100, 101, 133, 144, 202</u> <u>low amplitude</u>	<u>same as SOL</u>

Source to near trace offset (m)	<u>178 m.</u>	Number of non-recorded SPs	<u>0</u>
Operating streamer depth (m)	<u>10 m</u>	Number of gun misfire SPs	<u>62</u>
Seismic Filters, LC & HC (Hz)	<u>5 / 206</u>	Number of parity error SPs	<u>0</u>
Primary navigation	<u>Racal 1 DGPS</u>	Percentage of bad SPs	<u>4.0%</u>
Secondary navigation	<u>Racal 2 DGPS</u>	Chargeable kilometres	<u>76.75 km.</u>
Racal 1 DGPS tape no.	<u>007</u>	Gravity Y/N	<u>Y</u>
Racal 2 DGPS tape no.	<u>002</u>	DAS tape no.	<u>008</u>
Echo sounder 12 kHz Y/N	<u>Y</u>	Transducer depth	<u>5.1</u>
Echo sounder 3.5 kHz Y/N	<u>Y</u>	Transducer depth	<u>4.9</u>
Exabyte Tape no.	<u>002</u>	Magnetics recorded Y/N	<u>Y</u>

Comments: Changed to 2ms sampling for this line.
Streamer depth 10 m.
ODP drill site @ SP 1711
Sonar buoy @ SP 1715 (channel 25).

SEISMIC LINE LOG

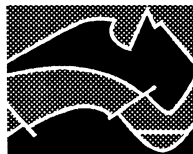
R/V RIG SEISMIC

Line Number 180/ 0201
 Line Name KIP-13A
 Sheet 2 of 9

Client: AGSO.
 Survey no: 180
 Survey Name: HEARD IS./KERG. PLAT. PT2

Time (UTC)	Shot Point	Tape Number	Event Details/Comments
075:1736.23	983	180/094	Acquisition test start
			offset shots
075:1743	980		st 1
075:1745	984		st 16
075:1746	988		Port 1
075:1748	992		Port 16
075:1738	985		Noise test
075:1800	1023		FSP SOL
			59°29.217S 84°0.850E
			WD 1714.5m FA 1° Dir 149°
(1) 075:1808	1046		Noise test 37.8µb unfiltered
			26.6µb (4hz) 16.5µb (8hz)
075:1838	1138		Noise test 30µb unfiltered
			18.8µb (4hz) 11.7µb (8hz)
075:1848	1168		Air Pressure 1880 psi
075:1909	1230		Noise 34.7µB (unfilt) 20.5µB (4hz) 12.7µB (8hz)
075:1915	1250		Air Pressure 2044 psi
075:1939	1322		Noise 34.5µb (unfilt) 14.4µb (4hz) 8.4µb (8hz)
075:2001	1391		Air Pressure 1807 psi
075:2008	1415		Noise 38.6µb (unfilt) 29.4µb (4hz) 20.9µb (8hz)
075:2021	1455		Air Pressure 1850 psi
075:2039	1512		Noise 34.8µb (unfilt) 24.3µb (4hz) 14.5µb (8hz)
075:2047	1540		Air pressure 2200 psi
(2) 075:2109	1611		Noise 31.8µb (unfilt) 20.5µb (4hz) 11.5µb (8hz)
(3) 075:2124	1659		Air Pressure 2090 psi
075:2139	1707		Noise 27.4µb (unfilt) 14µb (4hz) 8.1µb (8hz)
075:2140	1709		Air Pressure 2000 psi
075:2140	1711		Way point ODP site
			59°44.999'S 84°20.003'E
			WD = 1649m Dir = 148° FA = 6°
			CCE = 1.5m
075:2142	1715		Sonobuoy deployed.
075:2209	1802		Noise 30.9µB (unfilt), 17.5µB (4hz), 8.2µB (8hz)
075:2210	1806		Air pressure 1777 psi
075:2239	1899		Noise 33.3µB (unfilt) 21.4µB (4hz), 10.7µB (8hz)
075:2240	1902		Air pressure 1980 psi

- (1) 075:1810 1052 Sonobuoy deployed, sonobuoy dead @ SP 1510
 (2) 075:2113 1624 Sonobuoy deployed, sonobuoy dead @ SP 1650
 (3) 075:2133 1689 Sonobuoy deployed, no signal received.





SHOT EDIT LOG

R/V RIG SEISMIC

Client: AGSO

Survey No: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/0201

Line Name ODP- KIP- 13A

Sheet 4 of 9

1002 N	2122 T								
1003 T	2138 T								
1004 T	2142 T								
1005 A	2192 T								
1006 T	2202 T								
1007 T	2205 B								
1097 T	2200 N								
1135 T	2208 N								
1149 T	2209 N								
1209 T	2211 N								
1248 T	2213 T								
1257 T	2241 T								
1343 T	2290 T								
1345 T	2422 T								
1365 T	2423 T								
1382 T	2457 T								
1389 T	2460 T								
1414 T	2523 N								
1473 T	2524 N								
1475 T	2525 N								
1496 T	2526 N								
1529 T	2527 N								
1597 T	2531 N								
1635 T	2532 N								
1651 T	2533 N								
1683 T	2535 T								
1723 T									
1777 M									
1800 M									
1823 M									
1870 M									
1895 M									
1973 T									
1981 M									
2027 T									
2092 T									

A: Autofire M: Minor Timing Error 1ms to 2 ms T: Timing Error > 2.0 ms B: Timing Error > 4.0 ms N: No-Fire P: Parity Error

F: Frame Parity Error R: Not Recorded FS: Frames per Shot error

A SHOT POINT MARKED WITH A * INDICATES A FALSE ERROR

GUN OFFSET CALCULATIONS

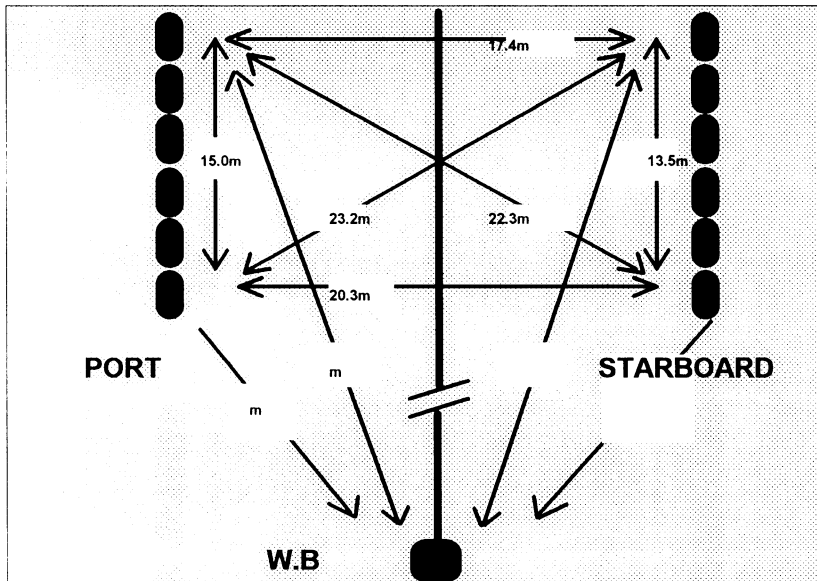
Cable Length (m)=	3000	Water Temperature (C°)=	0.8	Speed of sound in water=	1,451 m/s
Sample Interval (ms)=	2	Salinity (p	34		
Sequence Number:-	180/201	Line Name :-	KIP-13A	Tape:-	94

Port 1 @ S.P. 989-991				
	Channel	Time (msecs)	DELTA t (msecs)	Distance (m)
Ch 1	1	246	125	181.9
WB	241	0		
S1	243	133	13	18.4
S16	246	135	15	21.3
P1	247	121		
P16	250	130	9	13.5

Stbd 1 @ S.P. 980-982				
	Channel	Time (msecs)	DELTA t (msecs)	Distance (m)
Ch 1	1	251	127	184.8
WB	241	0		
S1	243	123		
S16	246	132	9	12.6
P1	247	135	11	16.4
P16	250	138	15	21.3

Port 6 @ S.P. 993-995				
	Channel	Time (msecs)	DELTA t (msecs)	Distance (m)
Ch 1	1	239	117	170.3
WB	241	0	-186	
S1	243	139	17	25.2
S16	246	136	14	20.3
P1	247	133	11	16.4
P16	250	122		

Stbd 6 @ S.P. 985-987				
	Channel	Time (msecs)	DELTA t (msecs)	Distance (m)
Ch 1	1	241	120	174.2
WB	241	0		
S1	243	131	10	14.5
S16	246	121		
P1	247	137	16	23.2
P16	250	135	14	20.3



 #####
 CENTRE OF SOURCE TO NEAR TRACE OFFSET (from Ch1) = 177.8m

OFFSET SHOTS FOR LIN 180/0201

GUN ON	S.P.	CH1	WB-241	S1-244	S16-247	P1-248	P16-251
S1	980	252	0	124	132	136	138
S1	981	250	0	124	132	134	138
S1	982	250	0	122	132	134	138
AVERAGE		251	0	123	132	135	138

GUN ON	S.P.	CH1	WB-241	S1-244	S16-247	P1-248	P16-251
S16	985	242	0	132	122	138	136
S16	986	240	0	130	120	136	134
S16	987	240	0	130	120	136	134
AVERAGE		241	0	131	121	137	135

GUN ON	S.P.	CH1	WB-241	S1-244	S16-247	P1-248	P16-251
P1	989	250	0	134	136	122	130
P1	990	244	0	134	136	120	130
P1	991	244	0	132	134	120	130
AVERAGE		246	0	133	135	121	130

GUN ON	S.P.	CH1	WB-241	S1-244	S16-247	P1-248	P16-251
P16	993	240	0	140	136	134	122
P16	994	240	0	138	136	132	122
P16	995	238	0	140	136	134	122
AVERAGE		239	0	139	136	133	122

SEISMIC TAPE LOG

R/V RIG SEISMIC



Client: AGSO Law of the Sea
 Survey no: 180
 Survey Name: HEARD-KERG-1

Line Number: 180/00201
 Line Name: KIP/13A
 Sheet 6 of 9

Tape Number	Start Shot	Start Time	End Shot	End Time
180/00094	981	75.174408	1013	75.175613
180/00095	1014	75.175613	1046	75.180828
180/00096	1047	75.180828	1079	75.181953
180/00097	1080	75.181953	1112	75.183017
180/00098	1113	75.183017	1145	75.184047
180/00099	1146	75.184047	1178	75.185136
180/00100	1179	75.185136	1211	75.190217
180/00101	1212	75.190217	1244	75.191312
180/00102	1245	75.191312	1277	75.192411
180/00103	1278	75.192411	1310	75.193501
180/00104	1311	75.193501	1343	75.194535
180/00105	1344	75.194535	1376	75.195606
180/00106	1377	75.195606	1409	75.200650
180/00107	1410	75.200650	1442	75.201720
180/00108	1443	75.201720	1475	75.202733
180/00109	1476	75.202733	1508	75.203745
180/00110	1509	75.203745	1541	75.204755
180/00111	1542	75.204755	1574	75.205750
180/00112	1575	75.205750	1607	75.210757
180/00113	1608	75.210757	1640	75.211805
180/00114	1641	75.211805	1673	75.212830
180/00115	1674	75.212830	1706	75.213855
180/00116	1707	75.213855	1739	75.214924
180/00117	1740	75.214924	1772	75.215946
180/00118	1773	75.215946	1805	75.221009
180/00119	1806	75.221009	1838	75.222024
180/00120	1839	75.222024	1871	75.223034
180/00121	1872	75.223034	1904	75.224101
180/00122	1905	75.224101	1937	75.225139
180/00123	1938	75.225139	1970	75.230235
180/00124	1971	75.230235	2003	75.231330
180/00125	2004	75.231330	2036	75.232431
180/00126	2037	75.232431	2069	75.233536
180/00127	2070	75.233536	2102	75.234620
180/00128	2103	75.234620	2135	75.235651
180/00129	2136	75.235651	2168	76.000711
180/00130	2169	76.000711	2201	76.001733
180/00131	2202	76.001733	2234	76.002755
180/00132	2235	76.002755	2267	76.003834
180/00133	2268	76.003834	2300	76.004928
180/00134	2301	76.004928	2333	76.010019
180/00135	2334	76.010019	2366	76.011122
180/00136	2367	76.011122	2399	76.012229
180/00137	2400	76.012229	2432	76.013323
180/00138	2433	76.013323	2465	76.014403
180/00139	2466	76.014403	2498	76.015455

SEISMIC TAPE LOG

R/V RIG SEISMIC



Client: AGSO Law of the Sea
Survey no: 180
Survey Name: HEARD-KERG-1

Line Number: 180/00201

Line Name: KIP/13A

Sheet 7 of 9

Tape Number	Start Shot	Start Time	End Shot	End Time
180/00141	2532	76.020557	2564	76.021707
180/00142	2565	76.021707	2569	76.021907



NAV LINE LOG

R/V RIG SEISMIC

Client: AGSO

Survey no: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 0201

Line Name ODP-KIP-13A

Sheet 8 of 9

Date 17 March '97

Observers LP

Time (UTC)	Shot Point	Event Details/Comments
075.180006	1023	FSP SOL
		Lat: 59° 29.217'S Long: 84° 0.850'E
		WD: 1714.5m FA: 1° DIR: 148°
075.1810	1052	Sonobuoy deployed
		59° 29.881'S 84° 01.657'E
075.203803	1510	Sonobuoy dead
		59° 40.390'S 84° 14.387'E
075.2113	1624	Sonobuoy deployed
		59° 43.003'S 84° 17.576'E
075.212111	1650	Sonobuoy dead
		59° 43.598'S 84° 18.307'E WD = 1619
075.2133	1689	Sonobuoy deployed no signal received
		59° 44.492'S 84° 19.400'E
075.214029	1711	Way point ODP drill site
		59° 44.989'S 84° 20.003'E
		WD: 1648.9m Dir = 148° FA = 6°
		CCE = 1.5m
075.214145	1715	Sonobuoy deployed
		59° 45.093'S 84° 20.109'E WD = 1649
075.2349	2110	Sonobuoy dead
		59° 54.151'S 84° 31.184'E WD = 1845m
076.003718	2263	CCE > 25m CCE max of 67.7m
		at SP 2282
076.004531	2288	CCE < 25m
		LSP EOL
076.021444	2557	Lat: 60° 04.406'S Long: 84° 43.758'E
		WD: 2197.5m FA = -9° DIR = 148°

NAV TRANSIT LOG

R/V RIG SEISMIC



AGSO MARINE RV Rig Seismic

SURVEY 180

Heard Is/Kerguelen Plateau Pt2

LINE # 180/0301

LINE NAME KP-J

Line Summary log

Seismic line log

Shot edit log

Offset shot diagram

Gun fault log

Tape log

Navigation line log

Transit / Line change log



LINE SUMMARY LOG

R/V RIG SEISMIC

Client: AGSO

Survey no: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 0301

Line Name KP-J

Sheet 1 of 12

Direction 123°

Date 17/3/97

Observers DP TH

THIS FOLIO OF LINE LOG SHEETS HAS BEEN CHECKED BY

DWS

Line Information	Time (UTC)	Shot Point	Tape Number	Box No.
Acquisition start	076:171213	900	180/143	5
SOL Noise test	076:173424	955		
First shot point (FSP)	076:175204	1001	180/146	5
First chargeable SP (FCSP)	076:175204	1001		
Last chargeable SP (LCSP)	077:054527	3200		
Last shot point (LSP)	077:054527	3200	180/212	8
EOL Noise test				
Acquisition stop	077:054941	3211	180/213	8

Line Details	Start of Line (FSP)	End of Line (LSP)
Wind direction and speed	SW 20 kn	SW 20 kn
Swell direction and height	SW 4m Wave 2m	SW 3m
Average noise (µBar)	7.3 µB FILTERED/232 µB UNFILTERED	/ µB FILTERED/ / µB UNFILTERED
Near 16 trace noise (µBar)	8.4 µB FILTERED/21.6 µB UNFILTERED	/ µB FILTERED/ / µB UNFILTERED
Feather angle (degrees)	-5°	0°
Water depth (m)	2413m	3863m
Latitude	61° 13.951 S	61° 33.238 S
Longitude	85° 27.915 E	87° 17.799 E
Source volume (cu ins)	3000	3000
Disabled guns from full array	0	0
Bad cable depths (bird no.)	0	0
Bad traces	N.I.	N.I.

Source to near trace offset (m)	178.1m	Number of non-recorded SPs	/
Operating streamer depth (m)	14m	Number of gun misfire SPs	509
Seismic Filters, LC & HC (Hz)	5 / 206	Number of parity error SPs	/
Primary navigation	Racal 1	Percentage of bad SPs	0.46%
Secondary navigation	Racal 2	Chargeable kilometres	109.9 km
Racal 1 DGPS tape no.	007	Gravity Y/N	Y
Racal 2 DGPS tape no.	003	DAS tape no.	09
Echo sounder 12 kHz Y/N	P/O	Transducer depth	51.
Echo sounder 3.5 kHz Y/N	P/O	Transducer depth	4.9
Exabyte Tape no.	003	12 kHz chart no.	P/O
		3.5 kHz chart no.	P/O

Comments: Port guns switched off @ SP 2137 & Sonobuoy ch 253.
 Missing SP # 2450 due to dogleg.
 Sonobuoy Deployed 61°36.217' 81° 3.050'
 Line ended due to gun failure
 Dogleg at SP 2741 due to Iceberg 61°35.032 S 86°52.916 E
 2 ms sample rate No water break in section 1 of cable.

SEISMIC LINE LOG

R/V RIG SEISMIC

Client: AGSO.

Survey no: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 0301

Line Name KP-J

Sheet 2 of 14

Time (UTC)	Shot Point	Tape Number	Event Details/Comments
076:1712	900	180/143	START OF ACQUISITION
076:1712	902		Automatic test sequence
076:1726	935	180/144	offset shots st 1
076:	937		st 16
076:	942		Port 1
076:	947		Port 16
076:1734	955		SOL Noise test
076:1752	1001	180/146	FSP, SOL 61°13.95' S 85°27.915' E WD 2413 m FA -5° Dir 123
076:1813	1053		Noise test 21.6 μB (unfilt) 132 μB (4hz) 106 (8hz)
076:1820	1072		Air Pressure 2010 psi
076:1843	1130		Noise 28.9 μB (unfilt) 20.3 μB (4hz) 143 μB (8hz)
076:1853	1157		stbd 8 out stbd 10 on
076:1859	1173		Port 1 out Port 5 on
076:1901	1177		stbd 8 on stbd 10 out
076:1903	1184		stbd 8 out stbd 10 on
076:1928	1250		Air Pressure 2035 psi
076:1943	1294		Noise 25.5 μB (unfilt) 15.0 μB (4hz) 10.9 μB (8hz)
076:2002	1350		Air Pressure 2020 psi
076:2003	1383		Noise 19.5 μB (unfilt) 13 μB (4hz) 10.1 μB (8hz)
076:2043	1477		Noise 27.1 μB (unfilt) 15.9 μB (4hz) 10.3 μB (8hz)
076:2044	1481		Air pressure 1855 psi
076:2113	1575		Noise 22.9 μB (unfilt) 13 μB (4hz) 9.4 μB (8hz)
076:2114	1577		Air pressure 1764 psi
076:2141	1666		stbd 2 off stbd 5 on
076:2143	1671		Noise 27.4 μB (unfilt) 16.7 μB (4hz) 12.7 μB (8hz)
076:2146	1679		Air pressure 1885 psi
076:2152	1699		stbd 4 off stbd 6 on
076:2153	1701		Port 2 off Port 6 on
076:2213	1768		Noise 25.4 μB (unfilt) 16.2 μB (4hz) 12.7 μB (8hz)
076:2214	1770		Air pressure 1887 psi
076:2244	1866		Noise 32.6 μB (unfilt) 22 μB (4hz) 15.9 μB (8hz)
076:2244	1868		Air pressure 1945 psi
076:2314	1961		Noise 29.5 μB (unfilt) 22 μB (4hz) 19.1 μB (8hz)
076:2314	1963		Air pressure 2013 psi
076:2344	2056		Noise 42.7 μB (unfilt) 30.6 μB (4hz) 18.7 μB (8hz)

SEISMIC LINE LOG

R/V RIG SEISMIC

Client: AGSO.

Survey no: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 0301

Line Name KP-J

Sheet 3 of 12

Time (UTC)	Shot Point	Tape Number	Event Details/Comments
06:2342	2050		Air Pressure 2172 psi
* 77:0010	2137		Pt Guns switched off
077:0013	2148		Noise 35.6 μ B (unfilt) 233 μ B (4hz) 133 μ B (8hz)
077:0029	2196		Air Pressure 2200 psi
077:0033	2208		stbd 6 off stbd 11 on
077:0044	2242		Noise 36.5 (unfiltered) 27.4 (4hz) 9.2 (8hz)
077:0115	2342		stbd 5 off 14 on
077:0114	2339		Noise 40.8 μ B (unfilt) 29.4 μ B (4hz) 18 (8hz)
077:0126	2379		Air Pressure 2080 psi
077:0144	2436		Noise 35.4 μ B (unfilt) 29.9 μ B (4hz) 21.5 μ B (8hz)
077:0147	2445		Dayleg 61°35.006'S 86°36.095'E WD 3748.4m FA -8° -31 Dir 123° → 101° cce max 295.1m at SP 2445
077:0200	2487		stbd 12 off now 1 gun down.
077:0212	2525		Dayleg 61°35.286S 86°40.611E WD 3881 Dir 101° → 88° FA -9° → -21° cce max -112m at SP 2224
077:0214	2532		Noise 33.8 μ B (unfilt.) 20.8 μ B (4hz) 13.2 μ B (8hz)
077:0244	2628		Noise 31.3 μ B (unfilt), 18.3 μ B (4hz), 10.2 μ B (8hz)
077:0245	2630		Air pressure 2175 psi
077:0314	2725		Noise 32.4 μ B (unfilt), 15.2 μ B (4hz), 21.4 μ B (8hz)
077:0317	2732		Air pressure 1731 psi
077:0320	2741		Dayleg due to iceberg 61°35.032'S 86°52.916'E WD: 3871m, Dir: 88° → 103° FA: -8° → 1° cce max 78.3m at SP 2751
077:0329	2771		stbd 7 out Noise
077:0345	2822		Air pressure 2133 psi
077:0352	2842		Port array on
077:0358	2862		Port array off
077:0400	2869		Port array on
077:0403	2880		Port 13 off Port 14
077:0419	2928		Sono buoy deployed.
077:0438	2990		Port 14 & 9 stbd out, Port 16 stbd in



SHOT EDIT LOG

R/V RIG SEISMIC

Client: AGSO

Survey No: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 0301

Line Name KP-J

Sheet 5 of 12

1002 T	1188 T	1464 T	1641 N	1701 A	1967 M
1006 T	1201 T	1468 T	1644 N	1702 T	1979 T
1022 FS	1234 T	1469 T	1646 M	1703 T	1980 B
1037 T	1235 T	1471 T	1647 M	1711 M	1981 B
1038 T	1251 T	1479 M	1651 T	1718 M	1985 M
1042 T	1259 T	1496 M	1654 N	1721 M	1986 M
1046 T	1262 T	1516 T	1655 T	1723 T	1987 B
1052 A	1263 T	1521 M	1657 M	1727 T	1992 N
1059 T	1286 T	1528 T	1661 B	1736 B	1993 N
1095 T	1287 T	1531 T	1662 T	1744 T	2009 T
1120 T	1288 T	1540 T	1663 N	1750 M	2021 B
1134 B	1292 T	1544 T	1664 M	1751 T	2022 N
1138 T	1298 T	1545 M	1665 N	1755 M	2023 N
1141 T	1299 T	1547 M	1668 M	1758 M	2024 N
1146 T	1301 T	1550 M	1670 T	1759 M	2025 B
1151 T	1321 T	1554 T	1674 M	1761 M	2039 T
1152 B	1322 T	1555 T	1676 T	1763 M	2047 T
1153 B	1331 T	1559 M	1677 T	1764 M	2048 N
1154 B	1332 T	1561 T	1678 T	1765 M	2050 B
1155 N	1339 T	1564 T	1679 M	1767 M	2063 T
1156 N	1340 T	1577 T	1681 T	1771 T	2064 T
1165 N	1341 T	1581 M	1683 T	1773 T	2065 T
1166 N	1345 T	1584 T	1686 T	1775 T	2080 N
1167 N	1353 T	1589 T	1688 A	1777 T	2081 N
1168 A *	1354 T	1597 T	1689 T	1779 T	2082 A *
1169 A *	1355 T	1599 T	1690 M	1798 M	2083 B
1170 N	1358 T	1600 T	1691 M	1845 M	2084 A *
1171 A *	1372 B	1606 T	1692 M	1856 M	2085 A *
1172 N	1375 T	1608 T	1693 T	1908 M	2087 B
1174 T	1376 T	1619 M	1694 T	1910 M	2089 T
1178 T	1377 T	1622 M	1695 T	1935 T	2092 T
1179 N	1388 T	1628 T	1696 T	1942 B	2094 T
1180 T	1397 T	1632 T	1697 T	1943 N	2107 T
1181 T	1442 FS	1633 T	1698 T	1944 N	2112 T
1182 T	1454 T	1634 T	1699 T	1945 N	2128 N
1183 T	1456 T	1640 N	1700 A	1946 B	2129 T

A: Autofire M: Minor Timing Error 1ms to 2 ms T: Timing Error > 2.0 ms B: Timing Error > 4.0 ms N: No-Fire P: Parity Error

F: Frame Parity Error R: Not Recorded FS: Frames per Shot error

A SHOT POINT MARKED WITH A * INDICATES A FALSE ERROR

SHOT EDIT LOG

R/V RIG SEISMIC

Client: AGSO

Survey No: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/0301

Line Name KPS

Sheet 6 of 12

2133 A *	2282 N	2479 T	2746 N	2803 A	2900 A *
2134 A *	2299 T	2480 T	2747 T	2808 M	2901 A *
2135 A *	2301 A	2481 T	2748 T	2843 B	2903 T
2136 A *	2309 N	2482 T	2749 T	2844 B	2904 T
2141 T	2310 A	2483 M	2750 A	2845 B	2906 A T
2142 T	2311 A	2484 M	2751 M	2846 N	2907 T
2143 T	2312 A	2485 M	2752 N	2847 N	2908 T
2167 T	2314 A	2486 M	2753 A	2848 T	2909 T
2175 T	2318 T	2491 M	2754 N	2849 N	2900 N
2181 B	2321 A	2503 T	2755 A	2850 N	2911 T
2182 B	2322 A	2503 T	2756 N	2851 B	2913 T
2183 B	2324 T	2506 T	2757 A	2854 A *	2914 T
2184 T	2325 A	2540 T	2758 N	2856 B	2915 T
2185 T	2326 A	2541 T	2759 A	2861 A *	2916 T
2187 T	2331 T	2554 T	2760 A	2864 M	2917 T
2191 T	2336 N	2574 T	2761 A	2866 B	2918 N
2192 T	2337 A	2578 T	2762 N	2869 B	2920 T
2197 A	2343 A	2585 T	2763 B	2870 B	2921 T
2199 A	2345 T	2606 T	2764 N	2871 B	2922 T
2201 T	2374 T	2611 T	2765 A	2872 B	2923 T
2202 T	2389 A	2613 T	2766 A	2872 A *	2924 T
2203 N	2420 T	2615 T	2767 A	2873 N	2925 N
2204 T	2435 T	2678 T	2768 A	2875 B	2926 N
2205 T	2441 M	2680 T	2769 A	2876 B	2927 N
2206 T	2445 A	2687 T	2770 A	2877 B	2928 N
2207 T	2459 T	2693 M	2773 M	2878 B	2929 N
2209 T	2466 T	2701 T	2774 T	2879 B	2930 N
2265 A	2467 T	2712 T	2775 T	2880 A	2931 N
2267 N	2469 T	2717 T	2776 T	2882 A	2932 N
2269 N	2471 T	2722 M	2777 T	2884 T	2933 N
2271 T	2472 T	2725 M	2778 M	2888 A	2934 N
2274 B	2473 T	2726 T	2788 A	2889 T	2936 N
2275 B	2474 T	2729 A	2789 A	2890 N	2937 N
2276 B	2476 T	2731 B	2790 A	2891 N	2938 T
2277 N	2477 T	2742 A	2792 A	2892 A	2939 T
2280 N	2478 T	2745 A	2802 A	2896 T	2940 T

A: Autofire M: Minor Timing Error 1ms to 2 ms T: Timing Error > 2.0 ms B: Timing Error > 4.0 ms N: No-Fire P: Parity Error

F: Frame Parity Error R: Not Recorded FS: Frames per Shot error

A SHOT POINT MARKED WITH A * INDICATES A FALSE ERROR



SHOT EDIT LOG

R/V RIG SEISMIC

Client: AGSO
Survey No: 180
Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/0301
Line Name KPS
Sheet 07 of 12

2941 T	3036 B	3194 N							
2942 T	3055 T	3195 A							
2943 T	3064 T	3196 A							
2944 A	3067 T	3197 A							
2946 A	3073 T	3198 A							
2952 T	3075 T								
2953 T	3076 T								
2956 T	3078 T								
2957 T	3081 T								
2958 T	3086 T								
2959 T	3088 T								
2960 T	3094 T								
2963 T	3095 T								
2964 T	3096 T								
2967 T	3097 T								
2969 A	3100 T								
2973 T	3105 T								
2974 T	3108 T								
2976 T	3118 T								
2977 A	3119 T								
2978 N	3120 T								
2980 A	3121 T								
2984 T	3123 T								
2986 N	3124 T								
2988 T	3125 T								
2990 A	3151 T								
2992 N	3182 A								
2993 N	3184 T								
2995 N	3185 B								
2996 N	3187 N								
2997 N	3188 N								
2999 T	3189 N								
3000 T	3190 B								
3002 T	3191 N								
3011 F	3192 B								
3021 T	3193 B								

A: Autofire M: Minor Timing Error 1ms to 2 ms T: Timing Error > 2.0 ms B: Timing Error > 4.0 ms N: No-Fire P: Parity Error

F: Frame Parity Error R: Not Recorded FS: Frames per Shot error

A SHOT POINT MARKED WITH A * INDICATES A FALSE ERROR

GUN OFFSET CALCULATIONS

Cable Length (m)=	3000	Water Temperature (C°)=	0.5	Speed of sound in water=	1,450 m/s
Sample Interval (ms)=	2	Salinity (p	34		
Sequence Number:-	180/301	Line Name :-	KP-J	Tape:-	144

Port 1 @ S.P. 947-949

	Channel	Time (msecs)	DELTA t (msecs)	Distance (m)
Ch 1	1	249	127	183.7
WB	241	0		
S1	243	134	11	16.4
S16	246	138	15	21.7
P1	247	123		
P16	250	132	9	13.5

Stbd 1 @ S.P. 936-938

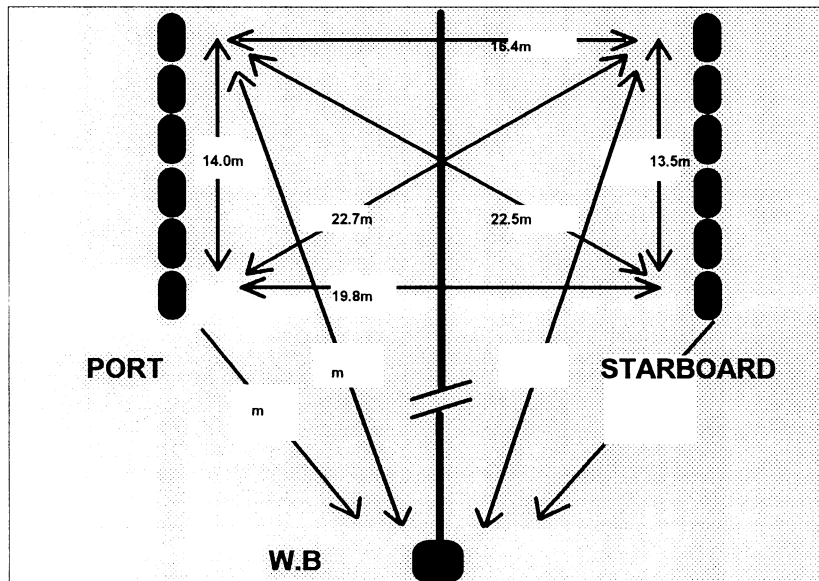
	Channel	Time (msecs)	DELTA t (msecs)	Distance (m)
Ch 1	1	251	127	184.6
WB	241	0		
S1	243	123		
S16	246	132	9	12.6
P1	247	135	11	16.4
P16	250	138	15	21.3

Port 6 @ S.P. 951-953

	Channel	Time (msecs)	DELTA t (msecs)	Distance (m)
Ch 1	1	239	117	170.1
WB	241	0	-186	
S1	243	139	17	24.2
S16	246	135	13	19.3
P1	247	132	10	14.5
P16	250	122		

Stbd 6 @ S.P. 940-942

	Channel	Time (msecs)	DELTA t (msecs)	Distance (m)
Ch 1	1	241	120	174.0
WB	241	0		
S1	243	131	10	14.5
S16	246	121		
P1	247	137	16	23.2
P16	250	135	14	20.3



#####

CENTRE OF SOURCE TO NEAR TRACE OFFSET (from Ch1) = 178.1m

OFFSET SHOTS FOR LIN 180/0301

GUN ON	S.P.	CH1	WB-241	S1-244	S16-247	P1-248	P16-251
S1	936	252	0	124	132	136	138
S1	937	250	0	124	132	134	138
S1	938	250	0	122	132	134	138
AVERAGE		251	0	123	132	135	138
GUN ON	S.P.	CH1	WB-241	S1-244	S16-247	P1-248	P16-251
S16	939	242	0	132	122	138	136
S16	940	240	0	130	120	136	134
S16	941	240	0	130	120	136	134
AVERAGE		241	0	131	121	137	135
GUN ON	S.P.	CH1	WB-241	S1-244	S16-247	P1-248	P16-251
P1	944	250	0	134	138	124	132
P1	945	250	0	134	138	122	132
P1	946	248	0	134	137	122	132
AVERAGE		249	0	134	138	123	132
GUN ON	S.P.	CH1	WB-241	S1-244	S16-247	P1-248	P16-251
P16	951	240	0	138	134	132	122
P16	952	240	0	138	136	130	122
P16	953	238	0	140	136	134	122
AVERAGE		239	0	139	135	132	122

SEISMIC TAPE LOG

R/V RIG SEISMIC



Client: AGSO Law of the Sea
 Survey no: 180
 Survey Name: HEARD-KERG-1

Line Number: 180/00301

Line Name: KP-J

Sheet 9 of 12

Tape Number	Start Shot	Start Time	End Shot	End Time
180/00143	900	76.171127	932	76.172454
180/00144	933	76.172454	965	76.173811
180/00145	966	76.173811	998	76.175054
180/00146	999	76.175054	1031	76.180350
180/00147	1032	76.180350	1064	76.181703
180/00148	1065	76.181703	1097	76.182948
180/00149	1098	76.182948	1130	76.184240
180/00150	1131	76.184240	1163	76.185542
180/00151	1164	76.185542	1196	76.190825
180/00152	1197	76.190825	1229	76.192021
180/00153	1230	76.192021	1262	76.193156
180/00154	1263	76.193156	1295	76.194312
180/00155	1296	76.194312	1328	76.195414
180/00156	1329	76.195414	1361	76.200523
180/00157	1362	76.200523	1394	76.201636
180/00158	1395	76.201636	1427	76.202715
180/00159	1428	76.202715	1460	76.203747
180/00160	1461	76.203747	1493	76.204806
180/00161	1494	76.204806	1526	76.205822
180/00162	1527	76.205822	1559	76.210826
180/00163	1560	76.210826	1592	76.211835
180/00164	1593	76.211835	1625	76.212849
180/00165	1626	76.212849	1658	76.213915
180/00166	1659	76.213915	1691	76.214933
180/00167	1692	76.214933	1724	76.215950
180/00168	1725	76.215950	1757	76.220950
180/00169	1758	76.220950	1790	76.222016
180/00170	1791	76.222016	1823	76.223029
180/00171	1824	76.223029	1856	76.224035
180/00172	1857	76.224035	1889	76.225043
180/00173	1890	76.225043	1922	76.230113
180/00174	1923	76.230113	1955	76.231145
180/00175	1956	76.231145	1988	76.232208
180/00176	1989	76.232208	2021	76.233228
180/00177	2022	76.233228	2054	76.234258
180/00178	2055	76.234258	2087	76.235338
180/00179	2088	76.235338	2120	77.000426
180/00180	2121	77.000426	2153	77.001528
180/00181	2154	77.001528	2186	77.002612
180/00182	2187	77.002612	2219	77.003639
180/00183	2220	77.003639	2252	77.004658
180/00184	2253	77.004658	2285	77.005717
180/00185	2286	77.005717	2318	77.010737
180/00186	2319	77.010737	2351	77.011751
180/00187	2352	77.011751	2384	77.012809
180/00188	2385	77.012809	2417	77.013828

SEISMIC TAPE LOG

R/V RIG SEISMIC



Client: AGSO Law of the Sea
 Survey no: 180
 Survey Name: HEARD-KERG-1

Line Number: 180/00301
 Line Name: KP-J
 Sheet 10 of 12

Tape Number	Start Shot	Start Time	End Shot	End Time
180/00189	2418	77.013828	2451	77.014912
180/00190	2452	77.014912	2484	77.015907
180/00191	2485	77.015907	2517	77.020931
180/00192	2518	77.020931	2550	77.022009
180/00193	2551	77.022009	2583	77.023025
180/00194	2584	77.023025	2616	77.024038
180/00195	2617	77.024038	2649	77.025049
180/00196	2650	77.025049	2682	77.030059
180/00197	2683	77.030059	2715	77.031120
180/00198	2716	77.031120	2748	77.032154
180/00199	2749	77.032154	2781	77.033226
180/00200	2782	77.033226	2814	77.034242
180/00201	2815	77.034242	2847	77.035327
180/00202	2848	77.035327	2880	77.040357
180/00203	2881	77.040357	2913	77.041427
180/00204	2914	77.041427	2946	77.042446
180/00205	2947	77.042446	2979	77.043510
180/00206	2980	77.043510	3012	77.044538
180/00207	3013	77.044538	3045	77.045618
180/00208	3046	77.045618	3078	77.050643
180/00209	3079	77.050643	3111	77.051703
180/00210	3112	77.051703	3144	77.052732
180/00211	3145	77.052732	3177	77.053819
180/00212	3178	77.053819	3210	77.054830
180/00213	3211	77.054830	3213	77.054941



NAV LINE LOG

R/V RIG SEISMIC

Client: AGSO

Survey no: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 00301

Line Name KP-J

Sheet 11 of 12

Date 17/3/97

Observers PA SH

Time (UTC)	Shot Point	Event Details/Comments
076.175204	1001	FSP SOL
		Lat: 61°13.951'S Long: 85°27.915'E
		WD=2413.1m FA= -5° Dir= 123°
077.014705	2445	Dogleg
		61°35.006'S 86°36.095'S
		WD=3748.4m FA= 8° → -31° Dir= 123° → 101°
		CCE max of 295.1m at SP 2455.
077.021210	2525	Dogleg
		61°35.286S 86°40.611E WD=3881
		Dir 101° → 88° FA -9° → -21°
		CCE max of -112 @ SP 2224
077.032015	2743	Dogleg
		61°35.032S 86°52.916E WD:3871m
		Dir 88° → 103° FA: -8° → 1°
		CCE max: -78.3m at SP 2751
077.041900	2927	SONOBUOY#8 DEPLOYED @ 61°36.217'S 87°3.050'E
077.052553	3139	DOGLEG @
		61°37.543'S 87°14.675E 87° WD 3869
		DIR: 103 → 116° ; FA: -4 → 7° ; CCE MAX: 11m @ SP 3142
077.054527	3200	*SEISMIC TERMINATED; BATHYMETRIC CONTINUING
		LSP, SEISMIC : TERMINATED DUE TO GUN FAILURE
		@ 61°38.238'S 87°17.799'E
		WD: 3869m ; FA: 0° ; DIR: 123°



AGSO MARINE RV Rig Seismic

SURVEY 180

***Heard Is/Kerguelen
Plateau Pt2***

LINE # 180/0401

LINE NAME KP-J1

Line Summary log

Seismic line log

Shot edit log

Offset shot diagram

Gun fault log

Tape log

Navigation line log

Transit / Line change log



LINE SUMMARY LOG

R/V RIG SEISMIC

Client: AGSO

Survey no: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 0401

Line Name KP-J1

Sheet 1 of 9

Direction 105°

Date 18/3/97

Observers P.A. LP

THIS FOLIO OF LINE LOG SHEETS HAS BEEN CHECKED BY

T Hunter

Line Information	Time (UTC)	Shot Point	Tape Number	Box No.
Acquisition start	077:125725	940	180/214	08
SOL Noise test	077:130020	948		
First shot point (FSP)	077:132002	1001	180/215	08
First chargeable SP (FCSP)	077:132002	1001		
Last chargeable SP (LCSP)	077:190349	1925		
Last shot point (LSP)	077:190849	1925	180/243	09
EOL Noise test	077:190458	1928		
Acquisition stop	077:190851	1938	180/244	09

Line Details	Start of Line (FSP)	End of Line (LSP)
Wind direction and speed	W 30	NW at 30 knots
Swell direction and height	N at 3m	NW at 2m
Average noise (µBar)	36.8 µB FILTERED / 37.4 µB UNFILTERED	14.7 µB FILTERED / 30.2 µB UNFILTERED
Near 16 trace noise (µBar)	23.1 µB FILTERED / 109.0 µB UNFILTERED	14.6 µB FILTERED / 37.5 µB UNFILTERED
Feather angle (degrees)	4°	-2°
Water depth (m)	3918.0m	3922m
Latitude	61°50.975'S	61°57.793'S
Longitude	86°17.520'E	89°08.197'E
Source volume (cu ins)	1500 cu ins	1500 cu ins
Disabled guns from full array	10	10
Bad cable depths (bird no.)	BIRD 13 - OPEN LOOP	BIRD 13
Bad traces	47 57 100 101 133 low amplitude	same as SOL

Source to near trace offset (m)	174.3 m	Number of non-recorded SPs	0
Operating streamer depth (m)	14m	Number of gun misfire SPs	48
Seismic Filters, LC & HC (Hz)	5 / 206	Number of parity error SPs	0
Primary navigation	RACAL I DGPS	Percentage of bad SPs	5.1%
Secondary navigation	RACAL II DGPS	Chargeable kilometres	46.25 km
Racal 1 DGPS tape no.	07	Gravity Y/N	Y
Racal 2 DGPS tape no.	03	DAS tape no.	09
Echo sounder 12 kHz Y/N	Y	Transducer depth	5.1
Echo sounder 3.5 kHz Y/N	Y	Transducer depth	4.9
Exabyte Tape no.	04	Magnetics recorded Y/N	Y
Comments: This line shot with only stbd array.		Mag dist from stern (m)	230m
Sonobuoy deployed SP 1138, SP. 1265 and SP 1515 (best)		12 kHz chart no.	P/O
Dogleg @ SP 1573 of 7°.		3.5 kHz chart no.	P/O
Streamer @ 14m.			
2 ms sample rate			
Sonobuoy ch 253.			

SEISMIC LINE LOG

R/V RIG SEISMIC

Line Number 180/ 0401
 Line Name KP - J 1
 Sheet 2 of 9

Client: AGSO.

Survey no: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Time (UTC)	Shot Point	Tape Number	Event Details/Comments
077:1257	940	180/214	START OF ACQUISITION
077:1302	953		AUTOMATIC TEST SEQUENCE INIT
077:1307	966		SOL NOISE TEST
077:1309	972		OFFSET SHOTS: STB-2
077:1311	977		STB-16
077:1320	1001		FSP, SOL
077:1323	1010		AIR PRESSURE: 2000 PSI
077:1345	1069		CABLE NOISE: 39.2 μ B; 29.5 μ B (4Hz); 76.3 μ B (8Hz)
077:1409	1134	180/219	SONOBUOY DEPLOYED @ 61°51.879'S; 88°24.853'E WD: 3919.6m
077:1415	1150		CABLE NOISE: 29.2 μ B; 17.9 μ B (4Hz); 15.4 μ B (8Hz)
077:1422	1160		AIR PRESSURE: 2000 PSI
077:1442	1226	180/222	Sono buoy dead
077:1445	1236		Noise tests: 43.7 μ B, 20.5 μ B (8Hz)
077:1445	1236		Air Pressure: 1995
077:145600	1265		Sono buoy deployed WD: 3916m Lat: 61°52.769 Long: 88°32.081
077:152419	1344		Sono buoy Dead Lat 61°53.315 Long: 88°36.435 WD: 3915m
077:1515	1319		Cable Noise: 30.9 μ B, 10.35 μ B (8Hz)
077:1515	1319		Air Pressure: 2004
077:1616	1483		Noise 36 μ B (unfilt), 28.1 μ B (4Hz) 20.4 μ B (8Hz)
077:1616	1484		Air Pressure 1960 psi
077:1628	1515		Sono buoy deployed 61°54.846'S 88°45.633'E WD= 3915m
077:1646	1561		Noise 39.6 μ B (unfilt) 33.4 μ B (4Hz) 25.6 μ B (8Hz)
077:1646	1563		Air pressure 1922 psi
077:1650	1573		Dogleg 61°55.388'S 88°48.739'E WD: 3913m FA: -5°-D-11°40'IR: 110°-D-105° CCE max 31.6m at SP 1578, WD= 3912m
077:1716	1642		Noise 41.7 μ B (unfilt) 31.2 μ B (4Hz) 22.1 μ B (8Hz)
077:1717	1644		Air pressure 1927 psi
077:1746	1723		Noise 35.6 μ B (unfilt) 26.6 μ B (4Hz) 19.4 μ B (8Hz)
077:1747	1725		Air pressure 1850 psi

Note: All times on this page should be formatted as DDD.HHMM



SHOT EDIT LOG

R/V RIG SEISMIC

Client: AGSO
Survey No: 180
Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/0401
Line Name KP-J1
Sheet 4 of 9

1019 T	1722 M									
1117 T	1723 T									
1158 T	1739 M									
1182 T	1742 M									
1196 T	1783 M									
1305 T	1818 M									
1310 1310 T	1872 M									
1329 T	1884 T									
1331 T	1893 T									
1336 T	1901 T									
1346 T	1920 T									
1374 T	1922 T									
1381 1381 T										
1396 T										
1403 T										
1411 T										
1417 T										
1420 T										
1428 T										
1443 T										
1446 T										
1449 M										
1463 T										
1476 M										
1492 M										
1496 T										
1509 M										
1555 M										
1578 M										
1583 M										
1606 T										
1643 M										
1644 M										
1664 M										
1679 T										
1692 M										

A: Autofire M: Minor Timing Error 1ms to 2 ms T: Timing Error > 2.0 ms B: Timing Error > 4.0 ms N: No-Fire P: Parity Error

F: Frame Parity Error R: Not Recorded FS: Frames per Shot error

A SHOT POINT MARKED WITH A * INDICATES A FALSE ERROR

GUN OFFSET CALCULATIONS

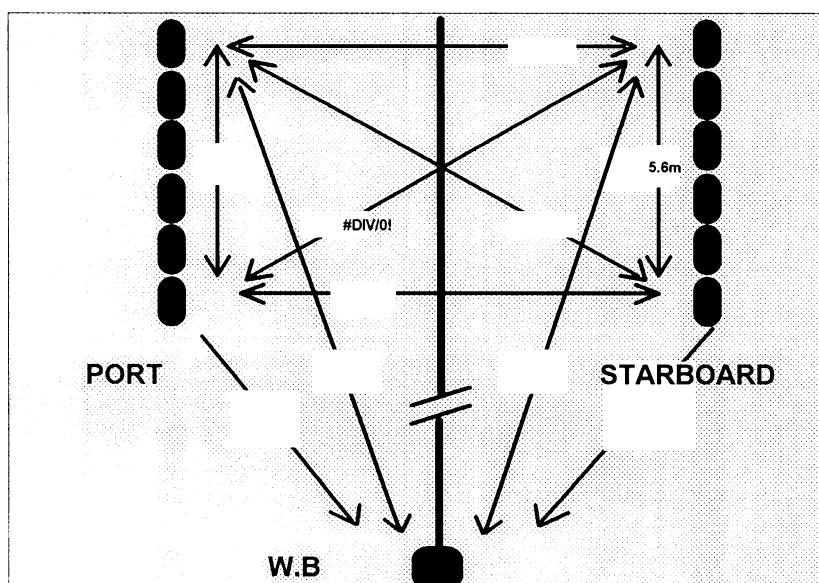
Cable Length (m)=	1800	Water Temperature (C°)=	1	Speed of sound in water=	1,452 m/s
Sample Interval (ms)=	4	Salinity (p	34		
Sequence Number:-	180/401	Line Name :-	KP-J1	Tape:-	215

Port 1 @ S.P. 0				
	Channel	Time (msecs)	DELTA t (msecs)	Distance (m)
Ch 1	1	0		
WB	241	0		
S1	244	0		
S15	247	0		
P1	248	0		
P15	251	0		

Stbd 1 @ S.P. 974-976				
	Channel	Time (msecs)	DELTA t (msecs)	Distance (m)
Ch 1	1	250	123	179.1
WB	241	0		
S1	244	127		
S15	247	131	5	6.8
P1	248	0		
P16	251	0		

Port 16 @ S.P. 0				
	Channel	Time (msecs)	DELTA t (msecs)	Distance (m)
Ch 1	1	0		
WB	241	0		
S1	244	0		
S15	247	0		
P1	248	0		
P16	251	0		

Stbd 16 @ S.P. 977-979				
	Channel	Time (msecs)	DELTA t (msecs)	Distance (m)
Ch 1	1	242	116.6667	169.4
WB	241	0		
S1	244	129	3	4.4
S15	247	126		
P1	248	0		
P15	251	0		



#####

CENTRE OF SOURCE TO NEAR TRACE OFFSET (from Ch1) = 174.3m

OFFSET SHOTS FOR LIN 180/601

GUN ON	S.P.	CH1	WB-241	S1-244	S16-247	P1-248	P16-251
S1	974	250	0	128	132	0	0
S1	975	250	0	126	132	0	0
S1	976	250	0	126	130	0	0
AVERAGE		250	0	127	131	0	0
GUN ON	S.P.	CH1	WB-241	S1-244	S16-247	P1-248	P16-251
S16	977	243	0	128	127	0	0
S16	978	242	0	130	128	0	0
S16	979	242	0	128	122	0	0
AVERAGE		242	0	129	126	0	0
GUN ON	S.P.	CH1	WB-241	S1-244	S16-247	P1-248	P16-251
P1	0	0	0	0	0	0	0
P1	0	0	0	0	0	0	0
P1	0	0	0	0	0	0	0
AVERAGE		0	0	0	0	0	0
GUN ON	S.P.	CH1	WB-241	S1-244	S16-247	P1-248	P16-251
P16	0	0	0	0	0	0	0
P16	0	0	0	0	0	0	0
P16	0	0	0	0	0	0	0
AVERAGE		0	0	0	0	0	0

GUN FAILURE LOGLINE NUMBER 402 DATE KP-51

PORT ARRAY

GUN No. FAULT

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____

STARBOARD ARRAY

GUN No. FAULT

1. Air / UNCERTAIN
2. _____
3. _____
4. BAD TIMING - GUN.
5. _____
6. _____
7. _____
8. Air LEAK
9. Timing \approx 28'
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____

SEISMIC TAPE LOG

R/V RIG SEISMIC



Client: AGSO Law of the Sea
 Survey no: 180
 Survey Name: HEARD-KERG-1

Line Number: 180/00401

Line Name: KP-J1

Sheet 7 of 9

Tape Number	Start Shot	Start Time	End Shot	End Time
180/00214	940	77.125725	972	77.130910
180/00215	973	77.130910	1005	77.132134
180/00216	1006	77.132134	1038	77.133354
180/00217	1039	77.133354	1071	77.134611
180/00218	1072	77.134611	1104	77.135826
180/00219	1105	77.135826	1137	77.141016
180/00220	1138	77.141016	1170	77.142158
180/00221	1171	77.142158	1203	77.143342
180/00222	1204	77.143342	1236	77.144521
180/00223	1237	77.144521	1269	77.145650
180/00224	1270	77.145650	1302	77.150845
180/00225	1303	77.150845	1335	77.152102
180/00226	1336	77.152102	1368	77.153304
180/00227	1369	77.153304	1401	77.154515
180/00228	1402	77.154515	1434	77.155722
180/00229	1435	77.155722	1467	77.160935
180/00230	1468	77.160935	1500	77.162156
180/00231	1501	77.162156	1533	77.163435
180/00232	1534	77.163435	1566	77.164724
180/00233	1567	77.164724	1599	77.165951
180/00234	1600	77.165951	1632	77.171222
180/00235	1633	77.171222	1665	77.172430
180/00236	1666	77.172430	1698	77.173646
180/00237	1699	77.173646	1731	77.174902
180/00238	1732	77.174902	1764	77.180129
180/00239	1765	77.180129	1797	77.181357
180/00240	1798	77.181357	1830	77.182632
180/00241	1831	77.182632	1863	77.183933
180/00242	1864	77.183933	1896	77.185218
180/00243	1897	77.185218	1929	77.190521
180/00244	1930	77.190521	1938	77.190914



NAV LINE LOG

R/V RIG SEISMIC

Client: AGSO

Survey no: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 0401

Line Name KP-J1

Sheet 8 of 9

Date 18/3/97

Observers DP PA Dws

Time (UTC)	Shot Point	Event Details/Comments
077:132002	1001	SOL Lat: 61°50.975s Long: 88°17.520E WD: 3918m FA: 4° DIR: 105°
077:140910	1134	Sonobuoy #9 Deployed 61°51.879's 88°24.853'E WD: 3919.6m
077:145600	1265	Sonobuoy #9 Dead SONOBUOY #10 DEPLOYED 61°52.769's, 88°32.081'E WD: 3916m.
077:152419	1344	SONOBUOY DEAD 61°53.315's, 88°36.435'E WD: 3915
077:162738	1515	Sonobuoy Deployed 61°54.846S 88°45.633E WD: 3915m
077:165001	1573	Dogleg 61°55.388S 88°48.739E WD: 3913m CRSE: 110° → 105° FA: -5 → -116 CCE: 31.6m @ 1578
077:185227	1896	Magnetometer to standby
77:190349	1925	LSP EOL 61°57.793s 89°08.197e WD= 3922 FA= -2° Sonar buoy #11 finished

NAV TRANSIT LOG

R/V RIG SEISMIC

Sheet 9 of 9

Client:AGSO

Survey No:180

Survey Name:HEARD IS./KERG. PLAT. PT2

Transit / Linechange

From: KP - JJ

To: KP - K

[illegible]

intermittent.



AGSO MARINE RV Rig Seismic

SURVEY 180

Heard Is/Kerguelen Plateau Pt2

LINE # 180/0501

LINE NAME KP-K

Line Summary log

Seismic line log

Shot edit log

Offset shot diagram

Gun fault log

Tape log

Navigation line log

Transit / Line change log



LINE SUMMARY LOG

R/V RIG SEISMIC

Client: AGSO

Survey no: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 501

Line Name KP-K

Sheet 1 of 11

Direction 280°

Date 19/3/07

Observers TH, PA

THIS FOLIO OF LINE LOG SHEETS HAS BEEN CHECKED BY DWS

Line Information	Time (UTC)	Shot Point	Tape Number	Box No.
Acquisition start	<u>078.050400</u>	<u>900</u>	<u>180/245</u>	<u>09</u>
SOL Noise test	<u>078.052329</u>	<u>955</u>		
First shot point (FSP)	<u>078.053933</u>	<u>1001</u>	<u>180/248</u>	<u>09</u>
First chargeable SP (FCSP)	<u>078.053933</u>	<u>1001</u>		
Last chargeable SP (LCSP)	<u>079.044759</u>	<u>5280</u>		
Last shot point (LSP)	<u>079.044759</u>	<u>5280</u>	<u>180/377</u>	<u>13</u>
EOL Noise test	<u>079.041836</u>	<u>5282</u>		
Acquisition stop	<u>079.041956</u>	<u>5285</u>	<u>180/377</u>	<u>13</u>

Line Details	Start of Line (FSP)	End of Line (LSP)
Wind direction and speed	<u>NW 3Kn</u>	<u>WS 28Kn</u>
Swell direction and height	<u>W/NW 4m</u>	<u>W 3.5m</u>
Average noise (µBar)	<u>17.1 µB FILTERED/ 36.1 µB UNFILTERED</u>	<u>12.7 µB FILTERED/ 37.6 µB UNFILTERED</u>
Near 16 trace noise (µBar)	<u>11.5 µB FILTERED/ 39.0 µB UNFILTERED</u>	<u>12.0 µB FILTERED/ 43.0 µB UNFILTERED</u>
Feather angle (degrees)	<u>-6°</u>	<u>9°</u>
Water depth (m)	<u>4275m</u>	<u>2436m</u>
Latitude	<u>61° 14.625</u>	<u>61° 12.638</u>
Longitude	<u>89° 23.590</u>	<u>85° 27.308</u>
Source volume (cu ins)	<u>1500</u>	<u>1500</u>
Disabled guns from full array	<u>Std array (10)</u>	<u>11 guns</u>
Bad cable depths (bird no.)	<u>*13 OPEN LOOP</u>	<u>13 open loop</u>
Bad traces	<u>CH 9 INT NOISE SPIKES</u>	
	<u>CH 100 101, 202, 133 LOW SIGNAL</u>	<u>SAME AS SOL</u>
	<u>CH 140 INT NOISE</u>	
Source to near trace offset (m)	<u>176.1m</u>	Number of non-recorded SPs <u>NIL</u>
Operating streamer depth (m)	<u>12m</u>	Number of gun misfire SPs <u>187</u>
Seismic Filters, LC & HC (Hz)	<u>5 / 206</u>	Number of parity error SPs <u>NIL</u>
Primary navigation	<u>RACAL I DGPS</u>	Percentage of bad SPs <u>4.3%</u>
Secondary navigation	<u>RACAL II DGPS</u>	Chargeable kilometres <u>213.9km</u>
Racal 1 DGPS tape no.	<u>07</u>	Gravity Y/N <u>Y</u>
Racal 2 DGPS tape no.	<u>07</u>	DAS tape no. <u>010</u>
Echo sounder 12 kHz Y/N	<u>Y</u>	Transducer depth <u>5.1</u>
Echo sounder 3.5 kHz Y/N	<u>Y</u>	Transducer depth <u>4.9</u>
Exabyte Tape no.	<u>005</u>	
Comments:	<u>CH 9 SET BAD IN TRACE HEADER @ SP 2514;</u>	
	<u>SONOBUOYS DEPLOYED @ SP 1347; 2705; 4221; SONOBUOY CH 251</u>	
	<u>2 ms sample rate.</u>	

SEISMIC LINE LOG

R/V RIG SEISMIC

Line Number 180/ 501

Line Name KP - K

Sheet 2 of 11

Client: AGSO.

Survey no: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Time (UTC)	Shot Point	Tape Number	Event Details/Comments
078.050400	900	180/245	Aquisition start
078.050459	916	180/245	Automatic test Sequence
078.0518	941	180/246	Offset Shots port 7
078.052045	947	180/246	port 16
078.052329	955		SOL noise test
078.053933	1001	180/248	SOL FSP
078.0554	1040		Cable Noise: 33.0µB, 12.1µB (8Hz)
078.0554	1040		Air Pressure: 2150 psi
078.0623	1128		Cable Noise 33µB int, 11 12µB filt (8Hz)
078.0629	1145		Air Pressure PSI 1968.
078.0724	1314		Cable Noise: 39.7µB, 19.2µB (8Hz)
078.0724	1314		Air Pressure: 1888 psi
078.073420	1347		Sonobuoy test deployed *
			Lat: 61°12.959 Long: 89°04.578'
			WD: 4302m
078.0754	1409		Noise: 30.2µB, 14.4µB (8Hz)
078.0754	1409		Air pressure: 2019 psi
078.0824	1504		Cable Noise: 43.0µB, 26.9µB (8Hz)
078.0824	1504		Air pressure: 1962 psi
078.0854	1592		Cable Noise: 30.0µB, 13.2µB (8Hz)
078.0854	1592		Air Pressure: 1977 psi
078.0953	1745		Port 15 out, Port 16 in.
078.0947	1751		Sonobuoy Dead.
078.0955	1771		Cable Noise 41µB (no filt) 19.6µB (filt 8)
078.0957	1775		Air Pressure
078.1025	1863		CABLE NOISE: 38.9µB, 31.5µB (4Hz), 18.6µB (8Hz)
078.1030	1880		AIR PRESSURE: 2050 PSI
078.1054	1957		CABLE NOISE: 28.6µB, 19.0µB (4Hz); 11.9µB (8Hz)
078.1100	2004		AIR PRESSURE: 1890 PSI
078.1125	2052		CABLE NOISE: 36.6µB, 28.2µB (4Hz); 16.9µB (8Hz)
078.1141	2100		AIR PRESSURE: 2000 PSI
078.1154	2141		Cable Noise 30µB no filt 10µB (filt 8Hz)
078.1216	2208		Air Pressure 1974
078.1224	2234		Cable Noise: 27.8µB, 13.0µB (8Hz)
078.1224	2234		Air Pressure: 2010

SEISMIC LINE LOG

R/V RIG SEISMIC

Client: AGSO.

Survey no: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 501

Line Name KP-k

Sheet 3 of 11

Time (UTC)	Shot Point	Tape Number	Event Details/Comments
078:1251	2313		Port 3 out, Port 6 in
078:1255	2326		Cable Noise: 34.0 μ B, 13.1 μ B (8Hz)
078:1255	2326		Air Pressure: 2060 psi
078:1325	2419		Cable Noise: 34.7 μ B, 16.3 μ B (8Hz)
078:1325	2419		Air Pressure: 2044
078:1355	2512		CABLE NOISE: 26.7 μ B; 18.7 μ B (4Hz); 13.6 μ B (8Hz)
078:1405	2550		AIR PRESSURE: 1900 PSI
078:1413	2567		PORT 16 OUT; PORT 3 IN.
078:1425	2603		CABLE NOISE: 28.3 μ B; 17.6 μ B (4Hz); 10.9 μ B (8Hz)
078:1428	2610		AIR PRESSURE: 2100 PSI
078:1453	2686		DOGLEG @ 61°06.0496'S 87°51.436'E; WD: 4198m MAX CL: -22.6m @ SP 2684; DIR: 280° → 271°
078:1500	2705		SONOBUOY DEPLOYED @ 61°06.463'S, 87°49.835'E WD: 4194m
078:1526	2785		CABLE NOISE: 31.6 μ B; 17.8 μ B (4Hz); 11.6 μ B (8Hz)
078:1527	2790		AIR PRESSURE: 2100 PSI
078:1557	2884		DOGLEG @ 61°06.271'S 87°40.164'E; WD 4161m MAX CL: 3.1m @ SP 2869; DIR: 271° → 264°; FA: 1 → -7°
078:1626	2976		Noise 24.5 μ B (unfilt), 13.6 μ B (4Hz), 9.6 μ B (8Hz)
078:1627	2979		Air pressure 1931
078:1656	3075		Noise 20.7 μ B (unfilt) 12.8 (4Hz) 8.3 μ B (8Hz)
078:1709	3120		Sonar Bouy # 14 Dead.
078:1726	3150		Noise 26.5 μ B (unfilt) 17.4 μ B (4Hz) 9.7 μ B (8Hz)
078:1727	3175		Port 5 off, Port 3 on
078:1729	3180		Port 15 on, Now full array, (1 side)
078:1725	3000		Air Pressure 2237 Psi.
078:1756	3268		Noise 21.6 μ B (unfilt) 13.2 μ B (4Hz) 8.4 μ B (8Hz)
078:1826	3364		Air Pressure 2200 psi
078:1826	3364		Noise 23.2 μ B (unfilt) 15.4 μ B (4Hz) 10.3 μ B (8Hz)
078:1856	3457		Noise 18.7 μ B (unfilt) 11.6 μ B (4Hz) 8.4 μ B (8Hz)
078:1908	3495		Air Pressure 2200 Psi
078:1916	3519		Ports out Port 10 in
078:1927	3551		Noise 31.2 μ B (unfilt) 20.2 μ B (4Hz) 10.9 μ B (8Hz)
078:1956	3644		Noise 26.5 μ B (unfilt) 17.6 μ B (4Hz) 11.7 μ B (8Hz)
078:2035	3734		Air Pressure 2150 PSI
078:2027	3738		Noise 26.6 μ B (unfilt) 16.2 μ B (4Hz) 9.9 μ B (8Hz)

SEISMIC LINE LOG

R/V RIG SEISMIC

Client: AGSO.

Survey no: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 501

Line Name KP-K

Sheet 4 of 11

Time (UTC)	Shot Point	Tape Number	Event Details/Comments
078.2057	3833		Cable Noise 32 μ B, 17.1 μ B (4Hz), 11.1 μ B (8Hz)
078.2058	3836		Air pressure 2014 psi
078.2127	3932		Cable Noise 35.4 μ B (unfilt.), 19.7 μ B (4Hz), 12 μ B (8Hz)
078.2127	3934		Air pressure 1921 psi
078.2157	4033		Cable Noise 25 μ B (unfilt.), 14.5 μ B (4Hz), 10.3 μ B (8Hz)
078.2158	4035		Air pressure 1933 psi
078.2227	4134		Cable Noise 27.6 μ B (unfilt.), 17.5 μ B (4Hz), 12.1 μ B (8Hz)
078.2228	4135		Air pressure 1860 psi
078.2257	4234		Cable Noise 24.2 μ B (unfilt.), 16.8 μ B (4Hz), 12 μ B (8Hz)
078.2258	4235		Air pressure 2080 psi
078.2328	4336		Cable Noise 19.7 μ B (unfilt.), 12.0 μ B (4Hz), 8.6 μ B (8Hz)
078.2328	4338		Air pressure 2057 psi
078.2358	4436		Cable Noise 30.6 μ B (un), 16.5 μ B (4Hz), 12.8 μ B (8Hz)
079.0028	4535		Cable Noise 23.3 μ B (un), 12.4 μ B (4Hz), 8.9 μ B (8Hz)
079.0028	4537		Air pressure 2025 psi
079.0058	4634		Noise 21.2 μ B (unfilt.), 9.8 μ B (4Hz), 6.8 μ B (8Hz)
079.0059	4636		Air pressure 2047 psi
079.0128	4734		Cable Noise 20.4 μ B (unfilt.), 10 μ B (4Hz), 8.9 μ B (8Hz)
079.0129	4736		Air pressure 2097 psi
079.0154	4821		Sonobuoy deployed
079.0158	4833		Cable Noise 25.2 μ B (unfilt.), 14.9 μ B (4Hz), 12.4 μ B (8Hz)
079.0159	4836		Air pressure 2164 psi
079.0228	4929		Cable Noise 21.8 μ B (unfilt.), 8.4 μ B (4Hz), 7.8 μ B (8Hz)
079.0244	4981		Air Pressure 2020 psi
079.0258	5025		Cable Noise 26.6 μ B (unfilt.), 11.5 μ B (4Hz), 8.2 μ B (8Hz)
079.0328	5121		Cable Noise 24.1 μ B (unfilt.), 12.6 μ B (4Hz), 8 μ B (8Hz)
079.0339	5153		Air Pressure 2040 psi
079.0357	5215		
079.0358	5218		Cable Noise: 31.1 μ B, 9.9 μ B (8Hz)
079.0358	5218		Air Pressure: 2124
079.041759	5280		Lost SP EOL
			Lat: 61° 12.638 Long: 85° 27.308
			WD: 2436m FA: 9° DIR 264°
079.041836	5282		EOL Noise: 17.1 μ B, 36.1 μ B (8Hz)
079.041956	5285	180/377	Ag to Acquisition stop.



SHOT EDIT LOG

R/V RIG SEISMIC

Client: AGSO

Survey No: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 501

Line Name KP -K

Sheet 5 of 11

1012 FS	1748 T	2538 N	3122 N.	3513 N	5157 FS
1015 T	1760 A *	2545 T	3123 T	3514 N	5175 T
1020 T	1836 T	2552 T	3124 T	3515 B	5180 T
1031 T	1837 T	2553 T	3125 T	3516 N	5197 B
1051 T	1922 T	2555 N	3126 T	3517 N	5215 T
1057 T	1936 N	2557 N	3127 T	3518 N	5225 T
1062 T	1937 B	2563 N	3128 T	3729 R	5280 FS
1068 T	2023 T	2565 N	3129 T	3779 M	
1075 T	2158 T	2571 T	3165 N	3834 T	
1079 T	2194 T	2572 T	3167 B	4008 T	
1081 T	2249 T	2573 T	3169 N	4055 B	
1082 T	2260 T	2693 T	3170 N	4063 B	
1083 T	2273 T	2931 FS	3171 N	4072 B	
1084 T	2276 T	2961 M	3172 N	4083 B	
1088 T	2297 A	2968 FS	3174 N	4084 B	
1300 T	2304 A	2981 M	3176 B	4089 B	
1302 T	2306 A N	2996 M	3178 T	4091 B	
1304 T	2310 T	3047 T	3179 B	4095 B	
1306 T	2311 N	3060 T	3180 T	4097 T	
1368 A	2312 N	3066 T	3181 B	4100 M	
1315 M	2314 B	3070 T	3182 T	4101 B	
1317 M	2414 T	3078 T	3230 T	4106 B	
1342 FS	2423 T	3107 N	3325 T	4110 B	
1483 T	2424 T	3108 N	3347 T	4800 A	
1608 T	2426 T	3110 N	3371 T	5040 T	
1629 T	2428 T	3111 N	3457 T	5041 T	
1639 T	2431 T	3112 N.	3461 T	5042 T	
1666 T	2432 T	3113 N.	3470	5047 T	
1670 T	2433 T	3114 N.	3496 T	5048 T	
1693 T	2436 T	3115 N.	3503 B	5050 T	
1713 T	2439 A	3116 N.	3504 N	5052 T	
1739 N	2447 T	3117 N.	3505 B	5053 T	
1740 N	2455 T	3118 N.	3509 B	5059 T	
1741 T	2459 T	3119 N.	3510 B	5104 T	
1743 N	2470 FS	3120 N.	3511 B	5119 T	
1744 T	2504 T	3121 N	3512 N	5151 T	

A: Autofire M: Minor Timing Error 1ms to 2 ms T: Timing Error > 2.0 ms B: Timing Error > 4.0 ms N: No-Fire P: Parity Error

F: Frame Parity Error R: Not Recorded FS: Frames per Shot error

A SHOT POINT MARKED WITH A * INDICATES A FALSE ERROR

GUN OFFSET CALCULATIONS

6 of 11

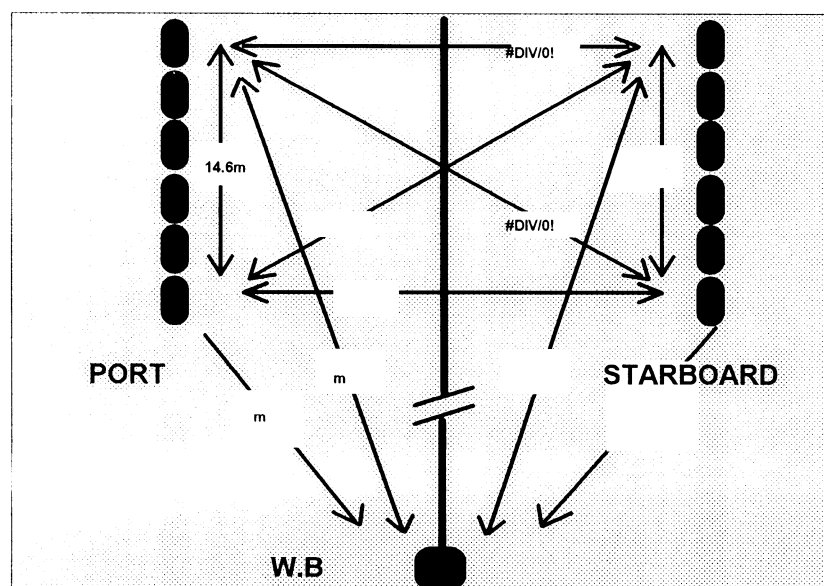
Cable Length (m)=	1600	Water Temperature (C°)=	1.8	Speed of sound in water=	1,456 m/s
Sample Interval (ms)=	4	Salinity (p)	34		
Sequence Number:-	180/501	Line Name :-	KP-K	Tape:-	246

Port 1 @ S.P. 943-945				
	Channel	Time (msecs)	DELTA t (msecs)	Distance (m)
Ch 1	1	248	125	182.5
WB	241	0		
S1	244	0		
S15	247	0		
P1	248	123		
P15	251	132	9	13.6

Stbd 1 @ S.P. 0				
	Channel	Time (msecs)	DELTA t (msecs)	Distance (m)
Ch 1	1	0		
WB	241	0		
S1	244	0		
S15	247	0		
P1	248	0		
P16	251	0		

Port 16 @ S.P. 948-950				
	Channel	Time (msecs)	DELTA t (msecs)	Distance (m)
Ch 1	1	239	117	169.8
WB	241	0		
S1	244	0		
S15	247	0		
P1	248	133	11	15.5
P16	251	122		

Stbd 16 @ S.P. 0				
	Channel	Time (msecs)	DELTA t (msecs)	Distance (m)
Ch 1	1	0		
WB	241	0		
S1	244	0		
S15	247	0		
P1	248	0		
P15	251	0		



#####

CENTRE OF SOURCE TO NEAR TRACE OFFSET (from Ch1) = 176.1m

OFFSET SHOTS FOR LIN 180/601

GUN ON	S.P.	CH1	WB-241	S1-244	S16-247	P1-248	P16-251
S1	0	0	0	0	0	0	0
S1	0	0	0	0	0	0	0
S1	0	0	0	0	0	0	0
AVERAGE		0	0	0	0	0	0
GUN ON	S.P.	CH1	WB-241	S1-244	S16-247	P1-248	P16-251
S16	0	0	0	0	0	0	0
S16	0	0	0	0	0	0	0
S16	0	0	0	0	0	0	0
AVERAGE		0	0	0	0	0	0
GUN ON	S.P.	CH1	WB-241	S1-244	S16-247	P1-248	P16-251
P1	943	248	0	0	0	122	132
P1	944	248	0	0	0	124	132
P1	945	248	0	0	0	122	132
AVERAGE		248	0	0	0	123	132
GUN ON	S.P.	CH1	WB-241	S1-244	S16-247	P1-248	P16-251
P16	948	240	0	0	0	134	122
P16	949	238	0	0	0	132	122
P16	950	238	0	0	0	132	122
AVERAGE		239	0	0	0	133	122

SEISMIC TAPE LOG

R/V RIG SEISMIC



Client: AGSO Law of the Sea
 Survey no: 180
 Survey Name: HEARD-KERG-1

Line Number: 180/00501

Line Name: KP-K

Sheet 1 of 3

7.9.1

Tape Number	Start Shot	Start Time	End Shot	End Time
180/00245	900	78.050400	932	78.051530
180/00246	933	78.051530	965	78.052656
180/00247	966	78.052656	998	78.053827
180/00248	999	78.053827	1031	78.055024
180/00249	1032	78.055024	1064	78.060207
180/00250	1065	78.060207	1097	78.061326
180/00251	1098	78.061326	1130	78.062429
180/00252	1131	78.062429	1163	78.063506
180/00253	1164	78.063506	1196	78.064547
180/00254	1197	78.064547	1229	78.065638
180/00255	1230	78.065638	1262	78.070713
180/00256	1263	78.070713	1295	78.071747
180/00257	1296	78.071747	1328	78.072820
180/00258	1329	78.072820	1361	78.073838
180/00259	1362	78.073838	1394	78.074911
180/00260	1395	78.074911	1427	78.075946
180/00261	1428	78.075946	1460	78.081002
180/00262	1461	78.081002	1493	78.082047
180/00263	1494	78.082047	1526	78.083135
180/00264	1527	78.083135	1559	78.084251
180/00265	1560	78.084251	1592	78.085422
180/00266	1593	78.085422	1625	78.090537
180/00267	1626	78.090537	1658	78.091643
180/00268	1659	78.091643	1691	78.092742
180/00269	1692	78.092742	1724	78.093847
180/00270	1725	78.093847	1757	78.094950
180/00271	1758	78.094950	1790	78.100100
180/00272	1791	78.100100	1823	78.101127
180/00273	1824	78.101127	1856	78.102214
180/00274	1857	78.102214	1889	78.103307
180/00275	1890	78.103307	1922	78.104326
180/00276	1923	78.104326	1955	78.105404
180/00277	1956	78.105404	1988	78.110429
180/00278	1989	78.110429	2021	78.111500
180/00279	2022	78.111500	2054	78.112526
180/00280	2055	78.112526	2087	78.113620
180/00281	2088	78.113620	2120	78.114741
180/00282	2121	78.114741	2153	78.115840
180/00283	2154	78.115840	2186	78.120918
180/00284	2187	78.120918	2219	78.122006
180/00285	2220	78.122006	2252	78.123048
180/00286	2253	78.123048	2285	78.124153
180/00287	2286	78.124153	2318	78.125231
180/00288	2319	78.125231	2351	78.130306
180/00289	2352	78.130306	2384	78.131342
180/00290	2385	78.131342	2417	78.132437

SEISMIC TAPE LOG

R/V RIG SEISMIC



Client: AGSO Law of the Sea
 Survey no: 180
 Survey Name: HEARD-KERG-1

Line Number: 180/00501
 Line Name: KP-K
 Sheet 2 of 3

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Tape Number	Start Shot	Start Time	End Shot	End Time
180/00291	2418	78.132437	2450	78.133514
180/00292	2451	78.133514	2483	78.134553
180/00293	2484	78.134553	2516	78.135635
180/00294	2517	78.135635	2549	78.140720
180/00295	2550	78.140720	2582	78.141818
180/00296	2583	78.141818	2615	78.142941
180/00297	2616	78.142941	2648	78.144053
180/00298	2649	78.144053	2681	78.145145
180/00299	2682	78.145145	2714	78.150246
180/00300	2715	78.150246	2747	78.151332
180/00301	2748	78.151332	2780	78.152402
180/00302	2781	78.152402	2813	78.153433
180/00303	2814	78.153433	2846	78.154458
180/00304	2847	78.154458	2879	78.155536
180/00305	2880	78.155536	2912	78.160603
180/00306	2913	78.160603	2945	78.161617
180/00307	2946	78.161617	2978	78.162628
180/00308	2979	78.162628	3011	78.163645
180/00309	3012	78.163645	3044	78.164634
180/00310	3045	78.164634	3077	78.165634
180/00311	3078	78.165634	3110	78.170625
180/00312	3111	78.170625	3143	78.171651
180/00313	3144	78.171651	3176	78.172726
180/00314	3177	78.172726	3209	78.173741
180/00315	3210	78.173741	3242	78.174759
180/00316	3243	78.174759	3275	78.175824
180/00317	3276	78.175824	3308	78.180850
180/00318	3309	78.180850	3341	78.181909
180/00319	3342	78.181909	3374	78.182930
180/00320	3375	78.182930	3407	78.184000
180/00321	3408	78.184000	3440	78.185053
180/00322	3441	78.185053	3473	78.190122
180/00323	3474	78.190122	3506	78.191202
180/00324	3507	78.191202	3539	78.192237
180/00325	3540	78.192237	3572	78.193322
180/00326	3573	78.193322	3605	78.194355
180/00327	3606	78.194355	3638	78.195436
180/00328	3639	78.195436	3671	78.200517
180/00329	3672	78.200517	3704	78.201557
180/00330	3705	78.201557	3738	78.202652
180/00331	3739	78.202652	3771	78.203717
180/00332	3772	78.203717	3804	78.204747
180/00333	3805	78.204747	3837	78.205812
180/00334	3838	78.205812	3870	78.210813
180/00335	3871	78.210813	3903	78.211810
180/00336	3904	78.211810	3936	78.212804

SEISMIC TAPE LOG

R/V RIG SEISMIC



Client: AGSO Law of the Sea
 Survey no: 180
 Survey Name: HEARD-KERG-1

Line Number: 180/00501
 Line Name: KP-K
 Sheet 3 of 3

9 of 11

Tape Number	Start Shot	Start Time	End Shot	End Time
180/00337	3937	78.212804	3969	78.213803
180/00338	3970	78.213803	4002	78.214754
180/00339	4003	78.214754	4035	78.215747
180/00340	4036	78.215747	4068	78.220745
180/00341	4069	78.220745	4101	78.221745
180/00342	4102	78.221745	4134	78.222714
180/00343	4135	78.222714	4167	78.223651
180/00344	4168	78.223651	4200	78.224705
180/00345	4201	78.224705	4233	78.225704
180/00346	4234	78.225704	4266	78.230652
180/00347	4267	78.230652	4299	78.231638
180/00348	4300	78.231638	4332	78.232625
180/00349	4333	78.232625	4365	78.233608
180/00350	4366	78.233608	4398	78.234618
180/00351	4399	78.234618	4431	78.235614
180/00352	4432	78.235614	4464	79.000611
180/00353	4465	79.000611	4497	79.001612
180/00354	4498	79.001612	4530	79.002616
180/00355	4531	79.002616	4563	79.003626
180/00356	4564	79.003626	4596	79.004624
180/00357	4597	79.004624	4629	79.005624
180/00358	4630	79.005624	4662	79.010627
180/00359	4663	79.010627	4695	79.011624
180/00360	4696	79.011624	4728	79.012620
180/00361	4729	79.012620	4761	79.013612
180/00362	4762	79.013612	4794	79.014559
180/00363	4795	79.014559	4827	79.015618
180/00364	4828	79.015618	4860	79.020638
180/00365	4861	79.020638	4893	79.021655
180/00366	4894	79.021655	4926	79.022727
180/00367	4927	79.022727	4959	79.023746
180/00368	4960	79.023746	4992	79.024759
180/00369	4993	79.024759	5025	79.025818
180/00370	5026	79.025818	5058	79.030838
180/00371	5059	79.030838	5091	79.031903
180/00372	5092	79.031903	5124	79.032927
180/00373	5125	79.032927	5157	79.033957
180/00374	5158	79.033957	5190	79.035010
180/00375	5191	79.035010	5223	79.040017
180/00376	5224	79.040017	5256	79.041032
180/00377	5257	79.041032	5285	79.041956

NAV LINE LOG

R/V RIG SEISMIC

Client:AGSO

Survey no:180

Survey Name:HEARD IS./KERG. PLAT. PT2

Line Number 180/ 0501

Line Name KP-K

Sheet 10 of 10

Date 19/3/97

Observers P.A.

Time (UTC)	Shot Point	Event Details/Comments
078:053933	1001	FSP, SOL @ 61°14.625'S, 89°23.590'E WD: 4275 m ; FA: -6° ; DIR: 280°
078:073420	1347	SONOBUOY DEPLOYED @ 61°12.959'S, 89°04.578'E WD: 4302 m
078:094754	1751	SONOBUOY DEAD @ 61°11.005'S 88°42.403'E WD: 4283 m
078:1453	2686	Dogleg: Lat: 61°06.496 Long: 87°51.166E WD: 4198 FA: 2 Dir: 272° Max CCE: 226 at SP 2684
078:1459	2705	Sonobuoy @ 61°06.463 87°49.835
078:1557	2884	Dogleg Lat: 61°6.271 Long: 87°40.164 WD: 4161 FA: 1° -7° Dir Max CCE 3.1 at SP 2889
078:170928	3120	Sonobuoy Dead
079:015421	4821	Sonobuoy Deployed 61°11.432S 85°52.797E WD: 3253 m
079:041759	5280	LSP, SOL @ 61°12.638'S, 85°27.308'E WD: 2436 m ; FA: 9° ; DIR: 264°



Sheet 11 of 11

Client:AGSO

Transit / Linechange

Survey No:180

From: KP-K 180/0501

Survey Name:HEARD IS./KERG. PLAT. PT2

To: KP-L 180/0601

[illegible]



AGSO MARINE RV Rig Seismic

SURVEY 180

Heard Is/Kerguelen Plateau Pt2

LINE # 180/0601

LINE NAME KP-L

Line Summary log

Seismic line log

Shot edit log

Offset shot diagram

Gun fault log

Tape log

Navigation line log

Transit / Line change log



LINE SUMMARY LOG

R/V RIG SEISMIC

Client: AGSO
Survey no: 180
Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 0601
Line Name KP-L
Sheet 1 of 13
Direction 258°
Date 23 March '97
Observers DL SM PAKP

THIS FOLIO OF LINE LOG SHEETS HAS BEEN CHECKED BY

DWG

Line Information	Time (UTC)	Shot Point	Tape Number	Box No.
Acquisition start	82:004318	900	180/378	13
SOL Noise test	82:010835	973		
First shot point (FSP)	82:011810	1001	180/378	13
First chargeable SP (FCSP)	82:011810	1001		
Last chargeable SP (LCSP)	83:132300	8112		
Last shot point (LSP)	83:132300	8112	180/437	15
EOL Noise test	83:132358	8115		
Acquisition stop	83:132562	8120	180/437	15

Line Details

	Start of Line (FSP)	End of Line (LSP)
Wind direction and speed	WSW 22 kn	NW 17 kn
Swell direction and height	SW, 3-4m	SW 1.0m Sea 0.5m
Average noise (µBar)	12.1 µB FILTERED/36.5 µB UNFILTERED	8.9 µB FILTERED/23.4 µB UNFILTERED
Near 16 trace noise (µBar)	15.5 µB FILTERED/60.4 µB UNFILTERED	9.5 µB FILTERED/22.9 µB UNFILTERED
Feather angle (degrees)	5°	-11°
Water depth (m)	4525m	2585-1m
Latitude	58° 10.217S	58° 41.005S
Longitude	89° 22.162E	83° 21.736E
Source volume (cu ins)	3000	3000
Disabled guns from full array	started without Port Array	
Bad cable depths (bird no.)	0	0
Bad traces	CH117- LOW SIGNAL/AMP.	58 79, 91, 117 low amp/sig.

Source to near trace offset (m)	169.1m	Number of non-recorded SPs	NIL
Operating streamer depth (m)	14m, 12m. #	Number of gun misfire SPs	125
Seismic Filters, LC & HC (Hz)	5 / 103	Number of parity error SPs	NIL
Primary navigation	Rocal I dGPS	Percentage of bad SPs	1.7%
Secondary navigation	Rocal II dGPS	Chargeable kilometres	355.8km
Rocal 1 DGPS tape no.	008	Gravity Y/N	Y
Rocal 2 DGPS tape no.	003	DAS tape no.	011
Echo sounder 12 kHz Y/N	Y	Transducer depth	5.1
Echo sounder 3.5 kHz Y/N	Y	Transducer depth	4.9
Exabyte Tape no.	007	12 kHz chart no.	P/O
		3.5 kHz chart no.	P/O

Comments: Only 1 (stbd) gun string from SP 1001 to SP 1343
SP 1229 streamer set to 14 m.

1600METRE CABLE USED: SONOB00Y DEPLOYED @ SP 2189 SP 3566 SP 6076.

* Streamer set to 12m. @ SP 4533.

4 ms sample rate

Bathymetry continued past EOL to 2500m Isobath

@ 58° 41.632s 83° 13.156e. Sonobouys @ SP 1667, 3566, 6076

Dogleg @ SP 3311

changed to 4ms sample rate

cable length 1600m

SEISMIC LINE LOG

R/V RIG SEISMIC

Client: AGSO.

Survey no: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 0601

Line Name KP-L

Sheet 2 of 13

Time (UTC)	Shot Point	Tape Number	Event Details/Comments
82:0043	900	180/378	Acquisition start
82:0044	903		offset shots st 1
82:0046	908		st 16
82:0049	918		Port 1
82:0052	926		Port 16
82:0053	928		Automatic sequence test
82:0108	973		SOL Noise test
82:0118	1001	180/378	FSP SOL started Line with only the st 6 array.
			58°10.2175 89°22.162E
			wd: 4525m FA: 5° Dir 258°
82:0140	1070		st 6 13 out 14 on
82:0205	1150		Air pressure 2066 psi
			Noise 36.7µB(unfilt) 28.3(4hz) 21.1µB(8hz)
82:0243	1275		Noise 42.6µB(unfilt) 35.5(4hz) 26.6µB(8hz)
82:0306	1343		Port array switched on
82:0314	1364		Noise 35.9µB(unfilt) 28.1µB(4hz) 23.4µB(8hz)
82:0343	1455		Noise 41.9µB(unfilt) 32.8µB(4hz) 27µB(8hz)
82:0400	1505		CLE > 50m ICEBERG-BUASSIVE ACTION
82:0414	1549		NOISE: 39.8µB (UNFILT); 27.4(4HZ); 21.8µB 8HZ
82:0429	1600		AIR PRESSURE 2030 PSI
82:0444	1648		NOISE: 37.3µB; 28.7µB(4HZ); 26.5µB(8HZ)
82:0446	1657		PT 3 OFF, PT 5 ON
82:0449	1667		SONO BUOY DEPLOYED
			@ 58°13.558'S ; 89°48.766'E ; WD 4672m
82:0457	1693		FA > 10°
82:0509	1730		AIR PRESSURE : 1930 PSI
82:0514	1749		NOISE: 38.2µB ; 23.4µB FILT.
82:0539	1831		FA < 10°
82:0609	1930		AIR PRESSURE 2000 PSI
82:0614	1948		NOISE: 41.9µB UNFILT ; 30.3µB FILT
82:0630	1997	1997	* SHOT RESYNCH 1997 TO 1998
82:0644	2048		Cable Noise: 35.8µB
82:0644	2048		Air Pressure: 1940 psi
82:0716	2189		Sono buoy dead 58°16.926S 89°22.555E

SEISMIC LINE LOG

R/V RIG SEISMIC

Client: AGSO.

Survey no: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 0601

Line Name KP-L

Sheet 3 of 13

Time (UTC)	Shot Point	Tape Number	Event Details/Comments
082:0814	2346		Cable Noise: 43.2 μ B, 31.6 μ B (8 Hz)
082:0814	2346		Air Pressure: 1935 psi
082:0845	2444		Cable Noise: 29.6 μ B, 19.7 μ B (8 Hz)
082:0845	2444		Air Pressure: 2078 psi
082:0914	2541		Cable Noise: 42.6 μ B, 32.7 μ B (8 Hz)
082:0914	2541		Air Pressure: 1965 psi
082:0944	2633		Cable Noise 39 μ B (0 Hz) 28 μ B (8 Hz)
082:0956	2668		Air Pressure 2121 PSI
082:1015	2727		CABLE NOISE: 46.7 μ B (0 Hz), 33.3 μ B (8 Hz)
082:1022	2750		AIR PRESSURE: 2000 PSI
082:1043	2816		FA \rightarrow -10°
082:1045	2820		NOISE TEST: 53.3 μ B (0 Hz), 27.4 μ B (8 Hz)
082:1045	2830		AIR PRESSURE 2000 PSI
082:1115	2912		NOISE TEST: 34.9 μ B, 25.2 μ B (8 Hz)
082:1112	2930		AIR PRESSURE: 2010 PSI
082:1127	2946		FA \leftarrow -10°
082:1145	3003		CABLE: 38.5 μ B, 25.1 μ B 8 Hz
082:1153	3030		AIR PRESSURE: 1900 PSI
082:1215	3101		Cable Noise: 38.2 μ B, 27.5 μ B (8 Hz)
082:1215	3101		Air Pressure: 1986 psi
082:1245	3198		Cable Noise: 31.3 μ B, 25.6 μ B (8 Hz)
082:1245	3198		Air Pressure: 1941 psi
082:1315	3296		Cable Noise: 31.5 μ B, 21.2 μ B (8 Hz)
082:1315	3296		Air Pressure: 1970 psi
082:131959	3311		Paylog @ 58° 23.248'S, 87° 26.667'E
			DIR: 258° \rightarrow 262°, FA° 0 \rightarrow 4°, CCE Max 22m at SP.
			WD: 4696m
082:1345	3395		Cable Noise: 36.6 μ B, 31.2 μ B (8 Hz)
082:1345	3395		Air Pressure: 1990 psi
082:1415	3494		Cable Noise: 26.7 μ B, 22.4 μ B (8 Hz)
082:1415	3494		Air Pressure: 1962 psi
082:1437	3566		SONOBUOY DEPLOYED
			@ 58° 24.195'S 87° 13.710 W 4694 m
082:1445	3592		CABLE NOISE: 27.2 μ B, 23.9 μ B (8 Hz)
082:1457	3630		AIR PRESSURE: 1880 PSI

SEISMIC LINE LOG

R/V RIG SEISMIC

Client: AGSO.

Survey no: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 0601

Line Name K P-L

Sheet 4 of 13

Time (UTC)	Shot Point	Tape Number	Event Details/Comments
082:1543	3798		Cable Noise: 26.8 μ B, 23.3 μ B (8Hz)
082:1543	3798		Air Pressure: 1909 psi
82:1616	3903		Noise 23.5 μ B (unfilt), 14.8 μ B (8Hz)
82:1628	3943		Air Pressure 1900 psi
82:1716	4106		Noise 22.7 μ B (unfilt) 13.9 μ B (8Hz)
82:1733	4164		Air Pressure 2080 psi
82:1714	4100		sonobuoy dead 58° 26.1685 86° 46.556 E wd 4378m
82:1746	4206		Noise 39.6 μ B (unfilt) 31.4 μ B (8Hz)
82:1752	4226		Air Pressure 1965 psi
82:1816	4305		Noise 38.7 μ B (unfilt) 35.2 μ B (8Hz)
82:1830	4351		Air Pressure 2040 psi
82:1846	4403		Noise 33.9 μ B (unfilt) 28.6 μ B (4Hz) 26.7 μ B (8Hz)
82:1901	4450		Air Pressure 1925 psi
* 82:1925	4533		Streamer set to 12 m.
82:1927	4540		Noise 34.8 μ B (unfilt) 31.7 μ B (4Hz) 30.7 μ B (8Hz)
082:1946	4604		Noise 33.9 μ B (unfilt) 28.1 μ B (4Hz) 26.5 μ B (8Hz)
082:2016	4706		Noise 33.7 μ B (unfilt) 24.1 μ B (4Hz), 19.6 μ B (8Hz)
082:2017	4707		Air pressure 1832 psi
082:2046	4805		Noise 28.3 μ B (unfilt), 22.4 μ B (4Hz), 20.9 μ B (8Hz)
082:2047	4808		Air pressure 1956 psi
082:2117	4904		Noise 31.2 μ B (unfilt), 20.1 μ B (4Hz), 18.1 μ B (8Hz)
082:2118	4910		Air pressure 1776 psi
082:2146	5005		Noise 34.6 μ B (unfilt), 19.5 μ B (4Hz), 18.8 μ B (8Hz)
082:2147	5007		Air pressure 1932 psi
082:2217	5106		Noise 31.2 μ B (unfilt), 20.3 μ B (4Hz), 19.2 μ B (8Hz)
082:2217	5108		Air pressure 1925 psi
082:2247	5201		Noise 31.8 μ B (unfilt), 17.7 μ B (4Hz), 15.5 μ B (8Hz)
082:2247	5204		Air pressure 1967 psi
082:2317	5297		Noise 27.6 μ B (unfilt), 17.5 μ B (4Hz), 16.1 μ B (8Hz)
082:2318	5301		Air pressure 1973 psi
082:2347	5396		Noise 21.8 μ B (unfilt) 17.4 μ B (4Hz) 16.1 μ B (8Hz)
083:0017	5496		Noise 34.2 μ B (unfilt) 23.9 μ B (4Hz) 20 μ B (8Hz)
083:0017	5497		Air pressure 1967 psi
083:0047	5599		Noise 30.1 μ B (unfilt) 23.7 μ B (4Hz) 22.8 μ B (8Hz)
083:0047	5600		Air pressure 1796 psi

SEISMIC LINE LOG

R/V RIG SEISMIC

Client: AGSO.

Survey no: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 0601

Line Name KP-L

Sheet 5 of 13

Time (UTC)	Shot Point	Tape Number	Event Details/Comments
083.0117	5702		Noise 26.4 μ B (unfilt), 21.7 μ B (4hz), 20.3 μ B (8hz)
083.0117	5703		Air pressure 1835 psi
083.0147	5805		Noise 30.9 μ B (unfilt), 21.5 μ B (4hz), 19.2 μ B (8hz)
083.0148	5807		Air pressure 1894 psi
083.0217	5902		Noise 30.7 μ B (unfilt), 14.8 μ B (4hz) 14.1 (8hz)
083.0231	5900		Air pressure 1936 psi.
083.0247	6002		Noise 23.1 μ B (unfilt) 12.2 μ B (4hz) 10.7 μ B (8hz)
083.0302	6050		Air Pressure 1954 psi.
083.0310	6076		Sonobuoy Deployed 58°33.425S, 86°46.586E
083.0310	6077		stbd Array switched off for repairs.
083.0317	6102		Noise 18.2 μ B (unfilt) 7.6 μ B (8hz)
083.0347	6204		Noise 24 μ B (unfilt) 8.5 μ B (8hz)
083.0352	6220		Air Pressure 2200 psi
083.0417	6304		Cable Noise: 28.9 μ B, 9.8 μ B (8Hz)
083.0417	6303		Air Pressure: 2171 psi
083.0448	6400		Cable Noise: 21.2 μ B, 7.4 μ B (8Hz)
083.0448	6400		Air Pressure: 2100 psi
083.052916	6536		stbd Array in water
083.052953	6538		Sonobuoy dead.
083.0533	6548		stbd 4 out, stbd 5 in
083.0547	6594		Cable Noise: 22.2 μ B, 10.7 μ B (8Hz)
083.0547	6594		Air Pressure: 2078
083.0618	6691		Cable Noise: 29.7 μ B, 11.8 μ B (8Hz)
083.0618	6691		Air Pressure: 1940 psi
083.0648	6792		CABLE NOISE: 29.4 μ B, 10.8 μ B UNFILT
083.0700	6833		AIR PRESSURE: 1986 psi
083.0717	6893		CABLE NOISE: 27.4 μ B, 9.4 μ B (8Hz)
083.0720	6900		AIR PRESSURE: 2000 psi
083.0746	6995		CABLE NOISE: 17.3 μ B (0Hz)
083.0750	7000		AIR PRESSURE: 1980 psi.
083.0816	7097		CABLE NOISE: 24.2 μ B, 15.6 μ B (8Hz)
083.0834	7150		AIR PRESSURE: 2000 psi
083.0848	7200		CABLE NOISE: 28.7 μ B, 21.7 μ B (8Hz)
083.0900	7242		AIR PRESSURE: 1900 psi



R/V RIG SEISMIC

Survey no:180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 0601

Line Name KP-L

Sheet 6 of 12

Lat: 58°41.005 Long: ~~80~~ 83°21.736
EOL cable Noise 23.4 μ B, 8.9 μ B (84)
Acquisition Stop



SHOT EDIT LOG

R/V RIG SEISMIC

Client: AGSO

Survey No: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 0601

Line Name KP-L

Sheet 7 of 13

1050 N	1548 T	5735 M	7363 T				
1051 B	1563 T	5874 T	7611 T				
1054 T	1565 T	5881 M	7612 T				
1055 N	1569 T	5916 T	7614 T				
1056 N	1574 T	5939 T	7680 T				
1057 T	1583 T	5973 T	7739 A				
1062 T	1599 T	5974 T	7762 T				
1063 T	1606 T	6002 T	7859 T				
1065 B	1614 T	6072 T	7892 T				
1066 B	1625 T	6073 T	7893 T				
1071 B	1628 T	6179 T	7899 T				
1087 T	1630 T	6537 A	7937 T				
1101 T	1636 T	6538 N	7970 T				
1344 T	1637 T	6539 N	7974 T				
1345 N	1649 T	6540 N	8042 T				
1345 T	1651 T	6541 N	8070 T				
1346 N	1652 T	6542 N	8073 A				
1347 N	1658 B	6543 N					
1348 N	1663 T	6544 N					
1349 T	2862 T	6545 N					
1350 A	3049 T	6546 N					
1374 T	3120 T	6547 N					
1379 T	3384 T	6567 T					
1403 T	3496 T	6850 T					
1407 T	3497 T	6851 T					
1410 T	3498 T	6866 T					
1411 T	3560 A	6875 T					
1413 T	4101 T	6938 T					
1450 T	4122 T	6952 T					
1483 T	4351 T	6997 T					
1487 T	4366 T	7083 N					
1497 T	5426 T	7084 N					
1535 T	5435 T	7085 N					
1542 T	5729 T	7199 T					
1544 T	5730 T	7229 T					
1546 A	5731 T	7322 T					

A: Autofire M: Minor Timing Error 1ms to 2 ms T: Timing Error > 2.0 ms B: Timing Error > 4.0 ms N: No-Fire P: Parity Error

F: Frame Parity Error R: Not Recorded FS: Frames per Shot error

A SHOT POINT MARKED WITH A * INDICATES A FALSE ERROR

GUN OFFSET CALCULATIONS

8 of 13

Cable Length (m)=	1600	Water Temperature (C°)=	2.2	Speed of sound in water=	1,411 m/s
Sample Interval (ms)=	4	Salinity (ppt)=	34		
Sequence Number:-	180/601	Line Name :-	KP-L	Tape:-	378

Port 1 @ S.P. 919-921

	Channel	Time (msecs)	DELTA t (msecs)	Distance (m)
Ch 1	1	296	112	158.0
WB	241	432	120	169.3
S1	244	184	0	0.0
S15	247	198	14	19.7
P1	248	184		
P15	251	197	13	17.9

Stbd 1 @ S.P. 903-905

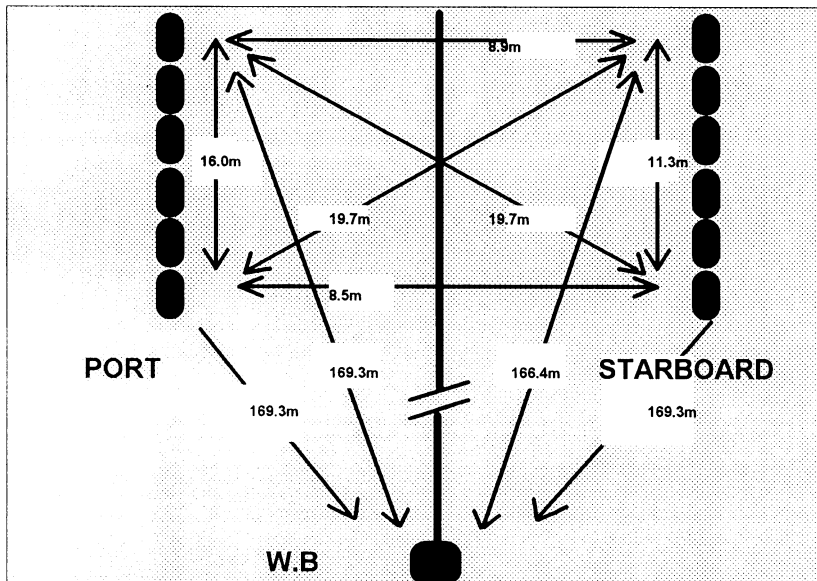
	Channel	Time (msecs)	DELTA t (msecs)	Distance (m)
Ch 1	1	301	117.3333	165.5
WB	241	430	118	166.4
S1	244	184		
S15	247	192	8	11.3
P1	248	197	12.66667	17.9
P16	251	199	15.33333	21.6

Port 16 @ S.P. 927-929

	Channel	Time (msecs)	DELTA t (msecs)	Distance (m)
Ch 1	1	291	107	151.4
WB	241	432	120	169.3
S1	244	197	13	17.9
S15	247	184	0	0.0
P1	248	194	10	14.1
P16	251	184		

Stbd 16 @ S.P. 909-911

	Channel	Time (msecs)	DELTA t (msecs)	Distance (m)
Ch 1	1	292	108	152.3
WB	241	432	120	169.3
S1	244	192	8	11.3
S15	247	184		
P1	248	198	14	19.7
P15	251	196	12	16.9



CENTRE OF SOURCE TO WATERBREAK = 168.6m
CENTRE OF SOURCE TO NEAR TRACE OFFSET (from WB) = 164.8m
CENTRE OF SOURCE TO NEAR TRACE OFFSET (from Ch1) = 156.8m

OFFSET SHOTS FOR LIN 180/601

GUN ON	S.P.	CH1	WB-241	S1-244	S16-247	P1-248	P16-251
S1	903	304	442	184	192	196	200
S1	904	300	442	184	192	196	198
S1	905	300	439	184	192	198	200
AVERAGE		301	441	184	192	197	199
GUN ON	S.P.	CH1	WB-241	S1-244	S16-247	P1-248	P16-251
S16	909	292	432	192	184	196	196
S16	910	292	430	192	184	198	196
S16	911	292	434	192	184	200	196
AVERAGE		292	432	192	184	198	196
GUN ON	S.P.	CH1	WB-241	S1-244	S16-247	P1-248	P16-251
P1	919	296	430	184	198	194	196
P1	920	296	434	184	198	196	196
P1	921	296	432	184	198	198	198
AVERAGE		296	432	184	198	196	197
GUN ON	S.P.	CH1	WB-241	S1-244	S16-247	P1-248	P16-251
P16	927	292	432	198	184	194	196
P16	928	292	434	198	184	194	198
P16	929	290	430	194	184	194	196
AVERAGE		291	432	197	184	194	197

9 of 13

Line N^o 180/0601
Line Name KP-L

RESYNCHED SHOTS

Actual:	1995	M	1996	1997	M	M	2001
Required:	1995	1996	1997	1998	1999	2000	2001

[illegible]

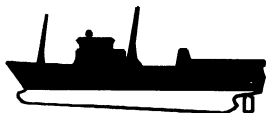
Actual:

Required:

Actual:
Required:

SEISMIC TAPE LOG

R/V RIG SEISMIC



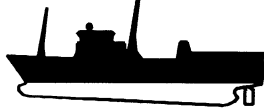
Client: AGSO Law of the Sea
 Survey no: 180
 Survey Name: HEARD-KERG-1

Line Number: 180/00601
 Line Name: KP-L
 Sheet 1 of 2

Tape Number	Start Shot	Start Time	End Shot	End Time
180/00378	900	82.004318	1021	82.012448
180/00379	1022	82.012448	1143	82.020318
180/00380	1144	82.020318	1265	82.024045
180/00381	1266	82.024045	1387	82.032200
180/00382	1388	82.032200	1509	82.040132
180/00383	1510	82.040132	1631	82.043846
180/00384	1632	82.043846	1753	82.051527
180/00385	1754	82.051527	1875	82.055250
180/00386	1876	82.055250	1997	82.062935
180/00387	2001	82.062935	2122	82.070638
180/00388	2123	82.070638	2244	82.074340
180/00389	2245	82.074340	2366	82.082035
180/00390	2367	82.082035	2488	82.085820
180/00391	2489	82.085820	2610	82.093705
180/00392	2611	82.093705	2732	82.101632
180/00393	2733	82.101632	2854	82.105553
180/00394	2855	82.105553	2976	82.113614
180/00395	2977	82.113614	3098	82.121412
180/00396	3099	82.121412	3220	82.125205
180/00397	3221	82.125205	3342	82.132920
180/00398	3343	82.132920	3464	82.140616
180/00399	3465	82.140616	3586	82.144341
180/00400	3587	82.144341	3708	82.151958
180/00401	3709	82.151958	3830	82.155451
180/00402	3831	82.155451	3952	82.163021
180/00403	3953	82.163021	4074	82.170621
180/00404	4075	82.170621	4196	82.174301
180/00405	4197	82.174301	4318	82.181957
180/00406	4319	82.181957	4440	82.185724
180/00407	4441	82.185724	4562	82.193343
180/00408	4563	82.193343	4684	82.200945
180/00409	4685	82.200945	4806	82.204633
180/00410	4807	82.204633	4928	82.212336
180/00411	4929	82.212336	5050	82.215933
180/00412	5051	82.215933	5172	82.223722
180/00413	5173	82.223722	5294	82.231546
180/00414	5295	82.231546	5416	82.235303
180/00415	5417	82.235303	5538	83.002914
180/00416	5539	83.002914	5660	83.010438
180/00417	5661	83.010438	5782	83.014029
180/00418	5783	83.014029	5904	83.021740
180/00419	5905	83.021740	6026	83.025436
180/00420	6027	83.025436	6148	83.033046
180/00421	6149	83.033046	6270	83.040715
180/00422	6271	83.040715	6392	83.044510
180/00423	6393	83.044510	6514	83.052228

SEISMIC TAPE LOG

R/V RIG SEISMIC



Client: AGSO Law of the Sea
 Survey no: 180
 Survey Name: HEARD-KERG-1

Line Number: 180/00601
 Line Name: KP-L
 Sheet 2 of 2

Tape Number	Start Shot	Start Time	End Shot	End Time
180/00424	6515	83.052228	6636	83.060103
180/00425	6637	83.060103	6758	83.063743
180/00426	6759	83.063743	6880	83.071401
180/00427	6881	83.071401	7002	83.075006
180/00428	7003	83.075006	7124	83.082555
180/00429	7125	83.082555	7246	83.090115
180/00430	7247	83.090115	7368	83.093654
180/00431	7369	83.093654	7490	83.101253
180/00432	7491	83.101253	7612	83.104841
180/00433	7613	83.104841	7734	83.112551
180/00434	7735	83.112551	7856	83.120440
180/00435	7857	83.120440	7978	83.124144
180/00436	7979	83.124144	8100	83.131914
180/00437	8101	83.131914	8120	83.132552



AGSO MARINE RV Rig Seismic

SURVEY 180

Heard Is/Kerguelen Plateau Pt2

LINE # 180/0701

LINE NAME KP-M

Line Summary log

Seismic line log

Shot edit log

Offset shot diagram

Gun fault log

Tape log

Navigation line log

Transit / Line change log



LINE SUMMARY LOG

R/V RIG SEISMIC

Client: AGSO

Survey no: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 701

Line Name KP-M

Sheet 1 of 11

Direction 47°

Date 24-3-97

Observers DWS DP.SH

THIS FOLIO OF LINE LOG SHEETS HAS BEEN CHECKED BY

DWS

Line Information	Time (UTC)	Shot Point	Tape Number	Box No.
Acquisition start	<u>083:223850</u>	<u>900</u>	<u>180/438</u>	<u>15</u>
SOL Noise test	<u>083:225852</u>	<u>962</u>		
First shot point (FSP)	<u>083:231133</u>	<u>1001</u>	<u>180/439</u>	<u>15</u>
First chargeable SP (FCSP)	<u>083:231133</u>	<u>1001</u>		
Last chargeable SP (LCSP)	<u>085:041643</u>	<u>6692</u>		
Last shot point (LSP)	<u>085:041643</u>	<u>6692</u>	<u>180/524</u>	<u>18</u>
EOL Noise test	<u>085:041804</u>	<u>6696</u>		
Acquisition stop	<u>085:042043</u>	<u>6703</u>	<u>180/524</u>	<u>18</u>

Line Details	Start of Line (FSP)	End of Line (LSP)
Wind direction and speed	<u>NW 35 kn</u>	<u>SW 45 kn</u>
Swell direction and height	<u>NW 5m</u>	<u>SW 5m</u>
Average noise (µBar)	<u>28.9 µB FILTERED/26.4 µB UNFILTERED</u>	<u>15.7 µB FILTERED/40.7 µB UNFILTERED</u>
Near 16 trace noise (µBar)	<u>7.7 µB FILTERED/9.1 µB UNFILTERED</u>	<u>22.8 µB FILTERED/45.9 µB UNFILTERED</u>
Feather angle (degrees)	<u>-4°</u>	<u>+0°</u>
Water depth (m)	<u>2385m</u>	<u>4677m</u>
Latitude	<u>58° 13.499 S</u>	<u>56° 29.740</u>
Longitude	<u>82° 43.978 E</u>	<u>86° 12.858</u>
Source volume (cu ins)	<u>3000 ci.</u>	<u>1500 ci from SP 5905</u>
Disabled guns from full array	<u>none</u>	<u>std array off</u>
Bad cable depths (bird no.)	<u>none.</u>	<u>None</u>
Bad traces	<u>CH 76 INT NOISEY</u>	<u>34, 63, 116, 117, 170, 203</u> <u>209 low amp/signal!</u>

Source to near trace offset (m)	<u>178.6m</u>	Number of non-recorded SPs	<u>NIL</u>
Operating streamer depth (m)	<u>12, 14 *</u>	Number of gun misfire SPs	<u>132</u>
Seismic Filters, LC & HC (Hz)	<u>5/1103</u>	Number of parity error SPs	<u>NIL</u>
Primary navigation	<u>Racal 1 DGPS</u>	Percentage of bad SPs	<u>2.3%</u>
Secondary navigation	<u>Racal 2 DGPS</u>	Chargeable kilometres	<u>284.5 km</u>
Racal 1 DGPS tape no.	<u>8</u>	Gravity Y/N	<u>Y</u>
Racal 2 DGPS tape no.	<u>4</u>	DAS tape no.	<u>12</u>
Echo sounder 12 kHz Y/N	<u>Y</u>	Transducer depth	<u>5.1</u>
Echo sounder 3.5 kHz Y/N	<u>Y</u>	Transducer depth	<u>4.9</u>
Exabyte Tape no.	<u>8</u>	Magnetics recorded Y/N	<u>Y</u>
Comments: <u>streamer lowered to 14m at SP 1745 / cable set at 12m at SP 3633</u>		Mag dist from stern (m)	<u>230m</u>
<u>* set at 14m at SP 5681</u>		12 kHz chart no.	<u>P/O</u>
<u>SP 5905 std array switched off.</u>		3.5 kHz chart no.	<u>P/O</u>
<u>Sonobuoy deployed at SP 4971 to 5470</u>			
<u>4 ms. sample rate.</u>			

SEISMIC LINE LOG

R/V RIG SEISMIC

Line Number 180/ 0701

Line Name KP-M

Sheet 2 of 11

Client: AGSO.

Survey no: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Time (UTC)	Shot Point	Tape Number	Event Details/Comments
83:223850	900	180/430	Acquisition start
83:2239	901		offset shots stbd 1
83:2242	910		16
83:2243	913		Port 1
83:2245	920		16
83:2248	929		Automatic Sequence tests
83:2259	962		SOL Noise test
83:2312	1001	180/439	FSP SOL
83:2312	1002		Air pressure 1930 psi.
083.2330	1057		Noise 33.2µB(unfilt) 19.3µB(4hz), 11.8µB(8hz)
083.2330	1058		Air pressure 1904 psi
084.0000	1147		Noise 31.6µB(unfilt), 18.5µB(4hz), 12.1µB(8hz)
084.0001	1149		Air pressure 2030 psi
084.0030	1238		Noise 33.5µB(unfilt), 22.1µB(4hz), 14.8µB(8hz)
084.0031	1241		Air pressure 2004 psi
084.0100	1331		Noise 32.4µB(unfilt), 19.3µB(4hz), 12.5µB(8hz)
084.0101	1333		Air pressure 1891 psi
084.0131	1430		Noise 33.1µB(unfilt), 20µB(4hz), 12.8µB(8hz)
084.0131	1431		Air pressure 1830 psi
084.0201	1530		Noise 33.4µB(unfilt), 21.2µB(4hz), 12.6µB(8hz)
084.0201	1531		Air pressure 1781 psi
084.0231	1630		Noise 46µB(unfilt) 36.5(4hz) 20.7(8hz)
084.0231	1631		Air Pressure 1830 psi.
084.0301	1730		Noise 47.9µB(unfilt) 37.9(4hz) 19.7µB(8hz)
084.0305	1745		streamer set to 14m.
084.0305	1746		Air pressure 2032 psi.
084.0310	1761		Noise 32.8µB(unfilt), 26.4µB(4hz), 23.1µB(8hz)
084.0331	1829		Noise 24.6µB(unfilt), 18.4µB(4hz), 16.2µB(8hz)
084.0332	1831		Air pressure 2133 psi
084.0356	1913		Sta 4 on stbd 5 off
084:0401	1929		Cable Noise: 27.1µB, 11.1µB(8Hz)
084:0401	1929		Air Pressure: 2041 psi
084:0501	2124		Cable Noise: 22.1µB, 19.0µB(8Hz)
084:0501	2124		Air Pressure: 1952 psi
084:0531	2216		Cable Noise: 30.8µB, 15.1µB(8Hz)
084:0531	2216		Air Pressure: 1977 psi

SEISMIC LINE LOG

R/V RIG SEISMIC

Client: AGSO.

Survey no: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/0701

Line Name KP-M

Sheet 3 of 11

Time (UTC)	Shot Point	Tape Number	Event Details/Comments
084.054757	2267		Port 9 out, Port 10 in
084.0601	2309		Cable Noise: 36.5µB, 19.6µB (8Hz)
084.0601	2309		Air Pressure: 1918 psi
* 084.0617	2370		TOW LEADER DEPLOYED OUT 10M (90 → 100M)
084.0631	2406		CABLE NOISE: 37.7µB, 17.4µB (8Hz)
084.0639	2430		AIR PRESSURE: 1900 PSI
084.0701	2504		CABLE NOISE: 39.4µB, 25.4µB (8Hz)
084.0707	2520		AIR PRESSURE: 2000 PSI
084.0729	2591		SONOBUOY DEPLOYED
			W 57° 44.520'S 83° 43.346'E W4274.3m
084.0731	2600		CABLE NOISE: 38.1µB, 17.1µB (8Hz)
084.0744	2640		AIR PRESSURE: 2000 PSI
084.0801	2693		CABLE NOISE: 31.0µB, 14.5µB (8Hz)
084.0811	2720		AIR PRESSURE: 2000 PSI
084.0831	2789		Cable Noise 26µB 17µB (8Hz).
084.0835	2802		Air Pressure 1854 PSI
084.0901	2888		Cable Noise 26µB 12µB (8Hz).
084.0902	2889		Air Pressure 1760 PSI
084.0932	2994		CABLE NOISE: 21.3µB, 11.6µB (8Hz)
084.0934	3000		AIR PRESSURE: 1800 PSI
084.0945	3040		SONABUOY DEAD
			W 57° 36.334'S, 83 59.969'E
084.1030	3205		Cable Noise: 18.5µB, 9.8µB (8Hz)
084.1030	3205		Air Pressure: 1823 psi
084.1102	3310		Cable Noise: 19.8µB, 11.6µB (8Hz)
084.1102	3310		Air Pressure: 1850 psi
084.1114	3351		FA' 10°
084.1133	3408		Cable Noise: 29.4µB, 14.6µB (8Hz)
084.1133	3408		Air Pressure 2002
084.1202	3502		Air Pressure: 2159 psi
084.1202	3502		Cable Noise: 23.0µB, 15.4µB (8Hz)
084.1233	3602		Cable Noise: 22.3µB, 19.6µB (8Hz)
084.1233	3602		Air Pressure: 1813 psi
084.1242	3633		Cable set to 12m
084.1258	3686		STBD 9 OFF, STBD 10 ON
084.1333	3804		CABLE NOISE: 21.2µB, 13.1µB (8Hz)

SEISMIC LINE LOG

RV RIG SEISMIC

Client: AGSO.

Survey no: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 0201

Line Name KP-M

Sheet 4 of 6

Time (UTC)	Shot Point	Tape Number	Event Details/Comments
084:1356	3880		AIR PRESSURE: 2000 psi
084:1403	3804		CABLE NOISE: 26.5 μ B, 19.7 μ B (8Hz)
084:1426	3980		AIR PRESSURE: 2000 psi
084:1443	4038		Cable < 10'
084:1503	4105		CABLE NOISE: 24.8 μ B; 18.2 μ B (8Hz)
084:1514	4140		AIR PRESSURE: 1900
084:1539	4225		FA = 71'
084:1539	4226		CABLE NOISE: 25.9 μ B, 18.6 μ B (8Hz)
084:1603	4305		Noise 30.3 μ B (unfilt), 26.2 μ B (4Hz), 24.1 μ B (8Hz)
084:1604	4307		Air pressure 1985 psi
084:1605	4311		FA = 10'
084:1634	4406		Noise 23.5 μ B (unfilt), 20.1 μ B (4Hz), 17.8 μ B (8Hz)
084:1634	4408		Air pressure 1975 psi
084:1629	4391		FA < 10'
084:1704	4507		Noise 27.1 μ B (unfilt), 21.5 μ B (4Hz), 18.9 μ B (8Hz)
084:1704	4509		Air pressure 1975 psi
084:1734	4607		Cable Noise 37.4 μ B (unfilt), 30.8 μ B (4Hz), 27.3 μ B (8Hz)
084:1734	4609		Air pressure 1955 psi
084:1804	4707		Cable Noise 36.7 μ B (unfilt), 31.3 μ B (4Hz), 29.2 μ B (8Hz)
084:1805	4709		Air pressure 2005 psi
084:1834	4806		Cable Noise 42 μ B (unfilt), 36.1 μ B (4Hz), 34.7 μ B (8Hz)
084:1835	4808		Air pressure 1922 psi
084:1904	4904		Cable Noise 41.8 μ B (unfilt), 37.9 μ B (4Hz), 34.3 μ B (8Hz)
084:1905	4906		Air pressure 2025 psi
084:1915	4940		Sonobuoy deployed - no signal
084:1924	4971		Sonobuoy deployed
			57°01.120'S 85°10.719'E wd = 4751 m
084:1934	5003		Noise 34.3 μ B (unfilt), 24.4 μ B (8Hz)
084:2004	5103		Noise 36.7 μ B (unfilt), 22.6 μ B (8Hz)
084:2015	5139		Air Pressure 1960 psi
084:2034	5205		Noise 33.2 μ B (unfilt), 17 μ B (8Hz)
084:2104	5310		Noise 34.7 μ B (unfilt), 23.2 μ B (8Hz)
084:2105	5312		Air pressure 1957 psi
084:2134	5410		Cable Noise 49.7 μ B (unfilt), 39.6 μ B (8Hz)
084:2135	5412		Air pressure 1784 psi
084:2134	5407		Sonobuoy signal intermittent

SEISMIC LINE LOG

R/V RIG SEISMIC

Client: AGSO.

Survey no: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 0701

Line Name KP-m

Sheet 5 of 11

Time (UTC)	Shot Point	Tape Number	Event Details/Comments
084.2152	5470		Sonobuoy dead wd = 4782m
			56°52.023'S 85°28.827'E
084.2205	5512		Cable Noise 54.2µB(unfilt), 47.6µB(8hz)
084.2205	5512		Air pressure 1875 psi
084.2235	5611		Cable Noise 47.2µB(unfilt), 35.2µB(8hz)
084.2235	5613		Air pressure 1989 psi
084.2255	5679		Port 3 off, port 5 on
084.2256	5681		streamer to 14 m
084.2305	5710		Cable Noise 47.9µB(unfilt), 30.1µB(8hz)
084.2305	5712		Air pressure 1955 psi
084.2336	5814		Noise 39.6µB(unfilt) 37.3µB(4hz) 30.5µB(8hz)
084.2336	5815		Air pressure 1854 psi
085.0002	5905		Stbd array switched off.
085.0005	5915		Noise 31.3µB(unfilt) 19.7µB(8hz)
085.0030	5999		Noise 47.6µB(unfilt) 32.4µB(8hz)
085.0038	6026		Air pressure 2250 psi
085.0100	6096		Noise 29.5µB(unfilt) 18.2µB(8hz)
085.0135	6206		Noise 51.7µB(unfilt) 29µB(8hz)
085.0205	6298		Cable Noise 40.2µB(unfilt) 29.2µB(8hz)
085.0206	6299		Air pressure 2027 psi
085.0235	6389		Noise 43.7µB(unfilt) 37.8µB(4hz) 29.3µB(8hz)
085.0305	6478		Noise 40.5µB(unfilt) 21.9µB(8hz)
085.0319	6519		Air pressure 2000 psi
085.0336	6570		Noise 49.6µB(unfilt) 27.6µB(8hz)
085.0340	6584		Air Pressure 2150 psi
085.041643	6692	180/524	LSP EOL
			Lat: 56°29.740 Long: 86°12.858
			FA 0° wd 4677m DIR
085.041804	6696	180/524	EOL cable Noise
085.042043	6703	180/524	Acquisition stop



SHOT EDIT LOG

R/V RIG SEISMIC

Client: AGSO

Survey No: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 0701

Line Name KP-M

Sheet 6 of 11

1078 T	2262 N	3665 T	5367 T						
1079 T	2264 N	3666 T	5402 T						
1082 B	2265 N	3667 T	5476 M						
1113 M	2266 N	3669 T	5567 T						
1148 M	2268 B	3670 T	5575 M						
1300 T	2323 T	3680 T	5636 T						
1361 M	2351 T	3682 T	5637 T						
1448 M	2468 T	3687 T	5638 T						
1500 M	2486 T	3771 T	5640 T						
1530 M	2545 T	3772 A	5661 T						
1545 T	2630 T	4031 T	5672 M						
1557 T	2657 T	4028 T	5674 N						
1629 T	2674 T	4082 T	5675 N						
1665 T	2675 T	4124 T	5676 N						
1676 T	2676 T	4235 T	5677 A						
1691 T	2677 T	4245 T	5678 N						
1712 T	2678 A	4302 B	5680 B						
1748 T	2695 T	4452 T	5693 M						
1753 T	2762 T	4605 T	5721 B						
1841 T	2797 T	4693 T	5725 B						
1914 N	2945 T	4704 T	5742 M						
1915 T	3164 T	4755 M	5807 T						
1916 T	3223 T	4795 T	5822 T						
1917 M	3234 T	4826 T	5864 T						
1918 M	3364 T	4842 T	\$						
1965 T	3430 T	4848 T							
2015 T	3519 T	4935 T							
2028 T	3526 T	4952 M							
2036 T	3527 T	4961 M							
2031 T	3529 T	4976 T							
2032 T	3545 T	5037 T							
2079 T	3546 T	5132 T							
2201 T	3622 T	5161 T							
2246 T	3631 T	5180 T							
2247 T	3637 T	5189 T							
2248 T	3643 T	5262 M							

A: Autofire M: Minor Timing Error 1ms to 2 ms T: Timing Error > 2.0 ms B: Timing Error > 4.0 ms N: No-Fire P: Parity Error

F: Frame Parity Error R: Not Recorded FS: Frames per Shot error

A SHOT POINT MARKED WITH A * INDICATES A FALSE ERROR

GUN OFFSET CALCULATIONS

7 of 11

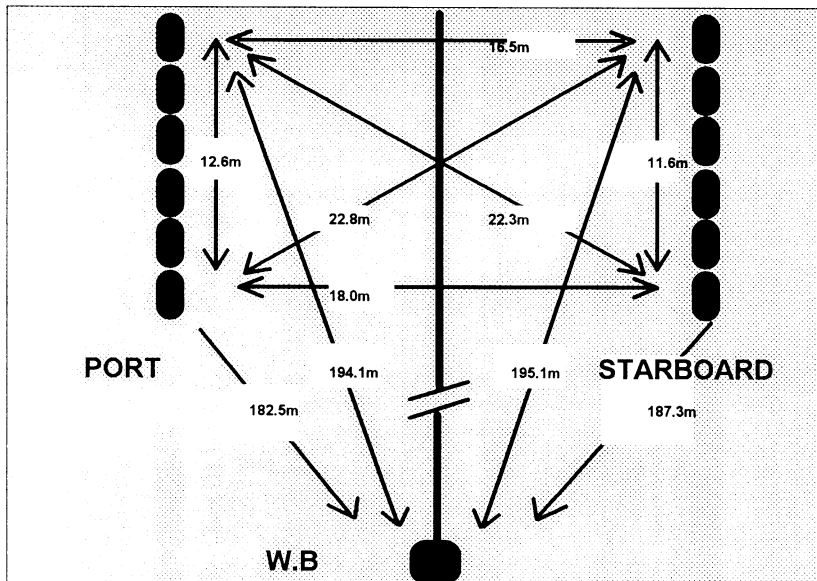
Cable Length (m)=	3000	Water Temperature (C°)=	1.8	Speed of sound in water=	1,456 m/s
Sample Interval (ms)=	4	Salinity (p)	34		
Sequence Number:-	190/701	Line Name :-	KP-M	Tape:-	483

Port 1 @ S.P. 913-915				
	Channel	Time (msecs)	DELTA t (msecs)	Distance (m)
Ch 1	1	311	126	183.4
WB	241	447	133	194.1
S1	244	196	11	15.5
S15	247	200	15	21.4
P1	248	185		
P15	251	195	9	13.6

Stbd 1 @ S.P. 901-903				
	Channel	Time (msecs)	DELTA t (msecs)	Distance (m)
Ch 1	1	312	128	186.3
WB	241	446	134	195.1
S1	244	184		
S15	247	192	8	11.6
P1	248	196	12	17.5
P16	251	200	16	23.3

Port 16 @ S.P. 920-922				
	Channel	Time (msecs)	DELTA t (msecs)	Distance (m)
Ch 1	1	301	117	169.8
WB	241	437	125	182.5
S1	244	199	15	22.3
S15	247	197	13	18.4
P1	248	192	8	11.6
P16	251	184		

Stbd 16 @ S.P. 910-912				
	Channel	Time (msecs)	DELTA t (msecs)	Distance (m)
Ch 1	1	304	120	174.7
WB	241	441	128.6667	187.3
S1	244	192	8	11.6
S15	247	184		
P1	248	200	16	23.3
P15	251	196	12	17.5



CENTRE OF SOURCE TO WATERBREAK = 189.7m
CENTRE OF SOURCE TO NEAR TRACE OFFSET (from WB) = 186.0m
CENTRE OF SOURCE TO NEAR TRACE OFFSET (from Ch1) = 178.6m

OFFSET SHOTS FOR LIN 180/101

GUN ON	S.P.	CH1	WB-241	S1-244	S16-247	P1-248	P16-251
S1	901	312	446	184	192	196	200
S1	902	312	446	184	192	196	200
S1	903	312	446	184	192	196	200
AVERAGE		312	446	184	192	196	200
GUN ON	S.P.	CH1	WB-241	S1-244	S16-247	P1-248	P16-251
S16	910	304	438	192	184	200	196
S16	911	304	442	192	184	200	196
S16	912	304	442	192	184	200	196
AVERAGE		304	441	192	184	200	196
GUN ON	S.P.	CH1	WB-241	S1-244	S16-247	P1-248	P16-251
P1	913	312	446	196	200	188	196
P1	914	308	446	196	200	184	192
P1	915	314	448	196	200	184	196
AVERAGE		311	447	196	200	185	195
GUN ON	S.P.	CH1	WB-241	S1-244	S16-247	P1-248	P16-251
P16	920	302	434	200	196	192	184
P16	921	300	440	198	198	192	184
P16	922	300	438	200	196	192	184
AVERAGE		301	437	199	197	192	184

SEISMIC TAPE LOG

R/V RIG SEISMIC



Line Number: 180/00701

Line Name: NO

Sheet 8 of 11

Client: AGSO Law of the Sea

Survey no: 180

Survey Name: HEARD-KERG-1

Tape Number	Start Shot	Start Time	End Shot	End Time
180/00438	900	83.223846	966	83.230007
180/00439	967	83.230007	1033	83.232203
180/00440	1034	83.232203	1100	83.234416
180/00441	1101	83.234416	1167	84.000634
180/00442	1168	84.000634	1234	84.002845
180/00443	1235	84.002845	1301	84.005052
180/00444	1302	84.005052	1368	84.011149
180/00445	1369	84.011149	1435	84.013212
180/00446	1436	84.013212	1502	84.015153
180/00447	1503	84.015153	1569	84.021229
180/00448	1570	84.021229	1636	84.023226
180/00449	1637	84.023226	1703	84.025243
180/00450	1704	84.025243	1770	84.031250
180/00451	1771	84.031250	1837	84.033331
180/00452	1838	84.033331	1904	84.035338
180/00453	1905	84.035338	1971	84.041343
180/00454	1972	84.041343	2038	84.043436
180/00455	2039	84.043436	2105	84.045507
180/00456	2106	84.045507	2172	84.051702
180/00457	2173	84.051702	2239	84.053857
180/00458	2240	84.053857	2306	84.060026
180/00459	2307	84.060026	2373	84.062117
180/00460	2374	84.062117	2440	84.064154
180/00461	2441	84.064154	2507	84.070221
180/00462	2508	84.070221	2574	84.072329
180/00463	2575	84.072329	2641	84.074451
180/00464	2642	84.074451	2708	84.080641
180/00465	2709	84.080641	2775	84.082733
180/00466	2776	84.082733	2842	84.084807
180/00467	2843	84.084807	2909	84.090751
180/00468	2910	84.090751	2976	84.092700
180/00469	2977	84.092700	3043	84.094607
180/00470	3044	84.094607	3110	84.100506
180/00471	3111	84.100506	3177	84.102412
180/00472	3178	84.102412	3244	84.104312
180/00473	3245	84.104312	3311	84.110244
180/00474	3312	84.110244	3378	84.112258
180/00475	3379	84.112258	3445	84.114419
180/00476	3446	84.114419	3512	84.120537
180/00477	3513	84.120537	3579	84.122555
180/00478	3580	84.122555	3646	84.124542
180/00479	3647	84.124542	3713	84.130531
180/00480	3714	84.130531	3780	84.132523
180/00481	3781	84.132523	3847	84.134603
180/00482	3848	84.134603	3914	84.140641
180/00483	3915	84.140641	3981	84.142646

SEISMIC TAPE LOG

R/V RIG SEISMIC



Client: AGSO Law of the Sea
 Survey no: 180
 Survey Name: HEARD-KERG-1

Line Number: 180/00701

Line Name: KP-M

Sheet 9 of 11

Tape Number	Start Shot	Start Time	End Shot	End Time
180/00484	3982	84.142646	4048	84.144626
180/00485	4049	84.144626	4115	84.150619
180/00486	4116	84.150619	4182	84.152614
180/00487	4183	84.152614	4249	84.154636
180/00488	4250	84.154636	4316	84.160653
180/00489	4317	84.160653	4383	84.162641
180/00490	4384	84.162641	4450	84.164651
180/00491	4451	84.164651	4517	84.170638
180/00492	4518	84.170638	4584	84.172633
180/00493	4585	84.172633	4651	84.174658
180/00494	4652	84.174658	4718	84.180718
180/00495	4719	84.180718	4785	84.182739
180/00496	4786	84.182739	4852	84.184814
180/00497	4853	84.184814	4919	84.190844
180/00498	4920	84.190844	4986	84.192900
180/00499	4987	84.192900	5053	84.194921
180/00500	5054	84.194921	5120	84.200917
180/00501	5121	84.200917	5187	84.202856
180/00502	5188	84.202856	5254	84.204835
180/00503	5255	84.204835	5321	84.210747
180/00504	5322	84.210747	5388	84.212749
180/00505	5389	84.212749	5455	84.214736
180/00506	5456	84.214736	5522	84.220735
180/00507	5523	84.220735	5589	84.222805
180/00508	5590	84.222805	5656	84.224823
180/00509	5657	84.224823	5723	84.230832
180/00510	5724	84.230832	5790	84.232837
180/00511	5791	84.232837	5857	84.234815
180/00512	5858	84.234815	5924	85.000742
180/00513	5925	85.000742	5991	85.002727
180/00514	5992	85.002727	6058	85.004816
180/00515	6059	85.004816	6125	85.010859
180/00516	6126	85.010859	6192	85.013043
180/00517	6193	85.013043	6259	85.015254
180/00518	6260	85.015254	6326	85.021437
180/00519	6327	85.021437	6393	85.023700
180/00520	6394	85.023700	6460	85.025936
180/00521	6461	85.025936	6527	85.032134
180/00522	6528	85.032134	6594	85.034352
180/00523	6595	85.034352	6661	85.040621
180/00524	6662	85.040621	6703	85.042043

Time (UTC)	Shot Point	Event Details/Comments
083:231133	1001	FSP SOL KP-M Lat: 58° 13.499 Long: 82° 43.978 Dir = 47° WD = 2385 FA: -4°
084:072856	2591	Sonobuoy deployed : Lat: 57° 44.520 WD: 4274.3 Long: 83° 43.346
084:090556	3040	SONOBUOY DEAD @ 57 36.334'S 83 59.969'E
084:192430	4971	Sonar buoy launched 57° 01.120'S 85° 10.719'E wd = 4751m
084:2152	5470	Sonar buoy dead. 56° 52.023'S 85° 28.827'E wd 4782m
085:041643	6692	LSP, EOL KP-M @ 56° 29.740'S, 86° 12.858'E DIR: 047° ; WD: 4677m ; FA: 0°

[illegible]



AGSO MARINE RV Rig Seismic

SURVEY 180

Heard Is/Kerguelen Plateau Pt2

LINE # 180/0801

LINE NAME KP-T

Line Summary log

Seismic line log

Shot edit log

Offset shot diagram

Gun fault log

Tape log

Navigation line log

Transit / Line change log



LINE SUMMARY LOG

R/V RIG SEISMIC

Client: AGSO

Survey no: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 801

Line Name KP-T

Sheet 1 of 9

Direction 078°

Date 28/3/97

Observers DWS MT

THIS FOLIO OF LINE LOG SHEETS HAS BEEN CHECKED BY

T Hunter

Line Information	Time (UTC)	Shot Point	Tape Number	Box No.
Acquisition start	<u>087:110634</u>	<u>918</u>	<u>180/525</u>	<u>18</u>
SOL Noise test	<u>087:111234</u>	<u>936</u>		
First shot point (FSP)	<u>087:113324</u>	<u>1001</u>	<u>180/526</u>	<u>18</u>
First chargeable SP (FCSP)	<u>087:113324</u>	<u>1001</u>		
Last chargeable SP (LCSP)	<u>087:002258.1</u>	<u>3413</u>		
Last shot point (LSP)	<u>088:002258</u>	<u>3413</u>	<u>180/562</u>	<u>19</u>
EOL Noise test	<u>088:002259</u>	<u>3416</u>		
Acquisition stop	<u>088:002542</u>	<u>3421</u>	<u>180/562</u>	<u>19</u>

Line Details	Start of Line (FSP)	End of Line (LSP)
Wind direction and speed	<u>N @ 42 kn</u>	<u>NW 55 kn</u>
Swell direction and height	<u>N @ 9m</u>	<u>NW 10m</u>
Average noise (µBar)	<u>10.7 µB FILTERED/23.3 µB UNFILTERED</u>	<u>40.2 µB FILTERED/54.8 µB UNFILTERED</u>
Near 16 trace noise (µBar)	<u>22.0 µB FILTERED/78.3 µB UNFILTERED</u>	<u>176 µB FILTERED/258 µB UNFILTERED</u>
Feather angle (degrees)	<u>5°</u>	<u>-5°</u>
Water depth (m)	<u>4775m</u>	<u>4283m</u>
Latitude	<u>55° 49.766'S</u>	<u>55° 34.793'S</u>
Longitude	<u>83° 19.481'E</u>	<u>85° 11.477'E</u>
Source volume (cu ins)	<u>1500 CU INS</u>	<u>1500</u>
Disabled guns from full array	<u>PORT ARRAY</u>	<u>Port Array</u>
Bad cable depths (bird no.)	<u>NIL</u>	<u>9</u>
Bad traces	<u>63, 116, 117, 192, 229 - LOW AMP</u>	<u>same as SOL</u>

Source to near trace offset (m)	<u>182.7m, 187.7</u>	Number of non-recorded SPs	<u>1</u>
Operating streamer depth (m)	<u>14m</u>	Number of gun misfire SPs	<u>59</u>
Seismic Filters, LC & HC (Hz)	<u>5 / 1.03</u>	Number of parity error SPs	<u>4</u>
Primary navigation	<u>Racal I DGPS</u>	Percentage of bad SPs	<u>2.65%</u>
Secondary navigation	<u>Racal II DGPS</u>	Chargeable kilometres	<u>104.5 km.</u>
Racal 1 DGPS tape no.	<u>8</u>	Gravity	<u>Y</u>
Racal 2 DGPS tape no.	<u>4</u>	DAS tape no.	<u>13</u>
Echo sounder 12 kHz Y/N	<u>Y</u>	Transducer depth	<u>5.1</u>
Echo sounder 3.5 kHz Y/N	<u>Y</u>	Transducer depth	<u>4.9</u>
Exabyte Tape no.	<u>009</u>	Magnetics recorded Y/N	<u>Y</u>
		Mag dist from stern (m)	<u>275</u>
		12 kHz chart no.	<u>-</u>
		3.5 kHz chart no.	<u>-</u>

Comments: Stb array only at SOL, TRACE HEADER ON TAPE 180/525 SHOULD READ

0525 NOT 09014. TOWLEADER changed from 95 to 100m @ SP 1200

Sonobuoy deployed: SP 1402

* From SP 3096 cable depth varied (cable surfaced at times)

x SP 3260 cable depth stabilised

FA > 10° from SP 1578 to SP 2465

Dogleg of 5° @ SP 1238.

Sonobuoy ch 253

4 ms. sample rate

Note: All times on this page should be formatted as DDD HHMM.SS

SEISMIC LINE LOG

R/V RIG SEISMIC

Client: AGSO.

Survey no: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 801

Line Name ICP-T

Sheet 2 of 9

Time (UTC)	Shot Point	Tape Number	Event Details/Comments
087:1106	918	180/525	START OF ACQUISITION
087:1107	920		AUTOMATIC TEST SEQUENCE INIT.
087:1113	936		SOL NOISE TEST: 23.3 μ B (0Hz); 10.7 μ B (8Hz)
087:1129	986		OFFSET TAPES STB 11
087:1130	989		" STB 16
087:1133	1001	180/526	FSP, SOL
087:1134	1006		AIR PRESSURE: 2170 PSI
087:1135	1007		CABLE NOISE: 20.4 μ B (0Hz); 12.3 μ B (8Hz)
087:1204	1099		CABLE NOISE: 28.7 μ B (0Hz); 15.7 μ B (8Hz)
087:1205	1100		AIR PRESSURE: 2050
087:1210	1113		* DOGLEG @ 55°49.122'S, 83°24.674'E DIR: 078° → 081°; FA: 4° → 7°; MAX CCE -19.6m @ SP1127; WD 4781m
087:1236	1119		CABLE NOISE: 37.3 μ B (0Hz); 25.2 μ B (8Hz)
087:1237	1125		AIR PRESSURE: 2150 PSI
087:1239	1200		TOWLEADER OUT TO 100m FROM 95m
087:1251	1238		* DOGLEG @ 55°48.579'S, 83°30.626'E; WD: 4758m DIR: 081° → 076°; FA: 7° → 2°; MAX CCE 35m @ SP1239
087:1314	1305		* SP NUMBER RESYNCHED FROM 1305 TO 1299 DUE TO SPEED PROBLEM
087:1335	1363		Cable Noise: 29.9 μ B, 15.7 μ B (8Hz)
087:1336	1363		Air Pressure: 1822
087:134845	1402		Sono buoy deployed WD: 4745.9 Lat: 55°47.535' Long: 83°38.249'
087:1405	1453		Cable Noise: 25.7 μ B, 17.7 μ B (8Hz)
087:1405	1453		Air Pressure: 2054 PSI
087:1435	1541		Cable Noise: 33.4 μ B, 17.8 μ B (8Hz)
087:1435	1541		Air Pressure: 2040
087:1448	1578		FA > 10°
087:1506	1631		Cable Noise: 28.9 μ B, 15.8 μ B (8Hz)
087:1506	1631		Air Pressure: 1867 PSI
087:1536	1722		Cable Noise 20 μ B, 12 μ B (8Hz)
087:1628	1878		Sono buoy Dead 55°44.5155 WD: 4782m 84°0.360E
87:1636	1905		Noise 32.4 μ B (unfilt) 20.3 μ B (8Hz)
87:1655	1965		Air pressure 1746 PSI

SEISMIC LINE LOG

R/V RIG SEISMIC

Client: AGSO.

Survey no: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 801

Line Name KP-T

Sheet 3 of 9

Time (UTC)	Shot Point	Tape Number	Event Details/Comments
087:1707	2002		Noise 24.9 μ B (unfilt) 11.7 μ B (8hz)
087:1714	2026		Air Pressure 1700 psi
087:1737	2102		Noise 27.9 μ B (unfilt) 19.9 μ B (8hz)
087:1743	2121		Air Pressure 2020 psi
087:1807	2204		Noise 32.7 μ B (unfilt) 25.1 μ B (4hz) 17.1 μ B (8hz)
087:1807	2205		Air pressure 2026 psi
087:1900	2382		Noise 30.7 μ B (unfilt) 25.5 μ B (4hz) 19.0 μ B (8hz)
087:1900	2383		Air pressure 2050 psi
087:1907	2405		Noise 38 μ B (unfilt) 31.9 μ B (4hz) 22.4 μ B (8hz)
087:1930	2484		Air Pressure 2047 psi
087:1937	2508		Noise 40.3 μ B (unfilt) 32.9 μ B (4hz) 23.7 μ B (8hz)
087:1957	2556		Air Pressure 2020 psi
087:2002	2593		Noise 28.1 μ B (unfilt) 20.1 μ B (4hz) 13.1 μ B (8hz)
087:2032	2696		Noise 41.4 μ B (unfilt) 31.3 μ B (4hz) 19.9 μ B (8hz)
087:2037	2713		Air Pressure 2000 psi
087:2041	2724		Noise 32.7 μ B (unfilt) 23.3 μ B (4hz) 14.5 μ B (8hz)
087:2056	2774		Noise 38.5 μ B (unfilt) 32.4 μ B (4hz) 25.2 μ B (8hz)
087:2132	2886		Missed Shot
087:2141	2915		Noise 41.1 μ B (unfilt), 37.6 μ B (4hz), 28.6 μ B (8hz)
087:2142	2916		Air pressure 1999 psi
087:2211	3011		Noise 41 μ B (unfilt), 38.3 μ B (4hz), 29.5 μ B (8hz)
087:2213	3016		Air pressure 2031 psi
087:2241	3106		Noise 41.6 μ B (unfilt), 36.1 μ B (4hz), 30.3 μ B (8hz)
087:2242	3107		Air pressure 2083 psi
087:2313	3209		Air pressure 2019 psi
087:2341	3292		Noise 44.3 μ B (unfilt) 35 μ B (4hz) 25.7 μ B (8hz)
087:2347	3308		Air pressure 2020 psi
088:0012	3380		Noise 48 μ B (unfilt) 41.7 μ B (4hz) 32 μ B (8hz)
088:0018	3398		Air Pressure 2100 psi
088:002238	3413		EOL LSP
88:002359	3416		Noise test
88:002542	3421		Cease Acquisition

* SP 3096 cable depth varied (surfaced at times)

* SP 3260 cable depth stabilised



SHOT EDIT LOG

R/V RIG SEISMIC

Client: AGSO

Survey No: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 501

Line Name KP-T

Sheet 4 of 9

1551 T	2806 FS *								
1611 T	2811 T								
1650 T	2817 T								
1750 T	2818 FS *								
1827 T	2849 T								
1946 T	2893 T								
4923 T	2904 T								
1953 T	2906 T								
1962 T	2926 T								
1963 T	2927 T								
1967 T	2937 T								
1970 T	2953 M								
1982 T	3010 T								
1997 T	3011 T								
2024 T	3015 T								
2029 T	3016 T								
2183 T	3019 T								
2198 T	3024 M								
2287 T	3044 T								
2293 T	3111 T								
2354 T	3119 T								
2411 T	3121 M								
2543 T	3204 FS *								
2558 T	3221 T								
2583 T	3252 T								
2629 T	3376 T								
2645 T	3412 T								
2648 T									
2659 T									
2666 T									
2696 T									
2740 FS *									
2764 T									
2773 T									
2774 T									
2777 T									

A: Autofire M: Minor Timing Error 1ms to 2 ms T: Timing Error > 2.0 ms B: Timing Error > 4.0 ms N: No-Fire P: Parity Error

F: Frame Parity Error R: Not Recorded FS: Frames per Shot error

A SHOT POINT MARKED WITH A * INDICATES A FALSE ERROR

GUN OFFSET CALCULATIONS

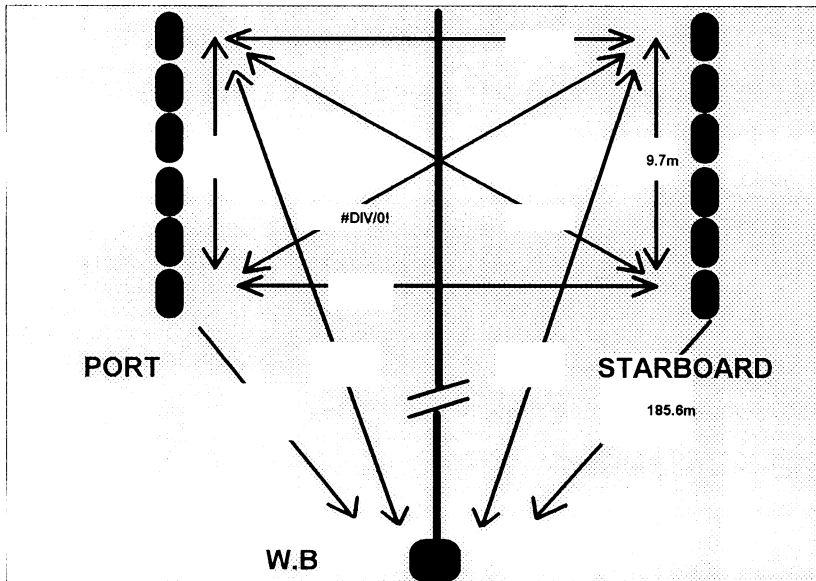
Cable Length (m)=	3000	Water Temperature (C°)=	2.2	Speed of sound in water=	1,458 m/s
Sample Interval (ms)=	4	Salinity (p	34		
Sequence Number:-	180/0801	Line Name :-	KP-T	Tape:-	526

Port 1 @ S.P. 0				
	Channel	Time (msecs)	DELTA t (msecs)	Distance (m)
Ch 1	1	0		
WB	241	0		
S1	244	0		
S15	247	0		
P1	248	0		
P15	251	0		

Stbd 1 @ S.P. 986				
	Channel	Time (msecs)	DELTA t (msecs)	Distance (m)
Ch 1	1	313	129.3333	188.5
WB	241	0		
S1	244	184		
S15	247	192	8	11.7
P1	248	0		
P15	251	0		

Port 16 @ S.P. 0				
	Channel	Time (msecs)	DELTA t (msecs)	Distance (m)
Ch 1	1	0		
WB	241	0		
S1	244	0		
S15	247	0		
P1	248	0		
P15	251	0		

Stbd 16 @ S.P. 989				
	Channel	Time (msecs)	DELTA t (msecs)	Distance (m)
Ch 1	1	313	121.3333	176.8
WB	241	447	127.3333	185.6
S1	244	187	-5	-7.8
S15	247	192		
P1	248	0		
P15	251	0		



 #####
 CENTRE OF SOURCE TO NEAR TRACE OFFSET (from Ch1) = 182.7m

OFFSET SHOTS FOR LIN 180/801

GUN ON	S.P.	CH1	WB-241	S1-244	S16-247	P1-248	P16-251
S1	986	308	446	184	184	0	0
S1	987	316	454	184	196	0	0
S1	988	316	450	184	196	0	0
AVERAGE		313	450	184	192	0	0
GUN ON	S.P.	CH1	WB-241	S1-244	S16-247	P1-248	P16-251
S16	989	316	450	184	196	0	0
S16	990	316	450	184	196	0	0
S16	991	308	442	192	184	0	0
AVERAGE		313	447	187	192	0	0
GUN ON	S.P.	CH1	WB-241	S1-244	S16-247	P1-248	P16-251
P1	15446	0	0	0	0	0	0
P1	15447	0	0	0	0	0	0
P1	15448	0	0	0	0	0	0
AVERAGE		0	0	0	0	0	0
GUN ON	S.P.	CH1	WB-241	S1-244	S16-247	P1-248	P16-251
P16	15452	0	0	0	0	0	0
P16	15453	0	0	0	0	0	0
P16	15454	0	0	0	0	0	0
AVERAGE		0	0	0	0	0	0

SEISMIC TAPE LOG

R/V RIG SEISMIC



Client: AGSO Law of the Sea
 Survey no: 180
 Survey Name: HEARD-KERG-1

Line Number: 180/00801
 Line Name: KP-T
 Sheet 6 of 9

Tape Number	Start Shot	Start Time	End Shot	End Time
180/00525	918	87.110634	975	87.112529
180/00526	984	87.112801	1050	87.114919
180/00527	1051	87.114919	1117	87.121138
180/00528	1118	87.121138	1184	87.123349
180/00529	1185	87.123349	1251	87.125549
180/00530	1252	87.125549	1314	87.131858
180/00531	1315	87.131858	1381	87.134158
180/00532	1382	87.134158	1448	87.140355
180/00533	1449	87.140355	1515	87.142658
180/00534	1516	87.142658	1582	87.145011
180/00535	1583	87.145011	1649	87.151206
180/00536	1650	87.151206	1716	87.153409
180/00537	1717	87.153409	1783	87.155640
180/00538	1784	87.155640	1850	87.161839
180/00539	1851	87.161839	1917	87.164011
180/00540	1918	87.164011	1984	87.170103
180/00541	1985	87.170103	2051	87.172136
180/00542	2052	87.172136	2118	87.174140
180/00543	2119	87.174140	2185	87.180121
180/00544	2186	87.180121	2252	87.182108
180/00545	2253	87.182108	2319	87.184126
180/00546	2320	87.184126	2386	87.190134
180/00547	2387	87.190134	2453	87.192104
180/00548	2454	87.192104	2520	87.194028
180/00549	2521	87.194028	2587	87.200006
180/00550	2588	87.200006	2654	87.201942
180/00551	2655	87.201942	2721	87.204001
180/00552	2722	87.204001	2788	87.210049
180/00553	2789	87.210049	2855	87.212222
180/00554	2856	87.212222	2923	87.214339
180/00555	2924	87.214339	2990	87.220437
180/00556	2991	87.220437	3057	87.222559
180/00557	3058	87.222559	3124	87.224707
180/00558	3125	87.224707	3191	87.230742
180/00559	3192	87.230742	3258	87.233005
180/00560	3259	87.233005	3325	87.235258
180/00561	3326	87.235258	3392	88.001545
180/00562	3393	88.001545	3421	88.002601

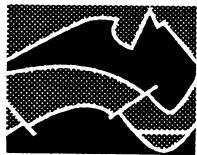
RESYNCHED SHOTS

Actual:	1304	1305	1302	1303	1304	1305 →
Required:	1304	1305	1306	1307	1308	1309

Actual:	Required:
2083	2087
2084	2088
2085	2089
2086	2090
2087	2091
2088	2092
2089	2093
2090	
2091	
2092	
2093	
2094	
2095	
2096	
2097	
2098	
2099	
2100	

Actual:	
Required:	

Actual:
Required:



NAV LINE LOG

R/V RIG SEISMIC

Client:AGSO

Survey no:180

Survey Name:HEARD IS./KERG. PLAT. PT2

Line Number 180/ 0801

Line Name KP-T

Sheet 8 of 9

Date 28/3/97

Observers

[illegible]

[illegible]



AGSO MARINE RV Rig Seismic

***SURVEY 180
Water Depths Only
Heard Is/Kerguelen
Plateau Pt2***

***LINE # 180/0901
LINE NAME KP-O***

***Line Summary log
Navigation line log
Transit / Line change log***



LINE SUMMARY LOG

R/V RIG SEISMIC

Client: AGSO

Survey no: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 0901

Line Name KP-O

Sheet 1 of

Direction 313°

Date 1/4/97

Observers

THIS FOLIO OF LINE LOG SHEETS HAS BEEN CHECKED BY

T Hunter

Line Information

Time (UTC)

Start of Line

090: 031338

End of Line

091: 044800

Line Details

Start of Line

End of Line

Water depth (m)

4774m.

3905m.

Latitude

54° 52.752s

53° 30.554s

Longitude

83° 46.086e

82° 48.013e

Primary navigation

Racal 1 DGPS

Secondary navigation

Racal 2 DGPS

Chargeable kilometres

165.05 km.

Racal 1 DGPS tape no.

009

Gravity Y/N

Y

Magnetics recorded Y/N

Y

Racal 2 DGPS tape no.

005

DAS tape no.

014

Mag dist from stern (m)

230m.

Echo sounder 12 kHz Y/N

Y

Transducer depth

5.1

12 kHz chart no.

P/O

Echo sounder 3.5 kHz Y/N

Y

Transducer depth

4.9

3.5 kHz chart no.

P/O

Exabyte Tape no.

/

Comments: Doglegs : 090:2118 54° 21.849s 82° 49.617e 313° → 326°

090:2228 54° 18.354s 82° 45.579e 326° → 339°

090:2306 54° 15.120s 82° 43.489e 339° → 352°

090:2342 54° 10.961s 82° 42.450e 352° → 5°

NO SEISMIC

[illegible]



AGSO MARINE RV Rig Seismic

***SURVEY 180
Water Depths Only
Heard Is/Kerguelen
Plateau Pt2***

***LINE # 180/1001
LINE NAME KP-P***

***Line Summary log
Navigation line log
Transit / Line change log***



LINE SUMMARY LOG

R/V RIG SEISMIC

Client: AGSO
Survey no: 180
Survey Name: HEARD IS./KERG. PLAT. PT2

Line Number 180/ 01001
Line Name KP - P
Sheet 1 of 3
Direction 267°
Date 1 April '97
Observers _____

THIS FOLIO OF LINE LOG SHEETS HAS BEEN CHECKED BY

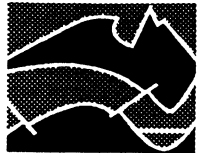
Line Information	Time (UTC)	Shot Point	Tape Number	Box No.
First chargeable SP (FCSP)	<u>091.094101</u>	<u>-</u>		
Last chargeable SP (LCSP)	<u>091.175700</u>	<u>-</u>		
Line Details	Start of Line (FSP)		End of Line (LSP)	

Water depth (m)	<u>4726.6 m</u>	<u>2407 m</u>
Latitude	<u>53° 45.042'S</u>	<u>53° 48.096'S</u>
Longitude	<u>83° 57.190'E</u>	<u>82° 15.126'E</u>

Primary navigation	<u>Racal I dGPS</u>		
Secondary navigation	<u>Racal II dGPS</u>	Chargeable kilometres	<u>112.3 km</u>
Racal 1 DGPS tape no.	<u>009</u>	Gravity Y/N	<u>Y</u>
Racal 2 DGPS tape no.	<u>005</u>	DAS tape no.	<u>014</u>
Echo sounder 12 kHz Y/N	<u>Y</u>	Transducer depth	<u>5.1</u>
Echo sounder 3.5 kHz Y/N	<u>Y</u>	Transducer depth	<u>4.9</u>
Exabyte Tape no.	<u>-</u>		

Comments: _____
Dogleg: _____

NO SEISMIC



NAV LINE LOG

R/V RIG SEISMIC

Client:AGSO

Survey no:180

Survey Name:HEARD IS./KERG. PLAT. PT2

Line Number 180/ 1001

Line Name KP-P

Sheet 2 of 3

Date 1/4/97

Observers 

[illegible]

NAV TRANSIT LOG

R/V RIG SEISMIC

Sheet 3 of 3

Client: AGSO

Survey No: 180

Survey Name: HEARD IS./KERG. PLAT. PT2

Transit / Linechange

From: KP-P 180/1001

To: Freemantle

Time (UTC)	Event Details/Comments
91:1757	EOL KP-P
	53° 48.096s 82° 15.126° WD=2407
	Begin transect to Eastern end of KP-Q
91:2340	Mag to standby
092:0708	Transit to Fremantle
094:081800	Dogleg WP1 52° 15.126°
	49° 54.701s 88° 28.958E
095:165000	Dogleg WP2 47° 48.864s 92° 19.591E
098:2200	Mag to standby giving bad data
099:0122	mag back on
099:0230	Racal 1 solution set to Perth, Dampier reference stations
099:0231	Racal 2 solution now Perth, Dampier
100:143135	Tape writing off.
133256	Disk writing off.
	DAS
100:144515	End of Survey S180 start of S181.