

2008 Modiolus 3D Seismic Survey

BEACH PETROLEUM LIMITED



Final Operations Report

PEL 91 & 92 – South Australia

Cooper Basin

July 2009

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- Appendix 5 Environmental Report (S Thirlwell)

Modiolus Seismic Survey Support Data

- Navigation data
- Observer Logs
- Processing Data
- Tape Listing
- Upholes

Removed by PIRSA

1.0 INTRODUCTION

The 2008 Modiolus Seismic Survey in the Cooper Basin in South Australia recorded a total of 332.7 sq km (1219.2 linear km) of 3D seismic data in PELs 91 and 92 commencing on 31st May 2008 and ending on 26th July 2008. 101 new upholes were drilled for the purpose of low velocity layer (LVL) measurement and refraction static calibration of the new lines.

The primary objectives of the survey were to mature to prospect status leads in each of the permit areas and to enhance the regional seismic framework in order to locate additional leads for future refinement.

Work Area Clearance (WAC) processes preceded the survey, conducted by representatives of the Dieri Aboriginal Corporation Native Title Claimant Group. The group was accompanied by their appointed technical experts who prepared reports on the clearance results. This led to several sensitive sites being avoided by shifting the line positions locally.

A total of 333 sq km was recorded for the 2008 Modiolus Survey, 137 sq km assigned to the PEL 91 joint venture and 195 sq km assigned to the PEL 92 joint venture. This represents a split of 41.3% for PEL 91 and 58.7% for PEL 92.

Table 1 Survey Statistics

	Total
Recording Start Date	31 st May 2008
Recording End Date	26 th July 2008
No of Lines	125 Receiver Lines 82 Source lines
Line No Range	R1128 to R1623 (incrementing by 7) S5128 to S5695 (incrementing by 7)
Line Length	332.7 sq km 1219.2 linear km
Average sq km/day	6.23
Average sq km/rec hr	0.98
No of Upholes	101
Average Hole Depth	33.3 m
Holes Per Day	6.7

Stewart Thirlwell provided the field supervision for the full project. The Field Supervision Report in Appendix 1 provides a detailed history and database with photographs for all aspects of the field operations.

The data acquisition contract was awarded to Terrex Seismic. The Contractor's Seismic Data Acquisition report is in Appendix 2.

Dynamic Satellite Surveys (DSS) were the surveying contractor for this project and the full Contractor's Survey Report is in Appendix 3.

The data processing was awarded to WesternGeco and the Data Processing Report is in Appendix 4.

Scanlon Drilling of Kalgoorlie drilled and Velocity Data recorded the upholes for the survey.

There was also a dynamite/drilling program over two salt lakes. Exploration Field Services (EFS) were used for drilling on the salt lake and Sequel Drill and Blast were used to provide the explosives and shot firers.

The contracting groups involved in the survey are summarised in Table 2.

Table 2 Contractors

Operation	Contractor	Report
Field supervision	Stewart Thirlwell	Appendix 1
Data acquisition	Terrex Seismic	Appendix 2
Line preparation	Terrex Contracting	
Survey	Dynamic Satellite Surveys	Appendix 3
Uphole drilling	Scanlon Drilling	
Uphole recording	Velocity Data	
Data processing	WesternGeco	Appendix 4
Salt lake drilling	Exploration Field Services	
Explosives	Sequel Drill & Blast	

The following sections provide a summary of the acquisition and processing of the survey.

2.0 FIELD OPERATIONS

2.1 Location

The 2008 Modiolus 3D seismic survey was conducted within PELs 91 and 92 in the Cooper Basin of South Australia, approximately 80-100 km west of the Moomba oil and gas production facility operated by Santos Ltd. Figure 1 shows the regional location of the Modiolus 3D Seismic Survey and Figure 2 shows the line location map.

2.2 Permitting

PIRSA was notified about the survey in PELs 91 and 92 on 31st March 2008. The seismic lines were located within the Mungeranie and the Clifton Hills pastoral leases and both of these properties were provided with Notices of Entry for the survey work. Santos as operator of adjacent PPLs and as provider of the local road access network was also provided with a Notice of Entry. Notices were also provided to the operators of coincident Geothermal and Mining Exploration licences. The Dieri Aboriginal Corporation (Dieri) and Aboriginal Legal Rights Movement were advised of the survey with a Notice of Entry. The Dieri were also consulted for the Cultural Heritage Clearance (next section).

2.3 Cultural Heritage Clearance

Beach Petroleum has ancillary agreements with the Dieri who are the Native Title claimants over various portions of the survey area and under that agreement consultation and field inspection of proposed line locations are required prior to conducting any fieldwork.

A Clearance Request for PELs 91 and 92 was sent to the Dieri legal representative and a field inspection was conducted between 25th February 2008 and 5th March 2008. The Work Area Clearance (WAC) was coordinated by Bill Hedditch of W.F. Hedditch Nominees Pty Ltd. (land access services contractor to Beach Petroleum) and the Dieri Native Title Claimant Group.

Inspection and survey of seismic lines was carried out in 4WD vehicles equipped UHF radios for communications. The vehicles were equipped with onboard navigational equipment consisting of a GPS unit coupled with laptop computers. This equipment traced and recorded the team's position in relation to the terrain and the proposed seismic lines. The process was documented with field notes, photographs and handheld GPS units.

The inspection process involved driving as much of the line as seemed safe and sensible with particular priority given to inspecting areas identified by the clearance team as likely to be significant. The lines were cleared with a number of specified deviations

2.4 Line Preparation & Survey

Line preparation was carried out by Terrex Contracting and the surveyors were Dynamic Satellite Surveys. Line preparation and survey work began on 24th April 2008 and was completed on 4th July 2008.

Table 3 lists the Control Station locations utilised.

Table 3 Control Station locations (Datum GDA 94 Zone 54)

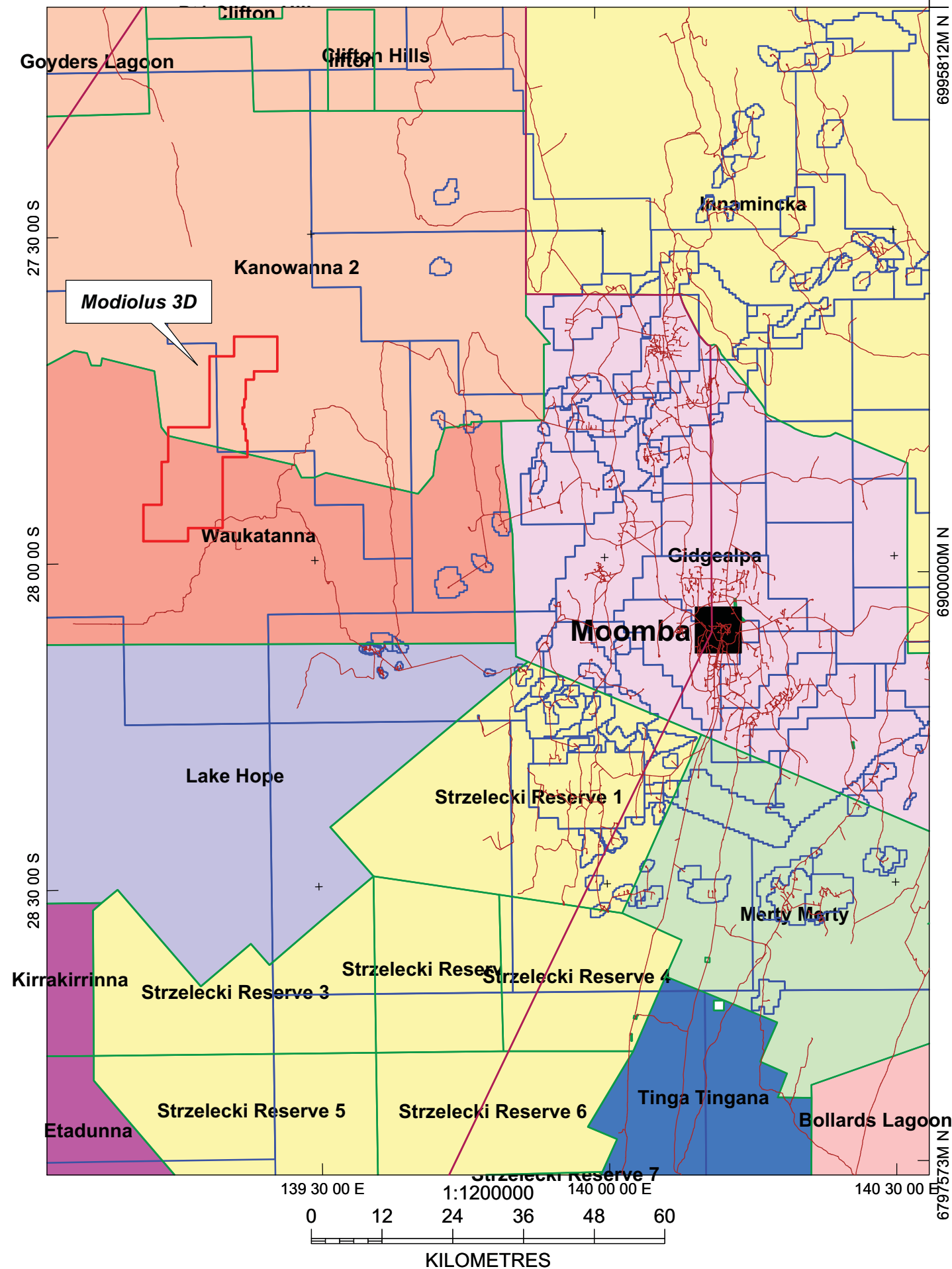
Station	Easting	Northing	Height	Comments
PM438	336346.8	6912776.2	18.77	Pioneer
NER01	335556.6	6906940.3	23.98	Pioneer
MYT01	333618.3	6903115.3	21.24	DSS

SA COOPER BASIN

307028M E

400000M E

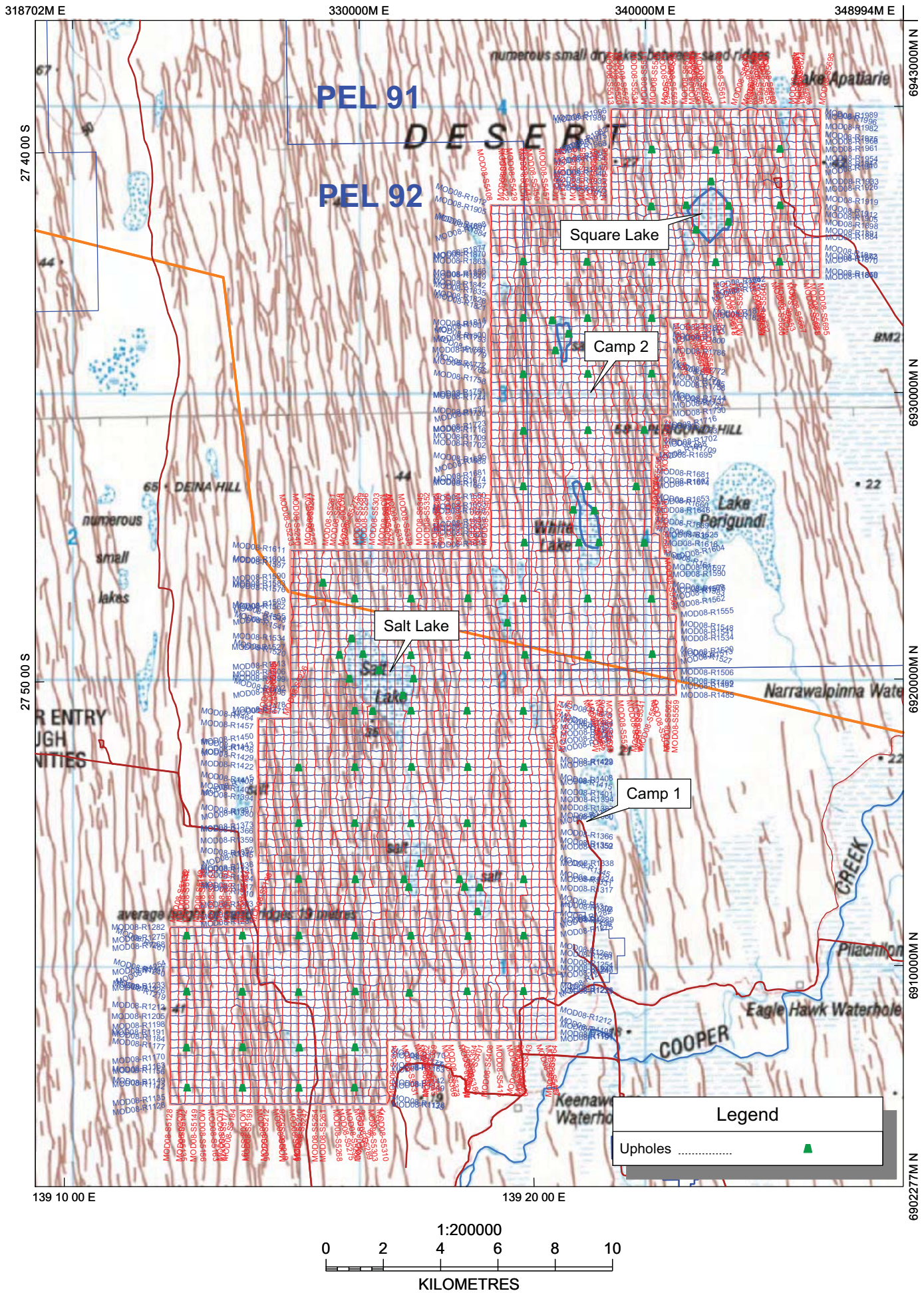
456780M E



GDA94 / MGA zone 54 (EPSG 28354)
 Transverse Mercator
 GRS 1980 spheroid
 Natural origin: [141 00 00E, 00 00 00N]

Figure 1

2008 Modiolus 3D



GDA94 / MGA zone 54 (EPSG 28354)

Transverse Mercator

GRS 1980 spheroid

Natural origin: [141 00 00E, 0 00 00N]

Figure 2

Each dozer was equipped with a GPS receiver containing the coordinates of each line including bend points and heritage no-go zones. Information on the survey methods and geodetic and geophysical datum employed is in the Contractors Survey Report (Appendix 3).

2.5 Environment

The 2008 Modiolus 3D Seismic Survey in PELs 91 and 92 was conducted under a 'Statement of Environmental Objectives' (SEO) published by PIRSA, which provided objectives and measurements for preparation and use of seismic lines in order to minimise impact and maximise rehabilitation. The dozer operators and surveyors were all trained in the techniques required to meet these objectives.

The environmental impact of the Modiolus 3D Seismic Survey was typical of that in dune and floodplain terrain. The standard practices were observed, i.e. dune cuts were minimised, sand was left on dune shoulders and not ramped into the swale and minimal windrows were left in swales or across clay floodplains. Ongoing monitoring of the 5 Environmental Monitoring Points (EMPs) will establish how well rehabilitation is taking place. On completion of recording activities, a section of the source and receiver lines passing through each EMP was audited using the Goal Attainment Scaling (GAS) system. Audits were generally carried out over a distance of approximately 1km either side of the EMP.

Comprehensive environmental guidelines on the preparation of lines were provided in written form and in inductions and were followed by the various crews prior to the 2D program. The major points stressed were.

- Weave lines to break the line of sight
- Minimise dune cuts
- Store sand from dune cuts on dune flanks and avoid “ramping”
- Minimise blade work in dune swales
- Where blade-work is necessary, ensure that the windrows are flattened
- Place doglegs at road and track crossings and try to avoid blade-work within 50m of road crossings
- Report and avoid any aboriginal artefacts found
- Spread drill cuttings so as not to create a “pile”
- Ensure that no litter is on the lines
- Ensure that all gates are closed and drop gates reinstated
- Report any fence wire breakages immediately and make sure that fences are stock-proof.

An environmental report for this area has been written and submitted to PIRSA. This is attached as Appendix 5 and contains EMP report and GAS audit reports.

2.6 Health and Safety

Safety received a high priority from Beach Petroleum, Terrex Seismic and all sub-contractors during this survey. An induction was held prior to the start of line preparation, recording and drilling. Inductions were also given to all new crewmembers upon arrival.

The basic tenets of the Terrex Seismic HSE policy were:

- Daily toolbox meetings pre-work
- Weekly safety meetings
- Site specific Emergency response plan

The safety efforts were comprehensive and no Lost Time Injuries were reported on this project.. A Health and Safety report is included in the Field Supervision Report (Appendix 1). Table 4 summarises some key safety statistics for the project.

Table 4 Safety Statistics

Safety Statistics	
Terrex Seismic Man-hours	33,624
Fatalities	0
LTI	0
MTI	0
First Aid Incidents	2
Incident / Accident Reports	4
Hazard Identification Reports	17
Training Hours	764
Tool Box / Safety Meeting Man-hours	747
Audits / Inspections	771
Drills	1
Land Spills (< 5 litres)	2

2.7 Recording Operations

Terrex Seismic was selected as the Vibroseis seismic data acquisition contractor for this project. The survey commenced on 31st May 2008 and finished on 26th July 2008. Full details of the operation are in Appendix 2. The acquisition parameters are listed in Table 5. Parameters were revised from previous Cooper Basin seismic surveys and this included recording 40m VP intervals and using 10 active lines in the patch.

Table 5 Acquisition Parameters

Instruments	
Model	Sercel 428XL
No. Channels	980 (10 lines x 98 channels)
Tape Format	SEGD revision 1 8058IEEE Demultiplexed, Noise edited correlated summed 4 sec record
Filters	Hi cut 200 Hz, (0.8 Nyquist – Linear); Lo cut: out
Correlation	Zero Phase – after sum
Stack	Diversity stack plus burst edit
Record Length	4 sec
Sample rate	2 ms
Source Parameters	
Vibrators	3 x I/O AHV IV's Buggy Mounted
Electronics	Pelton Advance 2, Model 5
Sweep frequency	5-90 Hz
Sweep length	4 sec
No. of sweeps	2 standing
VP interval	40m
Vibrator Array	3 vibs in line, 12.5m pad to pad standing. Centred on source stations, No move-up
Phase lock	Ground Force
Drive Level	80% varied by Amplitude control function
Amplitude Control	Peak to peak
Receiver Parameters	
Group interval	40m
Number of live traces	980 (10 lines x 98 channels)
Spread	Split, 1940 - 20 - 0 - 20 - 1940
Geophones	Sensor SM4 10Hz
Array	12 in line, centre on stations, 3.33m spacing
Connection	Series/Parallel (6x2)
Fold	7 fold inline 5 fold cross line 35 nominal

The survey area was divided into five panels for recording, A to E. Panel C was recorded first, followed by Panels' A, B, D and lastly E (see figure 3). The shooting order was unusual in nature as it was still unknown whether the northern part of the grid (PEL 91) would be included until after recording had started.

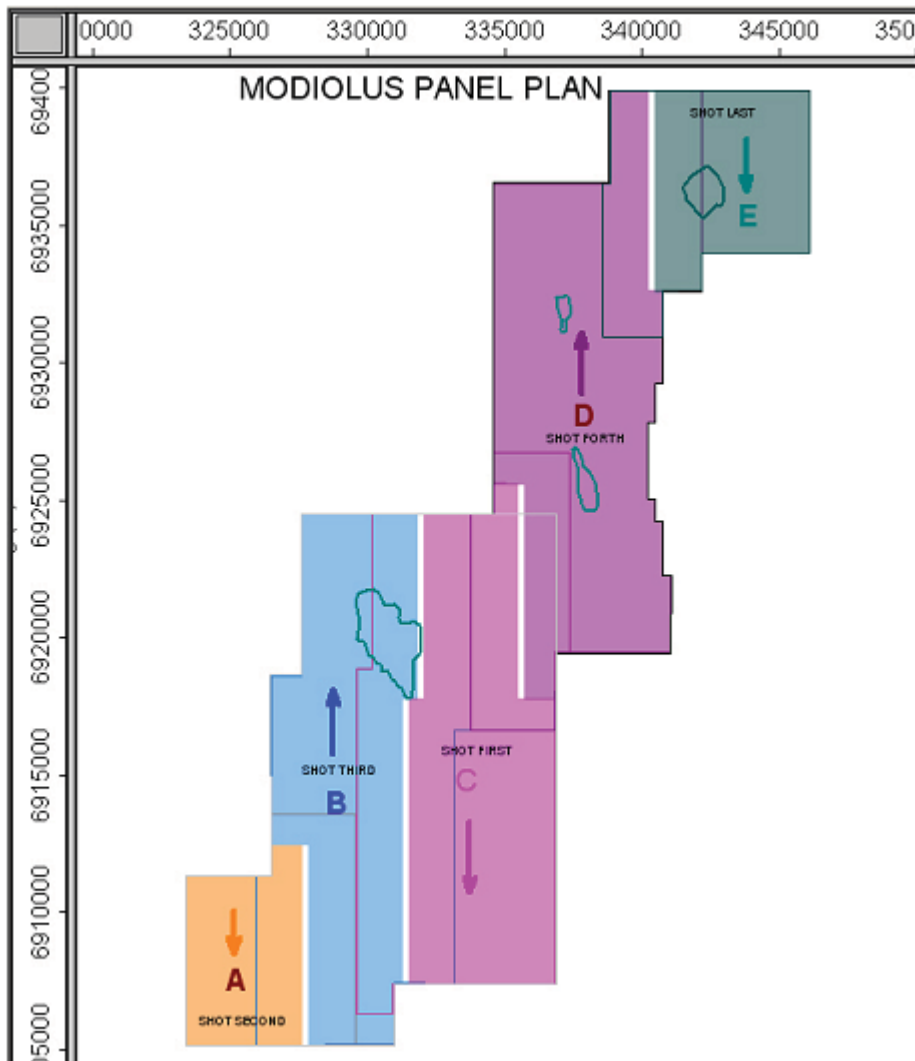


Figure 3 *Modiolus Panel Plan*

Data quality throughout the Modiolus Seismic Survey was generally good in all areas.

The Terrex Seismic crew were accommodated in a mobile camps put together specifically for the Cooper Basin campaign. The crew had 40-50 persons including the camp and administrative personnel. The average recording rate for this survey was 6.23 sq km/per day when normalised to a 12 hour day. 0.98 sq km/recording hour was achieved which is a reasonable performance for the crew. The average cycle time for the given parameters was about 43 seconds per VP.

Salt Lakes

There were several salt lakes within the Modiolus 3D survey area. Spread was laid across all lakes while the smaller lakes were detoured by the Vibroseis trucks, with skipped VP's. However, two of the lakes, Square Lake and Salt Lake, were nearly 2km across in places and skipping this much of the recording was not desirable. So, a dynamite/drilling program was designed to help obtain the data beneath them.

Two augers, mounted on bobcats with double tracks were used to drill 2m holes at every source point on the lakes. Holes were then loaded with 400g boosters and detonated to provide the energy source for recording. Very good record quality was obtained using this method. Unfortunately heavy rain soon after drilling commenced limited the effectiveness of this method although a significant number of infill locations were achieved.

Some areas of the lakes were too soft for the bobcats to traverse. Figures 4 and 5 below show the location of the shots on Salt Lake and Square Lake.

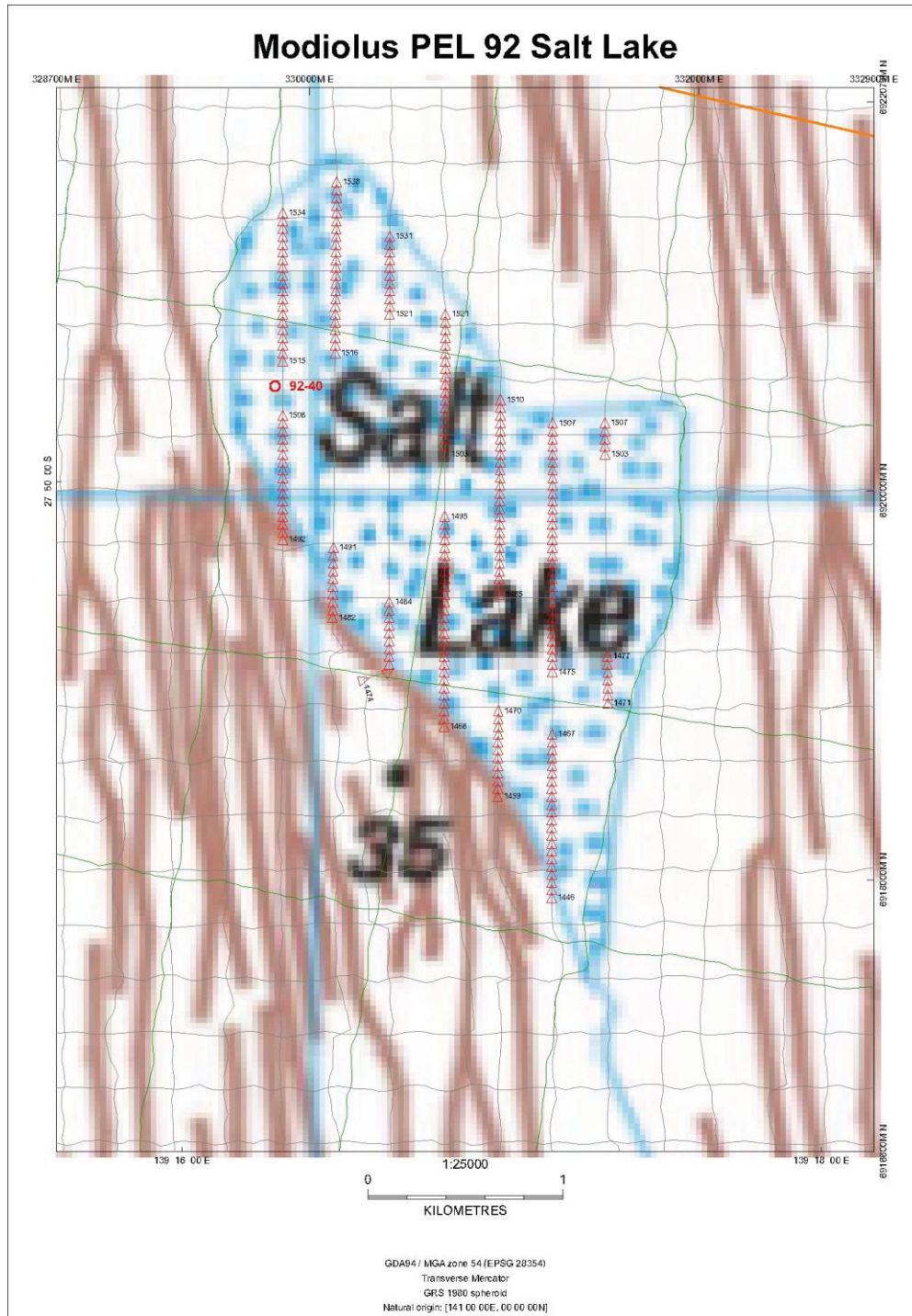


Figure 4 Salt Lake Shot Locations

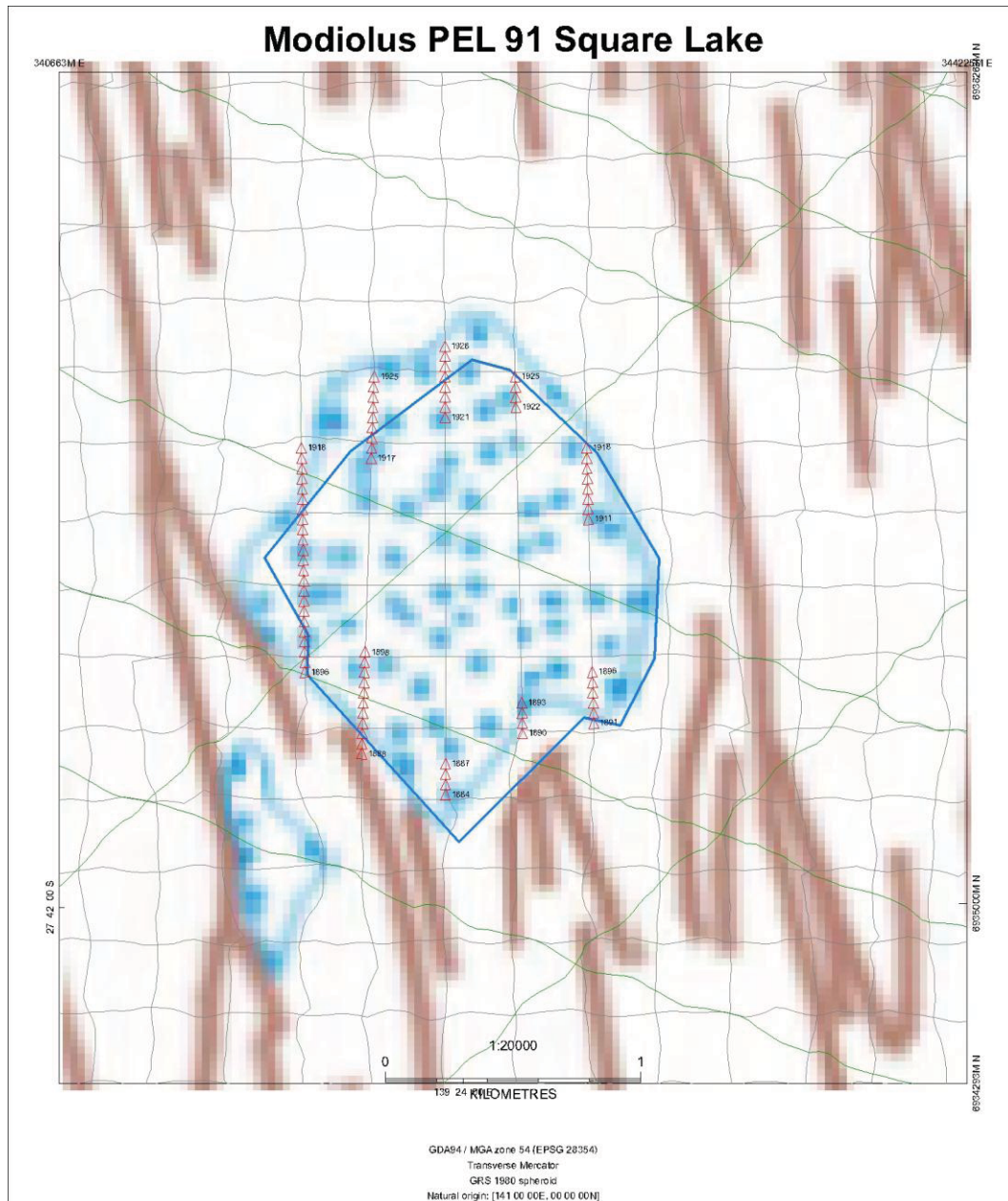


Figure 5 Square Lake Shot Locations

2.8 LVL Acquisition

The uphole program for the survey consisted of 101 holes. Scanlon Drilling of Kalgoorlie were contracted through Terrex Seismic to conduct the drilling work. Drilling was conducted using a Bourne 1000 truck mounted drilling rig. Uphole logging was contracted to Velocity Data using their Toyota Hi-Lux mounted weight drop logging unit. Drilling commenced on 23rd July 2008 and was completed on 19th August 2008.

The average hole depth was 33.3m and an average of 6.7 holes per day were recorded and logged. Plots of elevation vs. elevation of base of weathering show that across the area of this survey, the average depth of weathering was of 9.5m. Weathering depths varied with elevation and were consistent with a relatively stable base of weathering. Table 6 is a list of the uphole locations and .fbr file names.

Table 6 Uphole listing

Uphole	Easting	Northing	Elev	Line	Station	FBR File
DHMOD08-01	323999	6905733	32.3	1142	5142+7	DHMOD08-01.FBR
DHMOD08-02	325930	6905728	25.9	1142	5190+17	DHMOD08-02.FBR
DHMOD08-03	327898	6905730	17.0	1142	5239+26	DHMOD08-03.FBR
DHMOD08-04	329840	6905734	19.2	1142	5288+7	DHMOD08-04.FBR
DHMOD08-05	323978	6907133	28.4	1177	5141+23	DHMOD08-05.FBR
DHMOD08-06	325934	6907143	30.1	1177	5190+20	DHMOD08-06.FBR
DHMOD08-07	327913	6907131	17.2	1177	5240+0	DHMOD08-07.FBR
DHMOD08-08	329859	6907142	27.0	1177	5288+25	DHMOD08-08.FBR
DHMOD08-09	323987	6909090	35.0	1226	5141+35	DHMOD08-09.FBR
DHMOD08-10	325920	6909083	31.9	1226	5190+7	DHMOD08-10.FBR
DHMOD08-11	327894	6909072	21.4	1226	5239+21	DHMOD08-11.FBR
DHMOD08-12	329865	6909092	26.3	1226	5288+31	DHMOD08-12.FBR
DHMOD08-13	331748	6909079	21.9	1226	5335+37	DHMOD08-13.FBR
DHMOD08-14	333769	6909101	20.7	1226	5386+16	DHMOD08-14.FBR
DHMOD08-15	335741	6909104	19.2	1226	5435+27	DHMOD08-15.FBR
DHMOD08-16	323981	6911039	27.4	1275	5141+29	DHMOD08-16.FBR
DHMOD08-17	325931	6911045	29.4	1275	5190+20	DHMOD08-17.FBR
DHMOD08-18	327899	6911047	41.5	1275	5239+26	DHMOD08-18.FBR
DHMOD08-19	329844	6911039	21.0	1275	5288+12	DHMOD08-19.FBR
DHMOD08-20	331806	6911041	17.3	1275	5337+13	DHMOD08-20.FBR
DHMOD08-21	333806	6911030	15.8	1275	5387+12	DHMOD08-21.FBR
DHMOD08-22	335746	6911038	21.8	1275	5435+33	DHMOD08-22.FBR
DHMOD08-23	327884	6913020	38.1	1324	5239+11	DHMOD08-23.FBR
DHMOD08-24	329868	6913012	31.4	1324	5288+35	DHMOD08-24.FBR
DHMOD08-25	331567	6913012	14.6	1324	5331+15	DHMOD08-25.FBR
DHMOD08-26	333507	6913007	14.5	1324	5379+13	DHMOD08-26.FBR
DHMOD08-27	335744	6913007	19.5	1324	5435+30	DHMOD08-27.FBR
DHMOD08-28	327897	6914970	29.5	1373	5239+24	DHMOD08-28.FBR
DHMOD08-29	329851	6914969	18.7	1373	5288+18	DHMOD08-29.FBR
DHMOD08-30	331814	6914965	17.1	1373	5337+20	DHMOD08-30.FBR
DHMOD08-31	333774	6914967	16.5	1373	5386+21	DHMOD08-31.FBR
DHMOD08-32	335732	6914962	18.7	1373	5435+20	DHMOD08-32.FBR
DHMOD08-33	327889	6916908	37.6	1422	5239+16	DHMOD08-33.FBR
DHMOD08-34	329852	6916923	18.7	1422	5288+19	DHMOD08-34.FBR
DHMOD08-35	331831	6916934	18.6	1422	5337+38	DHMOD08-35.FBR
DHMOD08-36	333793	6916929	19.5	1422	5387	DHMOD08-36.FBR
DHMOD08-37	335754	6916924	19.3	1422	5436	DHMOD08-37.FBR
DHMOD08-38	329847	6918895	18.8	1471	5288+14	DHMOD08-38.FBR
DHMOD08-39	331813	6918899	16.4	1471	5337+21	DHMOD08-39.FBR
DHMOD08-40	333772	6918892	18.5	1471	5386+19	DHMOD08-40.FBR
DHMOD08-41	335733	6918888	19.3	1471	5435+20	DHMOD08-41.FBR
DHMOD08-42	329311	6920845	23.2	1520	5275	DHMOD08-42.FBR
DHMOD08-43	331810	6920834	20.0	1520	5337+17	DHMOD08-43.FBR
DHMOD08-44	333773	6920833	27.0	1520	5386+20	DHMOD08-44.FBR
DHMOD08-45	335787	6920849	21.5	1520	5436+33	DHMOD08-45.FBR
DHMOD08-46	329846	6922814	24.5	1569	5288+13	DHMOD08-46.FBR
DHMOD08-47	331812	6922810	25.1	1569	5337+19	DHMOD08-47.FBR
DHMOD08-48	333801	6922822	31.4	1569	5387+7	DHMOD08-48.FBR
DHMOD08-49	335732	6922816	17.4	1569	5435+19	DHMOD08-49.FBR
DHMOD08-50	328737	6923364	36.1	1583	5260+24	DHMOD08-50.FBR
DHMOD08-51	331835	6912728	11.4	1317	5338+2	DHMOD08-51.FBR
DHMOD08-52	331833	6913576	11.2	1338	5338	DHMOD08-52.FBR
DHMOD08-53	334073	6912729	11.2	1317	5394	DHMOD08-53.FBR

DHMOD08-54	334353	6911889	11.4	1296	5401	DHMOD08-54.FBR
DHMOD08-55	331253	6918890	10.6	1471	5323+20	DHMOD08-55.FBR
DHMOD08-56	330133	6920010	10.5	1499	5295+20	DHMOD08-56.FBR
DHMOD08-57	331253	6920009	10.8	1499	5323+20	DHMOD08-57.FBR
DHMOD08-58	330132	6921126	10.8	1527	5295+19	DHMOD08-58.FBR
DMHOD08-59	335175	6921961	17.5	1548	5241+22	DMHOD08-59.FBR
DHMOD08-61	337993	6920844	19.4	1520	5492	DHMOD08-61.FBR
DHMOD08-62	340233	6920871	18.9	1520	5548	DHMOD08-62.FBR
DHMOD08-63	337979	6922814	17.5	1569	5491+26	DHMOD08-63.FBR
DHMOD08-64	340204	6922803	34.7	1569	5547+11	DHMOD08-64.FBR
DHMOD08-65	335769	6924765	16.6	1618	5436+16	DHMOD08-65.FBR
DHMOD08-66	337973	6924768	12.4	1618	5491+20	DHMOD08-66.FBR
DHMOD08-67	339950	6924755	28.1	1618	5540+37	DHMOD08-67.FBR
DHMOD08-68	335733	6926729	20.6	1667	5435+20	DHMOD08-68.FBR
DHMOD08-69	337993	6926730	22.1	1667	5492	DHMOD08-69.FBR
DHMOD08-70	339674	6926724	34.9	1667	5534	DHMOD08-70.FBR
DHMOD08-71	335742	6928668	36.2	1716	5435+28	DHMOD08-71.FBR
DHMOD08-72	337993	6928688	20.9	1716	5492	DHMOD08-72.FBR
DHMOD08-73	339953	6928699	36.2	1716	5541	DHMOD08-73.FBR
DHMOD08-74	335733	6930643	24.4	1765	5435+20	DHMOD08-74.FBR
DHMOD08-75	337986	6930656	22.7	1765	5491+33	DHMOD08-75.FBR
DHMOD08-76	340213	6930666	39.3	1765	5547+20	DHMOD08-76.FBR
DHMOD08-77	337134	6932049	14.1	1800	5470+20	DHMOD08-77.FBR
DHMOD08-78	335731	6932609	21.4	1814	5435+18	DHMOD08-78.FBR
DHMOD08-79	337977	6932603	30.3	1814	5491+24	DHMOD08-79.FBR
DHMOD08-80	340209	6932606	19.8	1814	5547+16	DHMOD08-80.FBR
DHMOD08-81	335735	6934581	23.5	1863	5435+22	DHMOD08-81.FBR
DHMOD08-82	337954	6934570	38.5	1863	5491+2	DHMOD08-82.FBR
DHMOD08-83	340215	6934568	22.7	1863	5547+21	DHMOD08-83.FBR
DHMOD08-84	342449	6934554	21.5	1863	5603+16	DHMOD08-84.FBR
DHMOD08-85	344677	6934577	24.9	1863	5659+4	DHMOD08-85.FBR
DHMOD08-86	340201	6936502	21.7	1912	5547+8	DHMOD08-86.FBR
DHMOD08-88	344693	6936542	30.1	1912	5659+20	DHMOD08-88.FBR
DHMOD08-89	340216	6938487	32.3	1961	5547+24	DHMOD08-89.FBR
DHMOD08-90	342453	6938476	24.9	1961	5603+20	DHMOD08-90.FBR
DHMOD08-91	344693	6938509	28.5	1961	5659+20	DHMOD08-91.FBR
DHMOD08-93	337973	6925889	12.3	1646	5491+20	DHMOD08-93.FBR
DHMOD08-94	342173	6935969	13.9	1898	5596+20	DHMOD08-94.FBR
DHMOD08-155	333684	6912738	15.8	1317	5384	DHMOD08-155.FBR
DHMOD08-156	335113	6922817	16.3	1569	5420	DHMOD08-156.FBR
DHMOD08-157	336745	6932526	17.4	1811	5460	DHMOD08-157.FBR
DHMOD08-158	336852	6931474	17.0	1786	5463	DHMOD08-158.FBR
DHMOD08-159	341418	6936544	15.6	1912	5578	DHMOD08-159.FBR
DHMOD08-160	342286	6937376	16.3	1933	5599	DHMOD08-160.FBR
DHMOD08-161	342902	6936523	15.1	1912	5614	DHMOD08-161.FBR
DHMOD08-162	341762	6935685	15.7	1891	5586	DHMOD08-162.FBR
DHMOD08-163	337670	6924767	13.5	1618	5484	DHMOD08-163.FBR
DHMOD08-164	337472	6925911	16.8	1646	5479	DHMOD08-164.FBR

2.9 Rehabilitation and De-permitting

At the end of field acquisition activities the lines were checked for any rubbish and pegs left behind. The method of low impact line preparation use does not require any rehabilitation activities as the windrows were minimised and the lines should regenerate naturally. Bobcat tracks on the lake are still quite visible but it is considered that additional rehabilitation would worsen the visual impact. The impact is expected to diminish slowly over time.

Five Environmental Monitoring Points (EMP's) were established which will enable a record to be kept over time as the lines recover. The EMP's are summarised in Table 7.

Table 7 Environmental Monitoring Points (EMP's)

EMP No.	Easting	Northing	Location	Comments
1	326490	6911325	S5205/R1282 intersection	Marked by steel dropper with ID tag
2	331812	6920012	S5337/R1499 intersection	On salt lake. Marked by steel dropper with ID tag
3	328454	6907129	S5254/R1177 intersection	Marked by steel dropper with ID tag
4	336524	6908796	S5457/R1219 intersection	Marked by steel dropper with ID tag
5	345252	6935683	S5674/R1891 intersection	Marked by steel dropper with ID tag

3.0 DATA PROCESSING

3.1 Processing Tests

WesternGeco (Australia) Pty Ltd were awarded the contract to process the data. Processing flow was based on tests. The Contractor report in Appendix 4 discusses the detail and results of the processing. The processing project included the complete reprocessing of the Neritus 3D seismic survey (273 sq km) recorded in 2006 with the same parameters. The overlap between the surveys was designed to allow full merging of the surveys and the total area for processing was 575 sq km. Figure 6 below shows the Modiolus and Neritus Surveys and the overlap between them.

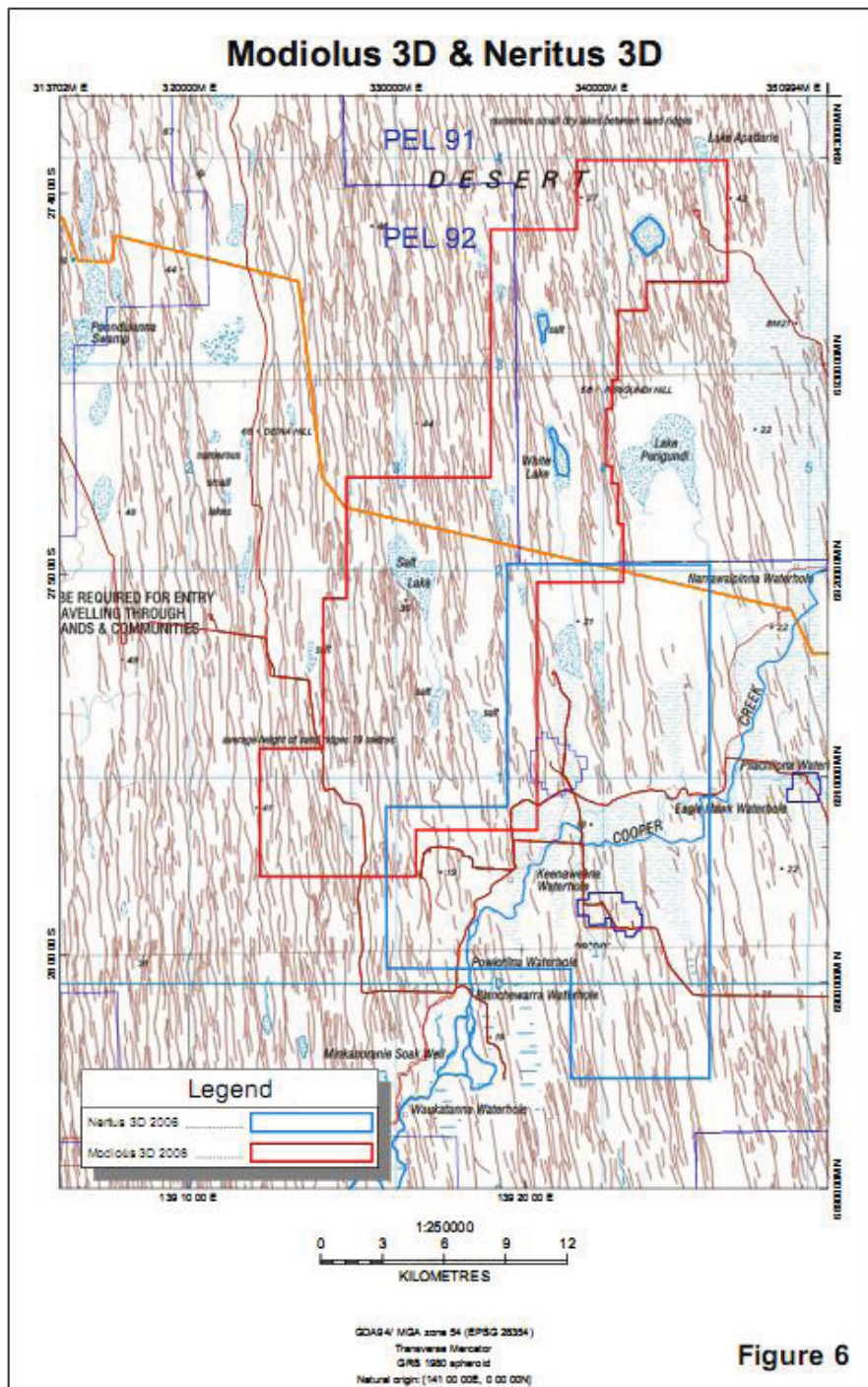


Figure 6

Figure 6 Modiolus 3D & Neritus 3D Survey Area

3.2 Processing Sequence

Table 8 Processing Sequence

Sequence	Processing Parameters
Format Conversion	Field data recorded in SEG2 format onto LTO2 tapes and then converted to WesternGeco's internal format.
Geometry Update	Geometry info applied to data. Elevation and statics written to trace headers.
Grid Define	Processing grid defined to allow sorting to CMP domain.
Amplitude Recovery	Spherical divergence compensation & exponential gain 4db/sec applied.
Minimum Phase Conversion	A filter was applied to convert zero phase correlated data to minimum phase. Dynamite data phase matched to Vibroseis data by applying 180 degrees phase shift.
Noise Attenuation	Anomalous amplitude attenuation initially used, then 3D-RNA was applied to reduce random noise.
Deconvolution	Surface consistent spiking deconvolution with operator length of 160ms used to deconvolve data.
Pre Stack Gain	For the residual and trim static computation processing, 500ms gates with 10% overlap were applied.
Common Midpoint Sort	Data sorted to common midpoint order
Velocity Analysis	Velocities run at 1km intervals. Velocity interp done using WesternGeco's InVA software.
Mute	Pre stack mute applied.
Residual Statics	Statics deviation picker derives reflection times and quality factors. Statics obtained by decomposing reflection pick times into surface consistent source and receiver statics. Residual Statics Analysis window was 800-2400ms.
Velocity Analysis	Velocities run at 500m intervals.
Trim Statics Analysis	Run over 500-2400ms window with max shift of 24ms allowed.
Common Offset Gather	Surface consistent deconvolved data with noise reduction was sorted into common offset gathers using equal trace distribution method. Residual statics and trim statics applied.
Amplitude Recovery	Spherical divergence compensation and exponential gain removed prior to prestack time migration.
Time Migrated Velocity Analysis	Velocities run at 500ms intervals. Velocity field was smoother for use in Kirchhoff migration.
Pre Stack Time Migration	Time migration performed by Kirchhoff time migration seismic function module. Migrating sorted common offset panels into zero offset panels to achieve prestack migration
Pre Stack Time Migrated Velocity Analysis	Migrated output data sorted to cmp order and smoothed migration velocity field removed.
NMO	Velocity functions applied to the data.
Pre Stack Gain	Applied to the data of 500ms gates with 10% overlap.
Trim Statics Migration	Run over a 500-2400ms window.
Radon Demultiple	96pct velocity mute tested and applied to the data.
Pre Stack Time Migrated Stack	Data stacked and shifted from smoothed surface to mean sea level datum.
Whitening	Range of spectral whitening options uses. Both Monk and 5-80Hz spectral whitening versions were created.
Filter	5-85Hz post stack filter applied.
Gain	A post stack balance applied.
Angle Stacks	Angle stacks produced for 0-20 degree and 20-40 degree angel ranges.

3.3 Static Corrections

For this survey a revised statics method was applied which was based on a static modelling process instead of the previously used refraction statics methodology.

The new upholes and existing upholes in the 3D area were interpreted using a 2 layer model and then used to create regional grids of the following parameters

- V0 Weathered zone velocity
- V1 Sub-weathering velocity
- Dw-elev Elevation of base of weathering

These grids were smoothed and used to calculate a static grid tied to the upholes also using the gridded elevation data (Elev). Back interpolation was then used to generate static values for each seismic station. The back interpolation was based on a smooth/flat base of weathering. QC plots were used to check for and correct anomalous values.

- $\text{Static} = -1000 * ((\text{Elev} - \text{Dw-Elev}) / V0 + \text{Dw-elev} / VS))$

A seismic reference datum of 0 m above sea level was used.

3.4 Archived Data

Processed Grid Definition

Table 9 Corner Points 3D Grid

In-Line	Cross-Line	X Co-ordinate	Y Co-ordinate
1700	10200	322323	6894057
1700	11440	347123	6894057
4042	10200	322323	6940897
4042	11440	347123	6940897

Grid definition

Inlines: 1766-2169 in the direction of 90 degrees
 Crosslines: 11011-11314 in the direction of 0 degrees
 CMP spacing: 40 m
 Line spacing: 280 m
 Projection: GDA 94 Zone 54

The final archived data all includes the reprocessed Neritus 3D data. An archive tape listing is included in the WesternGeco processing report (Appendix 4). The following data was sent to PIRSA:

- Raw final PSTM (2 disks)
- Final PSTM (Monk) (2 disks)
- Final PSTM (Spectral Whitening) (2 disks)

A field tape summary is in Table 10.

Table 10 Field Tape Listing

PEL 92						
Tape #	Swath	First FFID	Last FFID	First VP	Last VP	Date Recorded
5001	Panel C	2	7387	5529/1438	5373/1190	31/05/08 - 15/06/08
5002	Panel A	1	2595	5205/1141	5233/1141	16/06/08 - 20/06/08
5003	Panel B	1	7404	5240/1128	5233/1604	20/06/08 - 03/07/08
5004	Panel D	1	9489	5436/1443	5548/1975	04/07/08 - 20/07/08

4.0 CONCLUSIONS & RECOMMENDATIONS

The 2008 Modiolus Seismic Survey was a technical and operational success. The data acquired was of an excellent standard and provides information to further evaluate the leads and prospects within PEL 92. Environmental and cultural heritage considerations made in the planning and conduct of the survey are expected to result in very low long-term impact on the survey area. Line preparation methods employed were successful in avoiding significant visual and potential erosion problems and regeneration of the line over time is expected to remove most evidence of the survey. Areas discovered to be of cultural significance were avoided during the survey and remain undisturbed.

Seismic acquisition using dynamite source was attempted on 2 of the several salt lakes in the area. Unfortunately heavy rain soon after drilling commenced limited the effectiveness of this method although a significant number of infill locations were achieved.

All the contractors utilised during the survey performed well and would all be recommended for future projects in the area. A detailed list of recommendations appears in the Field Supervision Report (Appendix 1).

BEACH PETROLEUM LIMITED

Field Operations Report

for the

**2008 MODIOLUS 3D SEISMIC
SURVEY, PEL 91 & 92**

Cooper Basin, South Australia

Conducted by:

Terrex Seismic Pty Ltd

From

31st May – 26th July, 2008

**Prepared by: S Thirlwell
Thirlwell Exploration Services
ABN 30 652 402 747**

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CONTENTS

Beach Petroleum Limited

2008 Modiolus 3D Seismic Survey

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- 1.0 Introduction
- 2.0 Logistics
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- 5.0 Recording
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- 7.0 Line Preparation, Survey, Permitting and Environment
- 8.0 Safety
- 9.0 Remarks & Recommendations

Appendices

- I Recording Statistics
- II Drilling & LVL Statistics
- IIIa Line Preparation (Dozing) Statistics
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- IV EFS Lake Drilling

1.0 INTRODUCTION

The 2008 Modiolus 3D Seismic Survey was operated by Beach Petroleum Limited and conducted in PEL 91 & 92 in the Cooper Basin, South Australia by Terrex Seismic. The program was located north of the Cooper Creek system about 100 kms west of Moomba between Parsons # 1 in the south, and Ballaparudda # 1 in the north.

Terrex Seismic was contracted to collect the seismic data on an hourly rate. 332.66 sq kms of 3D seismic data was recorded on 82 source lines and 125 receiver lines 280 m apart. Recording operations began on 31st May and were completed on 26th July 2008.

Beach Petroleum sub-contracted (through Terrex Seismic) Dynamic Satellite Surveys to do the surveying, Terrex Contracting (TC) to do the line preparation, Scanlon Drilling to do the up-hole drilling and Velocity Data to do the up-hole logging. Cultural heritage surveys were conducted independently before the job started by a clearance team comprising representatives of the Dieri people plus archaeologists, anthropologists and a surveyor.

The crews were billeted in three separate camps that were located at various sites at different times.

Beach Petroleum's Operations Coordinator Doug Roberts was in overall control of the project while Stewart Thirlwell was contracted to represent Beach in the field.

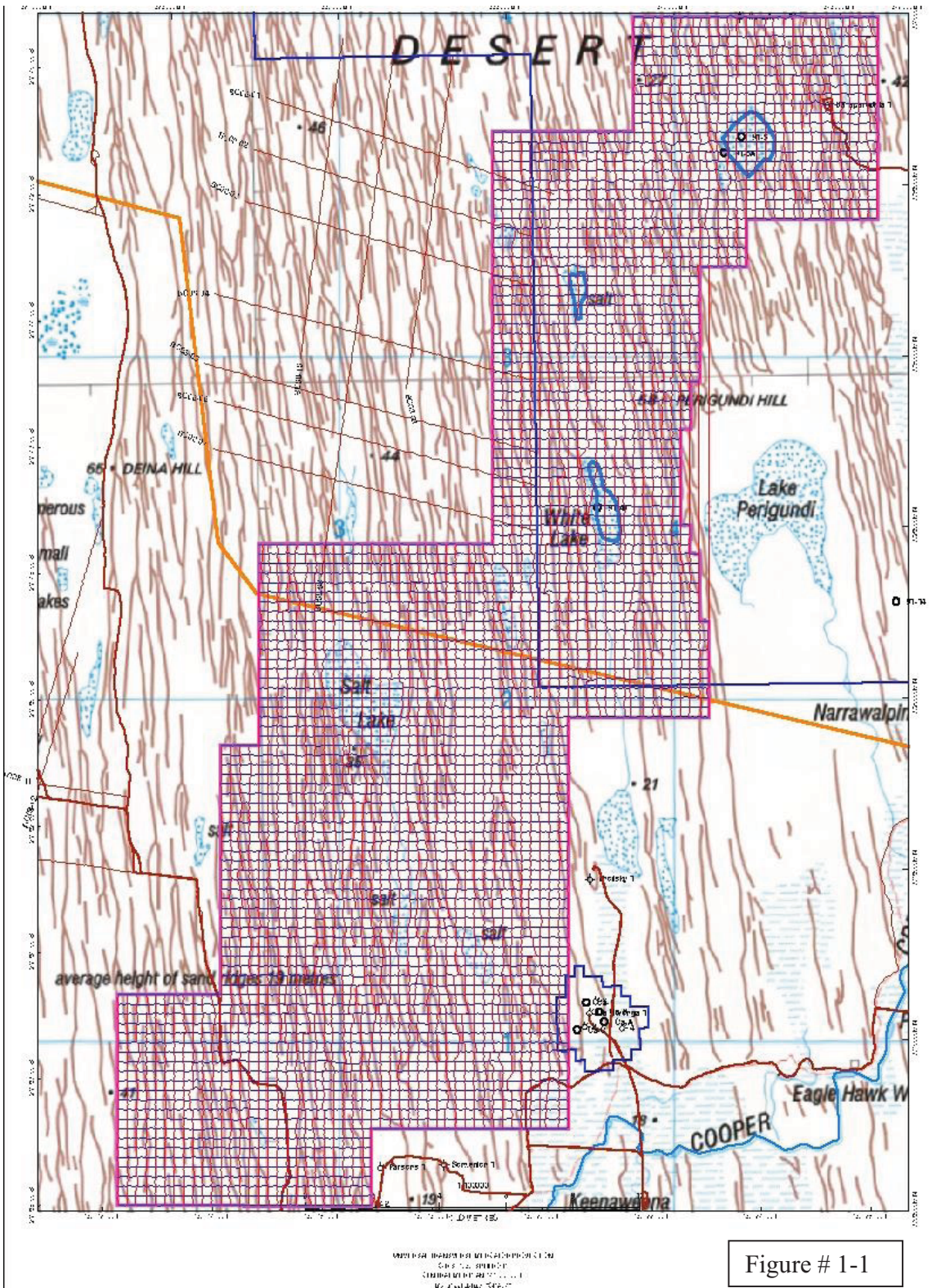
There were no Lost Time Injuries during the job.

Details of production are contained in the appendices.

Fig.# 1-1 shows a topographic map of the survey area.

1.0 INTRODUCTION

Modiolus 3D Seismic Survey



2.0 LOGISTICS

The Terrex Contracting (TC) dozer camp and Dynamic Satellite Surveys moved to the Modiolus area on 24th April 2008, and set up camp at Lhotsky 1, 4 kms north of the Callawonga production facilities. On the 15th June the camp was moved 15 kms north to access the northern part of the grid.

Terrex Seismic moved to PEL 92 on the 29th May, 08. The camp was set up at Lhotsky 1, 200m north of the Terrex Contracting camp. In order to reduce travel times the camp was moved to the northern part of the prospect on 12 July, and set up adjacent to the Terrex Contracting camp.

Scanlon Drilling moved into the area on 20th July, 2008. They set up camp at Lhotsky 1 and were independent to the rest of the operation. Upholes from the Modiolus and 2D Padollus surveys were drilled concurrently to minimize travel time. Drilling water was obtained from the Callawonga evaporation pond.

All contractors used satellite telephone and broad-band internet for communications.

Camp water was obtained from the Lycium Bore and drinking water from the Moomba demin plant. All rubbish, except burnable, was disposed of in the Moomba dump. Food and fuel were delivered weekly.

Refer to Fig # 2-1 and Table # 2-1 for camp locations.

Table # 2- 1: Camp Locations for the 2008 Modiolus 3D Seismic Survey

<u>Camp #</u>	<u>Crew</u>	<u>Eastings</u>	<u>Northings</u>	<u>Dates</u>	<u>Comments</u>
1	Terrex Contracting	336234	6915158	24 Apr-15 June	4 kms north of Callawonga
2	"	338166	6930169	15 June-8 July	19 kms north of Callawonga
1	Terrex Seismic	336234	6915158	29 May-12 July	4 kms north of Callawonga
2	Terrex Seismic	338166	6930169	12 July-1 Aug	19 kms north of Callawonga
1	Scanlon Drilling	336234	6915158	23 July- 19 Aug	4 kms north of Callawonga

2.0 LOGISTICS



Picture #2-1: Terrex Seismic Camp 1



Picture # 2-2: Terrex Contracting Camp 1

2.0 LOGISTICS

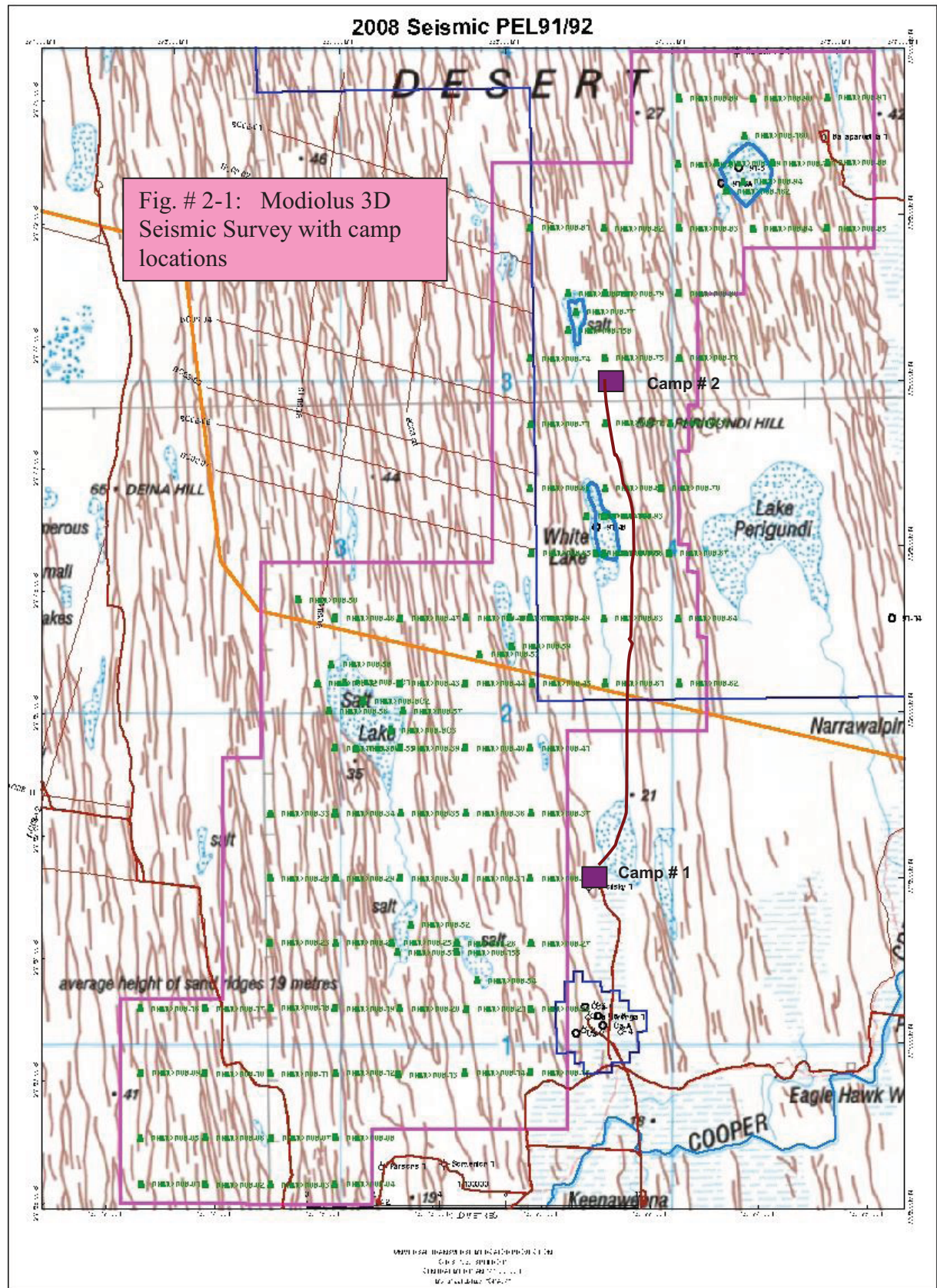


Picture # 2-3: Terrex Seismic Camp 2



Picture # 2-4: Cook Beau Togo prepares the evening meal

2.0 LOGISTICS



3.0 TIMETABLE of EVENTS

30 Apr Start line preparation on Modiolus 3D Seismic Survey.

31 May Begin recording on Modiolus 3D Seismic Survey.

4 July Complete line preparation on Modiolus 3D Seismic Survey.

23 July Scanlon Drilling start up-hole drilling on Modiolus 3D Seismic Survey.

26 July Complete recording on Modiolus 3D Seismic Survey.

19 Aug Complete uphole drilling on Modiolus 3D Seismic Survey.

4.0 - PARAMETERS

4.0 PARAMETERS

Survey: Modiolus 3D Seismic Survey, PEL 91 & 92

Surface Area: 332.6561 sq km

Source Lines: 82 lines, 280 m interval, VP numbers incrementing by 1

Source Line Numbers: MO08-S5128 to S5695, incrementing by 7

Receiver Lines: 125 lines, 280m intervals, stn numbers incrementing by 1

Receiver Line Numbers: MO08-R1128 to R1996, incrementing by 7

Source recorded into an active patch of 10 lines each 98 channels (980 live)

Nominal Fold 35

Instrumentation

Instruments:	: Sercel 428 XL
No. Channels	: 980 (10 lines x 980)
Tape Drives	: IBM Ultrium LT02 (dual drive – 200 Gbyte per tape)
Tape Format	: SEG-D Revision 1 8058IEEE Demultiplexed, Noise edited correlated summed 4 sec record
Filters	: Hi cut 200 Hz, (0.8 Nyquist - Linear) Lo cut: Out
Sample Rate	: 2 ms
Record Length	: 4 sec
RTC	: Yes
Correlation Type	: Zero Phase, After Sum
Stack	: Diversity stack plus burst edit

Source Data

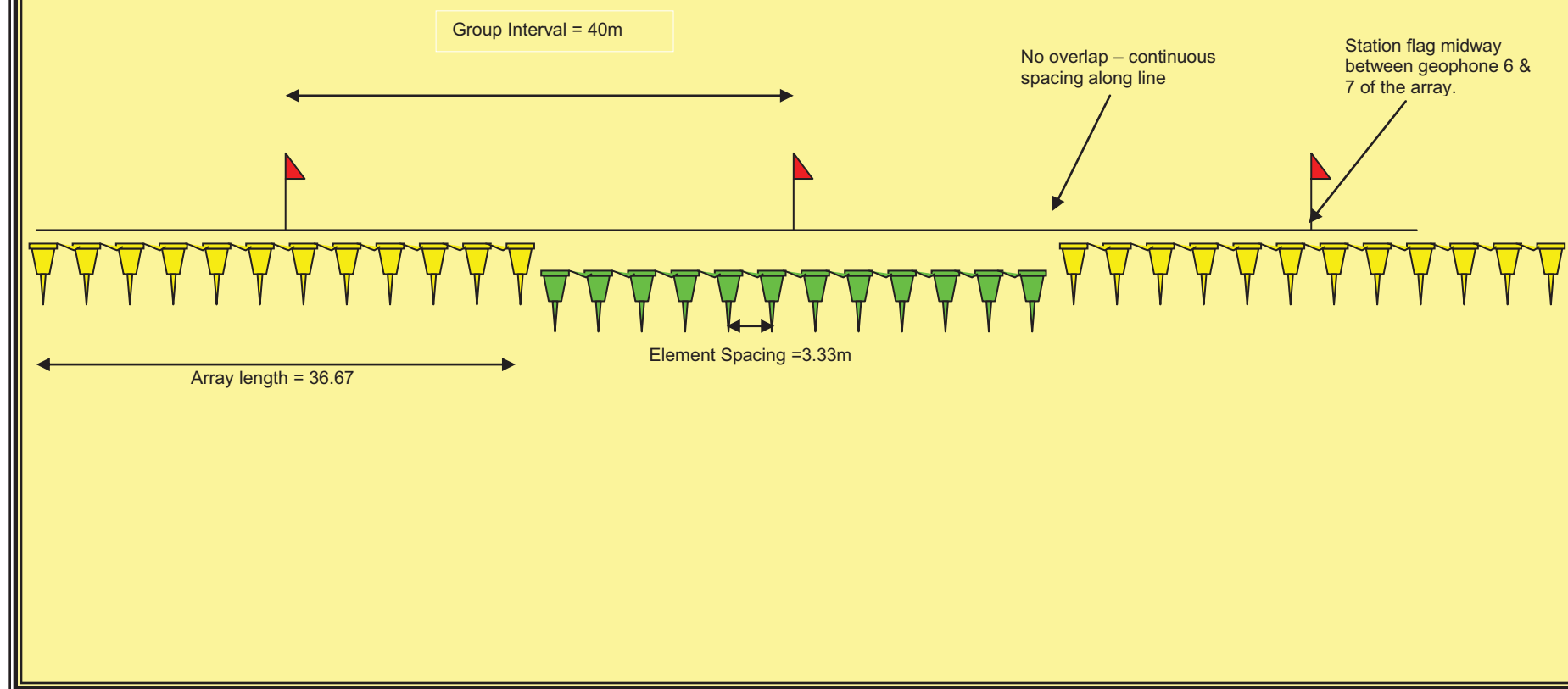
Vibrators	: 3 x I/O AHV IV's on 4x4 Buggies
Electronics	: Pelton VibePro
Sweep Frequency	: Mono-sweep, 5-90 Hz
Sweep Length	: 4 seconds
No. Sweeps	: 2 standing
VP Interval	: 40m
Vibrator Array	: 3 vibs in line, 12.5m pad to pad standing. Centred on source stations. No move-up.
Sweep Amplitude Taper	: 100% (none)
Drive Level	: 80% varied by amplitude control function
End Tapers (cosine)	: 0.2s
Phase Locking Type	: Ground Force
Amplitude Control?	: Peak to Peak

Receivers

Receiver Group Interval	: 40m
Number of live traces	: 980 (10 lines x 98 Channels)
Spread	: Split, 1940-20-0-20-1940
Geophones	: Sensor SM4 10 Hz
Array	: 12 in-line, centred on station, 3.3 spacing
Connection	: Series/Parallel (6x2)
Multiplicity	: 7 fold inline, 5 fold cross line 35 nominal

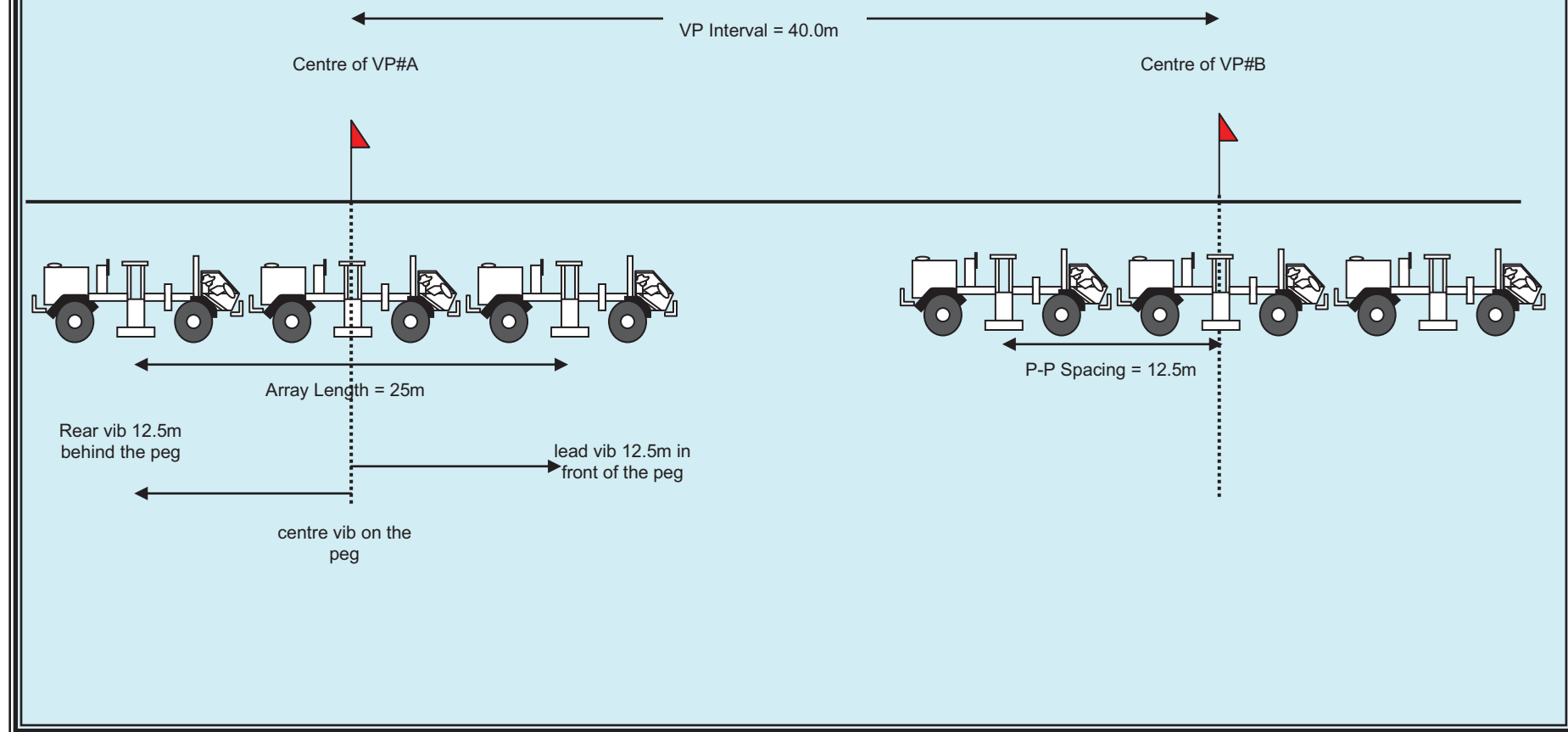
4.0 - PARAMETERS

**Fig. # 4-1: Geophone Array for Beach Petroleum Limited
2008 Modiolus 3D Seismic Survey**



4.0 - PARAMETERS

Fig. # 4-2: 3 Vibrator Arrays for the Beach Petroleum Limited 2008 Modiolus 3D Seismic Survey



5.0 - RECORDING

Introduction

The 2008 Modiolus 3D Seismic Survey was located in the western sector of the Cooper/Eromanga Basin, in north eastern South Australia and operated by Beach Petroleum Limited. It was made up of a single grid located in PEL 91 and 92. Terrex Seismic were contracted to conduct the survey. The recording phase was conducted from 31 May to 26 July, 2008.

The contract was based on an hourly rate. A total of 332.6561 sq kms of 3D seismic data was recorded on 1219.16 kms of source lines.

Full production statistics appear in Appendix I.

Terrain

The terrain was predominantly sand dunes bordering on floodplains to the south and east. There were a number of salt lakes to cross, some too large to skip requiring explosives to supplement the data. Some dunes, mainly in the northeast and west, caused access problems. Delays, as much as three weeks between line preparation and recording caused minor access problems. High winds experienced late in the survey had blown some dunes in. Occasional detours were required to avoid the worst examples.



Picture # 5-1: Crossing on southern section of Salt Lake

5.0 - RECORDING

Equipment

Terrex provided their recent Sercel 428 telemetric recording system, along with a field deployment of 2400 x 12 strings of Sensor SM4 10 Hz geophones.

Three Input Output AHV IV 60,000 lb vibrators were used on line with a fourth as spare.

There was one Station Unit (SU) every station. Each cable had 4 takeouts spaced at 55m intervals. There was one Line Acquisition Unit (LAUL) every 40 stations accompanied by a battery to power the line. Each line in the live patch was connected via a LAUX (cross line acquisition unit).



Picture # 5-2: Beach's John Bourne and Doug Roberts enter recorder.

Parameters

Parameters are listed in Section 4.0.

The parameters included 4 second sweeps, 4 second listen, 5-90 Hz upsweep, 2 sweeps/vp, 3 vibes, 12.5m P-P. The line spacing was 280 m, with 10 lines live, each with 98 stations. Station and VP interval, were both 40m. This gave an inline fold of 7, and a cross line of 5 with an overall fold of 35.

5.0 - RECORDING

Terrex's recent Sercel 428 system was used. The high density tape drives and hard disc recording facilities allowed a minimum of tapes to be used. One tape was used for each of the five panels. It also has the restriction that the only hi-cut filter option available was the $\frac{3}{4}$ Nyquist of 200 Hz.

Crew Strength

The following table details the strength and disposition of the crew:

Table # 5-1: Terrex Seismic Crew Strength and Disposition as on 24/07/08

<u>Contract Requirement</u>	<u>Actually on Crew</u>
Crew Manager (1)	Shane Goossens (1)
HSE Representative (1)	Sarah Burton (1)
Geophone Repair (1)	Ben Humphries (1)
Cable Repair (1)	Brad Richardson (1)
Senior Vehicle Mechanic (1)	Shane Lawless (1)
Vehicle Mechanic (1)	Julien Goossens (1)
Supply Driver (1)	Shane Kelly (1)
Camp Cooks (2)	Allan Cook, Beau Togo (2)
Kitchen Hand (0)	Masako Iwasaki (1)
Camp attendant (1)	Fay Ambachstheer (1)
Senior Vibe Tech (1)	Steve Joudrey (1)
Vibe Scout (1)	Allen Cabot (1)
Lead Vibe Op (1)	Anthony Davidson (1)
3 Vibe Operators (3)	Luke Samios, David James, David Lynch (3)
Senior Observer (1)	Joel Carry (1)
Line Boss (1)	Nathan Byrne (1)
Trouble Shooters (2)	Ed Wyllie, Greg Ablitt(2)
Cable truck personnel (8)	8 people on 3 cable trucks (8)
Jug truck (2)	2 jug truck personnel (2)
Line crew (12)	Line crew (12)
Total Contract Requirement = 42	Actually on crew = 43

Table # 5-1 shows crew strength was close to contract specs on 24 July. This was not always the case with the line crew running 3 short from 10 to 16 July, 5 short on 17 July, and 2 short from 18 to 21 July. Numbers were always down on crew change days.

5.0 - RECORDING



Picture # 5-3: I/O AHV IV Vibrator fitted with sand tyres.

Operations

The initial size of the survey was unsure at the start of recording due to a funding decision of a possible NE extension which was later confirmed. The grid was divided into five panels, A to E with the middle Panel C being recorded first. This was followed by the southern Panel A and then by Panels B, D and the northern Panel E. See Fig. #5-1: Panel Design.

5.0 - RECORDING

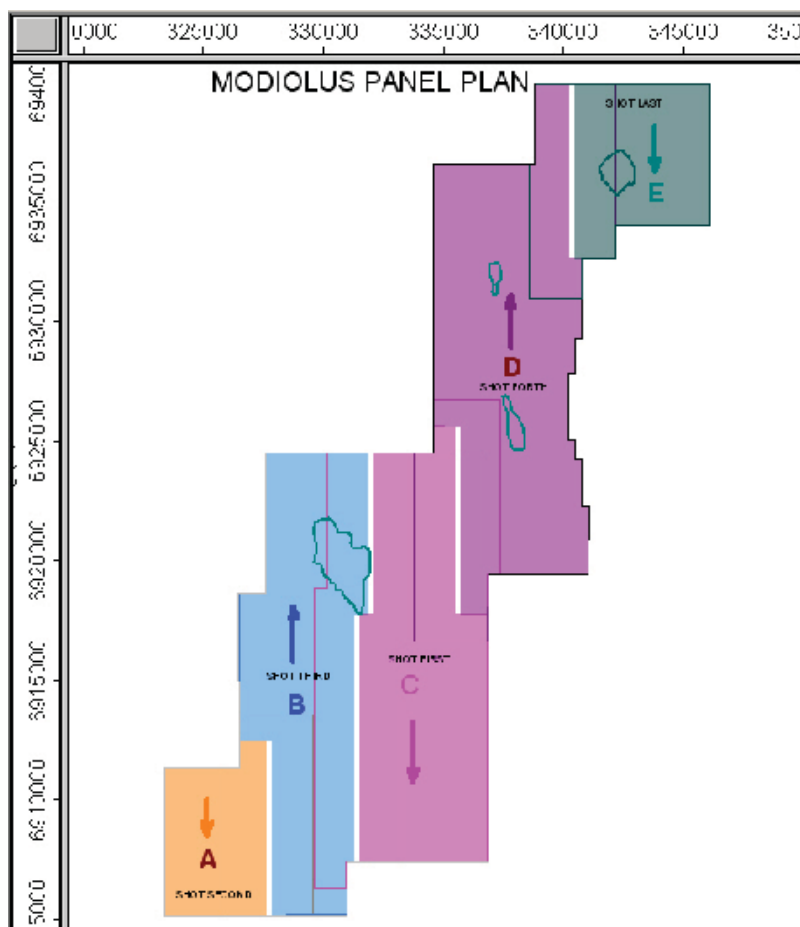


Fig. # 5-1: Panel Design

There was only one fence in the whole survey. This was the boundary fence between Clifton Hills to the north and Mungeranie to the south. This fenceline ran through the middle of the grid and was upgraded for use as an access track. Five lay down gates were placed in the fence to allow north-south access. The fence was in poor condition with broken wires and sand blowouts and was therefore far from stockproof. After recording was completed a fencing crew repaired the damaged sections and reinstated the temporary gates. This crew was independent of the survey and was presumably commissioned by the landholders.

Light rain began to fall the evening of 7 June increasing in intensity during the night. The rain continued for most of the following day with the crew unable to work. After checking the line conditions on the morning of 9 June a decision was made to start work with the crew leaving camp mid morning. The total rainfall over the prospect was only about 12 mm having little affect on field conditions. The roads in the area were however closed for a number of days, with the Moomba road near Gidgealpa closed for over a week.

5.0 - RECORDING

The first camp location at Lhotsky 1 was well placed to serve the southern and central part of the grid. A second campsite was located 15 kms to the north. This required a road to be established from the station boundary fence to the site, 10 kms to the north. The line clearing operation was the first to move to the new site, with the main camp following later. The road was watered on a regular basis with a water truck from Ballards at Lycium. This road was able to handle weekly semitrailers for fuel and supplies as well as heavy floats for the dozers. The second camp was able to service all the northern part of the grid as well as the following Padollus 2D Survey.

Large dunes in the west and northeast section of the program caused minor delays. This was mainly due to high winds late in the period blowing in the western dune approaches. A delay of up to two weeks between line clearing and recording is unavoidable with a 3D grid. Some of the dunes were flagged as no go areas due the danger involved.

Salt Lakes

The other major factor affecting recording was the crossing of several salt lakes. Two of these lakes, Salt Lake and Square Lake were nearly 2 kms wide and a drilling/dynamite program was designed to obtain data beneath them. The smaller lakes were detoured by the vibrators with skipped vp's and hand carried spread. White Lake was the exception as parts were too soft to traverse on foot. Four receiver lines could not be continuously laid over the lake surface. A spread design referred to as a "snake" was employed. The cable ends on the eastern side of the lake were connected in series to get the data to the recorder. Extra cables and batteries were required for the exercise.

A great deal of thought and preparation went into the drilling program on the two large lakes. Two augers, mounted on Bobcats with double width tracks, were used to drill two 2 m holes at every source point. Although these machines left a very slight impression on most of the lake surface, there were sections that could not support their weight. Once the Bobcat had encountered the softer surface it could not stop to reverse as the machine would sink. A bobcat did get bogged but was able to get out under its own power by wiring wood planks to the tracks, and sheets of ply in front of the unit. The operators soon became skilled in recognising and avoiding the treacherous areas. Holes were loaded with 400 gm boosters and gave very good record quality. The initial test hole gave no sign of blowing out and left no impression on the lake surface. During production a different pattern emerged. After progressing a couple of hundred metres from the shore some holes would blow out leaving a small craters, up to 10 cm's deep in places. Another couple of hundred metres towards the centre the holes would blow out a column of muddy water leaving a small mound behind. These surface blemishes gradually disappear due to the soft nature of the lake surface.

5.0 - RECORDING

Two types of vehicles were to be used to carry spread on the lake. The main one was the Mule of which there were three. Similar to a golf buggy in appearance with a motorcycle engine, 4 wheel drive and large section tyres inflated to 6 psi. The other was a small tracked vehicle called a Minidumper. This vehicle made very little impression on the lake surface but had a limited carrying capacity and a top speed of about 5 kph. The original instructions were to follow in the same wheel tracks each time the vehicle was used. This however did not work as once the surface was broken it would not support the weight of a following vehicle. After the first Mule was bogged vehicles were banned from the lake except for the use of the spread trouble shooters. Similar problems were experienced with the Minidumpers which also proved to be mechanically unreliable. From that point on the spread was hand carried with a couple of minor exceptions during the pickup phase. A Mule was used by the preloaders and drillers with much better results. With the experience gained from operations on Salt Lake, working on Square Lake was much more straight forward. It too had soft areas in the centre and the spread was hand carried.

An uphole program on these two lakes had limited success. The auger had the ability of drilling to a depth of 13 m but could only achieve this depth close to the lake shore. Towards the centre of the lake the hole would collapse after 5 metres due to slurry beneath the surface. Where holes were able to be drilled they were loaded with a bridge of detonators at 2 metre intervals.

The experience gained from working on these lakes was that sub surface conditions were often unpredictable and it would take many months of hot dry weather to produce a dry crust thick enough to traverse reliably. However the dynamite data recorded was of very high quality and well worth the effort.

5.0 - RECORDING



Picture # 5-4: Mule bogged on Salt Lake.



Picture # 5.5: Greg Willox operates the auger.

5.0 - RECORDING



Picture # 5-6: Matthew O'Leary fitting track extenders to Bobcat.



Picture # 5-7: Mini Dumper moving spread on Salt Lake.

5.0 - RECORDING



Picture # 5-8: Shot mounds left on lake surface.



Picture # 5-9: Crater left on surface.

5.0 - RECORDING

Production

Fig. # 5- 1 below details daily production in the 2008 Modiolus 3D Seismic Survey:

Fig. # 5-1 Daily Production vs Chargeable Hours

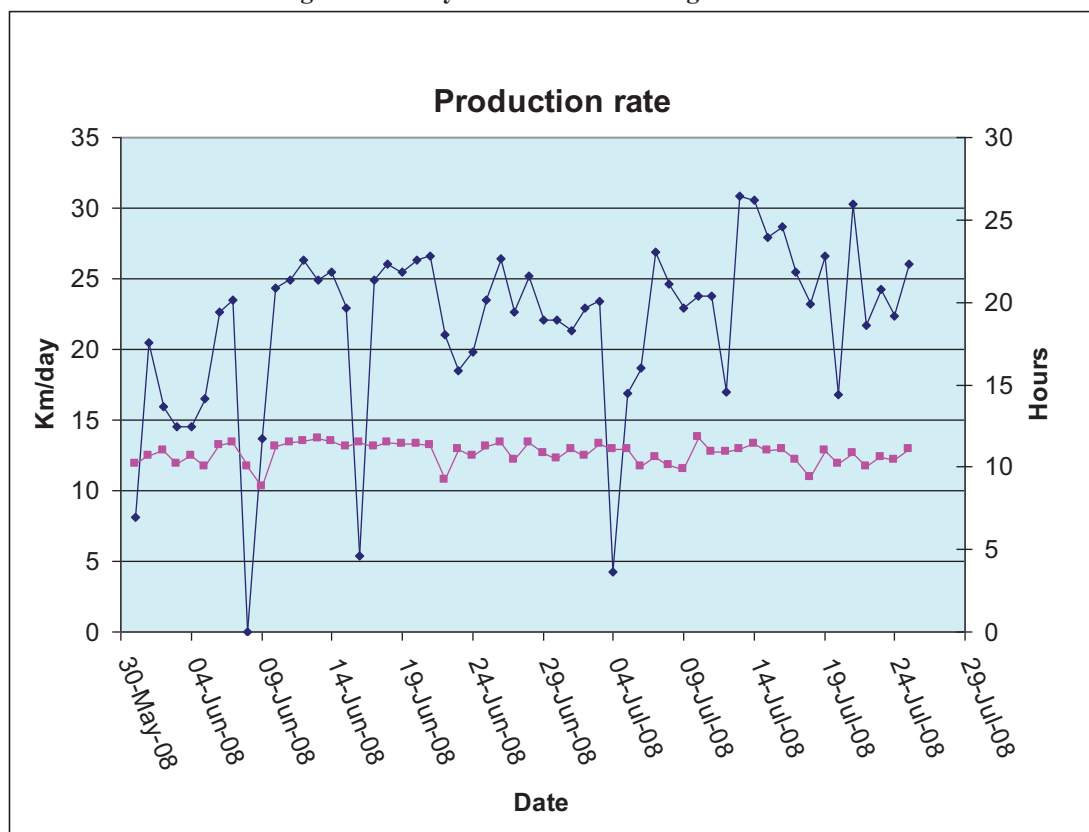


Fig. 1 shows the production achieved during the survey related to the charge hours. The dip in the graph to 0 production on 8 June shows the day lost due to wet weather. The other dips coincide with panel changes and a camp move day. The average daily production was 21.77 linear kms and 5.94 square kms. The shape of the survey with a five panel design was not always the optimum for efficient production although more than 30 kms was achieved on three days.

5.0 - RECORDING

Table # 5-2 below details the statistics:

Table # 5-2: Statistical Summary of the 2008 Modiolus 3D Seismic Survey

Start date	31 May 2008
End Date	26 July 2008
Total Recorded Linear Kms	1219.16
Total Recording Hours	332.6561
Total Standby Rate Charge Hours	48.8
Total Overall Hours	703.3 (excluding mobe, l/o & p/u)
Total Recording Days	56 (including part days)
Average Km/Day	21.7786
Average Km/Recording Hr	5.94
Total VPs	30002
Total Skips	476
Percentage Skips/Possible VPs	1.59%
Average Recording Cycle Time	40 seconds/VP
Efficiency Factor (Rec Hr/Tot Hr)	0.4743



Picture # 5-10: Planting geophones on Salt Lake.

5.0 - RECORDING

Data Quality

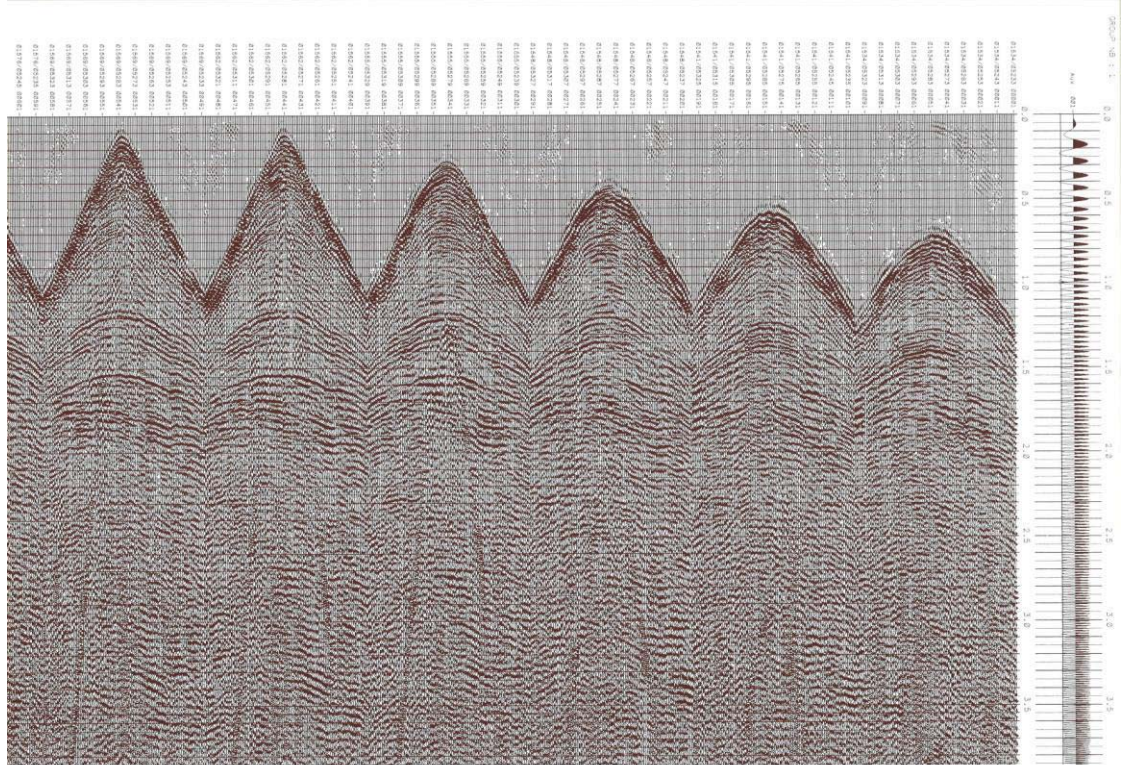
Data quality was generally good. Many of the monitors showed the presence of a deep Cambrian reflector at around 2.2 secs. The Permian section was seen at around 1.8 seconds.

Sample paper monitor records are shown in Sample Monitor 1 and 2, showing the record quality of both vibroseis and dynamite recordings in a similar area. It must be noted that the monitor records have a 20 Hz low cut playback filter applied to them. The observers do this to cosmetically clean up the record and make it easier to trouble shoot. But the effect is to mask the lower frequencies and, in particular, the full impact of ground-roll.



Picture # 5-11: Beach's Paul Belfrage checks a Vibrator tyre.

5.0 - RECORDING



5.0 - RECORDING

Observer & Line Boss

The observer on this job was Joel Carey with Mitchell Burton as relief observer. Joel is an ex-pat Canadian who returned to Canada for a short break during the middle of the survey. Technically, he is one of Terrex's most proficient observers. Lisa Welsh spent two weeks on the crew as Junior Observer in late June. The line boss was Gareth Byrne, with his cousin Nathan Byrne filling the position for the last two weeks of the survey.



Picture # 5-12: Observer Joel Carey and Beach's Doug Roberts.

Summary

Production was slow during the first week of operations but improved, with many days over 25 km's and 3 days over 30 km's. The panel design and program extension did not lend itself to continuous high production rates. The largest impediment was however the salt lakes that required a lot of hand carrying of the spread.

The instruments and associated equipment was essentially trouble free, except for persistent animal damage from dingoes and foxes.

5.0 - RECORDING

Vibrator performance was also excellent, with less than 2 hours downtime. Canadian Vibrator Tech, Steve Joudrey, must be complimented for an excellent job.

Data quality was good in all areas.



Picture # 5-13: Vibrator Tech Steve Joudrey.

6.0 DRILLING & LVL

Introduction

The uphole program for the 2008 Modiolus 3D Seismic Survey consisted of a grid of 100 holes (see Map1). Total metres drilled and logged were 3328. Drilling began on 23 July and was completed on 19 August, 2008. The Padollus 2D uphole program was drilled concurrently to minimise travel time.

The Modiolus 3D Seismic Survey consisted of a N-S trending grid approximately 35 km long and 13 km at the widest point. The holes were located on a grid pattern at 2 km intervals.



Picture #6- 1: The Scanlon rig in the south of the 3D grid.

Scanlon Drilling from Kalgoorlie WA was contracted to do the uphole drilling while Velocity Data was contracted to do the logging. The drilling contract was let on an hourly rate (+ consumables) basis while the logging contract for Velocity Data was let on a similar basis. Both were subcontracted through Terrex Seismic. Full production statistics appear in Appendix II.

6.0 DRILLING & LVL



Picture # 6-2: Typical drilling location in southern part of grid.

Scanlon Drilling & Velocity Data

Equipment

Table # 6-1: Equipment list for Scanlon Drilling Company

<u>Item</u>	<u>Description</u>
Drilling rig	Bourne 1000 mounted on an MAN 6x6 truck
Water trucks	2x Hino 4x4; 4500 litre tanks
Water truck	1x International S-Liner 6x4; 12,000 litre tanks;
Camp	1x kitchen/diner/sleeper van
Camp	1x sleeper van
Ablution	1x trailer with chemical toilet mounted
Utility	1x Toyota 4x4 Station Wagon
Communications	All vehicles have UHF radios; 2 x satellite telephones;

Velocity Data provided their Toyota Hi-Lux mounted weight drop logging unit and an accommodation/office caravan.

2008 Seismic PEL91/92

DEINA HILL

White Lake

Lake Perigundi

Narrawal plain

Drill camp

average height of sand ridges 19 metres

COOPER

Keenawana

SC0001

SC0002

SC0003

P.H.B. 1000-1

P.H.B. 1000-2

P.H.B. 1000-3

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Fig. # 6-1: 2008 Modiolus 3D Seismic Survey Uphole Locations.

6.0 DRILLING & LVL

Personnel

Scanlon Drilling: Driller: Russell St Jack/Brett Andrew
 Offsiders: Brad Sheehy, Joe Surch, David Peters, Mathew Piri and Calvin James.

Only 4 of the above personnel were on the crew at any given time.

Velocity Data Logger: Ian Wyatt, Nathan Jones (1 on crew at any time)



Picture # 6-3: Velocity Data's logging unit.

Drilling Operations

There were 100 holes in the Modiolus 3D uphole program. The average hole depth on this program was 33.3m and the average depth of weathering was 9.52m. All holes were drilled using the mud pit. Water was obtained from the Callawonga evaporation pond located in the south of the prospect.

Weathering depths showed a wide variation, from 2m to 24m, according to the Velocity data interpretations.

Lithologies were listed by the drillers as predominantly sand and clays. Sub-weathering velocities were in the range 1800 to 2000 metres/sec, but typically in the mid 1900's.

6.0 DRILLING & LVL



Picture # 6-4: Connecting cable to down-hole geophone.

Production

Drilling production was very good with reliable equipment except for a broken mud pump drive shaft. The operation was down for four days with this problem, the main delay was waiting on parts. This down time is not included in the statistics listed in Table #6-2. The average daily production was 221.7m.

The table below gives the statistics:

Table #6-2: Statistics for Scanlon Drilling on the 2008 Modiolus 3D Uphole Survey

Start Date	23 July 2008
End date	19 Aug 2008
Total Days	14.5 (half day Padollus Survey)
Total Holes Drilled	100
Average Holes/Day	6.67
Total Metres Drilled	3328
Total Full Rate Drill Hours	168.25
Average metres per Day	221.9
Average Depth of Hole	33.3 metres
Average Depth of Weathering	9.52 metres
Total Standby Rate Charge Hours	0.0
Average Metres/Full Rate Drill Hr	19.78
Average Metres/Total Charge Hr	18.14
Scanlon Drilling Driller	Russell St Jack/Brett Andrew
Velocity Data Logger(s)	Ian Wyatt, Nathan Jones

6.0 DRILLING & LVL

Summary for Scanlon Drilling and Velocity Data

Scanlon Drilling did an excellent job on the 2008 Modiolus 3D Seismic Survey. Production was high despite having access problems with blown-in dunes. Reports for daily production were emailed the same night by Velocity Data personnel. All this was done in an unsupervised situation.

Velocity Data observer Nathan Jones did most of the logging on the job. The VD product was up to the high standard that has been demonstrated on past surveys.

7.0 – LINE PREPARATION, SURVEYING, PERMITTING & ENVIRONMENT**Introduction**

Terrex Contracting (TC) was contracted to do the line preparation on the 2008 Modiolus 3D Seismic Surveys. Dynamic Satellite Surveys was contracted to do the surveying. Cultural heritage clearance was done independently of the seismic operation before the crews arrived by a Work Area Clearance (WAC) team contracted directly to Beach.

Equipment

Terrex Contracting provided the following equipment:

Table # 7-1: Terrex Contracting Equipment List

<u>Item</u>	<u>Number</u>
2008 Komatsu D65EX-15 Dozers	2
2005 Komatsu D65EX-15 Dozer	1
2001 Komatsu D65EX-12 Dozer, replaced by 2008 D65EX-15	1
John Deere 672 6x6 Grader	1
Caterpillar 12G 6x4 Grader	1
2008 Elross kitchen	1
2008 Elross Diner	1
2008 Elross Accom Caravans, inc 1 with office	2
Accom Caravan 30' with laundry	1
Brimaco 4 man Shower unit with laundry	1
Trailer with 2 Chemical Toilets	1
18,000 litre stainless steel water tanker trailer (former milk trailer)	1
1 semi trailer with workshop, stores and 110KVA Generator	1
2008 Electrical Distribution Power Board and Cabling	1
Broadband internet and telephone communications system	1
4x4 support vehicles	3

7.0 – LINE PREPARATION, SURVEYING, PERMITTING & ENVIRONMENT



Picture # 7-1: TC workshop area.

7.0 – LINE PREPARATION, SURVEYING, PERMITTING & ENVIRONMENT

The table below shows the TC personnel:

Table # 7-2: Terrex Contracting Personnel List for the 2008 Modiolus 3D Seismic Survey

<u>Name</u>	<u>Position</u>
Matt Gower, Rob Brown	Supervisors
Eric Ree, Gene Greenalgh, Cliff Jurd	Dozer operators
Rob Pugno, Bill Anderson, Mick McKenna	Dozer operators
John Talbot, Nick Smith, Reece Greenhalgh	Grader operators
Gene Hicks, Malcolm Taylor, Barry Merini	Grader operators
Peter Dehaas, Wi Hanara	Mechanics
Bryce Gaffin, Tony Screigh	Mechanics
James Hawthorn, Graham Feeley	Cooks



Picture # 7-2: TC operator Bill Anderson discusses issues with DSS surveyor Ben Allsopp.

7.0 – LINE PREPARATION, SURVEYING, PERMITTING & ENVIRONMENT

Line Preparation Operations

Terrex Contracting and Dynamic Satellite Surveys arrived on 29 April setting up camp at Lhotsky 1 in the late afternoon. Stewart Thirlwell and Paul Belfrage arrive at the same time after towing the office caravan from Moomba. Line clearing started on 30 April after Ben Allsopp from DSS set up the GPS units in the Dozers and graders. Doug Roberts arrived on 30 April with Dieri Chairperson Shane Kemp, and anthropologist, Rod Lucas. Doug gave the contractors an induction talk followed by Shane Kemp and Rod Lucas representing the Dieri people.



Picture # 7-3: Receiver line demonstrating weaving technique.

7.0 – LINE PREPARATION, SURVEYING, PERMITTING & ENVIRONMENT

The middle and southern parts of the grid were accessed from the Lhotsky camp site moving north to the second camp on 15 June located 20 kms to the north. The road north to the Clifton Hills – Mungeranie station boundary fence already existed and only needed watering to allow access from service vehicles. The northern 15 kms had to be graded and watered to firm the surface before moving the camp. The balance of the work was conducted out of this camp completing the dozing on 5 July and the grading on 8 July. The machines continued from this camp to complete the Padollus 2D survey.

Rain on 8 June shut down operations for a day resuming the afternoon of the following day.

Four dozers and two graders were used for the program with two of the dozers being changed for new units late in the survey. A third grader was used occasionally for clearing the access road.

The line clearing operation was efficient and well run. The operators were always aware of environmental and cultural considerations and must be complimented for the standard of their work.



Picture # 7-4: Dozer levelling top of dune.

7.0 – LINE PREPARATION, SURVEYING, PERMITTING & ENVIRONMENT**Surveying**

The Dynamic Satellite Surveys Personnel and equipment list is given in Table # 7-3 and # 7-4 below:

Table # 7- 3: Dynamic Satellite Surveys Personnel List for the 2008 Modiolus 3D Seismic Survey

<u>Name</u>	<u>Position</u>
Ben Allsopp	Head surveyor
Denny Widjedasa	Senior surveyor
Sam Hartgrove	GPS operator
Patrick Stebbing	GPS operator
Ben Mason	GPS operator
Andrew Tonkin	GPS operator
Cristian Gordini	Relief head surveyor

Table # 7-4: Dynamic Satellite Surveys Equipment List

4	Garmin 128 GPS/NovAtel receivers for Dozer operations
5	NovAtel Dual Receivers with SW load 3.51 complete with data loggers loaded with NAV 05 software
6	Laptop Computers (including Fujitsu tablets)
4	4x4 vehicles (DSS or rental) with fire extinguishers , UHF radios, vehicle recovery equipment, first aid kit etc.
1	Office-Accommodation Caravan

The surveying contract was given to Dynamic Satellite Surveys. Ben Allsopp was the head surveyor for most of the job. He was relieved for a period by Cristian Gordini, a highly qualified surveyor with limited seismic experience. However the team worked well with Cristian becoming quite proficient by the time Ben returned.

Permitting

The 2008 Modiolus 3D Seismic survey was conducted on two pastoral properties, Clifton Hills, managed by Travis and Teresa Gilby, and Mungeranie, managed by Luke Betts.

All of the above land holders were notified by mail by Beach Petroleum prior to the survey. During the survey Stewart Thirlwell contacted Teresa Gilby and Luke Betts to get permission to use drop gates in the boundary fence.

On the morning of 26 June Luke Betts visited the camp to discuss a permitting problem. The previous day a Terrex employee had driven on his private road to the Mungeranie Pub on the Birdsville Track without permission. The road is narrow with many sand dune crests and as it is used by station motorbikes unannounced vehicles present a danger. The Terrex employee was the vib scout buying beer that

7.0 – LINE PREPARATION, SURVEYING, PERMITTING & ENVIRONMENT

was unavailable on the dry crew. The employee was immediately terminated and flew out the following day. Stewart Thirlwell apologised to Luke Betts on Beach Petroleum's behalf with follow up phone calls informing him of the action taken and thanking him for the information. Terrex had recently fitted all their vehicles with a satellite tracking system. This vehicles route was logged giving time, location and speed.

Environment

Most of the terrain in the survey areas was sand dunes. There were a number of salt lakes the centre of the grid, three being quite large. These three lakes required hand carrying of the spread, and in the case of White Lake four lines required a break in the spread as the central part of the lake was too soft to walk on. The surveyors attempted to cross this lake using waders but sank the full length of their legs. It is unknown how long these will take to rehabilitate the only indication were footprints made early in the survey were starting to disappear towards the end of the survey.

Many dunes were starting to close in towards the end of the survey due to a number of days of strong northerly winds. This caused a few access problems in the final stages of the survey on Panel E in the northeast. Some dunes were flagged off to prevent accidents. In this area there was approximately two weeks time difference between dozing and recording, unavoidable with a 3D grid. The depegging crews needed to use caution when operating in the areas of larger dunes.

There were two environmental incidents. The first on 6 June 08, was a minor oil spill at the workshop when twenty litres of gear oil was spilt whilst filling a tank without the drain plug in place. The contaminated sand was removed and disposed of in the correct manor. The second occurred on 22 June 08 during field operations. A vibrator blew out a drive motor hose spilling 80 litres of hydraulic oil. Again the contaminated sand was removed and disposed of in the correct manor.

The salt lake surfaces were scarred especially Salt Lake with vehicle tracks left by the small quad bikes known as mules. Attempts to rectify this damage would only lead to greater damage to the surface. The first heavy rains will probable eliminate most of the blemishes.

8.0 – SAFETY

Introduction

The HSE officers on the Terrex Seismic crew were Joanne Wulff and Sarah Burton with Geoff Oswell spending time on the Terrex Contracting crew.

The basic tenets of the HSE policy were:

- An induction meeting prior to the start of operations at which potential hazards were identified and discussed. Inductions by Terrex and Beach for all new crew members;
- Producing a site-specific safety plan including an Emergency Response Plan detailing the procedure to adopt in case of emergency;
- Daily toolbox meetings: these were held at 6.30 am before departure in the mornings. They provided a forum for any safety or operational issues to be aired. These meetings were paid for by Beach at the standby rate for 0.3 hrs/day; Terrex Contracting held meeting in the evening at 6.45 pm;
- Weekly safety meetings: these were held on Sunday mornings and were more focused on purely safety issues. The HSE officer would review the week's safety performance and often include a first aid demonstration. The Crew Manager, Bird-dog and section heads added their views on crew safety performance and then comments from the various departments on the crew were invited.
- Regular drills for crewmembers.

All vehicles were equipped with first aid kits and fire extinguishers. About 30% of the crew were trained first aiders. Some of the safety related procedures on the crew were:

- All vehicles were fitted with dune poles and warning flags;
- All vehicles had headlights on at all times when driving;
- Journey management procedures were in place for all vehicles travelling outside the operational area;
- Supply truck drivers were given a mobile satellite telephone for communications;
- All crewmembers were required to wear long sleeve shirts and hats;
- All crewmembers were required to wear ankle-supporting lace-up boots;
- All line vehicles carried large containers of water and regular camp water runs were made when shortages were reported;
- All electrical cables in camp were buried to avoid tripping;
- Spotlights were placed around camp to illuminate the major traffic areas;

Summary

The fact that there have been no LTI's during this job, that involved a large number of man hours, is testament that Terrex HSE system is working even if it is technically non-compliant.

9.0 – REMARKS & RECOMMENDATIONS

Recording production was slow at the start of the job but improved as the crew gathered momentum and ended up being very good overall.

There were behavioural problems with some of the Terrex Seismic crew members early in the survey. These problems were quickly resolved to the great relief to the senior members of the crew. The camp was declared dry for the balance of the contract creating a much better environment. Terrex management must be complimented for acting quickly and decisively to put an end to the problem.

Party Manager, Shane Goossens (Gooz) did a commendable job. His technical knowledge of all aspect of the operation is excellent and has a good communication with the crew. A relief Party Manager Tony Hutchinson (Turbo), filled in for Shane whilst on break.

Terrex Contracting ran an excellent operation. Both Party Managers Matt Gower and Rob Brown must be complimented for their contribution.

The toolbox meetings and weekly safety meetings conducted by Terrex Contracting were beneficial and involved everyone. This was largely due to the small numbers, rarely more than fifteen people. Terrex Seismic on the other hand was addressing in excess of forty people and although the HSE Management System proved effective, the weekly meetings could be improved in the future. They were often long with many of the crew finding it difficult to maintain their attention.



Picture # 9-1: Camp 1 after rain.

9.0 – REMARKS & RECOMMENDATIONS



Picture # 9-2: Doug Roberts checking location of EMP 5 south of Ballararudda 1.



Picture # 9-3: Dingo's were not encouraged due to their habit of chewing cables.

9.0 – REMARKS & RECOMMENDATIONS

All contractor vehicles, except Terrex Seismic, were equipped with UHF radios. The only UHF radio monitored by Terrex Seismic was in the dog box. Future Beach contracts should consider including UHF radios in the contract specifications, especially with the requirement of using Ch 18 on Beach roads.

Dynamic Satellite Surveys joined in with Terrex Contracting for their safety meetings. Head surveyor Ben Allsopp, had good communications with the operators and was very well organised with his daily reports always being posted within a couple of hours of the completion of field work.

Both Scanlon Drilling and Velocity Data did a commendable job completing the uphole program largely unsupervised and independent from the rest of the operation.

In summary, the 2008 Modiolus 3D Seismic Survey was completed with excellent production, good data quality and no lost time injuries. All contractors are recommended for future work.

Stewart Thirlwell
Beach Representative

APPENDIX I

RECORDING PRODUCTION

Recording Production for Terrex Seismic Crew # 402 on the Beach Petroleum Modiolus 3D Seismic Survey in PEL 91,92: May/June/July 2008

Date	Lines, Geometry and Production												Daily Sq Km	Hours														Total day Hrs	Comments																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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7-Jun	32	1450	1387	5426	5464				35	1.40		23.52	6.42	6.8	0.5	0.3	3.6			0.1						0.5	0.2	12.3	All spread off lake	
7-Jun	33	1443	1380	5464	5331				140	5.60																				
7-Jun	34	1436	1373	5331	5464				140	5.60																				
7-Jun	35	1429	1366	5464	5331				140	5.60																				
7-Jun	36	1422	1359	5331	5457				133	5.32																				
8-Jun																														
9-Jun	36	1422	1359	5464	5464				7	0.28		13.72	3.74	3.8		0.1	2.2	0.1		0.7		0.3	9.7					10.0	Standby due to weather	
9-Jun	37	1415	1352	5464	5331				140	5.60											0.3	0.2	2.3		0.5			10.2	Late start due to wet conditions	
9-Jun	38	1408	1345	5331	5464				140	5.60																				
9-Jun	39	1401	1338	5464	5415				56	2.24																				
10-Jun	39	1401	1338	5408	5331				84	3.36		24.36	6.65	6.5		0.2	4.0			0.3		0.3		0.2		0.5	0.1	12.1	skip 15 VP's on lake	
10-Jun	40	1394	1331	5331	5464				140	5.60																				
10-Jun	41	1387	1324	5464	5331				140	5.60	4																			
10-Jun	42	1380	1317	5331	5464				140	5.60	11																			
10-Jun	43	1373	1310	5464	5366				105	4.20																				
11-Jun	43	1373	1310	5359	5331				26	1.40	9	24.92	6.80	6.0	0.5	0.2	3.2	1.3		0.1		0.3				0.5		12.1	skip 58 VP's for salt lake	
11-Jun	44	1366	1303	5331	5464				133	5.60	7																			
11-Jun	45	1359	1296	5464	5331				131	5.60	9																			
11-Jun	46	1352	1289	5331	5464				120	5.60	20																			
11-Jun	47	1345	1282	5464	5331				127	5.60	13																			
11-Jun	48	1338	1275	5331	5352				28	1.12																				
12-Jun	48	1338	1275	5352	5464				98	4.48	14	26.32	7.18	6.5	0.5	0.2	3.8	0.3		0.1		0.3				0.5		12.2	skip 31 VP's for salt lake	
12-Jun	49	1331	1268	5464	5331				127	5.60	13																			
12-Jun	50	1324	1261	5331	5464				136	5.60	4																			
12-Jun	51	1317	1254	5464	5331				140	5.60																				
12-Jun	52	1310	1247	5331	5450				126	5.04																				
13-Jun	52	1310	1247	5450	6564				14	0.56		24.92	6.80	6.8		0.3	3.5			0.1		0.3		0.8		0.5		12.3	Spread damage from animals (dingo)	
13-Jun	53	1303	1240	5464	5331				140	5.60																				
13-Jun	54	1296	1233	5331	5464				140	5.60																				
13-Jun	55	1289	1226	5464	5331				140	5.60																				
13-Jun	56	1282	1219	5331	5464				140	5.60																				
13-Jun	57	1275	1212	5464	5422				49	1.96																				
14-Jun	57	1275	1212	5422	5331				91	3.64		25.48	6.95	6.8	0.5	0.2	3.8			0.2		0.3				0.4		12.2	Panel C spread layout completed. Panel A layout commenced	
14-Jun	58	1268	1205	5331	5464				140	5.60																				
14-Jun	59	1261	1198	5464	5331				140	5.60																				
14-Jun	60	1254	1191	5331	5464				140	5.60																				
14-Jun	61	1247	1184	5464	5345				126	5.04																				
15-Jun	61	1247	1184	5345	5331				14	0.56		22.96	6.26	6.3	1.1	0.2	2.9			0.4		0.3		0.4		0.6		12.2	Panel C completed	
15-Jun	62	1240	1184	5331	5464				140	5.60																				

Date	Lines, Geometry and Production												Daily Sq Km	Hours													Total day Hrs	Comments
	Swath#	Rec. Line to	Rec Line	Source Line to	Source Line	VP to	VP	#Traverses	# Production VPs	Linear Kms	Skips	Daily Lin Km		Recording	Recorder Move	swath Move	Traverse Move	Debur	Layout & Pickup	Test, Troubleshoot & Other	Wait on Spread	Standby Toolbox	Standby Other	Extra Charge Hrs	Prospect Move	Travel	Downtime	
15-Jun	63	1233	1184	5464	5331				140	5.60																		
15-Jun	64	1226	1184	5331	5464				140	5.60																		
15-Jun	65	1219	1184	5464	5331				140	5.60																		
16-Jun	66	1338	1275	5233	5205				35	1.40		5.04	1.38	1.4		0.2	0.6		9.0	0.1		0.3			0.6		12.2	Panel move
16-Jun	67	1331	1268	5205	5233				35	1.40																		
16-Jun	68	1324	1261	5233	5205				35	1.40																		
16-Jun	69	1317	1254	5205	5233				21	0.84																		
17-Jun	69	1317	1254	5212	5205				14	0.56		24.92	6.80	6.8		0.6	3.5			0.3		0.3			0.8		12.3	Full day on Panel A
17-Jun	70	1310	1247	5128	5233				112	4.48																		
17-Jun	71	1303	1240	5233	5128				112	4.48																		
17-Jun	72	1296	1233	5128	5233				112	4.48																		
17-Jun	73	1289	1226	5233	5128				112	4.48																		
17-Jun	74	1282	1219	5128	5233				112	4.48																		
17-Jun	75	1275	1212	5233	5191				49	1.96																		
18-Jun	75	1275	1212	5184	5128				63	2.52		26.04	7.11	6.8	0.5	0.3	3.4	0.2		0.1		0.3			0.7		12.3	
18-Jun	76	1268	1205	5128	5233				112	4.48																		
18-Jun	77	1261	1198	5233	5128				112	4.48																		
18-Jun	78	1254	1191	5128	5233				112	4.48																		
18-Jun	79	1247	1184	5233	5128				112	4.48																		
18-Jun	80	1240	1177	5128	5233				112	4.48																		
18-Jun	81	1233	1170	5233	5212				28	1.12																		
19-Jun	81	1233	1170	5105	5128				84	3.36		25.48	6.95	6.1	0.5	0.4	3.6	0.5		0.1		0.3			0.8		12.3	13 skips due to salt lake
19-Jun	82	1226	1163	5128	5233				112	4.48																		
19-Jun	83	1219	1156	5233	5128				112	4.48																		
19-Jun	84	1212	1149	5128	5233				106	4.48	6																	
19-Jun	85	1205	1142	5233	5128				105	4.48	7																	
19-Jun	86	1198	1135	5128	5233				105	4.20																		
20-Jun	86	1198	1135	5233	5233				7	0.28		26.32	7.18	7.2		0.2	3.1			0.1		0.3	0.4	0.2	0.8		12.3	spread damage 0.4, complete Panel A start Panel B
20-Jun	87	1191	1128	5233	5128				112	4.48																		
20-Jun	88	1184	1128	5128	5233				112	4.48																		
20-Jun	89	1177	1128	5233	5128				112	4.48																		
20-Jun	90	1170	1128	5128	5233				112	4.48																		
20-Jun	91	1163	1128	5128	5233				112	4.48																		
20-Jun	92	1128	1163	5240	5317				84	3.36																		
20-Jun	93	1128	1170	5317	5210				7	0.28																		
21-Jun	93	1128	1170	5303	5240				70	2.80		26.60	7.26	7.0	0.6	0.4	3.0			0.2		0.3			0.8		12.3	
21-Jun	94	1128	1177	5240	5317				84	3.36																		
21-Jun	95	1128	1184	5240	5317				84	3.36																		
21-Jun	96	1128	1191	5317	5240				84	3.36																		

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	Swath#	Rec. Line to	Rec Line	Source Line to	Source Line	VP to	VP	#Traverses	# Production VPs	Linear Kms	Skips	Daily Lin Km	Daily Sq Km	Recording	Recorder Move	swath Move	Traverse Move	Debur	Layout & Pickup	Test, Troubleshoot & Other	Wait on Spread	Standby Toolbox	Standby Other	Extra Charge Hrs	Prospect Move	Travel	Downtime		
21-Jun	97	1135	1198	5240	5317				84	3.36																			
21-Jun	98	1142	1205	5317	5240				84	3.36																			
21-Jun	99	1149	1212	5240	5317				84	3.36																			
21-Jun	100	1156	1219	5324	5240				91	3.64																			
22-Jun	101	1163	1226	5240	5324				91	3.64		21.00	5.73	5.4	0.6	0.1	2.8			0.2	1.8	0.3				0.8		12.0	WOS 1.8, wide Panel
22-Jun	102	1170	1233	5324	5240				91	3.64																			
22-Jun	103	1177	1240	5240	5324				91	3.64																			
22-Jun	104	1184	1247	5324	5240				91	3.64																			
22-Jun	105	1191	1254	5240	5324				91	3.64																			
22-Jun	106	1198	1261	5324	5261				70	2.80																			
23-Jun	106	1198	1261	5254	5240				21	0.84		18.48	5.04	5.2		0.2	2.8	0.1		0.3	1.3	0.3	1.2			0.7		12.1	WOS 1.3, wide Panel, spread damage animals 1.2
23-Jun	107	1205	1268	5240	5324				91	3.64																			
23-Jun	108	1212	1275	5324	5240				91	3.64																			
23-Jun	109	1219	1282	5240	5324				91	3.64																			
23-Jun	110	1226	1289	5342	5240				91	3.64																			
23-Jun	111	1233	1296	5240	5310				77	3.08																			
24-Jun	111	1223	1296	5317	5324				14	0.56		19.88	5.42	5.2	0.5	0.3	3.0	0.2		0.1	0.8	0.3	0.7			0.7	0.4	12.2	spread damage 0.7,
24-Jun	112	1240	1303	5324	5240				91	3.64																			
24-Jun	113	1247	1310	5240	5324				91	3.64																			
24-Jun	114	1254	1317	5324	5240				91	3.64																			
24-Jun	115	1261	1324	5240	5324				91	3.64																			
24-Jun	116	1268	1331	5324	5240				91	3.64																			
24-Jun	117	1275	1338	5240	5261				28	1.12																			
25-Jun	117	1275	1338	5268	5342				63	2.52		23.52	6.42	5.8	0.5	0.3	3.5			0.1		0.3	0.8			0.7	0.5	12.5	Sread damage 0.8
25-Jun	118	1282	1345	5340	5205				126	5.04																			
25-Jun	119	1289	1352	5205	5342				126	5.04																			
25-Jun	120	1296	1359	5342	5205				126	5.04																			
25-Jun	121	1303	1366	5205	5342				126	5.04																			
25-Jun	122	1310	1373	5342	5310				21	0.84																			
26-Jun	122	1310	1373	5303	5205				105	4.20		26.04	7.11	6.4		0.3	3.6	0.2		0.1		0.3	0.7			0.7		12.3	Sread damage 0.7
26-Jun	123	1317	1380	5205	5324				126	5.04																			
26-Jun	124	1324	1387	5324	5205				126	5.04																			
26-Jun	125	1331	1394	5205	5324				126	5.04																			
26-Jun	126	1338	1401	5324	5205				126	5.04																			
26-Jun	127	1345	1408	5205	5240				42	1.68																			
27-Jun	127	1345	1408	5247	5342				84	3.36		22.68	6.19	5.8	0.5	0.2	3.1			0.1		0.3	0.5			0.7	0.9	12.1	Sread damage 0.5
27-Jun	128	1352	1415	5342	5205				126	5.04																			
27-Jun	129	1359	1422	5205	5342				126	5.04																			
27-Jun	130	1366	1429	5342	5205				126	5.04																			

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27-Jun	131	1373	1436	5205	5303				105	4.20																			
28-Jun	131	1373	1436	5310	5324				21	0.84		25.20	6.88	6.3		0.4	3.7			0.1		0.3	0.8			0.6		12.2	Sread damage 0.8
28-Jun	132	1380	1443	5324	5205				126	5.04																			
28-Jun	133	1387	1450	5205	5324				126	5.04																			
28-Jun	134	1394	1457	5324	5205				126	5.04																			
28-Jun	135	1401	1464	5205	5324				126	5.04																			
28-Jun	136	1408	1471	5324	5226				105	4.20																			
29-Jun	136	1408	1471	5219	5205				21	0.84		22.12	6.04	6.1	0.5	0.2	3.1	0.2		0.3	0.3	0.3	0.1			0.9		12.0	
29-Jun	137	1415	1478	5205	5338				135	5.40																			
29-Jun	138	1422	1485	5338	5205				133	5.32																			
29-Jun	139	1429	1492	5205	5338				127	5.08																			
29-Jun	140	1436	1499	5338	5233				93	3.72																			
29-Jun	137	1415	1478	5324	5324				3	0.12	2																		Explosives on Salt Lake
29-Jun	138	1422	1485	5324	5324				7	0.28																			Explosives on Salt Lake
29-Jun	139	1429	1492	5317	5324				12	0.48	1																		Explosives on Salt Lake
29-Jun	140	1436	1499	5324	5310				14	0.56	5																		Explosives on Salt Lake
30-Jun	141	1443	1506	5233	5338				80	3.20		22.12	6.04	6.6		0.1	2.6	0.7		0.2		0.3	0.2			0.7	0.5	11.9	0.2 spread damage
30-Jun	142	1450	1523	5338	5223				73	2.92																			
30-Jun	143	1457	1520	5223	5338				69	2.76																			
30-Jun	144	1464	1527	5338	5223				63	2.52																			
30-Jun	145	1471	1534	5223	5338				63	2.52																			
30-Jun	146	1478	1541	5338	5338				7	0.28																			
30-Jun	141	1443	1506	5303	5331				21	0.84	11																		Explosives on Salt Lake
30-Jun	142	1450	1523	5296	5331				30	1.20	9																		Explosives on Salt Lake
30-Jun	143	1457	1520	5289	5331				35	1.40	8																		Explosives on Salt Lake
30-Jun	144	1464	1527	5289	5331				32	1.28	17																		Explosives on Salt Lake
30-Jun	145	1471	1534	5289	5310				10	0.40	18																		Explosives on Salt Lake
30-Jun	146	1478	1541	5289	5289				3	0.12	4																		Explosives on Salt Lake
1-Jul	146	1478	1541	5331	5233				65	2.60		21.28	5.81	6.5	0.7	0.2	3.0	0.3		0.1		0.3	0.1			1.0		12.2	0.1 spread damage
1-Jul	147	1485	1548	5233	5338				84	3.36																			
1-Jul	148	1492	1555	5338	5233				89	3.56																			
1-Jul	149	1499	1562	5233	5338				93	3.72																			
1-Jul	150	1506	1569	5338	5268				69	2.76																			
1-Jul	145	1471	1534	5317	5331				21	0.84																			Explosives on Salt Lake
1-Jul	146	1478	1541	5296	5331				16	1.32	17																		Explosives on Salt Lake
1-Jul	147	1485	1548	5289	5310				16	1.12	12																		Explosives on Salt Lake
1-Jul	148	1492	1555	5289	5310				22	0.92	1																		Explosives on Salt Lake
1-Jul	149	1499	1562	5289	5303				19	0.76																			Explosives on Salt Lake
1-Jul	150	1506	1569	5289	5296				6	0.32	2																		Explosives on Salt Lake

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2-Jul	150	1506	1569	5268	5233				35	1.40		22.96	6.26	5.6		0.3	3.6	0.9		0.2			0.3				0.8	11.7		
2-Jul	151	1513	1576	5233	5338				112	4.48																				
2-Jul	152	1520	1583	5338	5233				112	4.48																				
2-Jul	153	1527	1590	5233	5338				112	4.48																				
2-Jul	154	1534	1597	5338	5233				112	4.48																				
2-Jul	155	1541	1603	5233	5317				91	3.64																				
3-Jul	155	1541	1604	5324	5338				21	0.84		23.24	6.34	5.6	0.6	0.3	3.4	0.1	0.5	0.1		0.3	0.6			0.4	11.9	Complete Panel B		
3-Jul	156	1548	1611	5338	5233				112	4.48																				
3-Jul	157	1555	1611	5233	5338				112	4.48																				
3-Jul	158	1562	1611	5338	5233				112	4.48																				
3-Jul	159	1569	1611	5233	5338				112	4.48																				
3-Jul	160	1576	1611	5338	5233				112	4.48																				
4-Jul	161	1415	1478	5436	5464				35	1.40		4.20	1.15	1.0		0.1	0.5		8.7	0.1	0.5	0.3			0.3	0.3	11.8	Panel move		
4-Jul	162	1422	1485	5464	5436				35	1.40																				
4-Jul	163	1555	1611	5436	5464				35	1.40																				
5-Jul	164	1436	1499	5464	5436				35	1.40		16.84	4.60	4.1	0.5	0.1	2.3	0.4	3.4	0.3		0.3				0.4	11.8			
5-Jul	165	1443	1506	5436	5464				35	1.40																				
5-Jul	166	1450	1513	5436	5464				35	1.40																				
5-Jul	167	1457	1520	5569	5436				140	5.60																				
5-Jul	168	1464	1527	5436	5569				140	5.60																				
5-Jul	169	1471	1534	5569	5499				36	1.44																				
6-Jul	169	1471	1534	5548	5436				104	4.16		18.72	5.11	4.6	0.4	0.1	3.0	1.6		0.3		0.3	0.4			0.6	0.2	11.5	Vib down 0.2, charge time 10.0	
6-Jul	170	1478	1541	5436	5569				140	5.60																				
6-Jul	171	1485	1548	5569	5436				140	5.60																				
6-Jul	172	1492	1555	5436	5513				84	3.36																				
7-Jul	172	1492	1555	5520	5569				56	2.24		26.88	7.33	6.4		0.2	3.7			0.2		0.3				0.4	0.4	11.6	Vibs down 0.3	
7-Jul	173	1499	1562	5569	5436				140	5.60																				
7-Jul	174	1506	1569	5436	5569				140	5.60																				
7-Jul	175	1513	1576	5569	5436				140	5.60																				
7-Jul	176	1520	1583	5436	5569				140	5.60																				
7-Jul	177	1527	1590	5562	5523				56	2.24																				
8-Jul	177	1527	1590	5506	5436				77	3.08		24.64	6.72	5.9	0.5	0.2	3.2			0.2		0.3				0.4	0.8	11.5	Vibes down 0.4 due to cold oil. 0.4 for troubleshooting on salt lake	
8-Jul	178	1534	1597	5436	5562				133	5.32																				
8-Jul	179	1541	1604	5562	5436				133	5.32																				
8-Jul	180	1548	1611	5436	5562				133	5.32																				
8-Jul	181	1555	1618	5562	5436				133	5.32																				
8-Jul	182	1562	1625	5436	5436				7	0.28																				
9-Jul	182	1562	1625	5443	5562				126	5.04		22.96	6.26	5.4		0.3	3.2	0.7		0.1		0.3				0.4	1.3	11.7	Troubleshooting on salt lake and trouble starting observer server due to cold weather	
9-Jul	183	1569	1632	5562	5436				129	5.32	4																			

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9-Jul	184	1576	1639	5436	5555				119	5.04	7																			
9-Jul	185	1583	1646	5555	5436				119	5.04	7																			
9-Jul	186	1590	1653	5436	5492				56	2.52	7																			
10-Jul	186	1590	1653	5499	5555				63	2.52		23.80	6.49	5.1		0.2	2.5	1.5		0.1		0.3	1.6		0.4	0.1	11.8	Crew change (10 out, 8 in). Spread damage on lake detour.		
10-Jul	187	1597	1660	5548	5436				112	4.76	7																			
10-Jul	188	1604	1667	5436	5548				105	4.76	14																			
10-Jul	189	1611	1674	5548	5408				133	5.88	14																			
10-Jul	190	1617	1681	5408	5548				133	5.88	14																			
11-Jul	191	1625	1688	5548	5408				140	5.88	7	23.80	6.49	6.0	0.5	0.1	2.9	0.7		0.1		0.3	0.4		0.5	0.2	11.7	Spread damage (0.4). Detours around salt lakes.		
11-Jul	192	1632	1695	5408	5548				142	5.88	5																			
11-Jul	193	1639	1702	5548	5408				147	5.88																				
11-Jul	194	1646	1709	5408	5548				147	5.88																				
11-Jul	195	1653	1716	5548	5548				7	0.28																				
12-Jul	195	1653	1716	5541	5408				140	5.60		17.00	4.64	4.5		0.1	1.1		0.1		0.3			4.9	0.2	0.3	11.5	Camp move		
12-Jul	196	1660	1723	5548	5408				147	5.88																				
12-Jul	197	1667	1730	5408	5471				68	2.72																				
12-Jul	198	1674	1737	5408	5471				70	2.80																				
13-Jul	197	1667	1730	5471	5555				83	3.44	3	30.88	8.43	10.3						0.1		0.3	0.5		0.2	0.3	11.7	Good production. Spread damage from cable chews.		
13-Jul	198	1674	1737	5478	5555				84	3.36																				
13-Jul	199	1681	1744	5555	5408				154	6.16																				
13-Jul	200	1688	1758	5555	5408				154	6.16																				
13-Jul	201	1695	1758	5408	5548				147	5.88																				
13-Jul	202	1702	1765	5408	5548				147	5.88																				
14-Jul	201	1695	1758	5555	5555				7	0.28		30.52	8.33	10.2	0.6					0.1		0.3		0.3		0.2	0.1	11.8	Good production. Spread damage from cable chews.	
14-Jul	202	1702	1765	5555	5562				14	0.56																				
14-Jul	203	1709	1772	5562	5408				161	6.44																				
14-Jul	204	1716	1779	5562	5408				161	6.44																				
14-Jul	205	1723	1766	5408	5562				161	6.44																				
14-Jul	206	1730	1793	5408	5562				161	6.44																				
14-Jul	207	1737	1800	5562	5471				98	3.92																				
15-Jul	207	1737	1800	5464	5408				63	2.52		27.92	7.62	6.6		0.1	3.5	0.5		0.2		0.3			0.3	0.2	11.7	skips due to salt lake detour		
15-Jul	208	1744	1807	5408	5562				161	6.44																				
15-Jul	209	1751	1814	5562	5408				161	6.44																				
15-Jul	210	1758	1821	5408	5562				155	6.20	6																			
15-Jul	211	1765	1828	5562	5415				138	5.52	14																			
16-Jul	211	1765	1828	5415	5408				9	0.36		28.64	7.81	6.4		0.1	3.5	0.3		0.1		0.3	0.5		0.2	0.3	11.7	skips due to salt lake detour, 2 cables animal damage		
16-Jul	212	1772	1835	5408	5562				147	5.88	14																			
16-Jul	213	1779	1842	5562	5408				151	6.04	10																			
16-Jul	214	1786	1849	5408	5548				147	5.88																				

Date	Lines, Geometry and Production												Daily Sq Km	Hours														Total day Hrs	Comments
	Swath#	Rec. Line to	Rec Line	Source Line to	Source Line	VP to	VP	#Traverses	# Production VPs	Linear Kms	Skips	Daily Lin Km		Recording	Recorder Move	swath Move	Traverse Move	Detour	Layout & Pickup	Test, Troubleshoot & Other	Wait on Spread	Standby Toolbox	Standby Other	Extra Charge Hrs	Prospect Move	Travel	Downtime		
16-Jul	215	1793	1856	5548	5408				142	5.68	5																		
16-Jul	216	1800	1863	5408	5492				84	3.36	7																		
17-Jul	216	1800	1883	5499	5548				56	2.24		25.48	6.95	5.9	0.5	0.1	3.3	0.1		0.1	0.8	0.3	0.2		0.4		11.7	WOS 0.8 nc. 0.2 cable animal damage	
17-Jul	217	1807	1870	5548	5408				140	5.60	7																		
17-Jul	218	1814	1877	5408	5548				147	5.88																			
17-Jul	219	1821	1884	5548	5408				147	5.88																			
17-Jul	220	1828	1891	5408	5541				140	5.60																			
18-Jul	220	1828	1891	5548	5548				7	0.28		23.24	6.34	5.5		0.1	2.8	0.1		0.1	1.8	0.3	0.6		0.4		11.7	WOS 1.8 nc 0.6 cable animal damage	
18-Jul	221	1835	1898	5548	5408				147	5.88																			
18-Jul	222	1842	1905	5408	5548				147	5.88																			
18-Jul	223	1849	1912	5548	5408				147	5.88																			
18-Jul	224	1856	1919	5408	5534				133	5.32																			
19-Jul	224	1856	1919	5541	5548				14	0.56		26.60	7.26	6.6	0.5	0.5	2.7	0.1		0.1		0.3	0.3		0.5		11.6	0.3 cable animal damage, high gusty wind and sand	
19-Jul	225	1863	1926	5548	5408				147	5.88																			
19-Jul	226	1870	1933	5408	5548				147	5.88																			
19-Jul	227	1877	1940	5548	5408				147	5.88																			
19-Jul	228	1884	1947	5513	5548				42	1.68																			
19-Jul	229	1891	1954	5513	5548				42	1.68																			
19-Jul	230	1898	1961	5548	5513				42	1.68																			
19-Jul	231	1905	1968	5548	5513				42	1.68																			
19-Jul	232	1912	1975	5513	5527				21	0.84																			
19-Jul	233	1919	1982	5513	5527				21	0.84																			
20-Jul	232	1912	1975	5534	5548				21	0.84		16.80	4.58	4.6	0.5	0.2	1.1	0.3	3.2	0.2		0.3			0.9	0.2	11.5	3.2 Panel move, complete D & start E	
20-Jul	233	1919	1982	5534	5548				21	0.84																			
20-Jul	234	1926	1989	5548	5513				42	1.68																			
20-Jul	235	1933	1996	5548	5513				42	1.68																			
20-Jul	236	1940	1996	5548	5513				42	1.68																			
20-Jul	237	1947	1996	5513	5548				42	1.68																			
20-Jul	238	1954	1996	5513	5548				42	1.68																			
20-Jul	239	1961	1996	5513	5548				42	1.68																			
20-Jul	240	1996	1961	5555	5674				126	5.04																			
21-Jul	240	1996	1961	5681	5695				21	0.84		30.24	8.25	10.2						0.1		0.3	0.3		0.7	0.1	11.7	0.3 animal spread damage	
21-Jul	241	1996	1954	5695	5555				147	5.88																			
21-Jul	242	1996	1947	5695	5555				147	5.88																			
21-Jul	243	1996	1940	5555	5695				147	5.88																			
21-Jul	244	1996	1933	5555	5695				147	5.88																			
21-Jul	245	1989	1926	5695	5555				147	5.88																			
22-Jul	246	1982	1919	5555	5695				147	5.88		21.72	5.93	5.3	0.5	0.1	3.0			0.1	0.5	0.3	0.3		0.7	0.9	11.7	0.3 animal spread damage, working on Square Lake	
22-Jul	247	1975	1912	5695	5555				147	5.88																			

Date	Lines, Geometry and Production													Hours																Total day Hrs	Comments
	Swath#	Rec. Line to	Rec Line	Source Line to	Source Line	VP to	VP	#Traverses	# Production VPs	Linear Kms	Skips	Daily Lin Km		Daily Sq Km	Recording	Recorder Move	swath Move	Traverse Move	Detour	Layout & Pickup	Test, Troubleshoot & Other	Wait on Spread	Standby Toolbox	Standby Other	Extra Charge Hrs	Prospect Move	Travel	Downtime			
22-Jul	248	1968	1905	5555	5695				147	5.88																					
22-Jul	249	1961	1898	5695	5597				102	4.08																					
23-Jul	249	1961	1898	5590	5555				42	1.68		24.20	6.60	6.6		0.1	3.1	0.1		0.1		0.3	0.4			0.7	0.3	11.7	0.4 animal spread damage		
23-Jul	250	1954	1891	5555	5695				122	4.88	9																				
23-Jul	251	1947	1884	5695	5555				112	4.48	19																				
23-Jul	252	1940	1877	5555	5695				112	4.48	27																				
23-Jul	253	1933	1870	5695	5618				84	3.36	27																				
23-Jul	249	1961	1898	5597	5597				3	0.12																					Explosives, on lake
23-Jul	250	1954	1891	5597	5604				16	0.64																					
23-Jul	251	1947	1884	5611	5583				16	0.64																					
23-Jul	252	1940	1877	5583	5611				8	0.32																					
23-Jul	253	1933	1870	5590	5583				8	0.32																					
24-Jul	253	1933	1870	5576	5555				28	1.12		22.40	6.11	6.7		0.1	2.8			0.1		0.3	0.5			0.9	0.6	12.0	0.5 animal spread damage		
24-Jul	254	1926	1863	5555	5695				116	4.64	13																				
24-Jul	255	1919	1856	5695	5555				135	5.40	4																				
24-Jul	256	1912	1849	5555	5695				146	5.84	1																				
24-Jul	257	1905	1842	5695	5611				91	3.64																					
24-Jul	254	1926	1863	5583	5611				18	0.72																					Explosives, on lake
24-Jul	255	1919	1856	5606	5590				8	0.32																					
25-Jul	257	1905	1842	5604	5555				56	2.24		26.04	7.11	6.9			3.2	0.3		0.1		0.3	0.4			0.5	0.2	11.9	0.4 animal spread damage		
25-Jul	258	1898	1835	5555	5695				147	5.88																					
25-Jul	259	1891	1828	5695	5555				147	5.88																					
25-Jul	260	1884	1821	5695	5555				147	5.88																					
25-Jul	261	1877	1814	5597	5555				49	1.96																					
25-Jul	262	1870	1807	5597	5597				49	1.96																					
25-Jul	263	1863	1800	5597	5555				49	1.96																					
25-Jul	264	1856	1763	5555	5555				7	0.28																					
26-Jul	264	1856	1763	5562	5597				42	1.68		3.64	0.99	0.9	0.6		0.5		9.0	0.2		0.3				0.5		12.0	Survey complete		
26-Jul	265	1849	1786	5597	5555				49	1.96																					
									30017	1209.60	476	1219.12	332.65	321.7	15.5	10.6	151.6	14.4	39.8	9.2	16.2	18.2	24.3	8.7	4.9	32.4	11.9	678.3			

Total to Record = 1219.16 linear kms
 Recorded to Date = 1219.12
 Remaining =
 1 VP = 0.0109218 Sq Km
 1 Linear Km = 0.27286500 sq Km

Cumulative Total day Hrs = 678.3

APPENDIX II

SCANLON DRILLING VELOCITY DATA PRODUCTION

Drilling & LVL Production for Terrex Seismic Crew # 402 on the Beach Petroleum Modiolus 3D Seismic Survey in PEL 91,92: July/August 2008

Date	Uphole	R Line	S Line	Easting	Northing	Depth	Total M	Wx	Work Hrs	Work Hrs	Tvl Hrs	Survey	Comments
									Vel Dat	Scanlon			
20-Jul-08													On site late pm, 21 & 22 on 2D program
23-Jul-08	4	1142	5288	329840	6905734	28	222	12	10	11	1	Modiolus	
	3	1142	5239	327898	6905730	28		4				Modiolus	
	2	1142	5190	325930	6905728	40		12				Modiolus	
	1	1142	5142	323999	6905733	46		14				Modiolus	
	5	1177	5141	323978	6907133	34		14				Modiolus	
	9	1142	5141	323987	6909090	46		18				Modiolus	
24-Jul-08	16	1275	5142	323981	6911039	34	188	16	10	11	1	Modiolus	
	17	1274	5191	325931	6911045	40		18				Modiolus	
	10	1225	5191	325920	6909083	46		22				Modiolus	
	6	1177	5240	325934	6907143	40		16				Modiolus	
	7	1177	5240	327913	6907131	28		6				Modiolus	
25-Jul-08	11	1226	5239	327894	6909072	34	212	10	10	11	1	Modiolus	
	18	1275	5239	327899	6911047	52		26				Modiolus	
	23	1324	5239	327884	6913020	46		20				Modiolus	
	28	1373	5239	327897	6914970	34		16				Modiolus	
	33	1422	5239	327889	6916908	46		22				Modiolus	
27-Jul-08	34	1422	5288	329852	6916923	34	108	8	5	5.5	0.75	Modiolus	half day Padollus Survey
	29	1373	5288	329851	6914969	34		4				Modiolus	
	24	1324	5288	329868	6913012	40		20				Modiolus	
28-Jul-08	19	1275	5288	329844	6911039	34	210	8	9.5	10.75	1	Modiolus	
	12	1225	5289	329865	6909092	40		16				Modiolus	
	8	1177	5289	329859	6907142	40		16				Modiolus	
	13	1226	5336	331752	6909044	34		12				Modiolus	moved 34m S along 5338 - dune
	20	1275	5338	331806	6911041	34		4				Modiolus	
	51	1317	5338	331733	6912737	28		2				Modiolus	moved W along 1317 to salt lake edge
29-Jul-08	25	1324	5331	331567	6913012	28	214	4	10	11.5	1	Modiolus	
	52	1338	5338	332134	6913569	28		4				Modiolus	moved E to edge of salt lake
	30	1373	5337	331814	6914965	34		6				Modiolus	
	35	1422	5337	331831	6916934	34		6				Modiolus	
	36	1422	5387	333793	6916929	34		8				Modiolus	
	31	1373	5386	333774	6914967	28		4				Modiolus	
	53	1317	5394	334208	6921723	28		2				Modiolus	moved E to edge of salt lake
30-Jul-08	26	1324	5379	333507	6913007	28	214	4	9.5	11.5	0.75	Modiolus	
	155	1317	5380	333684	6912738	28		2				Modiolus	
	54	1296	5401	334133	6911887	28		2				Modiolus	moved W along 1296 to edge of salt lake

Date	Uphole	R Line	S Line	Easting	Northing	Depth	Total M	Wx	Work Hrs	Work Hrs	Tvl Hrs	Survey	Comments
	21	1275	5387	333806	6911030	28		6				Modiolus	
	14	1226	5386	333769	6909101	34		10				Modiolus	
	15	1226	5235	335741	6909104	34		8				Modiolus	
	22	1275	5435	335746	6911030	34		10				Modiolus	
31-Jul-08	27	1324	5435	335744	6913007	34	180	8	9.25	10	1	Modiolus	
	32	1373	5435	335732	6914962	28		6				Modiolus	
	37	1422	5436	335754	6916924	28		6				Modiolus	
	41	1471	5435	335733	6918888	28		6				Modiolus	
	45	1520	5436	335787	6920849	28		8				Modiolus	
	44	1520	5386	333773	6920833	34		16				Modiolus	
01-Aug-08	40	1471	5386	333772	6918892	28	214	8	10	11	1	Modiolus	
	39	1471	5337	331813	6918899	28		6				Modiolus	
	57	1499	5323	331900	6920014	28		4				Modiolus	moved to E side of lake along 1499
	43	1520	5337	331810	6920834	34		8				Modiolus	
	58	1527	5295	329739	6921417	28		4				Modiolus	moved to the NW side of lake to 1534
	42	1520	5274	329311	6920845	40		14				Modiolus	
	56	1499	5295	329662	6920012	28		8				Modiolus	moved to W side of lake along 1499
02-Aug-08	55	1471	5323	330475	6918880	40	268	6	10	11.25	1	Modiolus	moved to W side of lake along 1471
	38	1471	5288	329847	6918895	34		8				Modiolus	
	50	1583	5260	328737	6923364	52		24				Modiolus	
	46	1569	5288	329846	6922814	34		12				Modiolus	
	47	1569	5337	331812	6922810	34		10				Modiolus	
	48	1569	5387	333801	6922822	40		20				Modiolus	
	59	1548	5421	335175	6921961	34		6				Modiolus	drilled on interdunal flat
03-Aug-08	156	1569	5422	335113	6922817	34	238	8	9.5	11	1	Modiolus	
	49	1485	5435	335732	6922816	28		6				Modiolus	
	65	1617	5436	335769	6924765	28		4				Modiolus	
	68	1666	5436	335733	6926729	28		10				Modiolus	
	71	1716	5435	335742	6928668	52		22				Modiolus	
	74	1765	5435	335733	6930643	34		10				Modiolus	
	75	1765	5491	337986	6930656	34		10				Modiolus	
04-Aug-08													Scanlon down. Replaced rear springs on water truck. Drive shaft broken on mud pump.
05-Aug-08													Scanlon down. Replacing broken drive shaft on mud pump.
06-Aug-08													Scanlon down. Replacing broken drive shaft on mud pump.
07-Aug-08													Scanlon down. Replacing broken drive shaft on mud pump.
15-Aug-08	157	1814	5464	336745	6932526	28	214	4	9.5	11	1	Modiolus	down hole moved from original location

Date	Uphole	R Line	S Line	Easting	Northing	Depth	Total M	Wx	Work Hrs	Work Hrs	Tvl Hrs	Survey	Comments
	81	1863	5435	335735	6934581	28		6				Modiolus	
	82	1863	5491	337954	6934570	40		20				Modiolus	
	79	1814	5491	337977	6932603	34		14				Modiolus	
	77	1800	5470	337317	6932053	28		2				Modiolus	
	158	1786	5464	336852	6931474	28		4				Modiolus	down hole moved from original location
	72	1765	5491	337993	6928688	28		4				Modiolus	
16-Aug-08	84	1863	5603	342449	6934554	28	226	8	9.25	11	1.25	Modiolus	
	85	1863	5659	344677	6934576	34		10				Modiolus	
	88	1912	5659	344693	6936541	40		12				Modiolus	
	94	1898	5596	342895	6935966	28		6				Modiolus	Down hole moved west along 1898 to edge of salt lake
	162	1891	5583	341762	6935685	28		2				Modiolus	down hole moved from original location
	83	1863	5547	340215	6934568	28		6				Modiolus	
	80	1814	5547	340209	6932606	28		4				Modiolus	
	76	1765	5547	340213	6930666	46		24				Modiolus	
18-Aug-08	73	1716	5541	339953	6928699	40	238	22	9.25	11.5	0.75	Modiolus	
	70	1667	5534	339674	6926724	40		22				Modiolus	
	67	1618	5540	339950	6924755	34		14				Modiolus	
	64	1569	5547	340204	6922803	40		22				Modiolus	
	62	1520	5548	340233	6920849	28		6				Modiolus	
	61	1520	5492	337993	6920849	28		6				Modiolus	
	63	1569	5491	337979	6922814	28		4				Modiolus	
19-Aug-08	163	1618	5485	337670	6924767	28	140	4	9.5	8	0.5	Modiolus	
	164	1646	5478	337472	6925911	28		0				Modiolus	
	69	1667	5492	337993	6926729	28		8				Modiolus	
	93	1646	5491	338214	6925881	28		2				Modiolus	Down hole moved E along 1646 to edge of salt lake
	66	1618	5491	338377	6924771	28		2				Modiolus	Down hole moved E along 1618 to edge of salt lake
TOTAL	100					3328			149.75	168.25	15.25		

APPENDIX IIIA

LINE PREPARATION
(DOZING)
PRODUCTION

Line Preparation Statistics for Terrex Contracting PEL 91 & 92 Modiolus 3D Seismic Survey - Dozing

	DOZER # 1 (Komatsu D65EX)					DOZER # 2 (Komatsu D65EX)					DOZER # 5 (Komatsu D65EX)					DOZER # 6 (Komatsu D65EX)					DOZER # 7 (Komatsu D65EX)					DOZER # 8(Komatsu D65EX)					Tot day			
Date	Km	Work	Walk/Float	Full Rate	Stby	Km	Work	Walk/Float	Full Rate	Stby	Km	Work	Walk/Float	Full Rate	Stby	Km	Work	Walk/Float	Full Rate	Stby	Km	Work	Walk/Float	Full Rate	Stby	Km	Work	Walk/Float	Full Rate	Stby	Km	Comments		
Apr/May/June																																		
30	3.80	2.50		2.50	8.00	3.80	2.50		2.50	8.00												2.60	2.00		2.00	8.50				0.00	10.20	Setup GPS		
1	7.08	10.50		10.50		7.08	10.50		10.50													4.92	10.50		10.50						0.00	19.08	Start rec lines	
2	7.84	10.50		10.50		6.68	10.50		10.50													4.48	10.50		10.50						0.00	19.00		
3	10.60	10.50		10.50		10.60	10.50		10.50													4.76	10.50		10.50						0.00	25.96		
4	14.12	10.50		10.50		8.48	10.50		10.50													9.24	10.50		10.50						0.00	31.84		
5	11.80	10.50		10.50		5.25	10.50		10.50													2.88	10.50		10.50						0.00	19.93		
6	9.80	10.50		10.50		8.24	10.50		10.50													5.36	10.50		10.50						0.00	23.40		
7	11.16	10.50		10.50		3.68	10.50		10.50													6.16	10.50		10.50						0.00	21.00		
8	7.12	10.50		10.50		10.56	10.50		10.50							6.40	6.00		6.00			2.84	4.00								0.00	26.92		
9	16.52	10.50		10.50		10.80	10.50		10.50							1.68	8.00		8.00												0.00	29.00	D6 hose replaced	
10				0.00		6.32	10.50		10.50							5.08	10.50		10.50								8.32	10.50		10.50		0.00	19.72	
11	6.28	6.00		6.00		4.68	10.50		10.50							4.16	10.50		10.50								3.44	4.00		4.00		0.00	18.56	
12	7.52	10.00		10.00		7.36	10.00		10.00							6.92	10.50		10.50												0.00	21.80		
13	10.24	10.50		10.50		7.72	10.50		10.50							9.48	10.50		10.50													0.00	27.44	
14	8.40	10.50		10.50		7.92	10.50		10.50							10.44	10.50		10.50								2.92	6.50		6.50		0.00	29.68	
15	8.44	10.00		10.00		11.64	10.50		10.50							10.28	10.50		10.50								5.68	10.50		10.50		0.00	36.04	D8 difficult country
16	6.72	10.50		10.50		6.68	9.50	1.00	10.50							8.92	10.50		10.50												0.00	22.32		
17	13.32	10.50		10.50		5.00	10.50		10.50		9.88	9.00		9.00		10.08	10.50		10.50												0.00	38.28	D2 large blow out dunes	
18	10.72	10.50		10.50		7.92	10.50		10.50		10.28	10.50		10.50																		0.00	28.92	
19	11.96	10.50		10.50		8.16	10.50		10.50		10.64	10.50		10.50																		0.00	30.76	
20	12.20	10.50		10.50		8.36	10.50		10.50		9.96	10.50		10.50																		0.00	30.52	
21	10.52	10.50		10.50		10.80	10.50		10.50		5.40	10.00	0.50	10.50		18.20	10.50		10.50													0.00	44.92	
22	16.12	9.50	1.00	10.50		7.48	10.50		10.50		15.48	10.50		10.50		9.40	10.50		10.50													0.00	48.48	
23	16.64	10.50		10.50		11.12	10.50		10.50		12.32	10.50		10.50		18.32	10.50		10.50													0.00	58.40	
24	8.64	8.50	2.00	10.50		10.72	10.50		10.50		11.48	10.50		10.50		10.24	9.00	1.50	10.50													0.00	41.08	
25	9.24	10.50		10.50		12.92	10.50		10.50		16.56	10.00		10.00		9.20	10.50		10.50													0.00	47.92	
26	15.32	10.50		10.50		15.36	10.50		10.50		21.00	10.50		10.50		15.20	10.50		10.50													0.00	66.88	
27	24.00	11.00		11.00		11.48	9.00	1.50	10.50		17.00	9.00	1.50	10.50		15.28	11.00		11.00													0.00	67.76	
28	7.68	6.50	4.00	10.50		12.56	9.50	1.00	10.50		13.72	10.50		10.50		10.68	8.00	2.50	10.50													0.00	44.64	
29	11.92	8.00	2.50	10.50		10.34	8.50	2.00	10.50		10.20	6.50	4.00	10.50		23.36	10.50		10.50													0.00	55.82	
30	22.60	10.00		10.00		16.36	10.00		10.00		19.12	10.00		10.00		18.20	10.00		10.00													0.00	76.28	
31	10.36	10.00		10.00		14.12	10.00		10.00		16.24	10.00		10.00		10.08	10.00		10.00													0.00	50.80	
1	12.32	10.00		10.00		16.08	10.00		10.00		22.12	10.00		10.00		12.32	10.00		10.00													0.00	62.84	
2	14.84	10.00		10.00		14.20	10.00		10.00		10.64	10.00		10.00		12.40	10.00		10.00													0.00	52.08	
3	15.12	10.00		10.00		13.16	10.00		10.00		10.36	10.00		10.00		10.80	10.00		10.00													0.00	49.44	
4	9.52	10.00		10.00		7.84	10.00		10.00		8.40	10.00		10.00		11.48	10.00		10.00													0.00	37.24	
5	10.36	10.00		10.00		10.08	10.00		10.00		9.52	10.00		10.00		10.92	10.00		10.00													0.00	40.88	
6	10.92	10.00		10.00		9.24	10.00		10.00		9.80	10.00		10.00		10.36	10.00		10.00													0.00	40.32	
7	10.36	10.00		10.00		8.00	10.00		10.00		5.32	10.00		10.00		4.20	8.00	2.00	10.00													0.00	27.88	
8		0.00		0.00	10.00		0.00		0.00	10.00		0.00		0.00	10.00		0.00		0.00	10.00											0.00	0.00	Rain	
9	4.08	2.50	1.50	4.00	6.00	7.28	4.00		4.00	6.00	4.04	2.50	1.50	4.00	6.00	5.32	4.00		4.00	6.00											0.00	20.72	delyed start, wet	
10	8.76	10.00		10.00		7.00	8.00	2.00	10.00		13.40	10.00		10.00		9.72	8.00	2.00	10.00															

APPENDIX IIIB

LINE PREPARATION
(GRADING)
PRODUCTION

Line Preparation Statistics for Terrex Contracting PEL 91 &92 Modiolus 3D Seismic Survey (Grading)

Date	Grader #1 (JD 6x6)			Grader #2 (Cat 12G)			Grader #3			Comments
	Work	Stby	Chg	Work	Stby	Chg	Work	Stby	Chg	
Apr/May/June										
Apr-30	5.00	5.50	10.50	2.50	8.00	10.50				Setup GPS
May-01			0.00		10.00	10.00				Start rec lines
2	10.50		10.50	10.50		10.50				
3	10.50		10.50	10.50		10.50				
4	10.50		10.50	10.50		10.50				
5	10.50		10.50	10.50		10.50				
6	10.50		10.50		10.00	10.00				
7	10.50		10.50	10.50		10.50				
8	10.50		10.50	10.50		10.50				
9	10.50		10.50	10.50		10.50				
10	10.50		10.50	8.00		8.00				
11	5.50		5.50	9.00		9.00				Tyre repairs
12	11.00		11.00	9.00		9.00				Tyre repairs
13	11.00		11.00	10.50		10.50				
14	10.50		10.50	0.00		0.00				G2 down, radiator
15	5.50		5.50	10.50		10.50				
16	10.50		10.50	10.50		10.50				
17	10.50		10.50	10.50		10.50				
18	10.50		10.50	10.50		10.50				
19	10.00		10.00	10.50		10.50				
20	10.50		10.50	10.50		10.50				
21	10.50		10.50	10.50		10.50				
22	10.50		10.50	10.50		10.50				
23	10.50		10.50	10.50		10.50				
24	10.50		10.50	10.50		10.50				
25	10.50		10.50	10.50		10.50				
26	10.50		10.50	10.50		10.50				
27	10.50		10.50	10.50		10.50				
28	10.50		10.50	10.50		10.50				
29	10.50		10.50	10.50		10.50				
30	9.00		9.00	9.00		9.00				G1,2 down, tyre & oil leak
31	10.00		10.00	10.00		10.00	9.00		9.00	G3 on access track
Jun-01	10.00		10.00	10.00		10.00	10.00		10.00	G3 on access track
2	10.00		10.00	10.00		10.00				
3	10.00		10.00	10.00		10.00				
4	10.00		10.00	10.00		10.00				
5	10.00		10.00	10.00		10.00	8.50		8.50	G3 on access track
6	10.00		10.00	10.00		10.00	5.50		5.50	G3 on access track
7	10.00		10.00	9.50	0.50	10.00	8.50		8.50	G3 on access track
8	0.00	10.00	10.00	0.00	10.00	10.00				Rain
9	4.00	6.00	10.00	4.00	6.00	10.00				delyed start, wet
10	10.00		10.00	10.00		10.00				
11	10.00		10.00	9.50		9.50	8.50		8.50	G3 on access track
12	10.00		10.00	10.00		10.00	9.00		9.00	G3 on access track
13	10.00		10.00		10.00					G2 on standby with crew change
14	10.00		10.00				10.00		10.00	
15	10.00		10.00		10.00	10.00				G2 down for camp move
16	10.00		10.00	10.00		10.00				
17	10.00		10.00	10.00		10.00				
18	10.00		10.00	10.00		10.00				
19	10.00		10.00	10.00		10.00				
20	7.00		7.00	10.00		10.00				
21	10.50		10.50	10.50		10.50				
22	10.50		10.50	10.50		10.50				
23	11.00		11.00	11.00		11.00				
24	11.50		11.50	11.50		11.50				
25	10.50		10.50	10.50		10.50				
26	10.50		10.50	10.50		10.50				
27	10.00		10.00			0.00	9.50		9.50	G2 service
28	9.50		9.50	10.50		10.50				G1 service
29	10.00		10.00	10.00		10.00				
30	10.00		10.00	10.00		10.00				
Jul-01	10.00		10.00	10.00		10.00				
2	10.00		10.00	10.00		10.00				
3	10.00		10.00	10.00		10.00				
4	10.00		10.00							One grader operation
5	10.00		10.00							
6	10.00		10.00	10.00		10.00				2 Graders to catch up
7	10.00		10.00	10.00		10.00				
8				10.00		10.00				Graders completed the 3D grid
Total	663.50	21.50	685.00	597.00	64.50	651.50	50.00	9.50	78.50	

APPENDIX IV

EFS SALT LAKE UPHOLE DRILLING

Beach Petroleum 2008 Modiolus 3D Seismic Survey - EFS Salt Lake Drilling

Bobcat 1

Date	Line	SPs Drilled	SPs	Work Hrs	S/B Hours	Total	No Men	Comments
6-Jun-08	5324	28	1507-1480	7	4	11	2	
7-Jun-08	5324	22	1446-1467	7	4.5	11.5	2	wait on GPS
24-Jun-08	5310	26	1468-1495	11.5		11.5	2	setup in am
25-Jun-08	5310	2	1494,95	11.5		11.5	2	drill bogged, recon lake
26-Jun-08	5310, 5303	29	1521-03,1531-22	11.5		11.5	2	
27-Jun-08	5303, 5296, 5289	27	1521, 1538-1516, 1515-1517	11.5		11.5	2	
28-Jun-08	5296/1520, 5310/1506	2		11.5		11.5	2	uphole 13m, 12m
29-Jun-08	5331/1484	1		11.5		11.5	2	uphole 13m, move rig
30-Jun-08	5597/1898,5604/1918	2		11.5		11.5	1	upholes filling in
1-Jul-08								
2-Jul-08	UH 51,53 &1478/5303	1		11.5		11.5	1	UH Sq Lake wash out
3-Jul-08	UH 5289/1498, 5324/1450	2		11.5		11.5	3	2 UH Salt Lake wash out
4-Jul-08								demob
TOTAL		142		117.5	8.5	126		

Bobcat 2

Date	Line	SPs Drilled	SPs	Work Hrs	S/B Hours	Total	No Men	Comments
6-Jun-08								
7-Jun-08	5324, 5331	30	1479-14750,1478-1502	11.5		11.5	2	Suspended due to wet weather
24-Jun-08	5331, 5317	23	1503-1507, 1510-1493	11.5		11.5	2	setup in am
25-Jun-08	5317	20	1492-85,70-59	11.5		11.5	2	
26-Jun-08	5303, 5296, 5289	28	1484-74, 1491-82, 1498-92	11.5		11.5	2	
27-Jun-08	5289	25	1499-1508, 1520-1534	11.5		11.5	2	
28-Jun-08	5289, 5331	9	1518,19, 1471-77	11.5		11.5	2	Salt Lake sps complete
29-Jun-08				11.5		11.5	1	move rig, assist on lake
30-Jun-08	5597, 5590, 5583	25	1884-87, 1888-98, 1896-1905	11.5		11.5	2	Square Lake
1-Jul-08	5583, 5590, 5597	30	1906-18, 1917-25, 1921-28	11.5		11.5	3	Square Lake, scouting
2-Jul-08	5604, 5611	22	1890-93, 1922-25; 1891-96, 1911-18	11.5		11.5	2	complete Sq Lake
3-Jul-08								
4-Jul-08								demob
TOTAL		212		115	0	115		



BEACH PETROLEUM 2008 MODIOLUS 3D SEISMIC SURVEY



OPERATIONS REPORT

MAY - JULY 2008

BY

Shane Goossens

OF

CREW # 402

**TERREX SEISMIC
UNIT # 2 / 37 HOWSON WAY
BIBRA LAKE
WESTERN AUSTRALIA 6163**

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1. INTRODUCTION

Terrex Seismic was contracted by Beach Petroleum to conduct the Modiolus 3D Seismic Survey. Acquisition commenced on the 31st of May 2008 and was completed on the 26th of July 2008.

1.1 GEOGRAPHICAL AREA

The Modiolus 3D grid is located approximately 100km North West of Moomba in South Australia. The surrounding area consisted mainly of rolling sand dunes and multiple large salt lakes.



Laying spread across salt lake with Mule

1.2 WEATHER

The weather was relatively fine & cool throughout the program, although there was one day of recording lost due to rain. Working conditions were challenging for the line crew, with 7 salt lakes scattered throughout the prospect all requiring hand carry or the use of Kawasaki Mules or tracked buggies.



Camp and Line conditions after rain

1.3 LOGISTICS

All equipment and camp were mobilised from the previous prospect in the Cooper Basin on the 28th May 2008. The move time was 1 day, with an extra day added for camp setup as the crew arrived at the Modiolus camp site late in the afternoon.

The accommodation facilities were in the form of mobile vans that were provided by Terrex Seismic and were capable of sleeping up to 58 people.

All meals were provided by the mobile kitchen and diner staffed by two full time cooks and one kitchen hand.

All supplies including food and freight were transported via road out of Adelaide and delivered to camp by Neil Mansell's Transport.

Fuel for all vehicles was supplied by I.O.R. Petroleum of Eromanga and was delivered to site.

All other logistics were supported out of Terrex Seismic Perth Office.



Bobcat mounted drill rigs used for drilling explosive shot holes

2. SURVEYING

2.1 RANGING / CHAINING / SURVEYING

Line chaining and survey for the entire program were completed by Dynamic Satellite Surveys personnel from Yeppoon in Queensland.

2.2 LINE CLEARING

All line clearing was performed by Terrex Contracting.

2.3 PERMITTING

Permitting was carried out by the client, with Stewart Thirlwell acting as the client representative.



Line clearing carried out by Terrex Contracting

3. RECORDING PARAMETERS

General Survey Details

Survey: 2008 Modiolus 3D Seismic Survey
AFE Code: PEL 92 08/011 JV Beach Petroleum & Cooper Energy Limited
Source recorded into an active patch of 10 lines each 98 channels nominal fold 35.

3.1 Recording Parameters

Instrumentation

Instruments : Sercel 428XL
No. Channels : 980 (10 lines x 98 ch)
Tape Drives : IBM Ultrium LT02 (dual drive – 200 Gbyte per tape)
Tape Format : SEG D Revision 1 8058 IEEE Demultiplexed,
Noise edited correlated summed 4 sec record
Filters : Hi cut 200 Hz, (0.8 Nyquist - Linear)
Lo cut: Out
Sample Rate : 2 ms
Record Length : 4 sec
RTC : Yes
Correlation Type : Zero Phase, After Sum
Stack : Diversity stack plus burst edit

Source Data

Vibrators : 3 x Input-Output AHV-IV Buggy Mounted
Electronics : Pelton Advance 2, Model 5
Sweep Frequency : Mono-sweep, 5-90 Hz
Sweep Length : 4 seconds
No. Sweeps : 2 standing
VP Interval : 40m
Vibrator Array : 3 vibs in line, 12.5m pad to pad standing.
Centred on source stations, No move-up.

Sweep Amplitude Taper : 100% (none)
Drive Level : 80% varied by amplitude control function
End Tapers (cosine) : 0.2s
Phase Locking Type : Ground Force
Amplitude Control : Peak to Peak

Receivers

Receiver Group Interval : 40m
Number of live traces : 980 (10 lines x 98 Channels)
Spread : Split, 1940 – 20 - 0 - 20 – 1940
Geophones : Sensor SM4 10 Hz
Array : 12 in-line, centred on stations, 3.33m spacing
Connection : Series/Parallel (6x2)
Multiplicity : 7 fold inline 5 fold cross line 35 nominal

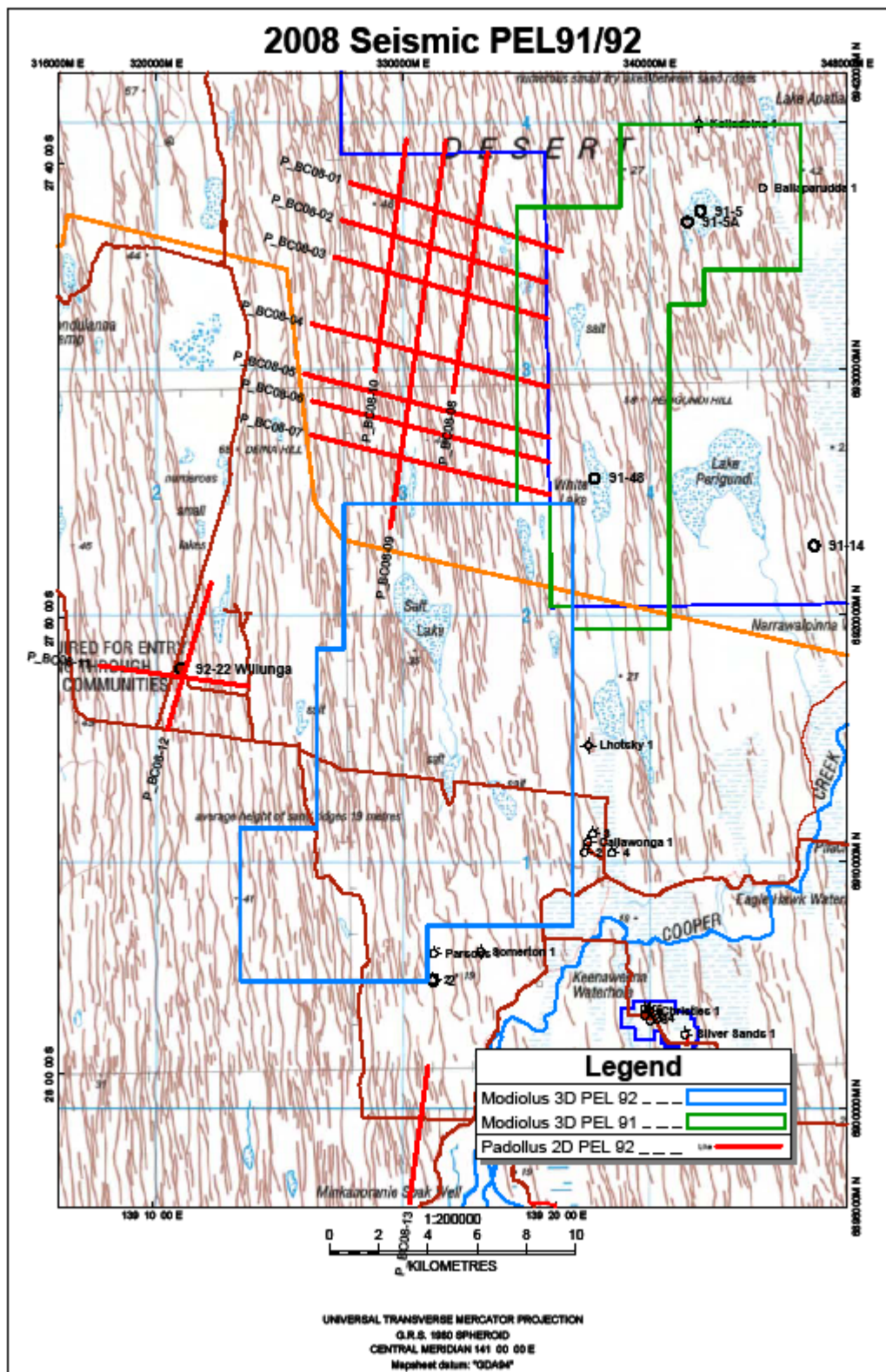
Source/Spread Layout

Line naming convention

MOD08-S5128 commencing at station 1128. Low numbers to the South end (NS Lines)

MOD08-R1128 commencing at station 5128. Low numbers to the West (EW lines)

3.2 MODIOLUS 3D GRID



3.3 RECORDING

The Modiolus 3D was located in the Cooper Basin, approx 100 km North West of Moomba in South Australia. Recording commenced on the 31st of May 2008. The grid was split into 5 panels “A” through “E”, covering an area of 332.65 km². The shooting order was unusual in nature due to an extension to the original 200 km² program being added after initial line clearing had started, with production starting on Panel C, then Panels A, B, D & E.

The first production profile was recorded at station 1438 on source line 5429 on the 31st of May 2008. Panel C contained 81.5977 km² of recording and was completed on the 15th of June 2008 at an average daily production rate of 5.44 km² / day. One day of recording was lost on Panel C due to wet weather. Panel C was also the first panel on which the line crew encountered one of the various large salt lakes on the program; spread was laid across the salt lake although no SP's were recorded on it until Panel B.

The first production profile on Panel A was recorded on the 16th of June 2008 at station 1303 on source line 5205. Acquisition on Panel A was completed on the 20th of June 2008 with a total of 29.4148 km² recorded at an average production rate of 5.88 km² / day. Production was quicker on panel A due to an absence of salt lakes and the fact that it was a rather narrow panel.

The first production profile on Panel B was recorded at station 1128 on source line 5240 on the 20th of June 2008. Panel B contained 81.5977 km² of recording and was completed on the 3rd of July 2008 at an average daily production rate of 6.19 km² / day. Panel B was the first panel where explosives were used as an energy source while recording through the salt lake, with shot firers using small 4WD vehicles known as “Mules”.

The first production profile on Panel D was recorded at station 1443 on source line 5463 on the 4th of July 2008. Panel D contained 104.75 km² of recording and was completed on the 20th of July 2008 at an average daily production rate of 6.16 km² / day. This panel had some explosive work, but relatively minor in comparison to Panel B.

The first production profile on Panel E was recorded on the 20th of July 2008 at station 1995 on source line 5555. Panel E contained 36.37 km² of recording and was completed on the 26th of July 2008 at an average daily production rate of 5.6 km² / day. The completion of this panel signaled the end of the Modiolus 3D, with all spread being picked up and the recording crew starting on the Padollus 2D in the same Exploration Lease.

3.4 PROCESSING

“A” & “B” tapes were sent to the following location:

Doug Roberts

Beach Petroleum Ltd

Level # 1, 25 Conyngham St

Glenside, SA, 5065



Kawasaki “Mules” used by shot firers



Yanmar tracked vehicles used by line crew to traverse salt lakes with spread

APPENDIX A

EQUIPMENT SPECIFICATIONS

SERCEL 428 Seismic Data Acquisition System

- Three (3) 19inch Flat Screens with Sun Blade Computer
- Veritas V12 Plotter, UPS, LIM, APM
- Two (2) LTO High Density Tape Drives
- Five Hundred and Fifty (550) Seismic Cables with 4 x FDU's per cable separated by 55 metres between takeouts (2200 Ch)
- Fifty (50) Power Harness Leads
- Ninety-Seven (97) Line Batteries
- Fifty-Four (54) Transverse Cable
- Twenty-Seven (27) Repeaters
- Fourteen (14) LAUX's
- Forty-Nine (49) LAUL's
- Ten (10) Telwin (Nevaboot 140) Battery Chargers
- Pelton Real Time Similarity System
- One (1) 10 metre 6 DB Boost High Gain Antenna on Recording Truck
- **Sensor SM4 10Hz High Specification Superphones**
- Four Thousand Six Hundred (4600) Geophone strings with 6 ph/group (Equivalent of 2300 Channels of 12 phones/group)/

Note: Terrex Seismic warrants that 90% of equipment will be used in field and up to 10% may be undergoing repair and maintenance.

SOURCE EQUIPMENT

- **Four (4) Input-Output AVH IV 4x4 Buggy Vibrators:**
Peak force is 62000lbs per Vibe and Hold-Down weight is 62400lbs per Vibe
- **Four (4) Pelton VibPro Vibrator Control Electronics**
- One (1) Pelton ShotPro Encoder for explosive work
- One (1) Pelton VibPro Encoder Sweep Generator for Recorder
- Three (3) operating Online and One (1) on Standby
- Electronics are capable of Trade Marked **Varisweep**

APPENDIX B

VEHICLE EQUIPMENT LIST

VEHICLE	REGISTRATION
100 Series Landcruiser Wagon	1CCX-396
100 Series Landcruiser Wagon	366 KKZ
100 Series Landcruiser Wagon	094 IIU
100 Series Landcruiser Wagon	096 IIU
100 Series Landcruiser Wagon	1BYK- 183
100 Series Landcruiser Wagon	772 KCU
100 Series Landcruiser Wagon	WZI 799
Troop Carrier Ambo	1CGX-030
Landcruiser Tray back	344IJX
Landcruiser Trayback	799-JMJ
Landcruiser Trayback	1BRD 044
Landcruiser Trayback	308-IJX
Landcruiser Trayback	367-KKZ
Landcruiser Trayback	798-JMJ
Landcruiser Trayback	311-IJX
Landcruiser Trayback	1BSR 496
Landcruiser Trayback	800-JMJ
Landcruiser Trayback	235-GVQ
Landcruiser Trayback	801-JMJ
Landcruiser Trayback	1CUE-670
LIGHT VEHICLE LIST	
I/O AHV-IV Vibrator	C 32657
I/O AHV-IV Vibrator	C 32658
I/O AHV-IV Vibrator	C 32659
I/O AHV-IV Vibrator	C 32660
Hino Recorder	1 CDW 327
Paystar Water Truck	627-JAH
Kenworth Cab/o	1AGB 177
Paystar Vibe Service Truck	875 HJU
Kenworth Spread Truck	874 HJU
Hino Spread Truck	7DT 982
Paystar Workshop	371 JCN
Freightliner Water	448 KMT
Kenworth Generators	WNK750
Paystar Spread	626 JAH
Hino Crane Truck	1 CMW 981
HEAVY VEHICLE LIST	

VEHICLE	REGISTRATION
6 x 4 Toilet Trailer (Ladies Single)	1TBF 454
8 x 5 Tandem Box Trailer (Wash Down)	1TBU 582
Dolly	509-QJG
Dry Stores/Coolroom on Trailer	508 QJG
Elross 1 Room (4 man) sleeper	1TER 545
Elross 1 Room (4 man) sleeper	1TER 546
Elross HSE Office	1TFB 626
Homemade Pig Trailer Laundry	496 QJG
Homemade Pig Trailer Showers	504 QJG
Mechanic's Workshop (C'made)	1TAR 750
Modern Caravan (Battery Hen)	6WC 169
Rio Tinto 3 Room Sleeper	506 QJG
Spread Trailer	507-QJG
Tri-axle trailer (Generators)	126-QMP
Tandem-axle trailer (Spread)	092-QIR
Tamworth Cable Repair	N 69423
Tandem 3 Toilet Trailer	0TDJ 497
Elross New Office/ 2 Man sleeper	1 TGL 813
Elross Diner	1 TGZ 789
Elross Kitchen	1TGZ 790
Elross 3 Rooms (6 man) sleeper	1TGL 663
Elross 3 Rooms (6 man) sleeper	1TGL 664
Elross 3 Rooms (6 man) sleeper	1TGL 666
Elross 3 Rooms (6 man) sleeper	1TGL 815
Elross 3 Rooms (6 man) sleeper	1TGL 812
Elross 3 Rooms (6 man) sleeper	1TGL 811
TRAILER LIST	

APPENDIX C

TAPE LISTING

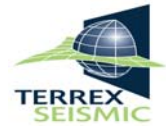
Beach Petroleum Modiolus 3D							
Tape #	Swath	First FFID	Last FFID	First VP	Last VP	Date Recorded	Comments
5001	Panel C	2	7387	5529/1438	5373/1190	31/05/2008 - 15/06/2008	Panel C
5002	Panel A	1	2595	5205/1303	5233/1141	16/06/2008 - 20/06/2008	Panel A
5003	Panel B	1	7404	5240/1128	5233/1604	20/06/08 -- 03/07/08	Panel B
5004	Panel D	1	9489	5436/1443	5548/1975	04/07/08 -- 20/07/08	Panel D
5005	Panel E	1	3242	5555/1995	5555/1814	20/07/08 -- 26/0/08	Panel E

APPENDIX D

OCCUPATIONAL HEALTH & SAFETY STANDARDS and HSE POLICY

- Site specific inductions / daily toolbox meetings / weekly safety meetings
 - Weekly Section head meetings
 - Personal protective equipment
 - Traffic Management Safety as required
 - VHF / UHF / HF communications
 - Vehicle emergency equipment
 - Random drug and alcohol tests





TERREX SEISMIC HEALTH, SAFETY AND ENVIRONMENT POLICY

Terrex Seismic is an Exploration Contractor involved in Seismic Acquisition to the Oil, Gas and Mineral Industries.

Our Commitments

- To provide a safe, healthy and injury free workplace for our employees, contractors and the general public.
- Assisting all of our employees and contractors to meet their HSE obligations.
- Establish and implement an HSE Management System and Operational Plans at all levels of the Company.
- Education and training of all of our Employees in HSE Systems, Procedures, Risk Assessment and Risk Minimization.
- Ongoing evaluation and modification of all of our HSE Management Systems, Procedures and Plans in order to ensure a consistent improvement in the establishment of a safe, healthy and environmentally sound workplace.
- Ensure all of our HSE Systems are in accordance with the relevant legislation and requirements of Clients and Government Bodies.

Our Goal

- To achieve a workplace where the targets of zero injuries, equipment damage and environmental incidents are attained.

Our Systems

- Management shall provide a visible, personal involvement in all aspects of HSE, and through their actions create a culture that facilitates employee HSE involvement. Management shall make available the appropriate resources to carry out all manner of HSE.
- Policies and objectives shall be initiated, defined, communicated and revised at all organizational levels.
- Organizational responsibilities shall be defined and the necessary resources provided to achieve HSE objectives
- Management shall continuously evaluate the HSE risks to the employees, clients and environment. Comprehensive risk assessment provides the necessary information in order to take action to reduce the risk to our operations.
- HSE shall be integrated in the design, development and delivery of all services. This includes planning for existing operations, managing change and developing emergency response measures.

Each employee has a personal responsibility to comply with this policy and contribute towards its implementation. Management holds the responsibility to communicate the requirements of this policy to all our employees, contractors and visitors and to involve them in its implementation.

Breach of this policy will be taken very seriously and may involve disciplinary action.

Stephen P. C. Tobin

APPENDIX E

END OF CONTRACT HSE SUMMARY





Health Safety & Environment

End of Contract Report Beach Petroleum_Modiolus 3D

28th May - 26th July 2008

Client	Beach Petroleum	HSE Advisor	Sarah Burton/Joanne Wulff/ Shirley Bobrowski
Location	Callawonga	Combined Personnel	46
Camp Site	57 person Accommodation	BAC Tests Conducted	151
Camp Location	38km North of Callawonga Wells	Preliminary Drug Tests	13
Sub-Contractors	Terrex Contracting Conics Positioning	Standard Operating Procedure Revisions	0

Summary

28-May-2008	Demobilisation from Caroowinnie 3D to Modiolus 3D
29-May-2008	Started laying spread
30-May-2008	Tory Tassone IVMS installer left crew today
31-May-2008	Commenced shooting.
01-June-2008	Drillers, Greg Willox and Matthew O'Leary arrived on site.
01-June-2008	Safety Sunday Meeting - Sun Safety
04-June-2008	Leo Bass started DETEC training. Oil Spill and Mechanics Workshop - refer incident report.
06-June-2008	Leo Bass finished DETEC and left crew.
08-June-2008	Rained in - not working.
09-June-2008	Line Crew returned to work.
12-June-2008	Client rep Stewart Thirlwell off site and Paul Belfrage in
15-June-2008	Safety Sunday Meeting - Personal Hygiene
18-June-2008	Stewart Thirlwell back on crew.
22-June-2008	Safety Sunday Meeting - Snake Bite Sophia Beresford-Cane injured elbow - refer incident report.
23-June-2008	Chris Phillips injured tooth - refer incident report.
24-June-2008	The drillers returned yesterday and will be commencing work on the lake again today.
25-June-2008	Vibe Oil Spill - refer incident report.
26-June-2008	Doug Roberts and Danny Burns arrive on crew for one night.
29-June-2008	Safety Sunday Meeting - Hazard and Incident Reporting Card Procedures.
05-June-2008	Drillers,Grg Willox, Mathew O'Leary and Vince Loving left site.
06-July-2008	Safety Sunday Meeting - Tyre Changing.
08-July-2008	Paul Belfrage here for a week replacing Stewart Thirlwell.
12-July-2008	Moved to Terrex Seismic Camp #2.
15-July-2008	Stewart Thirlwell back on crew, Paul Belfrage off site.
20-July-2008	Safety Sunday Meeting - Risk Assessment
24-July-2008	Doug Roberts and John Bourne arrive on crew for one night.
26-July-2008	Shooting Completed.

Medical Statistics

Safety Statistics	
Terrex Seismic Man-hours	33,624.00
Sub-Contractor Man-hours	0.00
Fatalities	0
LTI's	0
MTI's	0
Days since last MTI/LTI	491
First Aid Incidents	2
Incident / Accident Reports	4
Work Days Lost	0
Hazard Identification Reports	17
Training Hours	763.75
Tool Box / Safety Meeting Man-hours	747.40
Audits / Inspections	771
Drills	1
Land Spills (< 5 litres)	2

Clinic Attendance	
Colds/Flu/Sore throat	16
Non Specific	4
Ear / Nose / Throat	0
Allergies	0
Muscular / Skeletal / Soft Tissue	8
Eye Irritation	5
Headaches	11
Gynaecological	0
Wound / Laceration / Dressing	2
Skin / Rash / Fungal	2
Dental	1
Burn	1
Heat Illness	0
Bites / Stings	0
Upset Stomach	5
TOTAL	55

Report compiled by: Sarah Burton

APPENDIX F

PERSONNEL – CREW LIST

POSITION	NAMES
Crew Manager	Goossens Shane
Assistant Crew Manager	Hutchison Tony
HSE	Burton Sarah
HSE Trainee	Wulff Joanne
HSE	Bobrowski Shirley
Admin Staff	
Mechanic	Goossens Julien
Mechanic	Lawless Shane
Mechanic	Paul Marco
Campy	Ambachtsheer Nola
Campy	Halpin Julian
Campy	Harris Sarah
Campy	Onvlee Adrian
Campy	Powell Lorraine
Cook	Cook Alan
Cook	Smith Goeff
Cook	Togo Beau
Kitchen Hand	Iwaski Masako
Supply Driver	Laycock Timothy
Supply Driver	James Dave
Supply Driver	Kelly Shane
Supply Driver	Stirling Brennan
Camp Staff	
Observer	Burton Mitchell
Observer	Carry Joel
Junior Observer	Welsh Lisa
Cable Repair	Humphries Ben
Cable Repair (Trainee)	Richardson Brad
Cable Repair	Grainger Les
Technical	
Vib Op/Scout	Lynch David
Vib Op	Samios Luke
Vib Op	Fox Greg
Vib Op	Davidson Anthony
Vib Op	Little Greg
Vib Op	Atkins Wade
Vib Op	James Dave
Vib Op	Dittmer Karl
Vibrator Crew	
Vib Tech	Manning Edward
Vib Tech	Jourdrey Donald
Vib Tech Trainee	Cabot Allen
Vib Tech	
Line Boss	Byrne Gareth
Line Boss	Byrne Nathan
Snr Line	
T/Shooter	Byrne Nathan
T/Shooter	Byrne Gareth
T/Shooter	Wyllie Edward
T/Shooter	Capper Alyx
T/Shooter	McLeod Hamish
T/Shooter	Onvlee Adrian
T/Shooter	Miles Keeley
Trouble Shooters	
De-Pegger	William Smith
De-Pegger	Ryan McInroy
De-Pegger	Harmston Kennith
De-Pegger	Kelly Shane
De-Peggers	

POSITION	NAMES
Security	Hudson Tony
Security	Mc Leod Rowan
Security	Phillips Chris
Security	
Line Crew	Ablitt Gregory
Line Crew	Ambachtsheer Nola
Line Crew	Bresford-Kane Sophia
Line Crew	Bourke Kristy
Line Crew	Brandley Jessica
Line Crew	Brooke-Bailey Oliver
Line Crew	Byrne Nathan
Line Crew	Capper Alyx
Line Crew	Cullen Ben
Line Crew	Dittmer Karl
Line Crew	Durance Dale
Line Crew	Geisler Steven
Line Crew	Haase Anna
Line Crew	Harris Sarah
Line Crew	Harrison Josh
Line Crew	Harmston Kennith
Line Crew	Herrick Sam
Line Crew	Kelly Shane
Line Crew	Lloyd Tyson
Line Crew	Maher Josh
Line Crew	McCarthy Jeremy
Line Crew	McInroy Ryan
Line Crew	McLeod Hamish
Line Crew	McLeod Rowan
Line Crew	Miles Keeley
Line Crew	Moran Brad
Line Crew	Newbould Ryan
Line Crew	Nowley Darryl
Line Crew	Onvlee Adrian
Line Crew	Paul Carlo
Line Crew	Phillips Chris
Line Crew	Philpott Peter
Line Crew	Post James
Line Crew	Reynolds Johnathan
Line Crew	Richardson Brad
Line Crew	Rogers Luke
Line Crew	Samios Luke
Line Crew	Sampson Brooke
Line Crew	Smith Christine
Line Crew	Smith William
Line Crew	Taylor Aaron
Line Crew	Terrey Neil
Line Crew	Watty Dion
Line Crew	Wilson Dave
Line Crew	Wood Daryl
Line Crew	Wulff Fiona
Line Crew	Wyllie Edward
Line Crew	Wyllie Hugh
Line Crew	

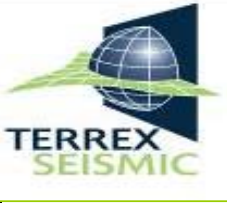
PERSONNEL – CREW NUMBERS

POSITION	NUMBERS
Crew Manager	1
Assistant Crew Manager	1
HSE	1
HSE Trainee	1
Mechanic	1 - 2
Campy	2
Cook	2
Kitchen Hand	1
Supply Driver	1
Observer	1
Junior Observer	1
Cable Repair	1 - 2
Cable Repair (Trainee)	1
Vib Op/Scout	1
Vib Op	4
Vib Tech	1 - 2
Vib Tech Trainee	1
Line Boss	1
T/Shooter	2
De-Pegger	1
Security	2
Line Crew	21 - 25

APPENDIX G

DAILY REPORTS

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client..... Beach Petroleum
Survey Name. Modiolus 3D
Area..... PEL 91, PEL 92
State..... SA

Party Manager: Shane Goossens
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Thursday, 29 May 2008

PRODUCTION

Swath	Source	Receiver	Kms.	Skips	Vp's	<u>Daily Totals</u>
						VP's: 0
						Skips: 0
						Lin.Kms: 0.0000
						Day.Sq.Klms: 0.0000
						<u>Cumulative Totals</u>
						Cum. Skip Vp's: 476
						Cum. VP's: 0
						Cum.Lin.Kms: 0.000
						Cum.Sq.Klm: 0.0000
						Lin.Kms.Remaining: 1215.32
						Sq.Kms.Remaining: 0.0000
						% Completed: 0.00%
						Average Daily Production Sq. Kms: 0.0000
						Average Daily Production Line Kms: 0.0000
						<u>Estimated Finish Date:</u>

HOURS

				<u>Daily Totals</u>
Working Time -	Down Time -	Standby Time -		Working Time: 0.0
Recording:	Human Error:	Toolbox/Safety Meeting:	0.3	Standby Time: 0.8
Requested Experimental:	Troubleshooting:	Induction:	0.5	Down Time: 0.0
Recorder Moveup:	Recorder:	Weather:		Non-Charge Time: 0.0
Vibrator Moveup:	Vibes:	Other:		Other: 11.7
Detour:	WOS:			Total Day Hrs: 12.5
Traverse Move:	Other:			Security & Offsider Hrs: 0.0
Swath Move:	Non-Charge Time -	Other -		<u>Cumulative Totals</u>
Spread Damage:	Travel Time:	Spread Layout/Pickup:	2.7	Working Time(Job): 0.0
Interprospect Move:	Instrument Tests\Morning QC:	Crew Demobe/Remobe:		Standby Time(Job): 0.8
Extras-	Panel Move:	Camp move prep:	9.0	Down Time(Job): 0.0
Vehicles:	Other:			Non-Charge Time(Job): 11.7
Mules:	3			Total Hrs (Job): 12.5
Tracked Buggies:	2			Security & Offsider Hrs(Job): 0.0
Personnel(Security):				
Personnel(Drillers):				
Personnel(Shot Firers):				

COMMENTS:

*Finish camp setup
*Start spread layout
*Crew induction by Doug Roberts

Spread Movement

Client: Modiolus 3D				Date: Thursday, 29 May 2008			
Layout				Pickup			
Line	Station #		Tot	Line	Station #		Tot
1611	5408	5463	56				1
Total Stations :			56	Total Stations:			1
Equipment Report				Bad Phones: 0			
				Bad Cable: 0			

Total Crew #'s:48 Line Crew #'s:26 Vehicle #'s:18

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client..... Beach Petroleum
Survey Name. Modiolus 3D
Area..... PEL 91, PEL 92
State..... SA

Party Manager: Shane Goossens
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Friday, 30 May 2008

PRODUCTION

Swath	Source	Receiver	Kms.	Skips	Vp's	<u>Daily Totals</u>
						VP's: 0
						Skips: 0
						Lin.Kms: 0.0000
						Day.Sq.Klms: 0.0000
						<u>Cumulative Totals</u>
						Cum. Skip Vp's: 476
						Cum. VP's: 0
						Cum.Lin.Kms: 0.000
						Cum.Sq.Klm: 0.0000
						Lin.Kms.Remaining: 1215.32
						Sq.Kms.Remaining: 0.0000
						% Completed: 0.00%
						Average Daily Production Sq. Kms: 0.0000
						Average Daily Production Line Kms: 0.0000
						<u>Estimated Finish Date:</u>

HOURS

				<u>Daily Totals</u>
Working Time -	Down Time -	Standby Time -		Working Time: 0.0
Recording:	Human Error:	Toolbox/Safety Meeting: 0.3		Standby Time: 0.3
Requested Experimental:	Troubleshooting:	Induction:		Down Time: 0.0
Recorder Moveup:	Recorder:	Weather:		Non-Charge Time: 0.0
Vibrator Moveup:	Vibes:	Other:		Other: 11.7
Detour:	WOS:			Total Day Hrs: 12.0
Traverse Move:	Other:			Security & Offsider Hrs: 0.0
Swath Move:	Non-Charge Time -	Other -		<u>Cumulative Totals</u>
Spread Damage:	Travel Time:	Spread Layout/Pickup: 11.7		Working Time(Job): 0.0
Interprospect Move:	Instrument Tests\Morning QC:	Crew Demobe/Remobe:		Standby Time(Job): 1.1
Extras-	Panel Move:	Camp move prep:		Down Time(Job): 0.0
Vehicles:	Other:			Non-Charge Time(Job): 23.4
Mules: 3				Total Hrs (Job): 24.5
Tracked Buggies: 2				Security & Offsider Hrs(Job): 0.0
Personnel(Security):				
Personnel(Drillers):				
Personnel(Shot Firers):				

COMMENTS:

*Spread layout continued
*Slow layout due to catching surveyors

Spread Movement

Client: Modiolus 3D

Date: Friday, 30 May 2008

Layout				Pickup			
Line	Station #		Tot	Line	Station #		Tot
1667	5408	5477	70				1
1660	5408	5477	70				
1653	5408	5477	70				
1646	5408	5477	70				
1639	5408	5477	70				
1632	5408	5477	70				
1625	5408	5477	70				
1618	5408	5477	70				
1611	5464	5477	14				
1604	5318	5477	160				
Total Stations :		734		Total Stations:		1	

Total Crew #'s:48 Line Crew #'s:26 Vehicle #'s:18

Equipment Report Bad Phones: 2 Bad Cable: 1

Crew Manager

Client Rep



Terrex Seismic Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Shane Goossens
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Saturday, 31 May 2008

PRODUCTION

Swath	Source	Receiver	Kms.	Skips	Vp's	Daily Totals
1	5429-5408	1667-1604	1.12	0	28	VP's: 203
2	5408-5429	1660-1597	1.12	0	28	Skips: 0
3	5429-5408	1653-1590	1.12	0	28	Lin.Kms: 8.1200
4	5408-5429	1646-1583	1.12	0	28	Day.Sq.Klms: 2.2157
5	5429-5345	1639-1576	3.64	0	91	Cumulative Totals
						Cum. Skip Vp's: 476
						Cum. VP's: 203
						Cum.Lin.Kms: 8.120
						Cum.Sq.Klm: 2.2157
						Lin.Kms.Remaining: 1207.20
						Sq.Kms.Remaining: -2.2157
						% Completed: 2.35%
						Average Daily Production Sq. Kms: 2.2157
						Average Daily Production Line Kms: 8.1200
						Estimated Finish Date:

HOURS

Daily Totals

Working Time -	Down Time -	Standby Time -	Working Time:	3.9
Recording: 2.1	Human Error:	Toolbox/Safety Meeting: 0.3	Standby Time:	0.3
Requested Experimental:	Troubleshooting:	Induction:	Down Time:	0.0
Recorder Moveup:	Recorder:	Weather:	Non-Charge Time:	1.9
Vibrator Moveup:	Vibes:	Other:	Other:	6.0
Detour: 0.3	WOS:		Total Day Hrs:	12.1
Traverse Move: 1.3	Other:		Security & Offsider Hrs:	0.0
Swath Move: 0.2	Non-Charge Time -	Other -	Cumulative Totals	
Spread Damage:	Travel Time: 0.7	Spread Layout/Pickup: 6.0	Working Time(Job):	3.9
Interprospect Move:	Instrument Tests\Morning QC: 0.2	Crew Demobe/Remobe:	Standby Time(Job):	1.4
Extras-	Panel Move:	Camp move prep:	Down Time(Job):	0.0
Vehicles:	Other: 1		Non-Charge Time(Job):	31.3
Mules: 3			Total Hrs (Job):	36.6
Tracked Buggies: 2			Security & Offsider Hrs(Job):	0.0
Personnel(Security):				
Personnel(Drillers):				
Personnel(Shot Firers):				

COMMENTS:

*Initial layout completed
*Production started on 3D survey

Spread Movement

Client: Modiolus 3D

Date: Saturday, 31 May 2008

Layout				Pickup			
Line	Station #		Tot	Line	Station #		Tot
1604	5296	5317	22	1667	5408	5477	70
1597	5296	5477	182	1660	5408	5477	70
1590	5296	5477	182	1653	5408	5477	70
1583	5296	5477	182	1646	5408	5477	70
1576	5296	5477	182				
1569	5296	5477	182				
1562	5405	5477	73				
Total Stations :			1005	Total Stations:			280

Total Crew #'s:48 Line Crew #'s:28 Vehicle #'s:18

Equipment Report Bad Phones: 2 Bad Cable: 3

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client..... Beach Petroleum
Survey Name. Modiolus 3D
Area..... PEL 91, PEL 92
State..... SA

Party Manager: Shane Goossens
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Sunday, 1 June 2008

PRODUCTION

Swath	Source	Receiver	Kms.	Skips	Vp's	Daily Totals
6	5345-5429	1632-1569	3.64	0	91	VP's: 511
7	5429-5345	1625-1562	3.64	0	91	Skips: 0
8	5345-5429	1618-1555	3.64	0	91	Lin.Kms: 20.4400
9	5429-5345	1611-1548	3.64	0	91	Day.Sq.Klms: 5.5774
10	5345-5429	1604-1541	3.64	0	91	Cumulative Totals
11	5429-5380	1597-1534	2.24	0	56	Cum. Skip Vp's: 476
						Cum. VP's: 714
						Cum.Lin.Kms: 28.560
						Cum.Sq.Klm: 7.7931
						Lin.Kms.Remaining: 1186.76
						Sq.Kms.Remaining: 323.8269
						% Completed: 2.35%
						Average Daily Production Sq. Kms: 3.8966
						Average Daily Production Line Kms: 14.2800
						Estimated Finish Date: Sunday, 24 August 2008

HOURS

Daily Totals

Working Time -	Down Time -	Standby Time -	Working Time:	10.4
Recording: 5.4	Human Error:	Toolbox/Safety Meeting: 0.3	Standby Time:	0.3
Requested Experimental:	Troubleshooting:	Induction:	Down Time:	0.2
Recorder Moveup: 0.7	Recorder:	Weather:	Non-Charge Time:	1.2
Vibrator Moveup:	Vibes: 0.2	Other:	Other:	0.0
Detour: 1.3	WOS:		Total Day Hrs:	12.1
Traverse Move: 2.7	Other:		Security & Offsider Hrs:	0.0
Swath Move: 0.3	Non-Charge Time -	Other -	Cumulative Totals	
Spread Damage:	Travel Time: 0.7	Spread Layout/Pickup:	Working Time(Job):	14.3
Interprospect Move:	Instrument Tests/Morning QC: 0.3	Crew Demobe/Remobe:	Standby Time(Job):	1.7
Extras-	Panel Move:	Camp move prep:	Down Time(Job):	0.0
Vehicles:	Other: 0.2		Non-Charge Time(Job):	32.7
Mules: 3			Total Hrs (Job):	48.7
Tracked Buggies: 2			Security & Offsider Hrs(Job):	0.0
Personnel(Security):				
Personnel(Drillers):				
Personnel(Shot Firers):				

COMMENTS:

*OK production, crew allowed to use main acces track tomorrow
*Vibrator down time due to electrical problem

Spread Movement

Client: Modiolus 3D

Date: Sunday, 1 June 2008

Layout				Pickup			
Line	Station #		Tot	Line	Station #		Tot
1562	5296	5404	109	1639	5408	5477	70
1555	5296	5477	182	1632	5408	5477	70
1548	5296	5477	182	1625	5408	5477	70
1541	5296	5477	182	1618	5408	5477	70
1534	5296	5477	182	1611	5296	5477	182
1527	5296	5345	50	1604	5296	5477	182
Total Stations :			887	Total Stations:			644

Total Crew #'s:48 Line Crew #'s:28 Vehicle #'s:18

Equipment Report

Bad Phones: 5

Bad Cable: 2

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Shane Goossens
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Monday, 2 June 2008

PRODUCTION

Swath	Source	Receiver	Kms.	Skips	Vp's	Daily Totals
11	5373-5345	1597-1534	1.4	0	35	VP's: 399
12	5345-5429	1590-1527	3.64	0	91	Skips: 0
13	5429-5345	1583-1520	3.64	0	91	Lin.Kms: 15.9600
14	5345-5429	1576-1513	3.64	0	91	Day.Sq.Klms: 4.3549
15	5429-5345	1569-1506	3.64	0	91	Cumulative Totals
						Cum. Skip Vp's: 476
						Cum. VP's: 1113
						Cum.Lin.Kms: 44.520
						Cum.Sq.Klm: 12.1480
						Lin.Kms.Remaining: 1170.80
						Sq.Kms.Remaining: 319.4720
						% Completed: 3.66%
						Average Daily Production Sq. Kms: 4.0493
						Average Daily Production Line Kms: 14.8400
						Estimated Finish Date: Wednesday, 20 August 2008

HOURS

					Daily Totals
Working Time -		Down Time -		Standby Time -	Working Time: 9.8
Recording:	4.5	Human Error:		Toolbox/Safety Meeting: 0.3	Standby Time: 1.2
Requested Experimental:		Troubleshooting:		Induction:	Down Time: 0.0
Recorder Moveup:		Recorder:		Weather:	Non-Charge Time: 1.1
Vibrator Moveup:		Vibes:		Spread Damage: 0.9	Other: 0.0
Detour:	0.6	WOS:			Total Day Hrs: 12.1
Traverse Move:	2.7	Other:			Security & Offsider Hrs: 0.0
Swath Move:	0.2	Non-Charge Time -		Other -	Cumulative Totals
WOS:	1.8	Travel Time:	0.7	Spread Layout/Pickup:	Working Time(Job): 24.1
Interprospect Move:		Instrument Tests\Morning QC:	0.1	Crew Demobe/Remobe:	Standby Time(Job): 3.2
Extras-		Panel Move:		Camp move prep:	Down Time(Job): 0.0
Vehicles:		Other:	0.3		Non-Charge Time(Job): 33.8
Mules:	3				Total Hrs (Job): 61.1
Tracked Buggies:	2				Security & Offsider Hrs(Job): 0.0
Personnel(Security):		Total security Hours (Job):		0	
Personnel(Drillers):	2				
Personnel(Shot Firers):					

COMMENTS:

*Spread damage caused by dingo or fox chewage
*Slow production, line crew slow because of lake
*Wait on spread time due to laying across salt lake

Spread Movement

Client: Modiolus 3D

Date: Monday, 2 June 2008

Layout				Pickup			
Line	Station #		Tot	Line	Station #		Tot
1527	5346	5477	132	1597	5296	5477	182
1520	5296	5477	182	1590	5296	5477	182
1513	5296	5477	182	1583	5296	5477	182
1506	5296	5477	182	1576	5296	5477	182
1499	5296	5359	64	1569	5424	5477	54
Total Stations :			742	Total Stations:			782

Total Crew #'s:48 Line Crew #'s:28 Vehicle #'s:18

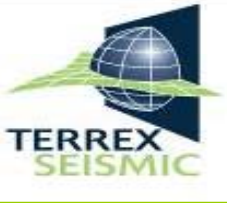
Equipment Report

Bad Phones: 3

Bad Cable: 3

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client..... Beach Petroleum
Survey Name. Modiolus 3D
Area..... PEL 91, PEL 92
State..... SA

Party Manager: Shane Goossens
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Tuesday, 3 June 2008

PRODUCTION

Swath	Source	Receiver	Kms.	Skips	Vp's	Daily Totals
16	5345-5429	1562-1499	3.64	0	91	VP's: 364
17	5429-5345	1555-1492	3.64	0	91	Skips: 0
18	5345-5429	1548-1485	3.64	0	91	Lin.Kms: 14.5600
19	5429-5345	1541-1478	3.64	0	91	Day.Sq.Klms: 3.9729
						Cumulative Totals
						Cum. Skip Vp's: 476
						Cum. VP's: 1477
						Cum.Lin.Kms: 59.080
						Cum.Sq.Klm: 16.1209
						Lin.Kms.Remaining: 1156.24
						Sq.Kms.Remaining: 315.4991
						% Completed: 4.86%
						Average Daily Production Sq. Kms: 4.0302
						Average Daily Production Line Kms: 14.7700
						Estimated Finish Date: Thursday, 21 August 2008

See Production Map Tab

HOURS

Daily Totals

Working Time -		Down Time -		Standby Time -		Working Time:		10.1
Recording:	4.0	Human Error:		Toolbox/Safety Meeting:	0.3	Standby Time:		1.1
Requested Experimental:		Troubleshooting:		Induction:		Down Time:		0.0
Recorder Moveup:	0.6	Recorder:		Weather:		Non-Charge Time:		0.9
Vibrator Moveup:		Vibes:		Spread Damage:	0.8	Other:		0.0
Detour:	0.4	WOS:				Total Day Hrs:		12.1
Traverse Move:	2.3	Other:				Security & Offsider Hrs:		0.0
Swath Move:		Non-Charge Time -		Other -		Cumulative Totals		
WOS:	2.8	Travel Time:	0.6	Spread Layout/Pickup:		Working Time(Job):		34.2
Interprospect Move:		Instrument Tests\Morning QC:	0.1	Crew Demobe/Remobe:		Standby Time(Job):		4.3
Extras-		Panel Move:		Camp move prep:		Down Time(Job):		0.0
Vehicles:		Other:	0.2			Non-Charge Time(Job):		34.7
Mules:	3					Total Hrs (Job):		73.2
Tracked Buggies:	2					Security & Offsider Hrs(Job):		0.0
Personnel(Security):		Total security Hours (Job):		0				
Personnel(Drillers):	2							
Personnel(Shot Firers):								

COMMENTS:

*Spread damage caused by dingo or fox chewage
*Slow production, line crew slow because of lake
*Wait on spread time due to laying across salt lake

Spread Movement

Client: Modiolus 3D

Date: Tuesday, 3 June 2008

Layout				Pickup			
Line	Station #		Tot	Line	Station #		Tot
1499	5360	5477	118	1569	5296	5423	128
1492	5296	5477	182	1562	5296	5477	182
1485	5296	5477	182	1555	5296	5477	182
1478	5296	5477	182	1548	5296	5477	182
1471	5282	5377	96	1541	5443	5477	35
Total Stations :			760	Total Stations:			709

Total Crew #'s:48 Line Crew #'s:28 Vehicle #'s:18

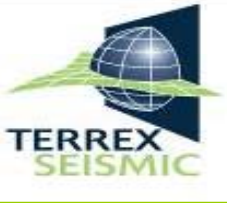
Equipment Report

Bad Phones: 2

Bad Cable: 3

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client..... Beach Petroleum
Survey Name. Modiolus 3D
Area..... PEL 91, PEL 92
State..... SA

Party Manager: Shane Goossens
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Wednesday, 4 June 2008

PRODUCTION

Swath	Source	Receiver	Kms.	Skips	Vp's	Daily Totals
20	5345-5429	1534-1471	3.64	0	91	VP's: 364
21	5429-5345	1527-1464	3.64	0	91	Skips: 0
22	5345-5429	1520-1457	3.64	0	91	Lin.Kms: 14.5600
23	5429-5345	1513-1450	3.64	0	91	Day.Sq.Klms: 3.9729
						Cumulative Totals
						Cum. Skip Vp's: 476
						Cum. VP's: 1841
						Cum.Lin.Kms: 73.640
						Cum.Sq.Klm: 20.0938
						Lin.Kms.Remaining: 1141.68
						Sq.Kms.Remaining: 311.5262
						% Completed: 6.06%
						Average Daily Production Sq. Kms: 4.0188
						Average Daily Production Line Kms: 14.7280
						Estimated Finish Date: Thursday, 21 August 2008

See Production Map Tab

HOURS

Daily Totals

Working Time -		Down Time -		Standby Time -		Working Time:		8.9
Recording:	4.0	Human Error:		Toolbox/Safety Meeting:	0.3	Standby Time:		1.8
Requested Experimental:		Troubleshooting:		Induction:		Down Time:		0.0
Recorder Moveup:		Recorder:		Weather:		Non-Charge Time:		1.2
Vibrator Moveup:		Vibes:		Spread Damage:	1.5	Other:		0.0
Detour:	0.4	WOS:				Total Day Hrs:		11.9
Traverse Move:	2.1	Other:				Security & Offsider Hrs:		0.0
Swath Move:	0.1	Non-Charge Time -		Other -		Cumulative Totals		
WOS:	2.3	Travel Time:	0.8	Spread Layout/Pickup:		Working Time(Job):		43.1
Interprospect Move:		Instrument Tests\Morning QC:	0.1	Crew Demobe/Remobe:		Standby Time(Job):		6.1
Extras-		Panel Move:		Camp move prep:		Down Time(Job):		0.0
Vehicles:		Other:	0.3			Non-Charge Time(Job):		35.9
Mules:	3					Total Hrs (Job):		85.1
Tracked Buggies:	2					Security & Offsider Hrs(Job):		0.0
Personnel(Security):		Total security Hours (Job):		0				
Personnel(Drillers):	2							
Personnel(Shot Firers):								

COMMENTS:

*Spread damage caused by dingo or fox chewage, line crew told not to leave any food scraps on line that will attract dingoes
*Wait on spread time due to laying across salt lake
*Slow production, line crew slow because of lake
*Front crew finished on lake, back to start picking up on lake today.

Spread Movement

Client: Modiolus 3D

Date: Wednesday, 4 June 2008

Layout				Pickup			
Line	Station #		Tot	Line	Station #		Tot
1471	5378	5463	86	1541	5296	5442	147
1464	5282	5463	182	1534	5296	5477	182
1457	5282	5463	182	1527	5296	5477	182
1450	5282	5463	182	1520	5296	5477	182
1443	5282	5405	124				
Total Stations :			756	Total Stations:			693

Total Crew #'s:48 Line Crew #'s:28 Vehicle #'s:18

Equipment Report

Bad Phones: 4

Bad Cable: 7

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Shane Goossens
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Thursday, 5 June 2008

PRODUCTION

Swath	Source	Receiver	Kms.	Skips	Vp's
24	5345-5429	1506-1443	3.64	0	91
25	5429-5345	1499-1436	3.64	0	91
26	5345-5429	1492-1429	3.64	0	91
27	5429-5345	1485-1422	3.64	0	91
28	5345-5387	1478-1415	1.96	0	49

Daily Totals

VP's: 413
Skips: 0
Lin.Kms: 16.5200
Day.Sq.Klms: 4.5078

Cumulative Totals

Cum. Skip Vp's: 476
Cum. VP's: 2254
Cum.Lin.Kms: 90.160
Cum.Sq.Klm: 24.6016
Lin.Kms.Remaining: 1125.16
Sq.Kms.Remaining: 307.0184
% Completed: 7.42%

Average Daily Production Sq. Kms: 4.1003

Average Daily Production Line Kms: 15.0267

Estimated Finish Date: Tuesday, 19 August 2008

See Production Map Tab

HOURS

Daily Totals

Working Time -		Down Time -		Standby Time -	
Recording:	4.3	Human Error:		Toolbox/Safety Meeting:	0.3
Requested Experimental:		Troubleshooting:		Induction:	
Recorder Moveup:	0.5	Recorder:		Weather:	
Vibrator Moveup:		Vibes:		Spread Damage:	0.7
Detour:		WOS:	1.6		
Traverse Move:	2.7	Other:			
Swath Move:		Non-Charge Time -		Other -	
WOS:	1.5	Travel Time:	0.5	Spread Layout/Pickup:	
Interprospect Move:		Instrument Tests/Morning QC:	0.1	Crew Demobe/Remobe:	
Extras-		Panel Move:		Camp move prep:	
Vehicles:		Other:			
Mules:	3				
Tracked Buggies:	2				
Personnel(Security):	2	Total security Hours (Job):	0		
Personnel(Drillers):	2				
Personnel(Shot Firers):	2				

Working Time: 9.0
Standby Time: 1.0
Down Time: 1.6
Non-Charge Time: 0.6
Other: 0.0
Total Day Hrs: 12.2
Total Day Charge Hrs: 10.0
Security & Offsider Hrs: 0.0

Cumulative Totals

Working Time(Job): 52.1
Standby Time(Job): 7.1
Down Time(Job): 1.6
Non-Charge Time(Job): 36.5
Total Hrs (Job): 97.3
Security & Offsider Hrs(Job): 0.0

COMMENTS:

*Spread damage caused by dingo or fox chewage
*Wait on spread time due to laying across salt lake
*Slow production, line crew slow because of lake
*Crew change in via Innamincka

Spread Movement

Client: Modiolus 3D

Date: Thursday, 5 June 2008

Layout				Pickup			
Line	Station #		Tot	Line	Station #		Tot
1443	5406	5463	58	1513	5296	5477	182
1436	5282	5463	182	1506	5296	5477	182
1429	5282	5463	182	1499	5296	5477	182
1422	5282	5463	182	1492	5296	5477	182
1415	5282	5463	182				
1408	5434	5463	30				
Total Stations :			816	Total Stations:			728

Total Crew #'s:46 Line Crew #'s:25 Vehicle #'s:18

Equipment Report

Bad Phones:

Bad Cable: 2

Crew Manager

Client Rep



Terrex Seismic Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Shane Goossens
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Friday, 6 June 2008

PRODUCTION

Swath	Source	Receiver	Kms.	Skips	Vp's	Daily Totals
28	5394-5429	1478-1415	1.68	0	42	VP's: 567
29	5464-5331	1471-1408	5.6	0	140	Skips: 0
30	5331-5464	1464-1401	5.6	0	140	Lin.Kms: 22.6800
31	5464-5331	1457-1394	5.6	0	140	Day.Sq.Klms: 6.1886
32	5331-5429	1450-1387	4.2	0	105	Cumulative Totals
						Cum. Skip Vp's: 476
						Cum. VP's: 2821
						Cum.Lin.Kms: 112.840
						Cum.Sq.Klm: 30.7902
						Lin.Kms.Remaining: 1102.48
						Sq.Kms.Remaining: 300.8298
						% Completed: 9.28%
						Average Daily Production Sq. Kms: 4.3986
						Average Daily Production Line Kms: 16.1200
						Estimated Finish Date: Thursday, 14 August 2008

See Production Map Tab

HOURS

Daily Totals

Working Time -	Down Time -	Standby Time -	Working Time:	10.4
Recording: 6.4	Human Error:	Toolbox/Safety Meeting: 0.3	Standby Time:	0.9
Requested Experimental:	Troubleshooting:	Induction:	Down Time:	0.0
Recorder Moveup:	Recorder:	Weather:	Non-Charge Time:	0.8
Vibrator Moveup:	Vibes:	Spread Damage: 0.6	Other:	0.0
Detour:	WOS:		Total Day Hrs:	12.1
Traverse Move: 3.5	Other:		Total Day Charge Hrs:	11.3
Swath Move: 0.5	Non-Charge Time -	Other -	Security & Offsider Hrs:	18.0
WOS:	Travel Time: 0.5	Spread Layout/Pickup:	Cumulative Totals	
Interprospect Move:	Instrument Tests/Morning QC: 0.1	Crew Demobe/Remobe:	Working Time(Job):	62.5
Extras-	Panel Move:	Camp move prep:	Standby Time(Job):	8.0
Vehicles: 1	Other: 0.2		Down Time(Job):	1.6
Mules: 3			Non-Charge Time(Job):	37.3
Tracked Buggies: 2			Total Hrs (Job):	109.4
Personnel(Security): 2	Total security Hours (Job): 18		Security & Offsider Hrs(Job):	18.0
Personnel(Drillers): 2				
Personnel(Shot Firers): 2				

COMMENTS:

*Spread damage caused by dingo or fox chewage
*Good production, no wait on spread
*Back crew nearly clear of salt lake

Spread Movement

Client: Modiolus 3D

Date: Friday, 6 June 2008

Layout				Pickup			
Line	Station #		Tot	Line	Station #		Tot
1408	5282	5433	152	1485	5296	5477	182
1401	5282	5463	182	1478	5296	5463	168
1394	5282	5463	182	1471	5282	5463	182
1387	5282	5463	182	1464	5282	5463	182
1380	5373	5463	91	1457	5350	5463	114
Total Stations :			789	Total Stations:			828

Total Crew #'s:46 Line Crew #'s:25 Vehicle #'s:18

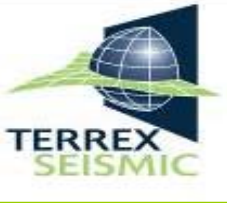
Equipment Report

Bad Phones: 2

Bad Cable: 2

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client..... Beach Petroleum
Survey Name..... Modiolus 3D
Area..... PEL 91, PEL 92
State..... SA

Party Manager: Shane Goossens
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Saturday, 7 June 2008

PRODUCTION

Swath	Source	Receiver	Kms.	Skips	Vp's	Daily Totals
32	5426-5464	1450-1387	1.4	0	35	VP's: 588
33	5464-5331	1443-1380	5.6	0	140	Skips: 0
34	5331-5464	1436-1373	5.6	0	140	Lin.Kms: 23.5200
35	5464-5331	1429-1366	5.6	0	140	Day.Sq.Klms: 6.4178
36	5331-5457	1422-1359	5.32	0	133	Cumulative Totals
						Cum. Skip Vp's: 476
						Cum. VP's: 3409
						Cum.Lin.Kms: 136.360
						Cum.Sq.Klm: 37.2080
						Lin.Kms.Remaining: 1078.96
						Sq.Kms.Remaining: 294.4120
						% Completed: 11.22%
						Average Daily Production Sq. Kms: 4.6510
						Average Daily Production Line Kms: 17.0450
						Estimated Finish Date: Sunday, 10 August 2008

See Production Map Tab

HOURS

Daily Totals

Working Time -		Down Time -		Standby Time -		Working Time:	11.2
Recording:	6.8	Human Error:		Toolbox/Safety Meeting:	0.3	Standby Time:	0.3
Requested Experimental:		Troubleshooting:		Induction:		Down Time:	0.0
Recorder Moveup:	0.5	Recorder:		Weather:		Non-Charge Time:	0.8
Vibrator Moveup:		Vibes:		Spread Damage:		Other:	0.0
Detour:		WOS:				Total Day Hrs:	12.3
Traverse Move:	3.6	Other:				Total Day Charge Hrs:	11.5
Swath Move:	0.3	Non-Charge Time -		Other -		Security & Offsider Hrs:	42.0
WOS:		Travel Time:	0.5	Spread Layout/Pickup:		Cumulative Totals	
Interprospect Move:		Instrument Tests/Morning QC:	0.1	Crew Demobe/Remobe:		Working Time(Job):	73.7
Extras-		Panel Move:		Camp move prep:		Standby Time(Job):	8.3
Vehicles:	1	Other:	0.2			Down Time(Job):	1.6
Mules:	3					Non-Charge Time(Job):	38.1
Tracked Buggies:	2					Total Hrs (Job):	121.7
Personnel(Security):	2	Total security Hours (Job):		42		Security & Offsider Hrs(Job):	42.0
Personnel(Drillers):	2						
Personnel(Shot Firers):	2						

COMMENTS:

*Good production, no wait on spread
*All spread off salt lake

Spread Movement

Client: Modiolus 3D

Date: Saturday, 7 June 2008

Layout				Pickup			
Line	Station #		Tot	Line	Station #		Tot
1380	5282	5372	91	1457	5282	5349	68
1373	5282	5463	182	1450	5282	5463	182
1366	5282	5463	182	1443	5282	5463	182
1359	5282	5463	182	1436	5282	5463	182
1352	5282	5463	182	1429	5282	5463	182
1345	5282	5318	37	1422	5282	5344	63
Total Stations :			856	Total Stations:			859

Total Crew #'s:46 Line Crew #'s:25 Vehicle #'s:18

Equipment Report

Bad Phones: 3

Bad Cable: 1

Crew Manager

Client Rep

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Shane Goossens
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Monday, 9 June 2008

PRODUCTION

Swath	Source	Receiver	Kms.	Skips	Vp's
36	5464	1422-1359	0.28	0	7
37	5464-5331	1415-1352	5.6	0	140
38	5331-5464	1408-1345	5.6	0	140
39	5464-5415	1401-1338	2.24	0	56

Daily Totals

VP's: 343
Skips: 0
Lin.Kms: 13.7200
Day.Sq.Klms: 3.7437

Cumulative Totals

Cum. Skip Vp's: 476
Cum. VP's: 3752
Cum.Lin.Kms: 150.080
Cum.Sq.Klm: 40.9517
Lin.Kms.Remaining: 1065.24
Sq.Kms.Remaining: 290.6683
% Completed: 12.35%
Average Daily Production Sq. Kms: 4.5502
Average Daily Production Line Kms: 16.6756
Estimated Finish Date: Tuesday, 12 August 2008

See Production Map Tab

HOURS

Daily Totals

Working Time -		Down Time -		Standby Time -	
Recording:	3.8	Human Error:		Toolbox/Safety Meeting:	0.3
Requested Experimental:		Troubleshooting:	0.6	Induction:	
Recorder Moveup:		Recorder:		Weather:	
Vibrator Moveup:		Vibes:		Spread Damage:	2.3
Detour:	0.1	WOS:			
Traverse Move:	2.2	Other:			
Swath Move:	0.1	Non-Charge Time -		Other -	
WOS:		Travel Time:	0.5	Spread Layout/Pickup:	
Interprospect Move:		Instrument Tests	Morning QC: 0.1	Crew Demobe/Remobe:	
Extras-		Panel Move:		Camp move prep:	
Vehicles:	1	Other:	0.2		
Mules:	3				
Tracked Buggies:	2				
Personnel(Security):	2	Total security Hours (Job): 90			
Personnel(Drillers):	2				
Personnel(Shot Firers):	2				

Working Time: 6.2
Standby Time: 2.6
Down Time: 0.6
Non-Charge Time: 0.8
Other: 0.0
Total Day Hrs: 10.2
Total Day Charge Hrs: 8.8

Cumulative Totals

Working Time(Job): 79.9
Standby Time(Job): 20.9
Down Time(Job): 2.2
Non-Charge Time(Job): 38.9
Total Hrs (Job): 141.9
Security & Offsider Hrs(Job): 90.0

COMMENTS:

*Substantial spread damage due to cattle & dingoes
*Many phones pulled out of ground due to cattle
*Good production considering late start

Spread Movement

Client: Modiolus 3D

Date: Monday, 9 June 2008

Layout				Pickup			
Line	Station #		Tot	Line	Station #		Tot
1345	5319	5463	145	1422	5345	5463	119
1338	5282	5463	182	1415	5282	5463	182
1331	5282	5463	182	1408	5282	5463	182
1324	5450	5463	14				
Total Stations :			523	Total Stations:			483

Total Crew #'s:46 Line Crew #'s:25 Vehicle #'s:18

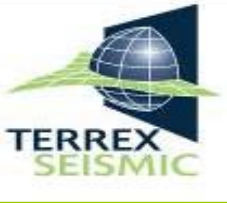
Equipment Report

Bad Phones: 5

Bad Cable: 2

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client..... Beach Petroleum
Survey Name..... Modiolus 3D
Area..... PEL 91, PEL 92
State..... SA

Party Manager: Shane Goossens
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Tuesday, 10 June 2008

PRODUCTION

Swath	Source	Receiver	Kms.	Skips	Vp's	Daily Totals
39	5408-5331	1401-1338	3.36	0	84	VP's: 594
40	5331-5464	1394-1331	5.6	0	140	Skips: 15
41	5464-5331	1387-1324	5.6	4	136	Lin.Kms: 24.3600
42	5331-5464	1380-1317	5.6	11	129	Day.Sq.Klms: 6.6470
43	5464-5366	1373-1310	4.2	0	105	Cumulative Totals
						Cum. Skip Vp's: 476
						Cum. VP's: 4346
						Cum.Lin.Kms: 174.440
						Cum.Sq.Klm: 47.5987
						Lin.Kms.Remaining: 1040.88
						Sq.Kms.Remaining: 284.0213
						% Completed: 14.35%
						Average Daily Production Sq. Kms: 4.7599
						Average Daily Production Line Kms: 17.4440
						Estimated Finish Date: Saturday, 9 August 2008

See Production Map Tab

HOURS

Daily Totals

Working Time -		Down Time -		Standby Time -		Working Time:	10.7
Recording:	6.5	Human Error:		Toolbox/Safety Meeting:	0.3	Standby Time:	0.5
Requested Experimental:		Troubleshooting:		Induction:		Down Time:	0.1
Recorder Moveup:		Recorder:		Weather:		Non-Charge Time:	0.8
Vibrator Moveup:		Vibes:	0.1	Spread Damage:	0.2	Other:	0.0
Detour:		WOS:				Total Day Hrs:	12.1
Traverse Move:	4.0	Other:				Total Day Charge Hrs:	11.2
Swath Move:	0.2	Non-Charge Time -		Other -		Cumulative Totals	
WOS:		Travel Time:	0.5	Spread Layout/Pickup:		Working Time(Job):	90.6
Interprospect Move:		Instrument Tests\Morning QC:	0.1	Crew Demobe/Remobe:		Standby Time(Job):	21.4
Extras-		Panel Move:		Camp move prep:		Down Time(Job):	2.3
Vehicles:	1	Other:	0.2			Non-Charge Time(Job):	39.7
Mules:	3					Total Hrs (Job):	154.0
Tracked Buggies:	2					Security & Offsider Hrs(Job):	114.0
Personnel(Security):	2	Total security Hours (Job):		114			
Personnel(Drillers):	2						
Personnel(Shot Firers):	2						

COMMENTS:

*Good production
*Skip vp's for salt lake, no points surveyed

Spread Movement

Client: Modiolus 3D

Date: Tuesday, 10 June 2008

Layout				Pickup			
Line	Station #		Tot	Line	Station #		Tot
1324	5282	5449	168	1401	5282	5463	182
1317	5282	5463	182	1394	5282	5463	182
1310	5282	5463	182	1387	5282	5463	182
1303	5282	5463	182	1380	5282	5463	182
1296	5371	5463	93	1373	5422	5463	42
Total Stations :			807	Total Stations:			770

Total Crew #'s:46 Line Crew #'s:25 Vehicle #'s:18

Equipment Report

Bad Phones: 1

Bad Cable: 3

Crew Manager

Client Rep



Terrex Seismic Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Shane Goossens
Client Rep: Paul Belfrage
Weather: Fine / Cool
DATE: Wednesday, 11 June 2008

PRODUCTION

Swath	Source	Receiver	Kms.	Skips	Vp's	Daily Totals
43	5359-5331	1373-1310	1.4	9	26	VP's: 565
44	5331-5464	1366-1303	5.6	7	133	Skips: 58
45	5464-5331	1359-1296	5.6	9	131	Lin.Kms: 24.9200
46	5331-5464	1352-1289	5.6	20	120	Day.Sq.Klms: 6.7998
47	5464-5331	1345-1282	5.6	13	127	Cumulative Totals
48	5331-5352	1338-1275	1.12	0	28	Cum. Skip Vp's: 476
						Cum. VP's: 4911
						Cum.Lin.Kms: 199.360
						Cum.Sq.Klm: 54.3985
						Lin.Kms.Remaining: 1015.96
						Sq.Kms.Remaining: 277.2215
						% Completed: 16.40%
						Average Daily Production Sq. Kms: 4.9453
						Average Daily Production Line Kms: 18.1236
						Estimated Finish Date: Thursday, 7 August 2008

See Production Map Tab

HOURS

Daily Totals

Working Time -		Down Time -		Standby Time -		Working Time:	11.2
Recording:	6.0	Human Error:		Toolbox/Safety Meeting:	0.3	Standby Time:	0.3
Requested Experimental:		Troubleshooting:		Induction:		Down Time:	0.0
Recorder Moveup:	0.5	Recorder:		Weather:		Non-Charge Time:	0.6
Vibrator Moveup:		Vibes:		Spread Damage:		Other:	0.0
Detour:	1.3	WOS:				Total Day Hrs:	12.1
Traverse Move:	3.2	Other:				Total Day Charge Hrs:	11.5
Swath Move:	0.2	Non-Charge Time -		Other -		Cumulative Totals	
WOS:		Travel Time:	0.5	Spread Layout/Pickup:		Working Time(Job):	101.8
Interprospect Move:		Instrument Tests/Morning QC:	0.1	Crew Demobe/Remobe:		Standby Time(Job):	21.7
Extras-		Panel Move:		Camp move prep:		Down Time(Job):	2.3
Vehicles:	1	Other:				Non-Charge Time(Job):	40.3
Mules:	3					Total Hrs (Job):	166.1
Tracked Buggies:	2					Security & Offsider Hrs(Job):	138.0
Personnel(Security):	2	Total security Hours (Job):		138			
Personnel(Drillers):	2						
Personnel(Shot Firers):	2						

COMMENTS:

*Good production
*Skip vp's for salt lake, no points surveyed
*Detour time due to salt lakes

Spread Movement

Client: Modiolus 3D

Date: Wednesday, 11 June 2008

Layout				Pickup			
Line	Station #		Tot	Line	Station #		Tot
1296	5282	5370	89	1373	5282	5421	140
1289	5282	5463	182	1366	5282	5463	182
1282	5282	5463	182	1359	5282	5463	182
1275	5282	5463	182	1352	5282	5463	182
1268	5282	5463	182	1345	5375	5463	89
Total Stations :			817	Total Stations:			775

Total Crew #'s:46 Line Crew #'s:25 Vehicle #'s:18

Equipment Report

Bad Phones: 6

Bad Cable: 1

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client..... Beach Petroleum
Survey Name..... Modiolus 3D
Area..... PEL 91, PEL 92
State..... SA

Party Manager: Shane Goossens
Client Rep: Paul Belfrage
Weather: Fine / Cool
DATE: Thursday, 12 June 2008

PRODUCTION

Swath	Source	Receiver	Kms.	Skips	Vp's	Daily Totals
48	5352-5464	1338-1275	4.48	14	98	VP's: 627
49	5464-5331	1331-1268	5.6	13	127	Skips: 31
50	5331-5464	1324-1261	5.6	4	136	Lin.Kms: 26.3200
51	5464-5331	1317-1254	5.6	0	140	Day.Sq.Klms: 7.1818
52	5331-5450	1310-1247	5.04	0	126	Cumulative Totals
						Cum. Skip Vp's: 476
						Cum. VP's: 5538
						Cum.Lin.Kms: 225.680
						Cum.Sq.Klm: 61.5803
						Lin.Kms.Remaining: 989.64
						Sq.Kms.Remaining: 270.0397
						% Completed: 18.57%
						Average Daily Production Sq. Kms: 5.1317
						Average Daily Production Line Kms: 18.8067
						Estimated Finish Date: Monday, 4 August 2008

See Production Map Tab

HOURS

					Daily Totals
Working Time -		Down Time -		Standby Time -	Working Time: 11.3
Recording:	6.5	Human Error:		Toolbox/Safety Meeting: 0.3	Standby Time: 0.3
Requested Experimental:		Troubleshooting:		Induction:	Down Time: 0.0
Recorder Moveup:	0.5	Recorder:		Weather:	Non-Charge Time: 0.6
Vibrator Moveup:		Vibes:		Spread Damage:	Other: 0.0
Detour:	0.3	WOS:			Total Day Hrs: 12.2
Traverse Move:	3.8	Other:			Total Day Charge Hrs: 11.6
Swath Move:	0.2	Non-Charge Time -		Other -	Cumulative Totals
WOS:		Travel Time:	0.5	Spread Layout/Pickup:	Working Time(Job): 113.1
Interprospect Move:		Instrument Tests\Morning QC:	0.1	Crew Demobe/Remobe:	Standby Time(Job): 22.0
Extras-		Panel Move:		Camp move prep:	Down Time(Job): 2.3
Vehicles:	1	Other:			Non-Charge Time(Job): 40.9
Mules:	3				Total Hrs (Job): 178.3
Tracked Buggies:	2				Security & Offsider Hrs(Job): 162.0
Personnel(Security):	2	Total security Hours (Job): 162			
Personnel(Drillers):					
Personnel(Shot Firers):	2				

COMMENTS:

*Good production
*Skip vp's for salt lake, no points surveyed
*Detour time due to salt lakes

Spread Movement

Client: Modiolus 3D

Date: Thursday, 12 June 2008

Layout				Pickup			
Line	Station #		Tot	Line	Station #		Tot
1261	5282	5463	182	1345	5282	5374	93
1254	5282	5463	182	1338	5282	5463	182
1247	5282	5463	182	1331	5282	5463	182
1240	5282	5463	182	1324	5282	5463	182
1233	5282	5330	49	1317	5282	5463	182
Total Stations :			777	Total Stations:			821

Total Crew #'s:46 Line Crew #'s:24 Vehicle #'s:18

Equipment Report

Bad Phones: 4

Bad Cable:

Crew Manager

Client Rep



Terrex Seismic Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Shane Goossens
Client Rep: Paul Belfrage
Weather: Fine / Cool
DATE: Friday, 13 June 2008

PRODUCTION

Swath	Source	Receiver	Kms.	Skips	Vp's	Daily Totals
52	5450-5464	1310-1247	0.56		14	VP's: 623
53	5464-5331	1303-1240	5.6		140	Skips: 0
54	5331-5464	1296-1233	5.6		140	Lin.Kms: 24.9200
55	5464-5331	1289-1226	5.6		140	Day.Sq.Klms: 6.7998
56	5331-5464	1282-1219	5.6		140	Cumulative Totals
57	5464-5422	1275-1212	1.96		49	Cum. Skip Vp's: 476
						Cum. VP's: 6161
						Cum.Lin.Kms: 250.600
						Cum.Sq.Klm: 68.3801
						Lin.Kms.Remaining: 964.72
						Sq.Kms.Remaining: 263.2399
						% Completed: 20.62%
						Average Daily Production Sq. Kms: 5.2600
						Average Daily Production Line Kms: 19.2769
						Estimated Finish Date: Sunday, 3 August 2008

See Production Map Tab

HOURS

Daily Totals

Working Time -	Down Time -	Standby Time -	Working Time:	10.6
Recording: 6.8	Human Error:	Toolbox/Safety Meeting: 0.3	Standby Time:	1.1
Requested Experimental:	Troubleshooting:	Induction:	Down Time:	0.0
Recorder Moveup:	Recorder:	Weather:	Non-Charge Time:	0.6
Vibrator Moveup:	Vibes:	Spread Damage: 0.8	Other:	0.0
Detour:	WOS:		Total Day Hrs:	12.3
Traverse Move: 3.5	Other:		Total Day Charge Hrs:	11.7
Swath Move: 0.3	Non-Charge Time -	Other -	Security & Offsider Hrs:	186.0
WOS:	Travel Time: 0.5	Spread Layout/Pickup:	Cumulative Totals	
Interprospect Move:	Instrument Tests/Morning QC: 0.1	Crew Demobe/Remobe:	Working Time(Job):	123.7
Extras-	Panel Move:	Camp move prep:	Standby Time(Job):	23.1
Vehicles: 1	Other:		Down Time(Job):	2.3
Mules: 3			Non-Charge Time(Job):	41.5
Tracked Buggies: 2			Total Hrs (Job):	190.6
Personnel(Security): 2	Total security Hours (Job): 186		Security & Offsider Hrs(Job):	186.0
Personnel(Drillers):				
Personnel(Shot Firers): 2				

COMMENTS:

*Good production
*Spread damage due to dingo chewage, 2 sets of geophones missing

Spread Movement

Client: Modiolus 3D

Date: Friday, 13 June 2008

Layout				Pickup			
Line	Station #		Tot	Line	Station #		Tot
1233	5331	5463	133	1310	5282	5463	182
1226	5282	5463	182	1303	5282	5463	182
1219	5282	5463	182	1296	5282	5463	182
1212	5282	5463	182	1289	5282	5463	182
1205	5282	5463	182	1282	5282	5463	182
Total Stations :			861	Total Stations:			910

Total Crew #'s:46 Line Crew #'s:25 Vehicle #'s:18

Equipment Report

Bad Phones: 8

Bad Cable: 3

Crew Manager

Client Rep



Terrex Seismic Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Shane Goossens
Client Rep: Paul Belfrage
Weather: Fine / Cool
DATE: Saturday, 14 June 2008

PRODUCTION

Swath	Source	Receiver	Kms.	Skips	Vp's
57	5422-5331	1275-1212	3.64	0	91
58	5331-5464	1268-1205	5.6	0	140
59	5464-5331	1261-1198	5.6	0	140
60	5331-5464	1254-1191	5.6	0	140
61	5464-5345	1247-1184	5.04	0	126

Daily Totals

VP's: 637
Skips: 0
Lin.Kms: 25.4800
Day.Sq.Klms: 6.9526

Cumulative Totals

Cum. Skip Vp's: 476
Cum. VP's: 6798
Cum.Lin.Kms: 276.080
Cum.Sq.Klm: 75.3327
Lin.Kms.Remaining: 939.24
Sq.Kms.Remaining: 256.2873
% Completed: 22.72%
Average Daily Production Sq. Kms: 5.3809
Average Daily Production Line Kms: 19.7200
Estimated Finish Date: Friday, 1 August 2008

See Production Map Tab

HOURS

Daily Totals

Working Time -		Down Time -		Standby Time -		Working Time:	11.3
Recording:	6.8	Human Error:		Toolbox/Safety Meeting:	0.3	Standby Time:	0.3
Requested Experimental:		Troubleshooting:		Induction:		Down Time:	0.0
Recorder Moveup:	0.5	Recorder:		Weather:		Non-Charge Time:	0.6
Vibrator Moveup:		Vibes:		Spread Damage:		Other:	0.0
Detour:		WOS:				Total Day Hrs:	12.2
Traverse Move:	3.8	Other:				Total Day Charge Hrs:	11.6
Swath Move:	0.2	Non-Charge Time -		Other -		Cumulative Totals	
WOS:		Travel Time:	0.4	Spread Layout/Pickup:		Working Time(Job):	135.0
Interprospect Move:		Instrument Tests\Morning QC:	0.2	Crew Demobe/Remobe:		Standby Time(Job):	23.4
Extras-		Panel Move:		Camp move prep:		Down Time(Job):	2.3
Vehicles:	1	Other:				Non-Charge Time(Job):	42.1
Mules:	3					Total Hrs (Job):	202.8
Tracked Buggies:	2					Security & Offsider Hrs(Job):	210.0
Personnel(Security):	2	Total security Hours (Job):		210			
Personnel(Drillers):							
Personnel(Shot Firers):	2						

COMMENTS:

*Good production
*Panel C completely layed with spread
*Spread layout commenced on Panel A

Spread Movement

Client: Modiolus 3D

Date: Saturday, 14 June 2008

Layout				Pickup			
Line	Station #		Tot	Line	Station #		Tot
1198	5282	5463	182	1275	5282	5463	182
1191	5282	5463	182	1268	5282	5463	182
1184	5282	5463	182	1261	5282	5463	182
1177	5282	5316	35	1254	5282	5463	182
1170	5282	5316	35	1247	5429	5463	35
1163	5282	5316	35				
1156	5282	5316	35				
1338	5281	5205	77				
Total Stations :			763	Total Stations:			763

Total Crew #'s:46 Line Crew #'s:25 Vehicle #'s:18

Equipment Report

Bad Phones: 4

Bad Cable: 1

Crew Manager

Client Rep



Terrex Seismic Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Shane Goossens
Client Rep: Paul Belfrage
Weather: Fine / Cool
DATE: Sunday, 15 June 2008

PRODUCTION

Swath	Source	Receiver	Kms.	Skips	Vp's	Daily Totals
61	5345-5331	1247-1184	0.56	0	14	VP's: 574
62	5331-5464	1240-1184	5.6	0	140	Skips: 0
63	5464-5331	1233-1184	5.6	0	140	Lin.Kms: 22.9600
64	5331-5464	1226-1184	5.6	0	140	Day.Sq.Klms: 6.2650
65	5464-5331	1219-1184	5.6	0	140	Cumulative Totals
						Cum. Skip Vp's: 476
						Cum. VP's: 7372
						Cum.Lin.Kms: 299.040
						Cum.Sq.Klm: 81.5977
						Lin.Kms.Remaining: 916.28
						Sq.Kms.Remaining: 250.0223
						% Completed: 24.61%
						Average Daily Production Sq. Kms: 5.4398
						Average Daily Production Line Kms: 19.9360
						Estimated Finish Date: Thursday, 31 July 2008

See Production Map Tab

HOURS

Daily Totals

Working Time -	Down Time -	Standby Time -	Working Time:	10.5
Recording: 6.3	Human Error:	Toolbox/Safety Meeting: 0.3	Standby Time:	0.7
Requested Experimental:	Troubleshooting:	Induction:	Down Time:	0.0
Recorder Moveup: 1.1	Recorder:	Weather:	Non-Charge Time:	1.0
Vibrator Moveup:	Vibes:	Spread Damage: 0.4	Other:	0.0
Detour:	WOS:		Total Day Hrs:	12.2
Traverse Move: 2.9	Other:		Total Day Charge Hrs:	11.2
Swath Move: 0.2	Non-Charge Time -	Other -		
WOS:	Travel Time: 0.6	Spread Layout/Pickup:		
Interprospect Move:	Instrument Tests/Morning QC: 0.2	Crew Demobe/Remobe:		
Extras-	Panel Move:	Camp move prep:		
Vehicles: 1	Other: 0.2			
Mules: 3				
Tracked Buggies: 2				
Personnel(Security): 2	Total security Hours (Job): 234			
Personnel(Drillers):				
Personnel(Shot Firers): 2				

Cumulative Totals

Working Time(Job):	145.5
Standby Time(Job):	24.1
Down Time(Job):	2.3
Non-Charge Time(Job):	43.1
Total Hrs (Job):	215.0
Security & Offsider Hrs(Job):	234.0

COMMENTS:

Spread Movement

Client: Modiolus 3D				Date: Sunday, 15 June 2008			
Layout				Pickup			
Line	Station #		Tot	Line	Station #		Tot
1331	5205	5281	77	1247	5282	5428	147
1324	5205	5281	77	1240	5282	5463	182
1317	5205	5281	77	1233	5282	5463	182
1310	5205	5281	77	1226	5282	5317	36
1303	5205	5281	77	1219	5282	5317	36
1296	5205	5281	77	1212	5282	5317	36
1289	5205	5281	77	1205	5282	5317	36
1282	5128	5281	154	1198	5282	5317	36
1275	5128	5192	65	1191	5282	5317	36
				1184	5282	5317	36
				1177	5282	5317	36
				1170	5282	5317	36
				1163	5282	5317	36
				1156	5282	5317	36
				1184	5318	5345	28
Total Stations :			758	Total Stations:			935
Equipment Report				Bad Phones: 1			
Bad Cable: 1							

Total Crew #'s:46 Line Crew #'s:25 Vehicle #'s:18

Crew Manager

Client Rep



Terrex Seismic Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Shane Goossens
Client Rep: Paul Belfrage
Weather: Fine / Cool
DATE: Monday, 16 June 2008

PRODUCTION

Swath	Source	Receiver	Kms.	Skips	Vp's
66	5233-5205	1338-1275	1.4	0	35
67	5205-5233	1331-1268	1.4	0	35
68	5233-5205	1324-1261	1.4	0	35
69	5205-5233	1317-1254	0.84	0	21

Daily Totals

VP's: 126
Skips: 0
Lin.Kms: 5.0400
Day.Sq.Klms: 1.3752

Cumulative Totals

Cum. Skip Vp's: 476
Cum. VP's: 7498
Cum.Lin.Kms: 304.080
Cum.Sq.Klm: 82.9729
Lin.Kms.Remaining: 911.24
Sq.Kms.Remaining: 248.6471
% Completed: 25.02%
Average Daily Production Sq. Kms: 5.1858
Average Daily Production Line Kms: 19.0050
Estimated Finish Date: Sunday, 3 August 2008

See Production Map Tab

HOURS

Daily Totals

Working Time -		Down Time -		Standby Time -	
Recording:	1.4	Human Error:		Toolbox/Safety Meeting:	0.3
Requested Experimental:		Troubleshooting:		Induction:	
Recorder Moveup:		Recorder:		Weather:	
Vibrator Moveup:		Vibes:		Spread Damage:	
Detour:		WOS:			
Traverse Move:	0.6	Other:			
Swath Move:	0.2	Non-Charge Time -		Other -	
WOS:		Travel Time:	0.6	Spread Layout/Pickup:	
Panel Move:	9.0	Instrument Tests/Morning QC:	0.1	Crew Demobe/Remobe:	
Extras-		Panel Move:		Camp move prep:	
Vehicles:	1	Other:			
Mules:	3				
Tracked Buggies:	2				
Personnel(Security):	2	Total security Hours (Job):		258	
Personnel(Drillers):					
Personnel(Shot Firers):					

Working Time: 11.2
Standby Time: 0.3
Down Time: 0.0
Non-Charge Time: 0.7
Other: 0.0
Total Day Hrs: 12.2
Total Day Charge Hrs: 11.5

Cumulative Totals

Working Time(Job): 156.7
Standby Time(Job): 24.4
Down Time(Job): 2.3
Non-Charge Time(Job): 43.8
Total Hrs (Job): 227.2
Security & Offsider Hrs(Job): 258.0

COMMENTS:

*Move spread from Panel "C" to Panel "A"
*Production started on Panel "A"

Spread Movement

Client: Modiolus 3D

Date: Monday, 16 June 2008

Layout				Pickup			
Line	Station #		Tot	Line	Station #		Tot
1275	5193	5281	89	1219	5358	5463	106
1268	5128	5281	154	1212	5282	5463	182
1261	5128	5281	154	1205	5282	5463	182
1254	5128	5281	154	1198	5282	5463	182
1247	5128	5281	154	1191	5282	5463	182
1240	5128	5281	154	1184	5346	5463	118
1233	5128	5216	89				
Total Stations :			948	Total Stations:			952

Total Crew #'s:45 Line Crew #'s:25 Vehicle #'s:18

Equipment Report Bad Phones: 6 Bad Cable: 4

Crew Manager

Client Rep



Terrex Seismic Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Shane Goossens
Client Rep: Paul Belfrage
Weather: Fine / Cool
DATE: Tuesday, 17 June 2008

PRODUCTION

Swath	Source	Receiver	Kms.	Skips	Vp's	Daily Totals
69	5212-5205	1317-1254	0.56	0	14	VP's: 623
70	5128-5233	1310-1247	4.48	0	112	Skips: 0
71	5233-5128	1303-1240	4.48	0	112	Lin.Kms: 24.9200
72	5128-5233	1296-1233	4.48	0	112	Day.Sq.Klms: 6.7998
73	5233-5128	1289-1226	4.48	0	112	Cumulative Totals
74	5128-5233	1282-1219	4.48	0	112	Cum. Skip Vp's: 476
75	5233-5191	1275-1212	1.96	0	49	Cum. VP's: 8121
						Cum.Lin.Kms: 329.000
						Cum.Sq.Klm: 89.7727
						Lin.Kms.Remaining: 886.32
						Sq.Kms.Remaining: 241.8473
						% Completed: 27.07%
						Average Daily Production Sq. Kms: 5.2807
						Average Daily Production Line Kms: 19.3529
						Estimated Finish Date: Saturday, 2 August 2008

See Production Map Tab

HOURS

Daily Totals

Working Time -	Down Time -	Standby Time -	Working Time:
Recording: 6.8	Human Error:	Toolbox/Safety Meeting: 0.3	10.9
Requested Experimental:	Troubleshooting:	Induction:	Standby Time: 0.3
Recorder Moveup:	Recorder:	Weather:	Down Time: 0.0
Vibrator Moveup:	Vibes:	Spread Damage:	Non-Charge Time: 1.1
Detour:	WOS:		Other: 0.0
Traverse Move: 3.5	Other:		Total Day Hrs: 12.3
Swath Move: 0.6	Non-Charge Time -	Other -	Total Day Charge Hrs: 11.2
WOS:	Travel Time: 0.8	Spread Layout/Pickup:	Cumulative Totals
Panel Move:	Instrument Tests/Morning QC: 0.3	Crew Demobe/Remobe:	Working Time(Job): 167.6
Extras-	Panel Move:	Camp move prep:	Standby Time(Job): 24.7
Vehicles: 1	Other:		Down Time(Job): 2.3
Mules: 3			Non-Charge Time(Job): 44.9
Tracked Buggies: 2			Total Hrs (Job): 239.5
Personnel(Security): 2	Total security Hours (Job): 282		Security & Offsider Hrs(Job): 282.0
Personnel(Drillers):			
Personnel(Shot Firers):			

COMMENTS:

Spread Movement

*Good production, first full day on panel A

Client: Modiolus 3D				Date: Tuesday, 17 June 2008			
Layout				Pickup			
Line	Station #		Tot	Line	Station #		Tot
1233	5217	5281	65	1226	5318	5463	146
1226	5128	5281	154	1219	5318	5357	40
1219	5128	5281	154	1338	5205	5281	77
1212	5128	5281	154	1331	5205	5281	77
1205	5128	5281	154	1324	5205	5281	77
1198	5200	5281	82	1317	5205	5281	77
				1310	5205	5281	77
				1303	5205	5281	77
				1296	5205	5281	77
				1289	5205	5281	77
				1282	5128	5197	70
Total Stations :			763	Total Stations:			872

Total Crew #'s:45 Line Crew #'s:25 Vehicle #'s:18

Equipment Report Bad Phones: 6 Bad Cable: 1

Crew Manager

Client Rep



Terrex Seismic Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Shane Goossens
Client Rep: Stewart Thirlwell
Weather: Fine / Cool

DATE: Wednesday, 18 June 2008

PRODUCTION

Swath	Source	Receiver	Kms.	Skips	Vp's	Daily Totals
75	5184-5128	1275-1212	2.52	0	63	VP's: 651
76	5128-5233	1268-1205	4.48	0	112	Skips: 0
77	5233-5128	1261-1198	4.48	0	112	Lin.Kms: 26.0400
78	5128-5233	1254-1191	4.48	0	112	Day.Sq.Klms: 7.1054
79	5233-5128	1247-1184	4.48	0	112	Cumulative Totals
80	5128-5233	1240-1177	4.48	0	112	Cum. Skip Vp's: 476
81	5233-5212	1233-1170	1.12	0	28	Cum. VP's: 8772
						Cum.Lin.Kms: 355.040
						Cum.Sq.Klm: 96.8781
						Lin.Kms.Remaining: 860.28
						Sq.Kms.Remaining: 234.7419
						% Completed: 29.21%
						Average Daily Production Sq. Kms: 5.3821
						Average Daily Production Line Kms: 19.7244
						Estimated Finish Date: Friday, 1 August 2008

See Production Map Tab

HOURS

Daily Totals

Working Time -	Down Time -	Standby Time -	Working Time:	11.2
Recording: 6.8	Human Error:	Toolbox/Safety Meeting: 0.3	Standby Time:	0.3
Requested Experimental:	Troubleshooting:	Induction:	Down Time:	0.0
Recorder Moveup: 0.5	Recorder:	Weather:	Non-Charge Time:	0.8
Vibrator Moveup:	Vibes:	Spread Damage:	Other:	0.0
Detour: 0.2	WOS:		Total Day Hrs:	12.3
Traverse Move: 3.4	Other:		Total Day Charge Hrs:	11.5
Swath Move: 0.3	Non-Charge Time -	Other -		
WOS:	Travel Time: 0.7	Spread Layout/Pickup:		
Panel Move:	Instrument Tests/Morning QC: 0.1	Crew Demobe/Remobe:		
Extras-	Panel Move:	Camp move prep:		
Vehicles: 1	Other:			
Mules: 3				
Tracked Buggies: 2				
Personnel(Security): 2	Total security Hours (Job): 306			
Personnel(Drillers):				
Personnel(Shot Firers):				

Cumulative Totals

Working Time(Job): 178.8
Standby Time(Job): 25.0
Down Time(Job): 2.3
Non-Charge Time(Job): 45.7
Total Hrs (Job): 251.8
Security & Offsider Hrs(Job): 306.0

COMMENTS:

Spread Movement

Client: Modiolus 3D				Date: Wednesday, 18 June 2008			
Layout				Pickup			
Line	Station #		Tot	Line	Station #		Tot
1198	5128	5199	72	1282	5198	5281	84
1191	5128	5281	154	1275	5128	5281	154
1184	5128	5281	154	1268	5128	5281	154
1177	5128	5281	154	1261	5128	5281	154
1170	5128	5281	154	1254	5128	5281	154
1163	5128	5281	154	1247	5128	5281	154
1156	5128	5281	154	1240	5128	5207	80
Total Stations :			996	Total Stations:			934

*Excellent production, no down time

Total Crew #'s:45 Line Crew #'s:24 Vehicle #'s:18

Equipment Report Bad Phones: 6 Bad Cable:

Crew Manager

Client Rep



Terrex Seismic Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Shane Goossens
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Thursday, 19 June 2008

PRODUCTION

Swath	Source	Receiver	Kms.	Skips	Vp's	Daily Totals
81	5105-5128	1233-1170	3.36	0	84	VP's: 624
82	5128-5233	1226-1163	4.48	0	112	Skips: 13
83	5233-5128	1219-1156	4.48	0	112	Lin.Kms: 25.4800
84	5128-5233	1212-1149	4.48	6	106	Day.Sq.Klms: 6.9526
85	5233-5128	1205-1142	4.48	7	105	Cumulative Totals
86	5128-5233	1198-1135	4.2	0	105	Cum. Skip Vp's: 476
						Cum. VP's: 9396
						Cum.Lin.Kms: 380.520
						Cum.Sq.Klm: 103.8307
						Lin.Kms.Remaining: 834.80
						Sq.Kms.Remaining: 227.7893
						% Completed: 31.31%
						Average Daily Production Sq. Kms: 5.4648
						Average Daily Production Line Kms: 20.0274
						Estimated Finish Date: Thursday, 31 July 2008

See Production Map Tab

HOURS

Daily Totals

Working Time -	Down Time -	Standby Time -	Working Time:	11.1
Recording: 6.1	Human Error:	Toolbox/Safety Meeting: 0.3	Standby Time:	0.3
Requested Experimental:	Troubleshooting:	Induction:	Down Time:	0.0
Recorder Moveup: 0.5	Recorder:	Weather:	Non-Charge Time:	0.9
Vibrator Moveup:	Vibes:	Spread Damage:	Other:	0.0
Detour: 0.5	WOS:		Total Day Hrs:	12.3
Traverse Move: 3.6	Other:		Total Day Charge Hrs:	11.4
Swath Move: 0.4	Non-Charge Time -	Other -		
WOS:	Travel Time: 0.8	Spread Layout/Pickup:		
Panel Move:	Instrument Tests/Morning QC: 0.1	Crew Demobe/Remobe:		
Extras-	Panel Move:	Camp move prep:		
Vehicles: 1	Other:			
Mules: 3				
Tracked Buggies: 2				
Personnel(Security): 2	Total security Hours (Job): 330			
Personnel(Drillers):				
Personnel(Shot Firers):				

Cumulative Totals

Working Time(Job): 189.9
Standby Time(Job): 25.3
Down Time(Job): 2.3
Non-Charge Time(Job): 46.6
Total Hrs (Job): 264.1
Security & Offsider Hrs(Job): 330.0

COMMENTS:

*Excellent production, no down time
*Crew change out via Innamincka
*Panel A layed out completely

Spread Movement

Client: Modiolus 3D

Date: Thursday, 19 June 2008

Layout				Pickup			
Line	Station #		Tot	Line	Station #		Tot
1149	5128	5316	189	1240	5208	5281	74
1142	5128	5316	189	1233	5128	5281	154
1135	5128	5316	189	1226	5128	5281	154
1128	5128	5316	189	1219	5128	5190	63
				1212	5128	5190	63
				1205	5128	5190	63
				1198	5128	5144	17
Total Stations :			756	Total Stations:			588

Total Crew #'s:42 Line Crew #'s:23 Vehicle #'s:18

Equipment Report

Bad Phones: 1

Bad Cable:

Crew Manager

Client Rep



Terrex Seismic Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Shane Goossens
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Friday, 20 June 2008

PRODUCTION

Swath	Source	Receiver	Kms.	Skips	Vp's	Daily Totals
86	5233	1198-1135	0.28	0	7	VP's: 658
87	5233-5128	1191-1128	4.48	0	112	Skips: 0
88	5128-5233	1184-1128	4.48	0	112	Lin.Kms: 26.3200
89	5233-5128	1177-1128	4.48	0	112	Day.Sq.Klms: 7.1818
90	5128-5233	1170-1128	4.48	0	112	Cumulative Totals
91	5128-5233	1163-1128	4.48	0	112	Cum. Skip Vp's: 476
92	5240-5317	1128-1163	3.36	0	84	Cum. VP's: 10054
93	5317-5310	1128-1170	0.28	0	7	Cum.Lin.Kms: 406.840
See Production Map Tab						Cum.Sq.Klm: 111.0125
						Lin.Kms.Remaining: 808.48
						Sq.Kms.Remaining: 220.6075
						% Completed: 33.48%
						Average Daily Production Sq. Kms: 5.5506
						Average Daily Production Line Kms: 20.3420
						Estimated Finish Date: Wednesday, 30 July 2008

HOURS

Daily Totals

Working Time -		Down Time -		Standby Time -		Working Time:	10.7
Recording:	7.2	Human Error:		Toolbox/Safety Meeting:	0.3	Standby Time:	0.7
Requested Experimental:		Troubleshooting:		Induction:		Down Time:	0.0
Recorder Moveup:		Recorder:		Weather:		Non-Charge Time:	0.9
Vibrator Moveup:		Vibes:		Spread Damage:	0.4	Other:	0.0
Detour:		WOS:				Total Day Hrs:	12.3
Traverse Move:	3.1	Other:				Total Day Charge Hrs:	11.4
Swath Move:	0.2	Non-Charge Time -		Other -		Cumulative Totals	
WOS:		Travel Time:	0.8	Spread Layout/Pickup:		Working Time(Job):	200.6
Panel Move:	0.2	Instrument Tests\Morning QC:	0.1	Crew Demobe/Remobe:		Standby Time(Job):	26.0
Extras-		Panel Move:		Camp move prep:		Down Time(Job):	2.3
Vehicles:	1	Other:				Non-Charge Time(Job):	47.5
Mules:	3					Total Hrs (Job):	276.4
Tracked Buggies:	2					Security & Offsider Hrs(Job):	354.0
Personnel(Security):	2	Total security Hours (Job):	354				
Personnel(Drillers):							
Personnel(Shot Firers):							

COMMENTS:

*Excellent production, no down time
*Panel A completed
*Production started on Panel B

Spread Movement

Client: Modiolus 3D

Date: Friday, 20 June 2008

Layout				Pickup			
Line	Station #		Tot	Line	Station #		Tot
1156	5282	5316	35	1128	5128	5183	56
1163	5282	5316	35	1135	5128	5183	56
1170	5282	5316	35	1142	5128	5183	56
1177	5282	5316	35	1149	5128	5183	56
1184	5282	5372	91	1156	5128	5183	56
1191	5282	5372	91	1163	5128	5183	56
				1170	5128	5190	63
				1177	5128	5190	63
				1184	5128	5190	63
				1191	5128	5190	63
				1198	5145	5190	46
Total Stations :			322	Total Stations:			634

Total Crew #s:45 Line Crew #s:24 Vehicle #s:18

Equipment Report

Bad Phones:

Bad Cable: 2

Crew Manager

Client Rep



Terrex Seismic Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Shane Goossens
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Saturday, 21 June 2008

PRODUCTION

Swath	Source	Receiver	Kms.	Skips	Vp's	Daily Totals
93	5303-5240	1128-1170	2.8	0	70	VP's: 665
94	5240-5317	1128-1177	3.36	0	84	Skips: 0
95	5240-5317	1128-1184	3.36	0	84	Lin.Kms: 26.6000
96	5317-5240	1128-1191	3.36	0	84	Day.Sq.Klms: 7.2582
97	5240-5317	1135-1198	3.36	0	84	Cumulative Totals
98	5317-5240	1142-1205	3.36	0	84	Cum. Skip Vp's: 476
99	5240-5317	1149-1212	3.36	0	84	Cum. VP's: 10719
100	5324-5240	1156-1219	3.64	0	91	Cum.Lin.Kms: 433.440
See Production Map Tab						Cum.Sq.Klm: 118.2707
						Lin.Kms.Remaining: 781.88
						Sq.Kms.Remaining: 213.3493
						% Completed: 35.66%
						Average Daily Production Sq. Kms: 5.6319
						Average Daily Production Line Kms: 20.6400
Estimated Finish Date:						Tuesday, 29 July 2008

HOURS

Daily Totals

Working Time -	Down Time -	Standby Time -	Working Time:	11.0
Recording: 7.0	Human Error:	Toolbox/Safety Meeting: 0.3	Standby Time:	0.3
Requested Experimental:	Troubleshooting:	Induction:	Down Time:	0.0
Recorder Moveup: 0.6	Recorder:	Weather:	Non-Charge Time:	1.0
Vibrator Moveup:	Vibes:	Spread Damage:	Other:	0.0
Detour:	WOS:		Total Day Hrs:	12.3
Traverse Move: 3.0	Other:		Total Day Charge Hrs:	11.3
Swath Move: 0.4	Non-Charge Time -	Other -	Cumulative Totals	
WOS:	Travel Time: 0.8	Spread Layout/Pickup:		
Panel Move:	Instrument Tests/Morning QC: 0.2	Crew Demobe/Remobe:	Working Time(Job):	211.6
Extras-	Panel Move:	Camp move prep:	Standby Time(Job):	26.3
Vehicles: 1	Other:		Down Time(Job):	2.3
Mules: 3			Non-Charge Time(Job):	48.5
Tracked Buggies: 2			Total Hrs (Job):	288.7
Personnel(Security): 2	Total security Hours (Job): 378		Security & Offsider Hrs(Job):	378.0
Personnel(Drillers):				
Personnel(Shot Firers):				

COMMENTS:

*Excellent production, no down time

Spread Movement

Client: Modiolus 3D				Date: Saturday, 21 June 2008			
Layout				Pickup			
Line	Station #		Tot	Line	Station #		Tot
1198	5282	5372	91	1128	5184	5316	133
1205	5282	5372	91	1135	5184	5316	133
1212	5282	5372	91	1142	5184	5316	133
1219	5282	5372	91	1149	5184	5316	133
1226	5191	5372	182	1156	5184	5190	7
1233	5228	5372	145	1163	5184	5190	7
		5372					
Total Stations :			691	Total Stations:			546
Equipment Report				Bad Phones: 2			
				Bad Cable:			

Total Crew #s:45 Line Crew #s:24 Vehicle #s:18

Crew Manager

Client Rep



Terrex Seismic Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Shane Goossens
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Sunday, 22 June 2008

PRODUCTION

Swath	Source	Receiver	Kms.	Skips	Vp's	Daily Totals
101	5240-5324	1163-1226	3.64	0	91	VP's: 525
102	5324-5240	1170-1233	3.64	0	91	Skips: 0
103	5240-5324	1177-1240	3.64	0	91	Lin.Kms: 21.0000
104	5324-5240	1184-1247	3.64	0	91	Day.Sq.Klms: 5.7302
105	5240-5324	1191-1254	3.64	0	91	Cumulative Totals
106	5324-5261	1198-1261	2.8	0	70	Cum. Skip Vp's: 476
						Cum. VP's: 11244
						Cum.Lin.Kms: 454.440
						Cum.Sq.Klm: 124.0009
						Lin.Kms.Remaining: 760.88
						Sq.Kms.Remaining: 207.6191
						% Completed: 37.39%
						Average Daily Production Sq. Kms: 5.6364
						Average Daily Production Line Kms: 20.6564
						Estimated Finish Date: Tuesday, 29 July 2008

See Production Map Tab

HOURS

Daily Totals

Working Time -		Down Time -		Standby Time -		Working Time:	8.9
Recording:	5.4	Human Error:		Toolbox/Safety Meeting:	0.3	Standby Time:	0.3
Requested Experimental:		Troubleshooting:		Induction:		Down Time:	1.8
Recorder Moveup:	0.6	Recorder:		Weather:		Non-Charge Time:	1.0
Vibrator Moveup:		Vibes:		Spread Damage:		Other:	0.0
Detour:		WOS:	1.8			Total Day Hrs:	12.0
Traverse Move:	2.8	Other:				Total Day Charge Hrs:	9.2
Swath Move:	0.1	Non-Charge Time -		Other -		Cumulative Totals	
WOS:		Travel Time:	0.8	Spread Layout/Pickup:		Working Time(Job):	220.5
Panel Move:		Instrument Tests/Morning QC:	0.2	Crew Demobe/Remobe:		Standby Time(Job):	26.6
Extras-		Panel Move:		Camp move prep:		Down Time(Job):	4.1
Vehicles:	1	Other:				Non-Charge Time(Job):	49.7
Mules:	3					Total Hrs (Job):	300.9
Tracked Buggies:	2					Security & Offsider Hrs(Job):	402.0
Personnel(Security):	2	Total security Hours (Job):		402			
Personnel(Drillers):							
Personnel(Shot Firers):							

COMMENTS:

*Good production considering WOS time
*Line crew numbers low due to 2 sick people

Spread Movement

Client: Modiolus 3D

Date: Sunday, 22 June 2008

Layout				Pickup			
Line	Station #		Tot	Line	Station #		Tot
1233	5191	5287	97	1156	5191	5316	126
1240	5191	5372	182	1163	5191	5316	126
1247	5191	5372	182	1170	5191	5316	126
1254	5191	5372	182	1177	5191	5316	126
1261	5191	5372	182	1184	5191	5372	182
1268	5191	5263	73	1191	5191	5308	118
Total Stations :			898	Total Stations:			804

Total Crew #'s:45 Line Crew #'s:22 Vehicle #'s:18

Equipment Report

Bad Phones: 1

Bad Cable:

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Shane Goossens
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Monday, 23 June 2008

PRODUCTION

Swath	Source	Receiver	Kms.	Skips	Vp's	<u>Daily Totals</u>
106	5254-5240	1198-1261	0.84	0	21	VP's: 462
107	5240-5324	1205-1268	3.64	0	91	Skips: 0
108	5324-5240	1212-1275	3.64	0	91	Lin.Kms: 18.4800
109	5240-5324	1219-1282	3.64	0	91	Day.Sq.Klms: 5.0426
110	5324-5240	1226-1289	3.64	0	91	<u>Cumulative Totals</u>
111	5240-5310	1233-1296	3.08	0	77	Cum. Skip Vp's: 476
						Cum. VP's: 11706
						Cum.Lin.Kms: 472.920
						Cum.Sq.Klm: 129.0435
						Lin.Kms.Remaining: 742.40
						Sq.Kms.Remaining: 202.5765
						% Completed: 38.91%
						Average Daily Production Sq. Kms: 5.6106
						Average Daily Production Line Kms: 20.5617
						<u>Estimated Finish Date:</u> Wednesday, 30 July 2008

See Production Map Tab

HOURS

Daily Totals

Working Time -		Down Time -		Standby Time -		Working Time: 9.6
Recording:	5.2	Human Error:		Toolbox/Safety Meeting:	0.3	Standby Time: 1.5
Requested Experimental:		Troubleshooting:		Induction:		Down Time: 0.0
Recorder Moveup:		Recorder:		Weather:		Non-Charge Time: 1.0
Vibrator Moveup:		Vibes:		Spread Damage:	1.2	Other: 0.0
Detour:	0.1	WOS:				Total Day Hrs: 12.1
Traverse Move:	2.8	Other:				Total Day Charge Hrs: 11.1
Swath Move:	0.2	Non-Charge Time -		Other -		
WOS:	1.3	Travel Time:	0.7	Spread Layout/Pickup:		<u>Cumulative Totals</u>
Panel Move:		Instrument Tests\Morning QC:	0.1	Crew Demobe/Remobe:		Working Time(Job): 230.1
Extras-		Panel Move:		Camp move prep:		Standby Time(Job): 28.1
Vehicles:	1	Other:	0.2			Down Time(Job): 4.1
Mules:	3					Non-Charge Time(Job): 50.7
Tracked Buggies:	2					Total Hrs (Job): 313.0
Personnel(Security):	2	Total security Hours (Job): 426				Security & Offsider Hrs(Job): 426.0
Personnel(Drillers):						
Personnel(Shot Firers):						

COMMENTS:

*Good production considering WOS time
*Tony Hutchison in via Moomba
*Drillers and preloaders arrived on crew

Spread Movement

Client: Modiolus 3D

Date: Monday, 23 June 2008

Layout				Pickup			
Line	Station #	Tot		Line	Station #	Tot	
1268	5264	5372	109	1191	5309	5372	64
1275	5191	5372	182	1198	5191	5372	182
1282	5191	5372	182	1205	5191	5372	182
1289	5205	5372	168	1212	5191	5372	182
1296	5205	5372	168	1219	5191	5372	182
1303	5205	5372	168	1226	5271	5372	102
Total Stations :		977		Total Stations:		894	

Total Crew #'s:45 Line Crew #'s:24 Vehicle #'s:18

Equipment Report

Bad Phones: 1

Bad Cable: 4

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Shane Goossens
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Tuesday, 24 June 2008

PRODUCTION

Swath	Source	Receiver	Kms.	Skips	Vp's	<u>Daily Totals</u>
111	5317-5324	1233-1296	0.56	0	14	VP's: 497
112	5324-5240	1240-1303	3.64	0	91	Skips: 0
113	5240-5324	1247-1310	3.64	0	91	Lin.Kms: 19.8800
114	5324-5240	1254-1317	3.64	0	91	Day.Sq.Klms: 5.4246
115	5240-5324	1261-1324	3.64	0	91	<u>Cumulative Totals</u>
116	5324-5240	1268-1331	3.64	0	91	Cum. Skip Vp's: 476
117	5240-5261	1275-1338	1.12	0	28	Cum. VP's: 12203

See Production Map Tab

Cum.Lin.Kms: 492.800
Cum.Sq.Klm: 134.4681
Lin.Kms.Remaining: 722.52
Sq.Kms.Remaining: 197.1519
% Completed: 40.55%

Average Daily Production Sq. Kms: 5.6028
Average Daily Production Line Kms: 20.5333

Estimated Finish Date: Wednesday, 30 July 2008

HOURS

Daily Totals

Working Time -		Down Time -		Standby Time -		Working Time:	10.0
Recording:	5.2	Human Error:		Toolbox/Safety Meeting:	0.3	Standby Time:	1.0
Requested Experimental:		Troubleshooting:		Induction:		Down Time:	0.2
Recorder Moveup:	0.5	Recorder:		Weather:		Non-Charge Time:	1.0
Vibrator Moveup:		Vibes:		Spread Damage:	0.7	Other:	0.0
Detour:	0.2	WOS:	0.2			Total Day Hrs:	12.2
Traverse Move:	3.0	Other:				Total Day Charge Hrs:	11.0
Swath Move:	0.3	Non-Charge Time -		Other -			
WOS:	0.8	Travel Time:	0.7	Spread Layout/Pickup:		<u>Cumulative Totals</u>	
Panel Move:		Instrument Tests\Morning QC:	0.1	Crew Demobe/Remobe:		Working Time(Job):	240.1
Extras-		Panel Move:		Camp move prep:		Standby Time(Job):	29.1
Vehicles:	1	Other:	0.2			Down Time(Job):	4.3
Mules:	3					Non-Charge Time(Job):	51.7
Tracked Buggies:	2					Total Hrs (Job):	325.2
Personnel(Security):	2	Total security Hours (Job):		450		Security & Offsider Hrs(Job):	450.0
Personnel(Drillers):	4						
Personnel(Shot Firers):							

COMMENTS:

*Good production considering WOS time
*Zaac Chase arrived on crew (Shotfirer)

Spread Movement

Client: Modiolus 3D

Date: Tuesday, 24 June 2008

Layout				Pickup			
Line	Station #	Tot		Line	Station #	Tot	
1310	5205	5372	168	1226	5191	5270	80
1317	5205	5372	168	1233	5191	5372	182
1324	5205	5372	168	1240	5191	5372	182
1331	5205	5372	168	1247	5191	5372	182
1338	5205	5372	168	1254	5191	5372	182
1345	5360	5372	13	1261	5191	5372	182
				1268	5355	5372	18
Total Stations :		853		Total Stations:		1008	

Total Crew #'s:44 Line Crew #'s:23 Vehicle #'s:18

Equipment Report

Bad Phones: 1

Bad Cable: 2

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Tony Hutchison
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Wednesday, 25 June 2008

PRODUCTION

Swath	Source	Receiver	Kms.	Skips	Vp's	<u>Daily Totals</u>	
117	5268-5324	1275-1338	2.52	0	63	VP's:	588
118	5324-5205	1282-1345	5.04	0	126	Skips:	0
119	5205-5324	1289-1352	5.04	0	126	Lin.Kms:	23.5200
120	5324-5205	1296-1359	5.04	0	126	Day.Sq.Klms:	6.4178
121	5205-5324	1303-1366	5.04	0	126	<u>Cumulative Totals</u>	
122	5324-5310	1310-1373	0.84	0	21	Cum. Skip Vp's:	476
						Cum. VP's:	12791
						Cum.Lin.Kms:	516.320
						Cum.Sq.Klm:	140.8859
						Lin.Kms.Remaining:	699.00
						Sq.Kms.Remaining:	190.7341
						% Completed:	42.48%
						Average Daily Production Sq. Kms:	5.6354
						Average Daily Production Line Kms:	20.6528
						Estimated Finish Date:	Tuesday, 29 July 2008

See Production Map Tab

HOURS

Daily Totals

Working Time -		Down Time -		Standby Time -		Working Time:	10.1
Recording:	5.8	Human Error:		Toolbox/Safety Meeting:	0.3	Standby Time:	1.1
Requested Experimental:		Troubleshooting:		Induction:		Down Time:	0.2
Recorder Moveup:	0.5	Recorder:	0.2	Weather:		Non-Charge Time:	1.1
Vibrator Moveup:		Vibes:		Spread Damage:	0.8	Other:	0.0
Detour:		WOS:				Total Day Hrs:	12.5
Traverse Move:	3.5	Other:				Total Day Charge Hrs:	11.2
Swath Move:	0.3	Non-Charge Time -		Other -		<u>Cumulative Totals</u>	
WOS:		Travel Time:	0.7	Spread Layout/Pickup:		Working Time(Job):	250.2
Panel Move:		Instrument Tests\Morning QC:	0.1	Crew Demobe/Remobe:		Standby Time(Job):	30.2
Extras-		Panel Move:		Camp move prep:		Down Time(Job):	4.5
Vehicles:	1	Other:	0.3			Non-Charge Time(Job):	52.8
Mules:	3					Total Hrs (Job):	337.7
Tracked Buggies:	2					Security & Offsider Hrs(Job):	474.0
Personnel(Security):	2	Total security Hours (Job):		474			
Personnel(Drillers):	4						
Personnel(Shot Firers):	1						

COMMENTS:

*Good production
*Recorder problem was to send vibes back to reshoot

Spread Movement

Client: Modiolus 3D

Date: Wednesday, 25 June 2008

Layout				Pickup			
Line	Station #	Tot		Line	Station #	Tot	
1345	5205	5359	155	1268	5191	5354	164
1352	5205	5372	168	1275	5191	5372	182
1359	5205	5372	168	1282	5191	5372	182
1366	5205	5372	168	1289	5205	5372	168
1373	5205	5372	168	1296	5205	5372	168
1380	5205	5360	156	1303	5205	5277	73
Total Stations :		983		Total Stations:		937	

Total Crew #'s:44 Line Crew #'s:24 Vehicle #'s:18

Equipment Report

Bad Phones: 2

Bad Cable: 3

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Tony Hutchison
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Thursday, 26 June 2008

PRODUCTION

Swath	Source	Receiver	Kms.	Skips	Vp's
122	5303-5205	1310-1373	4.2	0	105
123	5205-5324	1317-1380	5.04	0	126
124	5324-5205	1324-1387	5.04	0	126
125	5205-5324	1331-1394	5.04	0	126
126	5324-5205	1338-1401	5.04	0	126
127	5205-5240	1345-1408	1.68	0	42

Daily Totals

VP's: 651
Skips: 0
Lin.Kms: 26.0400
Day.Sq.Klms: 7.1054
Cumulative Totals
Cum. Skip Vp's: 476
Cum. VP's: 13442
Cum.Lin.Kms: 542.360
Cum.Sq.Klm: 147.9913
Lin.Kms.Remaining: 672.96
Sq.Kms.Remaining: 183.6287
% Completed: 44.63%

See Production Map Tab

Average Daily Production Sq. Kms: 5.6920
Average Daily Production Line Kms: 20.8600

Estimated Finish Date: Tuesday, 29 July 2008

HOURS

Daily Totals

Working Time -		Down Time -		Standby Time -	
Recording:	6.4	Human Error:		Toolbox/Safety Meeting:	0.3
Requested Experimental:		Troubleshooting:		Induction:	
Recorder Moveup:		Recorder:		Weather:	
Vibrator Moveup:		Vibes:		Spread Damage:	0.7
Detour:	0.2	WOS:			
Traverse Move:	3.6	Other:			
Swath Move:	0.3	Non-Charge Time -		Other -	
WOS:		Travel Time:	0.7	Spread Layout/Pickup:	
Panel Move:		Instrument Tests\Morning QC:	0.1	Crew Demobe/Remobe:	
Extras-		Panel Move:		Camp move prep:	
Vehicles:	1	Other:			
Mules:	3				
Tracked Buggies:	2				
Personnel(Security):	2	Total security Hours (Job):		498	
Personnel(Drillers):	4				
Personnel(Shot Firers):	1				

Working Time: 10.5
Standby Time: 1.0
Down Time: 0.0
Non-Charge Time: 0.8
Other: 0.0
Total Day Hrs: 12.3
Total Day Charge Hrs: 11.5

Cumulative Totals

Working Time(Job): 260.7
Standby Time(Job): 31.2
Down Time(Job): 4.5
Non-Charge Time(Job): 53.6
Total Hrs (Job): 350.0
Security & Offsider Hrs(Job): 498.0

COMMENTS:

*Great production
*Crew change 8 in 6 out
*Spread damage is Dingo chew
*Supply Driver got water and went to Moomba to pick up Vibe Op
*Personnel into Moomba to pick up Cook

Spread Movement

Client: Modiolus 3D

Date: Thursday, 26 June 2008

Layout				Pickup			
Line	Station #	Tot		Line	Station #	Tot	
1380	5361	5372	12	1303	5278	5372	95
1387	5205	5372	168	1310	5205	5372	168
1394	5205	5372	168	1317	5205	5372	168
1401	5205	5372	168	1324	5205	5372	168
1408	5205	5372	168	1331	5205	5372	168
1415	5240	5386	147	1338	5289	5372	84
Total Stations :		831		Total Stations:		851	

Total Crew #'s:46 Line Crew #'s:25 Vehicle #'s:18

Equipment Report

Bad Phones: 2

Bad Cable: 2

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Tony Hutchison
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Friday, 27 June 2008

PRODUCTION

Swath	Source	Receiver	Kms.	Skips	Vp's	<u>Daily Totals</u>	
127	5247-5324	1345-1408	3.36	0	84	VP's:	567
128	5324-5205	1352-1415	5.04	0	126	Skips:	0
129	5205-5324	1359-1422	5.04	0	126	Lin.Kms:	22.6800
130	5324-5205	1366-1429	5.04	0	126	Day.Sq.Klms:	6.1886
131	5205-5303	1373-1436	4.2	0	105	<u>Cumulative Totals</u>	
			0			Cum. Skip Vp's:	476
						Cum. VP's:	14009
						Cum.Lin.Kms:	565.040
						Cum.Sq.Klm:	154.1799
						Lin.Kms.Remaining:	650.28
						Sq.Kms.Remaining:	177.4401
						% Completed:	46.49%
						Average Daily Production Sq. Kms:	5.7104
						Average Daily Production Line Kms:	20.9274
						<u>Estimated Finish Date:</u>	Tuesday, 29 July 2008

See Production Map Tab

HOURS

Daily Totals

Working Time -		Down Time -		Standby Time -		Working Time:	9.6
Recording:	5.8	Human Error:		Toolbox/Safety Meeting:	0.3	Standby Time:	0.8
Requested Experimental:		Troubleshooting:	0.2	Induction:		Down Time:	0.9
Recorder Moveup:	0.5	Recorder:	0.7	Weather:		Non-Charge Time:	0.8
Vibrator Moveup:		Vibes:		Spread Damage:	0.5	Other:	0.0
Detour:		WOS:				Total Day Hrs:	12.1
Traverse Move:	3.1	Other:				Total Day Charge Hrs:	10.4
Swath Move:	0.2	Non-Charge Time -		Other -			
WOS:		Travel Time:	0.7	Spread Layout/Pickup:		<u>Cumulative Totals</u>	
Panel Move:		Instrument Tests\Morning QC:	0.1	Crew Demobe/Remobe:		Working Time(Job):	270.3
Extras-		Panel Move:		Camp move prep:		Standby Time(Job):	32.0
Vehicles:	1	Other:				Down Time(Job):	5.4
Mules:	3					Non-Charge Time(Job):	54.4
Tracked Buggies:	2					Total Hrs (Job):	362.1
Personnel(Security):	2	Total security Hours (Job):		522		Security & Offsider Hrs(Job):	522.0
Personnel(Drillers):	4						
Personnel(Shot Firers):	1						

COMMENTS:

*Good production
*Trouble Shoot is for repeater problems
*Spread damage is Dingo chew
*Recorder problem was error in box
*Personnel into Moomba to drop of Vibe Op
*Started go through Salt Pan

Spread Movement

Client: Modiolus 3D

Date: Friday, 27 June 2008

Layout				Pickup			
Line	Station #	Tot		Line	Station #	Tot	
1415	5205	5239	35	1338	5205	5288	84
1422	5205	5386	182	1345	5205	5372	168
1429	5205	5386	182	1352	5205	5372	168
1436	5205	5386	182	1359	5205	5372	168
1443	5205	5386	182	1366	5205	5372	168
1450	5205	5330	126	1373	5205	5243	39
Total Stations :		889		Total Stations:		795	

Total Crew #'s:45 Line Crew #'s:25 Vehicle #'s:18

Equipment Report

Bad Phones: 1

Bad Cable: 1

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Tony Hutchison
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Saturday, 28 June 2008

PRODUCTION

Vibrators

Swath	Source	Receiver	Kms.	Skips	Vp's	See Production Map Tab
131	5310-5324	1373-1436	0.84	0	21	
132	5324-5205	1380-1443	5.04	0	126	
133	5205-5324	1387-1450	5.04	0	126	
134	5324-5205	1394-1457	5.04	0	126	
135	5205-5324	1401-1464	5.04	0	126	
136	5324-5226	1408-1471	4.2	0	105	

Daily Totals

VP's: 630
Skips: 0
Lin.Kms: 25.2000
Day.Sq.Klms: 6.8762
Cumulative Totals
Cum. Skip Vp's: 476
Cum. VP's: 14639
Cum.Lin.Kms: 590.240
Cum.Sq.Klm: 161.0561
Lin.Kms.Remaining: 625.08
Sq.Kms.Remaining: 170.5639
% Completed: 48.57%

Explosives

Swath	Source	Receiver	Kms.	Skips	Sp's
			0		

Average Daily Production Sq. Kms: 5.7520
Average Daily Production Line Kms: 21.0800
Estimated Finish Date: Monday, 28 July 2008

HOURS

Daily Totals

Working Time -		Down Time -		Standby Time -		Working Time:	10.4
Recording:	6.3	Human Error:		Toolbox/Safety Meeting:	0.3	Standby Time:	1.1
Requested Experimental:		Troubleshooting:		Induction:		Down Time:	0.0
Recorder Moveup:		Recorder:		Weather:		Non-Charge Time:	0.7
Vibrator Moveup:		Vibes:		Spread Damage:	0.8	Other:	0.0
Detour:		WOS:				Total Day Hrs:	12.2
Traverse Move:	3.7	Other:				Total Day Charge Hrs:	11.5
Swath Move:	0.4	Non-Charge Time -		Other -			
WOS:		Travel Time:	0.6	Spread Layout/Pickup:		<u>Cumulative Totals</u>	
Panel Move:		Instrument Tests\Morning QC:	0.1	Crew Demobe/Remobe:		Working Time(Job):	280.7
Extras-		Panel Move:		Camp move prep:		Standby Time(Job):	33.1
Vehicles:	1	Other:				Down Time(Job):	5.4
Mules:	3					Non-Charge Time(Job):	55.1
Tracked Buggies:	2					Total Hrs (Job):	374.3
Personnel(Security):	2	Total security Hours (Job):		546		Security & Offsider Hrs(Job):	546.0
Personnel(Drillers):	4						
Personnel(Shot Firers):	1						

COMMENTS:

*Good production
*Crew working well together
*Spread damage is Dingo chew
*Supply Driver and PM into Moomba to pick up Spare Cable Truck
*HSE out to field to help through Salt Pan

Spread Movement

Client: Modiolus 3D

Date: Saturday, 28 June 2008

Layout

Line	Station #	Tot
1450	5331	5386
1457	5205	5386
1464	5205	5386
1471	5233	5386
1478	5233	5386
1485	5344	5386

Pickup

Line	Station #	Tot
1373	5244	5372
1380	5205	5372
1387	5205	5372
1394	5205	5372
1401	5205	5372
1408	5357	5372

Total Stations : 771

Total Stations: 817

Total Crew #'s:45 Line Crew #'s:25 Vehicle #'s:18

Equipment Report

Bad Phones: 1

Bad Cable: 2

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Tony Hutchison
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Sunday, 29 June 2008

PRODUCTION

Vibrators

Swath	Source	Receiver	Kms.	Skips	Vp's	See Production Map Tab
136	5219-5205	1408-1471	0.84	0	21	
137	5205-5338	1415-1478	5.4	0	135	
138	5338-5205	1422-1485	5.32	0	133	
139	5205-5338	1429-1492	5.08	0	127	
140	5338-5233	1436-1499	3.72	0	93	
			0	0		

Daily Totals

VP's: 545
Skips: 8
Lin.Kms: 22.1200
Day.Sq.Klms: 6.0358
Cumulative Totals
Cum. Skip Vp's: 476
Cum. VP's: 15184
Cum.Lin.Kms: 612.360
Cum.Sq.Klm: 167.0919
Lin.Kms.Remaining: 602.96
Sq.Kms.Remaining: 164.5281
% Completed: 50.39%
Average Daily Production Sq. Kms: 5.7618
Average Daily Production Line Kms: 21.1159
Estimated Finish Date: Monday, 28 July 2008

Explosives

Swath	Source	Receiver	Kms.	Skips	Sp's
137	5324	1415-1478	0.2	2	3
138	5324	1422-1485	0.28		7
139	5317-5324	1429-1492	0.52	1	12
140	5324-5310	1436-1499	0.76	5	14

HOURS

Daily Totals

Working Time -		Down Time -		Standby Time -		Working Time:	10.4
Recording:	6.1	Human Error:		Toolbox/Safety Meeting:	0.3	Standby Time:	0.4
Requested Experimental:		Troubleshooting:		Induction:		Down Time:	0.0
Recorder Moveup:	0.5	Recorder:		Weather:		Non-Charge Time:	1.2
Vibrator Moveup:		Vibes:		Spread Damage:	0.1	Other:	0.0
Detour:	0.2	WOS:				Total Day Hrs:	12.0
Traverse Move:	3.1	Other:				Total Day Charge Hrs:	10.8
Swath Move:	0.2	Non-Charge Time -		Other -			
WOS:	0.3	Travel Time:	0.9	Spread Layout/Pickup:		<u>Cumulative Totals</u>	
Panel Move:		Instrument Tests\Morning QC:	0.3	Crew Demobe/Remobe:		Working Time(Job):	291.1
Extras-		Panel Move:		Camp move prep:		Standby Time(Job):	33.5
Vehicles:	1	Other:				Down Time(Job):	5.4
Mules:	3					Non-Charge Time(Job):	56.3
Tracked Buggies:	2					Total Hrs (Job):	386.3
Personnel(Security):	2	Total security Hours (Job):		570		Security & Offsider Hrs(Job):	570.0
Personnel(Drillers):	3						
Personnel(Shot Firers):	1						

COMMENTS:

*Good production
*Crew working well
*Supply Driver and Cable Repair Personnel into Moomba to get Drinking Water and Freight
*Mechanic out to field to see if he could fix Tracked Buggies
*WOS handcarry through Salt Pan
*Driller went out

Spread Movement

Client: Modiolus 3D

Date: Sunday, 29 June 2008

Layout

Line	Station #	Tot
1485	5233	5343
1492	5233	5386
1499	5233	5386
1506	5233	5386
1513	5296	5386

Pickup

Line	Station #	Tot
1408	5205	5356
1415	5205	5386
1422	5205	5386
1429	5205	5386
1436	5345	5386

Total Stations : 664

Total Stations: 740

Total Crew #'s:45 Line Crew #'s:25 Vehicle #'s:18

Equipment Report

Bad Phones: 2

Bad Cable: 0

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Tony Hutchison
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Monday, 30 June 2008

PRODUCTION

Vibrators

Swath	Source	Receiver	Kms.	Skips	Vp's	See Production Map Tab
141	5233-5338	1443-1506	3.2	0	80	
142	5338-5223	1450-1513	2.92	0	73	
143	5223-5338	1457-1520	2.76	0	69	
144	5338-5223	1464-1527	2.52	0	63	
145	5223-5338	1471-1534	2.52	0	63	
146	5338	1478-1541	0.28	0	7	

Daily Totals

VP's: 486
Skips: 67
Lin.Kms: 22.1200
Day.Sq.Klms: 6.0358
Cumulative Totals
Cum. Skip Vp's: 476
Cum. VP's: 15670
Cum.Lin.Kms: 634.520
Cum.Sq.Klm: 173.1277
Lin.Kms.Remaining: 580.80
Sq.Kms.Remaining: 158.4923
% Completed: 52.21%

Explosives

Swath	Source	Receiver	Kms.	Skips	Sp's
141	5303-5331	1443-1506	1.28	11	21
142	5296-5331	1450-1513	1.56	9	30
143	5289-5331	1457-1520	1.72	8	35
144	5289-5331	1464-1527	1.96	17	32
145	5289-5310	1471-1534	1.12	18	10
146	5289	1478-1541	0.28	4	3

Average Daily Production Sq. Kms: 5.7709
Average Daily Production Line Kms: 21.1507

Estimated Finish Date: Monday, 28 July 2008

HOURS

Daily Totals

Working Time -		Down Time -		Standby Time -		Working Time:
Recording:	6.6	Human Error:		Toolbox/Safety Meeting:	0.3	Standby Time:
Requested Experimental:		Troubleshooting:	0.2	Induction:		Down Time:
Recorder Moveup:		Recorder:		Weather:		Non-Charge Time:
Vibrator Moveup:		Vibes:	0.3	Spread Damage:	0.2	Other:
Detour:	0.7	WOS:				Total Day Hrs:
Traverse Move:	2.6	Other:				Total Day Charge Hrs:
Swath Move:	0.1	Non-Charge Time -		Other -		
WOS:		Travel Time:	0.7	Spread Layout/Pickup:		Cumulative Totals
Panel Move:		Instrument Tests\Morning QC:	0.2	Crew Demobe/Remobe:		Working Time(Job):
Extras-		Panel Move:		Camp move prep:		Standby Time(Job):
Vehicles:	1	Other:				Down Time(Job):
Mules:	3					Non-Charge Time(Job):
Tracked Buggies:	2					Total Hrs (Job):
Personnel(Security):	2	Total security Hours (Job):		594		Security & Offsider Hrs(Job):
Personnel(Drillers):	3					
Personnel(Shot Firers):	1					

COMMENTS:

*Good production
*Crew working well
*Supply Driver into Moomba to drop of Observer
*HSE out to field to help through Salt Pan
*Mechanic out to field to get Tracked Buggy out of bog in Salt Pan
*Extra VP shot in Swath 141 Station 1474 Source 5303 which was O/S for the Vibes and on Line for Dynamite. Look at Logs

Spread Movement

Client: Modiolus 3D

Date: Monday, 30 June 2008

Layout

Line	Station #	Tot
1513	5233	5295
1520	5233	5386
1527	5233	5386
1534	5233	5386
1541	5233	5386
1548	5233	5386
1555	5294	5386

Pickup

Line	Station #	Tot
1436	5205	5344
1443	5205	5386
1450	5205	5386
1457	5205	5386
1464	5314	5386

Total Stations : 926

Total Stations: 759

Total Crew #'s:44 Line Crew #'s:25 Vehicle #'s:18

Equipment Report

Bad Phones: 2

Bad Cable: 0

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Tony Hutchison
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Tuesday, 1 July 2008

PRODUCTION

Vibrators

Swath	Source	Receiver	Kms.	Skips	Vp's	See Production Map Tab
146	5331-5233	1478-1541	2.6	0	65	
147	5233-5338	1485-1548	3.36	0	84	
148	5338-5233	1492-1555	3.56	0	89	
149	5233-5338	1499-1562	3.72	0	93	
150	5338-5268	1506-1569	2.76	0	69	
			0			

Daily Totals

VP's: 500
Skips: 32
Lin.Kms: 21.2800
Day.Sq.Klms: 5.8066
Cumulative Totals
Cum. Skip Vp's: 476
Cum. VP's: 16170
Cum.Lin.Kms: 655.800
Cum.Sq.Klm: 178.9343
Lin.Kms.Remaining: 559.52
Sq.Kms.Remaining: 152.6857
% Completed: 53.96%

Explosives

Swath	Source	Receiver	Kms.	Skips	Sp's
145	5317-5331	1471-1534	0.84	0	21
146	5296-5331	1478-1541	1.32	17	16
147	5289-5310	1485-1548	1.12	12	16
148	5289-5310	1492-1555	0.92	1	22
149	5289-5303	1499-1562	0.76	0	19
150	5289-5296	1506-1569	0.32	2	6

Average Daily Production Sq. Kms: 5.7721
Average Daily Production Line Kms: 21.1548

Estimated Finish Date: Monday, 28 July 2008

HOURS

Working Time -

Recording: 6.5
Requested Experimental:
Recorder Moveup: 0.7
Vibrator Moveup:
Detour: 0.3
Traverse Move: 3.0
Swath Move: 0.2
WOS:
Panel Move:
Extras-
Vehicles: 1
Mules: 3
Tracked Buggies: 2
Personnel(Security): 2
Personnel(Drillers): 3
Personnel(Shot Firers): 1

Down Time -

Human Error:
Troubleshooting:
Recorder:
Vibes:
WOS:
Other:
Non-Charge Time -
Travel Time: 1
Instrument Tests\Morning QC: 0.1
Panel Move:
Other:

Standby Time -

Toolbox/Safety Meeting: 0.3
Induction:
Weather:
Spread Damage: 0.1
Other -
Spread Layout/Pickup:
Crew Demobe/Remobe:
Camp move prep:

Daily Totals

Working Time: 10.7
Standby Time: 0.4
Down Time: 0.0
Non-Charge Time: 1.1
Other: 0.0
Total Day Hrs: 12.2
Total Day Charge Hrs: 11.1

Cumulative Totals

Working Time(Job): 311.8
Standby Time(Job): 34.4
Down Time(Job): 5.9
Non-Charge Time(Job): 58.3
Total Hrs (Job): 410.4
Security & Offsider Hrs(Job): 618.0

COMMENTS:

*Good production
*Crew working well
*Supply Driver into Moomba to drop of 2 Linecrew (Someone in the Family not to good)
*Cable Repair Personel went and got Shower Water
*HSE out to field to help through Salt Pan

Spread Movement

Client: Modiolus 3D

Date: Tuesday, 1 July 2008

Layout

Line	Station #	Tot
1555	5233	5293
1562	5233	5386
1569	5233	5386
1576	5233	5386
1583	5268	5386

Pickup

Line	Station #	Tot
1464	5205	5313
1471	5233	5386
1478	5233	5386
1485	5233	5386
1492	5289	5386

Total Stations : 642

Total Stations: 669

Total Crew #'s:42 Line Crew #'s:23 Vehicle #'s:18

Equipment Report

Bad Phones: 2

Bad Cable: 0

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Tony Hutchison
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Wednesday, 2 July 2008

PRODUCTION

Vibrators

Swath	Source	Receiver	Kms.	Skips	Vp's	See Production Map Tab
150	5268-5233	1506-1569	1.4	0	35	
151	5233-5338	1513-1576	4.48	0	112	
152	5338-5233	1520-1583	4.48	0	112	
153	5233-5338	1527-1590	4.48	0	112	
154	5338-5233	1534-1597	4.48	0	112	
155	5233-5317	1541-1603	3.64	0	91	

Daily Totals

VP's: 574
Skips: 0
Lin.Kms: 22.9600
Day.Sq.Klms: 6.2650
Cumulative Totals
Cum. Skip Vp's: 476
Cum. VP's: 16744
Cum.Lin.Kms: 678.760
Cum.Sq.Klm: 185.1993
Lin.Kms.Remaining: 536.56
Sq.Kms.Remaining: 146.4207
% Completed: 55.85%
Average Daily Production Sq. Kms: 5.7875
Average Daily Production Line Kms: 21.2113
Estimated Finish Date: Monday, 28 July 2008

Explosives

Swath	Source	Receiver	Kms.	Skips	Sp's
			0		

HOURS

Working Time -

Recording: 5.6
Requested Experimental:
Recorder Moveup:
Vibrator Moveup:
Detour: 0.9
Traverse Move: 3.6
Swath Move: 0.3
WOS:
Panel Move:
Extras-
Vehicles: 1
Mules: 3
Tracked Buggies: 2
Personnel(Security): 2
Personnel(Drillers): 3
Personnel(Shot Firers): 1

Down Time -

Human Error:
Troubleshooting:
Recorder:
Vibes:
WOS:
Other:
Non-Charge Time -
Travel Time: 0.8
Instrument Tests\Morning QC: 0.2
Panel Move:
Other:

Standby Time -

Toolbox/Safety Meeting: 0.3
Induction:
Weather:
Spread Damage:
Other -
Spread Layout/Pickup:
Crew Demobe/Remobe:
Camp move prep:

Daily Totals

Working Time: 10.4
Standby Time: 0.3
Down Time: 0.0
Non-Charge Time: 1.0
Other: 0.0
Total Day Hrs: 11.7
Total Day Charge Hrs: 10.7

Cumulative Totals

Working Time(Job): 322.2
Standby Time(Job): 34.7
Down Time(Job): 5.9
Non-Charge Time(Job): 59.3
Total Hrs (Job): 422.1
Security & Offsider Hrs(Job): 642.0

COMMENTS:

*Good production
*Crew working well
*Supply Driver into Moomba to Pick up Operations Manager
*PM out to field to help through Salt Pan
*Detour was going through the Fence
*Finish Production A little bit early Generator Service on Recorder

Spread Movement

Client: Modiolus 3D

Date: Wednesday, 2 July 2008

Layout

Line	Station #	Tot
1583	5233	5267
1590	5233	5386
1597	5233	5386
1604	5233	5386
1611	5280	5386

Pickup

Line	Station #	Tot
1492	5233	5288
1499	5233	5386
1506	5233	5386
1513	5233	5386
1520	5282	5386

Total Stations : 604

Total Stations: 623

Total Crew #s:43 Line Crew #s:23 Vehicle #s:18

Equipment Report

Bad Phones: 3

Bad Cable: 0

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Tony Hutchison
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Thursday, 3 July 2008

PRODUCTION

Vibrators

Swath	Source	Receiver	Kms.	Skips	Vp's	See Production Map Tab
155	5324-5338	1541-1604	0.84	0	21	
156	5338-5233	1548-1611	4.48	0	112	
157	5233-5338	1555-1611	4.48	0	112	
158	5338-5233	1562-1611	4.48	0	112	
159	5233-5338	1569-1611	4.48	0	112	
160	5338-5233	1576-1611	4.48	0	112	

Daily Totals

VP's: 581
Skips: 0
Lin.Kms: 23.2400
Day.Sq.Klms: 6.3414
Cumulative Totals
Cum. Skip Vp's: 476
Cum. VP's: 17325
Cum.Lin.Kms: 702.000
Cum.Sq.Klm: 191.5407
Lin.Kms.Remaining: 513.32
Sq.Kms.Remaining: 140.0793
% Completed: 57.76%
Average Daily Production Sq. Kms: 5.8043
Average Daily Production Line Kms: 21.2727
Estimated Finish Date: Monday, 28 July 2008

Explosives

Swath	Source	Receiver	Kms.	Skips	Sp's
			0		

HOURS

Daily Totals

Working Time -		Down Time -		Standby Time -		Working Time:
Recording:	5.6	Human Error:		Toolbox/Safety Meeting:	0.3	Standby Time:
Requested Experimental:		Troubleshooting:		Induction:		Down Time:
Recorder Moveup:	0.6	Recorder:		Weather:		Non-Charge Time:
Vibrator Moveup:		Vibes:		Spread Damage:	0.6	Other:
Detour:	0.1	WOS:				Total Day Hrs:
Traverse Move:	3.4	Other:				Total Day Charge Hrs:
Swath Move:	0.3	Non-Charge Time -		Other -		
WOS:		Travel Time:	0.4	Spread Layout/Pickup:		<u>Cumulative Totals</u>
Panel Move:	0.5	Instrument Tests\Morning QC:	0.1	Crew Demobe/Remobe:		Working Time(Job):
Extras-		Panel Move:		Camp move prep:		Standby Time(Job):
Vehicles:	1	Other:				Down Time(Job):
Mules:	3					Non-Charge Time(Job):
Tracked Buggies:	2					Total Hrs (Job):
Personnel(Security):	2	Total security Hours (Job):		666		Security & Offsider Hrs(Job):
Personnel(Drillers):	3					
Personnel(Shot Firers):	1					

COMMENTS:

*Good production
*Crew working well
*PM into Moomba to pick up Mechanic and Freight
*Crew Change 11in 6out
*Finish Panel C Laying Spread on Panel D
*Supply Driver and Mecho out to Salt Pan to get Tracked Buggy out of Bog
*Spread Damage was Chewage
*Drillers Finish

Spread Movement

Client: Modiolus 3D

Date: Thursday, 3 July 2008

Layout

Line	Station #	Tot
1611	5233	5279
1415	5387	5463
1422	5387	5463
1429	5387	5463
1436	5387	5463
1443	5387	5463
1450	5387	5463
1457	5387	5442

Pickup

Line	Station #	Tot
1520	5233	5281
1527	5233	5386
1534	5233	5386
1541	5233	5386
1548	5233	5386
1555	5233	5325

Total Stations : 565

Total Stations: 758

Total Crew #'s:47 Line Crew #'s:25 Vehicle #'s:18

Equipment Report

Bad Phones: 5

Bad Cable: 1

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Tony Hutchison
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Friday, 4 July 2008

PRODUCTION

Vibrators

Swath	Source	Receiver	Kms.	Skips	Vp's	See Production Map Tab
161	5436-5464	1415-1478	1.4	0	35	
162	5464-5436	1422-1485	1.4	0	35	
163	5436-5464	1429-1492	1.4	0	35	
			0			
			0			
			0			

Daily Totals

VP's: 105
Skips: 0
Lin.Kms: 4.2000
Day.Sq.Klms: 1.1460

Cumulative Totals

Cum. Skip Vp's: 476
Cum. VP's: 17430
Cum.Lin.Kms: 706.200
Cum.Sq.Klm: 192.6867
Lin.Kms.Remaining: 509.12
Sq.Kms.Remaining: 138.9333
% Completed: 58.10%

Average Daily Production Sq. Kms: 5.6673

Average Daily Production Line Kms: 20.7706

Estimated Finish Date: Tuesday, 29 July 2008

Explosives

Swath	Source	Receiver	Kms.	Skips	Sp's
			0		

HOURS

Working Time -

Recording:	1.0
Requested Experimental:	
Recorder Moveup:	
Vibrator Moveup:	
Detour:	
Traverse Move:	0.5
Swath Move:	0.1
WOS:	0.5
Panel Move:	8.7
Extras-	
Vehicles:	1
Mules:	3
Tracked Buggies:	2
Personnel(Security):	1
Personnel(Drillers):	3
Personnel(Shot Firers):	0

Down Time -

Human Error:	
Troubleshooting:	
Recorder:	0.2
Vibes:	
WOS:	
Other:	
Non-Charge Time -	
Travel Time:	0.3
Instrument Tests\Morning QC:	0.1
Panel Move:	
Other:	0.1

Standby Time -

Toolbox/Safety Meeting:	0.3
Induction:	
Weather:	
Spread Damage:	
Other -	
Spread Layout/Pickup:	
Crew Demobe/Remobe:	
Camp move prep:	

Daily Totals

Working Time: 10.8
Standby Time: 0.3
Down Time: 0.2
Non-Charge Time: 0.5
Other: 0.0
Total Day Hrs: 11.8
Total Day Charge Hrs: 11.1

Cumulative Totals

Working Time(Job): 343.5
Standby Time(Job): 35.9
Down Time(Job): 6.1
Non-Charge Time(Job): 60.3
Total Hrs (Job): 445.8
Security & Offsider Hrs(Job): 678.0

COMMENTS:

*Crew working well
*PM out to field to check salt pan and put cables in saltpan with HSE
*Shot fire and Security Personnel went out in Truck
*Still picking up on Panel C and Laying on Panel D
*Supply Driver into Moomba to take Rubbish and Drop of
Operations Manager and pick up Freight
*Mecho in to Moomba to drop of Vibe Op's and Observer

Spread Movement

Client: Modiolus 3D

Date: Friday, 4 July 2008

Layout

Line	Station #	Tot
1457	5443	5463
1464	5387	5463
1471	5387	5463
1478	5387	5463
1485	5387	5568
1492	5387	5568
1499	5387	5568

Pickup

Line	Station #	Tot
1555	5326	5386
1562	5233	5386
1569	5233	5386
1576	5233	5386
1583	5233	5386
1590	5233	5386
1597	5233	5386

Total Stations : 798

Total Stations: 985

Total Crew #'s:43 Line Crew #'s:25 Vehicle #'s:18

Equipment Report

Bad Phones: 6

Bad Cable: 1

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Tony Hutchison
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Saturday, 5 July 2008

PRODUCTION

Vibrators

Swath	Source	Receiver	Kms.	Skips	Vp's	See Production Map Tab
164	5464-5436	1436-1499	1.4	0	35	
165	5436-5464	1443-1506	1.4	0	35	
166	5436-5464	1450-1513	1.4	0	35	
167	5569-5436	1457-1520	5.6	0	140	
168	5436-5569	1464-1527	5.6	0	140	
169	5569-5499	1471-1534	1.44	0	36	

Daily Totals

VP's: 421
Skips: 0
Lin.Kms: 16.8400
Day.Sq.Klms: 4.5951
Cumulative Totals
Cum. Skip Vp's: 476
Cum. VP's: 17851
Cum.Lin.Kms: 723.040
Cum.Sq.Klm: 197.2818
Lin.Kms.Remaining: 492.28
Sq.Kms.Remaining: 134.3382
% Completed: 59.49%

Explosives

Swath	Source	Receiver	Kms.	Skips	Sp's
			0		

Average Daily Production Sq. Kms: 5.6366
Average Daily Production Line Kms: 20.6583

Estimated Finish Date: Tuesday, 29 July 2008

HOURS

Working Time -

Recording: 4.1
Requested Experimental:
Recorder Moveup: 0.5
Vibrator Moveup:
Detour: 0.4
Traverse Move: 2.3
Swath Move: 0.1
WOS: 3.4
Panel Move:
Extras-
Vehicles: 0
Mules: 3
Tracked Buggies: 2
Personnel(Security): 0
Personnel(Drillers): 0
Personnel(Shot Firers): 0

Down Time -

Human Error:
Troubleshooting: 0.2
Recorder:
Vibes:
WOS:
Other:
Non-Charge Time -
Travel Time: 0.4
Instrument Tests\Morning QC: 0.1
Panel Move:
Other:

Standby Time -

Toolbox/Safety Meeting: 0.3
Induction:
Weather:
Spread Damage:
Other -
Spread Layout/Pickup:
Crew Demobe/Remobe:
Camp move prep:

Daily Totals

Working Time: 10.8
Standby Time: 0.3
Down Time: 0.2
Non-Charge Time: 0.5
Other: 0.0
Total Day Hrs: 11.8
Total Day Charge Hrs: 11.1

Cumulative Totals

Working Time(Job): 354.3
Standby Time(Job): 36.2
Down Time(Job): 6.3
Non-Charge Time(Job): 60.8
Total Hrs (Job): 457.6
Security & Offsider Hrs(Job): 678.0

COMMENTS:

*Crew working well
*W.O.S is Linecrew still bring gear from other Panel
*Trouble Shoot was bad Connect
*Detour was going around Fence
*Drillers went out

Spread Movement

Client: Modiolus 3D

Date: Saturday, 5 July 2008

Layout

Line	Station #	Tot
1506	5387	5568
1513	5387	5568
1520	5387	5568
1527	5387	5568
1534	5387	5568
1541	5387	5568
1548	5387	5568
1555	5555	5568

Pickup

Line	Station #	Tot
1604	5233	5386
1611	5233	5386
1415	5387	5463
1422	5387	5463
1429	5387	5463
1436	5387	5463
1443	5387	5463
1450	5387	5463
1457	5387	5463
1464	5387	5463

Total Stations : 1288

Total Stations: 924

Total Crew #s:42 Line Crew #s:25 Vehicle #s:18

Equipment Report

Bad Phones: 2

Bad Cable: 0

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Tony Hutchison
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Sunday, 6 July 2008

PRODUCTION

Vibrators

Swath	Source	Receiver	Kms.	Skips	Vp's	See Production Map Tab
169	5548-5436	1471-1534	4.16	0	104	
170	5436-5569	1478-1541	5.6	0	140	
171	5569-5436	1485-1548	5.6	0	140	
172	5436-5513	1492-1555	3.36	0	84	
			0			
			0			

Daily Totals

VP's: 468
Skips: 0
Lin.Kms: 18.7200
Day.Sq.Klms: 5.1081
Cumulative Totals
Cum. Skip Vp's: 476
Cum. VP's: 18319
Cum.Lin.Kms: 741.760
Cum.Sq.Klm: 202.3899
Lin.Kms.Remaining: 473.56
Sq.Kms.Remaining: 129.2301
% Completed: 61.03%
Average Daily Production Sq. Kms: 5.6219
Average Daily Production Line Kms: 20.6044
Estimated Finish Date: Tuesday, 29 July 2008

Explosives

Swath	Source	Receiver	Kms.	Skips	Sp's
			0		

HOURS

Working Time -

Recording: 4.6
Requested Experimental:
Recorder Moveup: 0.4
Vibrator Moveup:
Detour: 1.6
Traverse Move: 3.0
Swath Move: 0.1
WOS:
Panel Move:
Extras-
Vehicles: 0
Mules: 3
Tracked Buggies: 2
Personnel(Security): 0
Personnel(Drillers): 0
Personnel(Shot Firers): 0

Down Time -

Human Error:
Troubleshooting:
Recorder:
Vibes: 0.2
WOS:
Other:
Non-Charge Time -
Travel Time: 0.6
Instrument Tests\Morning QC: 0.3
Panel Move:
Other: 0.4

Standby Time -

Toolbox/Safety Meeting: 0.3
Induction:
Weather:
Spread Damage:
Other -
Spread Layout/Pickup:
Crew Demobe/Remobe:
Camp move prep:

Daily Totals

Working Time: 9.7
Standby Time: 0.3
Down Time: 0.2
Non-Charge Time: 1.3
Other: 0.0
Total Day Hrs: 11.5
Total Day Charge Hrs: 10.0

Cumulative Totals

Working Time(Job): 364.0
Standby Time(Job): 36.5
Down Time(Job): 6.5
Non-Charge Time(Job): 62.1
Total Hrs (Job): 469.1
Security & Offsider Hrs(Job): 678.0

COMMENTS:

*Crew working well and a great effort moving Panels
*Other was for a long Safety Sunday
*Vibes was for checking Hoses
*Detour was going around Fence

Spread Movement

Client: Modiolus 3D

Date: Sunday, 6 July 2008

Layout

Line	Station #	Tot
1555	5387	5554
1562	5387	5568
1569	5387	5436

Pickup

Line	Station #	Tot
1471	5387	5463
1478	5387	5463
1485	5387	5568
1492	5463	5568

Total Stations : 400

Total Stations: 442

Total Crew #'s:42 Line Crew #'s:25 Vehicle #'s:18

Equipment Report

Bad Phones: 3

Bad Cable: 1

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Tony Hutchison
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Monday, 7 July 2008

PRODUCTION

Vibrators

Swath	Source	Receiver	Kms.	Skips	Vp's	See Production Map Tab
172	5520-5569	1492-1555	2.24	0	56	
173	5569-5436	1499-1562	5.6	0	140	
174	5436-5569	1506-1569	5.6	0	140	
175	5569-5436	1513-1576	5.6	0	140	
176	5436-5569	1520-1583	5.6	0	140	
177	5562-5513	1527-1590	2.24	0	56	

Daily Totals

VP's: 672
Skips: 0
Lin.Kms: 26.8800
Day.Sq.Klms: 7.3346
Cumulative Totals
Cum. Skip Vp's: 476
Cum. VP's: 18991
Cum.Lin.Kms: 768.640
Cum.Sq.Klm: 209.7245
Lin.Kms.Remaining: 446.68
Sq.Kms.Remaining: 121.8955
% Completed: 63.24%

Explosives

Swath	Source	Receiver	Kms.	Skips	Sp's
			0		

Average Daily Production Sq. Kms: 5.6682
Average Daily Production Line Kms: 20.7741

Estimated Finish Date: Tuesday, 29 July 2008

HOURS

Daily Totals

Working Time -		Down Time -		Standby Time -		Working Time: 10.3	
Recording:	6.4	Human Error:		Toolbox/Safety Meeting:	0.3	Standby Time:	0.3
Requested Experimental:		Troubleshooting:	0.1	Induction:		Down Time:	0.4
Recorder Moveup:		Recorder:		Weather:		Non-Charge Time:	0.6
Vibrator Moveup:		Vibes:	0.3	Spread Damage:		Other:	0.0
Detour:		WOS:				Total Day Hrs:	11.6
Traverse Move:	3.7	Other:				Total Day Charge Hrs:	10.6
Swath Move:	0.2	Non-Charge Time -		Other -			
WOS:		Travel Time:	0.4	Spread Layout/Pickup:			
Panel Move:		Instrument Tests\Morning QC:	0.2	Crew Demobe/Remobe:			
Extras-		Panel Move:		Camp move prep:			
Vehicles:	0	Other:					
Mules:	3						
Tracked Buggies:	2						
Personnel(Security):	0	Total security Hours (Job): 678					
Personnel(Drillers):	0						
Personnel(Shot Firers):	0						

Cumulative Totals

Working Time(Job): 374.3
Standby Time(Job): 36.8
Down Time(Job): 6.9
Non-Charge Time(Job): 62.7
Total Hrs (Job): 480.7
Security & Offsider Hrs(Job): 678.0

COMMENTS:

*Excellent Production
*Crew working well
*Vibes Downtime was in wrong position and checking over Machines

Spread Movement

Client: Modiolus 3D

Date: Monday, 7 July 2008

Layout

Line	Station #	Tot
1569	5437	5561
1576	5387	5561
1583	5387	5561
1590	5387	5561
1597	5387	5520

Pickup

Line	Station #	Tot
1492	5387	5568
1499	5387	5568
1506	5387	5568
1513	5387	5568
1520	5387	5568

Total Stations : 784

Total Stations: 910

Total Crew #'s:42 Line Crew #'s:25 Vehicle #'s:18


Equipment Report

Bad Phones: 2

Bad Cable: 0

Crew Manager

Client Rep



Terrex Seismic

Daily Report

Client.....

Survey Name.....

Area.....

State.....

Beach Petroleum

Modiolus 3D

PEL 91, PEL 92

SA

CREW 402

Party Manager: Tony Hutchison

Client Rep: Paul Belfrage

Weather: Fine / Cool

DATE: Tuesday, 8 July 2008

PRODUCTION

Vibrators

Swath	Source	Receiver	Kms.	Skips	Vp's	See Production Map Tab
177	5506-5436	1527-1590	3.08	0	77	
178	5436-5562	1534-1597	5.32	0	133	
179	5562-5436	1541-1604	5.32	0	133	
180	5436-5562	1548-1611	5.32	0	133	
181	5562-5436	1555-1618	5.32	0	133	
182	5436-5436	1562-1625	0.28	0	7	

Explosives

Swath	Source	Receiver	Kms.	Skips	Sp's
			0		

Daily Totals

VP's: 616

Skips: 0

Lin.Kms: 24.6400

Day.Sq.Klms: 6.7234

Cumulative Totals

Cum. Skip Vp's: 476

Cum. VP's: 19607

Cum.Lin.Kms: 793.280

Cum.Sq.Klm: 216.4479

Lin.Kms.Remaining: 422.04

Sq.Kms.Remaining: 115.1721

% Completed: 65.27%

Average Daily Production Sq. Kms: 5.6960

Average Daily Production Line Kms: 20.8758

Estimated Finish Date: Tuesday, 29 July 2008

HOURS

Working Time -

Recording: 5.9

Requested Experimental:

Recorder Moveup: 0.5

Vibrator Moveup:

Detour:

Traverse Move: 3.2

Swath Move: 0.2

WOS:

Panel Move:

Extras-

Vehicles: 0

Mules: 3

Tracked Buggies: 2

Personnel(Security): 0

Personnel(Drillers): 0

Personnel(Shot Firers): 0

Down Time -

Human Error:

Troubleshooting: 0.4

Recorder:

Vibes: 0.4

WOS:

Other:

Non-Charge Time -

Travel Time: 0.4

Instrument Tests\Morning QC: 0.2

Panel Move:

Other:

Total security Hours (Job): 678

Standby Time -

Toolbox/Safety Meeting: 0.3

Induction:

Weather:

Spread Damage:

Other -

Spread Layout/Pickup:

Crew Demobe/Remobe:

Camp move prep:

Daily Totals

Working Time: 9.8

Standby Time: 0.3

Down Time: 0.8

Non-Charge Time: 0.6

Other: 0.0

Total Day Hrs: 11.5

Total Day Charge Hrs: 10.1

Cumulative Totals

Working Time(Job): 384.1

Standby Time(Job): 37.1

Down Time(Job): 7.7

Non-Charge Time(Job): 63.3

Total Hrs (Job): 492.2

Security & Offsider Hrs(Job): 678.0

COMMENTS:

*Good Production

*Crew working well

*Vibes Downtime was Oil to Cold in the Morning

*Troubleshooting was for LAUL

*Linecrew is going through Salt Pan

*HSE out to Field to help with Handcarry in Salt Pan

*Linecrew went out (Someone not to good in Family)

Spread Movement

Client: Modiolus 3D				Date: Tuesday, 8 July 2008			
Layout				Pickup			
Line	Station #		Tot	Line	Station #		Tot
1597	5521	5561	41	1527	5387	5568	182
1604	5387	5561	175	1534	5387	5568	182
1611	5387	5554	168	1541	5387	5568	182
1618	5408	5554	147	1548	5387	5568	182
1625	5408	5483	76				
1625	5500	5547	55				
1632	5408	5483	76				
1632	5500	5547	48				
1639	5408	5483	76				
Total Stations :		862		Total Stations:		728	

Total Crew #'s:41

Line Crew #'s:25

Vehicle #'s:18


Equipment Report

Bad Phones: 2

Bad Cable: 0

Crew Manager

Client Rep



Terrex Seismic
Daily Report

Client.....

Survey Name.....

Area.....

State.....

Beach Petroleum

Modiolus 3D

PEL 91, PEL 92

SA

CREW 402

Party Manager: Tony Hutchison

Client Rep: Paul Belfrage

Weather: Fine / Cool

DATE: Wednesday, 9 July 2008

PRODUCTION

Vibrators

Swath	Source	Receiver	Kms.	Skips	Vp's	See Production Map Tab
182	5443-5562	1562-1625	5.04	0	126	
183	5562-5436	1569-1632	5.32	4	129	
184	5436-5555	1576-1639	5.04	7	119	
185	5555-5436	1583-1646	5.04	7	119	
186	5436-5492	1590-1653	2.52	7	56	
			0			

Explosives

Swath	Source	Receiver	Kms.	Skips	Sp's
			0		

Daily Totals

VP's: 549

Skips: 25

Lin.Kms: 22.9600

Day.Sq.Klms: 6.2650

Cumulative Totals

Cum. Skip Vp's: 476

Cum. VP's: 20156

Cum.Lin.Kms: 816.240

Cum.Sq.Klm: 222.7129

Lin.Kms.Remaining: 399.08

Sq.Kms.Remaining: 108.9071

% Completed: 67.16%

Average Daily Production Sq. Kms: 5.7106

Average Daily Production Line Kms: 20.9292

Estimated Finish Date: Tuesday, 29 July 2008

HOURS

Working Time -

Recording: 5.4

Requested Experimental:

Recorder Moveup:

Vibrator Moveup:

Detour: 0.7

Traverse Move: 3.2

Swath Move: 0.3

WOS:

Panel Move:

Extras-

Vehicles: 0

Mules: 3

Tracked Buggies: 2

Personnel(Security): 0

Personnel(Drillers): 0

Personnel(Shot Firers): 0

Down Time -

Human Error:

Troubleshooting: 0.8

Recorder: 0.5

Vibes:

WOS:

Other:

Non-Charge Time -

Travel Time: 0.4

Instrument Tests\Morning QC: 0.1

Panel Move:

Other:

Standby Time -

Toolbox/Safety Meeting: 0.3

Induction:

Weather:

Spread Damage:

Other -

Spread Layout/Pickup:

Crew Demobe/Remobe:

Camp move prep:

Daily Totals

Working Time: 9.6

Standby Time: 0.3

Down Time: 1.3

Non-Charge Time: 0.5

Other: 0.0

Total Day Hrs: 11.7

Total Day Charge Hrs: 9.9

Cumulative Totals

Working Time(Job): 393.7

Standby Time(Job): 37.4

Down Time(Job): 9.0

Non-Charge Time(Job): 63.8

Total Hrs (Job): 503.9

Security & Offsider Hrs(Job): 678.0

COMMENTS:

*Good Production

*Crew working well

*Recorder downtime was to cold in morning Trouble Starting Server

*T/Shooting downtime was problems with LAUL

*Supply driver into Moomba to take Rubbish in and see if there was any freight

Spread Movement

Client: Modiolus 3D				Date: Wednesday, 9 July 2008			
Layout				Pickup			
Line	Station #		Tot	Line	Station #		Tot
1646	5408	5483	76	1555	5387	5568	182
1646	5500	5547	48	1562	5387	5561	175
1653	5408	5547	140	1569	5387	5561	175
1660	5408	5547	140	1576	5387	5561	175
1667	5408	5547	140	1583	5499	5561	63
1674	5408	5547	140				
Total Stations :		684		Total Stations:		770	

Total Crew #'s:41

Line Crew #'s:25

Vehicle #'s:18

Equipment Report

Bad Phones: 4

Bad Cable: 1

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Tony Hutchison
Client Rep: Paul Belfrage
Weather: Fine / Cool
DATE: Thursday, 10 July 2008

PRODUCTION

Vibrators

Swath	Source	Receiver	Kms.	Skips	Vp's	See Production Map Tab
186	5499-5555	1590-1653	2.52	0	63	
187	5548-5436	1597-1660	4.76	7	112	
188	5436-5548	1604-1667	4.76	14	105	
189	5548-5408	1611-1674	5.88	14	133	
190	5408-5548	1617-1681	5.88	14	133	
			0			

Daily Totals

VP's: 546
Skips: 49
Lin.Kms: 23.8000
Day.Sq.Klms: 6.4942
Cumulative Totals
Cum. Skip Vp's: 476
Cum. VP's: 20702
Cum.Lin.Kms: 840.040
Cum.Sq.Klm: 229.2071
Lin.Kms.Remaining: 375.28
Sq.Kms.Remaining: 102.4129
% Completed: 69.12%

Explosives

Swath	Source	Receiver	Kms.	Skips	Sp's
			0		

Average Daily Production Sq. Kms: 5.7302
Average Daily Production Line Kms: 21.0010
Estimated Finish Date: Monday, 28 July 2008

HOURS

Working Time -

Recording: 5.1
Requested Experimental:
Recorder Moveup:
Vibrator Moveup:
Detour:
Traverse Move:
Swath Move: 0.2
WOS:
Panel Move:
Extras-
Vehicles: 0
Mules: 3
Tracked Buggies: 2
Personnel(Security): 0
Personnel(Drillers): 0
Personnel(Shot Firers): 0

Down Time -

Human Error:
Troubleshooting: 0.1
Recorder:
Vibes:
WOS:
Other:
Non-Charge Time -
Travel Time: 0.4
Instrument Tests/Morning QC: 0.1
Panel Move:
Other:

Standby Time -

Toolbox/Safety Meeting: 0.3
Induction:
Weather:
Spread Damage: 1.6
Other -
Spread Layout/Pickup:
Crew Demobe/Remobe:
Camp move prep:

Daily Totals

Working Time: 9.3
Standby Time: 1.9
Down Time: 0.1
Non-Charge Time: 0.5
Other: 0.0
Total Day Hrs: 11.8
Total Day Charge Hrs: 11.2

Cumulative Totals

Working Time(Job): 403.0
Standby Time(Job): 39.3
Down Time(Job): 9.1
Non-Charge Time(Job): 64.3
Total Hrs (Job): 515.7
Security & Offsider Hrs(Job): 678.0

COMMENTS:

*Good Production
*Crew working well
*Crew Change 10 out 8 in
*T/Shooting downtime was problems with LAUL
*PM and HSE out to field to Help Linecrew
*HSE helping Campy and Cook
*Spread Damage 2 Cables on Snake in Actual Detour

Spread Movement

Client: Modiolus 3D

Date: Thursday, 10 July 2008

Layout

Line	Station #	Tot
1681	5408	5547
1688	5408	5547
1695	5408	5549
1702	5408	5554
1709	5408	5448

Pickup

Line	Station #	Tot
1583	5387	5498
1590	5387	5561
1597	5387	5561
1604	5387	5561
1611	5480	5554

Total Stations : 610

Total Stations: 712

Total Crew #s:39 Line Crew #s:20 Vehicle #s:18

Equipment Report

Bad Phones: 2

Bad Cable: 2

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Tony Hutchison
Client Rep: Paul Belfrage
Weather: Fine / Cool
DATE: Friday, 11 July 2008

PRODUCTION

Vibrators

Swath	Source	Receiver	Kms.	Skips	Vp's	See Production Map Tab
191	5548-5408	1625-1688	5.88	7	140	
192	5408-5548	1632-1695	5.88	5	142	
193	5548-5408	1639-1702	5.88	0	147	
194	5408-5548	1646-1709	5.88	0	147	
195	5548-5548	1653-1716	0.28	0	7	
			0			

Daily Totals

VP's: 583
Skips: 12
Lin.Kms: 23.8000
Day.Sq.Klms: 6.4942
Cumulative Totals
Cum. Skip Vp's: 476
Cum. VP's: 21285
Cum.Lin.Kms: 863.840
Cum.Sq.Klm: 235.7013
Lin.Kms.Remaining: 351.48
Sq.Kms.Remaining: 95.9187
% Completed: 71.08%

Explosives

Swath	Source	Receiver	Kms.	Skips	Sp's
			0		

Average Daily Production Sq. Kms: 5.7488
Average Daily Production Line Kms: 21.0693

Estimated Finish Date: Monday, 28 July 2008

HOURS

Working Time -

Recording: 6.0
Requested Experimental:
Recorder Moveup: 0.5
Vibrator Moveup:
Detour: 0.7
Traverse Move: 2.9
Swath Move: 0.1
WOS:
Panel Move:
Extras-
Vehicles: 0
Mules: 3
Tracked Buggies: 2
Personnel(Security): 0
Personnel(Drillers): 0
Personnel(Shot Firers): 0

Down Time -

Human Error:
Troubleshooting: 0.1
Recorder:
Vibes: 0.1
WOS:
Other:
Non-Charge Time -
Travel Time: 0.5
Instrument Tests/Morning QC: 0.1
Panel Move:
Other:

Standby Time -

Toolbox/Safety Meeting: 0.3
Induction:
Weather:
Spread Damage: 0.4
Other -
Spread Layout/Pickup:
Crew Demobe/Remobe:
Camp move prep:

Daily Totals

Working Time: 10.2
Standby Time: 0.7
Down Time: 0.2
Non-Charge Time: 0.6
Other: 0.0
Total Day Hrs: 11.7
Total Day Charge Hrs: 10.9

Cumulative Totals

Working Time(Job): 413.2
Standby Time(Job): 40.0
Down Time(Job): 9.3
Non-Charge Time(Job): 64.9
Total Hrs (Job): 527.4
Security & Offsider Hrs(Job): 678.0

COMMENTS:

*Good Production
*Crew working well
*PM into Moomba to pick up Vibe Tech
*T/Shooting downtime was problems with LAUL
*Spread Damage 1 cable chewage
*HSE into Moomba to pick up Linecrew
*Camp move Tomorrow
*Detours was for going around Salt Pan and Dunes

Spread Movement

Client: Modiolus 3D

Date: Friday, 11 July 2008

Layout

Line	Station #		Tot
1709	5449	5554	106
1716	5408	5554	147
1723	5408	5554	147
1730	5408	5561	154
1737	5408	5519	112

Pickup

Line	Station #		Tot
1611	5408	5479	72
1618	5408	5554	147
1625	5408	5554	147
1632	5408	5554	147
1639	5408	5547	140

Total Stations : 666

Total Stations: 653

Total Crew #s:41 Line Crew #s:22 Vehicle #s:18

Equipment Report

Bad Phones: 3

Bad Cable: 3

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Tony Hutchison
Client Rep: Paul Belfrage
Weather: Fine / Cool
DATE: Saturday, 12 July 2008

PRODUCTION

Vibrators

Swath	Source	Receiver	Kms.	Skips	Vp's	See Production Map Tab
195	5541-5408	1653-1716	5.6	0	140	
196	5548-5408	1660-1723	5.88	0	147	
197	5408-5471	1667-1730	2.72	0	68	
198	5408-5471	1674-1737	2.8	0	70	

Daily Totals

VP's: 425
Skips: 0
Lin.Kms: 17.0000
Day.Sq.Klms: 4.6387
Cumulative Totals
Cum. Skip Vp's: 476
Cum. VP's: 21710
Cum.Lin.Kms: 880.840
Cum.Sq.Klm: 240.3400
Lin.Kms.Remaining: 334.48
Sq.Kms.Remaining: 91.2800
% Completed: 72.47%

Explosives

Swath	Source	Receiver	Kms.	Skips	Sp's
			0		

Average Daily Production Sq. Kms: 5.7224
Average Daily Production Line Kms: 20.9724
Estimated Finish Date: Monday, 28 July 2008

HOURS

Daily Totals

Working Time -		Down Time -		Standby Time -	
Recording:	4.5	Human Error:		Toolbox/Safety Meeting:	0.3
Requested Experimental:		Troubleshooting:	0.3	Induction:	
Recorder Moveup:		Recorder:		Weather:	
Vibrator Moveup:		Vibes:		Spread Damage:	
Detour:		WOS:			
Traverse Move:	1.1	Other:			
Swath Move:	0.1	Non-Charge Time -		Other -	
WOS:		Travel Time:	0.2	Spread Layout/Pickup:	
Interprospect/Panel Move:	4.9	Instrument Tests/Morning QC:	0.1	Crew Demobe/Remobe:	
Extras-		Panel Move:		Camp move prep:	
Vehicles:	0	Other:			
Mules:	3				
Tracked Buggies:	2				
Personnel(Security):	0	Total security Hours (Job):		678	
Personnel(Drillers):	0				
Personnel(Shot Firers):	0				

Working Time: 10.6
Standby Time: 0.3
Down Time: 0.3
Non-Charge Time: 0.3
Other: 0.0
Total Day Hrs: 11.5
Total Day Charge Hrs: 10.9

Cumulative Totals

Working Time(Job): 423.8
Standby Time(Job): 40.3
Down Time(Job): 9.6
Non-Charge Time(Job): 65.2
Total Hrs (Job): 538.9
Security & Offsider Hrs(Job): 678.0

COMMENTS:

*Campmove Toolbox 6:30
*6:45-9:10 Pickup
*9:10-10:00 Move Camp
*10:00-11:45 Help put Vans in
*Good Production With Campmove
*The Camp Staff Finish of Setting up Camp
*Trouble shooting was for LAUL Problems

Spread Movement

Client: Modiolus 3D

Date: Saturday, 12 July 2008

Layout

Line	Station #		Tot
1737	5520	5561	42
1744	5408	5561	154
1751	5408	5561	154
1758	5408	5561	154

Pickup

Line	Station #		Tot
1646	5408	5547	140
1653	5408	5547	140
1660	5408	5547	140
1667	5408	5420	13
1674	5408	5420	13

Total Stations : 504

Total Stations: 446

Total Crew #s:41 Line Crew #s:22 Vehicle #s:18


Equipment Report

Bad Phones: 2

Bad Cable: 3

Crew Manager

Client Rep



Terrex Seismic

Daily Report

CREW 402

Party Manager: Tony Hutchison

Client Rep: Paul Belfrage

Weather: Fine / Cool

DATE: Sunday, 13 July 2008

Client.....

Survey Name.....

Area.....

State.....

Beach Petroleum

Modiolus 3D

PEL 91, PEL 92

SA

PRODUCTION

Vibrators

Swath	Source	Receiver	Kms.	Skips	Vp's	See Production Map Tab
197	5471-5555	1667-1730	3.44	3	83	
198	5478-5555	1674-1737	3.36	0	84	
199	5555-5408	1681-1744	6.16	0	154	
200	5555-5408	1688-1751	6.16	0	154	
201	5408-5548	1695-1758	5.88	0	147	
202	5408-5548	1702-1765	5.88	0	147	

Explosives

Swath	Source	Receiver	Kms.	Skips	Sp's
			0		

Daily Totals

VP's: 769

Skips: 3

Lin.Kms: 30.8800

Day.Sq.Klms: 8.4261

Cumulative Totals

Cum. Skip Vp's: 476

Cum. VP's: 22479

Cum.Lin.Kms: 911.720

Cum.Sq.Klm: 248.7661

Lin.Kms.Remaining: 303.60

Sq.Kms.Remaining: 82.8539

% Completed: 75.02%

Average Daily Production Sq. Kms: 5.7853

Average Daily Production Line Kms: 21.2028

Estimated Finish Date: Monday, 28 July 2008

HOURS

Working Time -

Recording: 10.3

Requested Experimental:

Recorder Moveup:

Vibrator Moveup:

Detour:

Traverse Move:

Swath Move:

WOS:

Interprospect/Panel Move:

Extras-

Vehicles: 0

Mules: 3

Tracked Buggies: 2

Personnel(Security): 0

Personnel(Drillers): 0

Personnel(Shot Firers): 0

Down Time -

Human Error:

Troubleshooting: 0.3

Recorder:

Vibes:

WOS:

Other:

Non-Charge Time -

Travel Time: 0.2

Instrument Tests/Morning QC: 0.1

Panel Move:

Other:

Standby Time -

Toolbox/Safety Meeting: 0.3

Induction:

Weather:

Spread Damage: 0.5

Other -

Spread Layout/Pickup:

Crew Demobe/Remobe:

Camp move prep:

Daily Totals

Working Time: 10.3

Standby Time: 0.8

Down Time: 0.3

Non-Charge Time: 0.3

Other: 0.0

Total Day Hrs: 11.7

Total Day Charge Hrs: 11.1

Cumulative Totals

Working Time(Job): 434.1

Standby Time(Job): 41.1

Down Time(Job): 9.9

Non-Charge Time(Job): 65.5

Total Hrs (Job): 550.6

Security & Offsider Hrs(Job): 678.0

COMMENTS:

*Excellent Production

*Trouble Shooting for LAUL Problems

*The Server Did not Generate the Logs for Jday195 ,the file to Big .

The File Jday195 is straight off the Data base

*Spread damage was Cable Chewage

Spread Movement

Client: Modiolus 3D				Date: Sunday, 13 July 2008			
Layout				Pickup			
Line	Station #		Tot	Line	Station #		Tot
1765	5408	5561	154	1667	5421	5547	127
1772	5408	5561	154	1674	5421	5547	127
1779	5408	5561	154	1681	5408	5547	140
1786	5408	5561	154	1688	5408	5547	140
1793	5408	5561	154	1695	5408	5490	83
				1702	5408	5490	83
Total Stations :			770	Total Stations:			700

Total Crew #'s:41

Line Crew #'s:22

Vehicle #'s:18

Equipment Report

Bad Phones: 2

Bad Cable: 3

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Tony Hutchison
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Monday, 14 July 2008

PRODUCTION

Vibrators

Swath	Source	Receiver	Kms.	Skips	Vp's	See Production Map Tab
201	5555-5555	1695-1758	0.28	0	7	
202	5555-5562	1702-1765	0.56	0	14	
203	5562-5408	1709-1772	6.44	0	161	
204	5562-5408	1716-1779	6.44	0	161	
205	5408-5562	1723-1786	6.44	0	161	
206	5408-5562	1730-1793	6.44	0	161	
207	5562-5471	1737-1800	3.92	0	98	

Daily Totals

VP's: 763
Skips: 0
Lin.Kms: 30.5200
Day.Sq.Klms: 8.3279

Cumulative Totals

Cum. Skip Vp's: 476
Cum. VP's: 23242
Cum.Lin.Kms: 942.240
Cum.Sq.Klm: 257.0940
Lin.Kms.Remaining: 273.08
Sq.Kms.Remaining: 74.5260
% Completed: 77.53%

Average Daily Production Sq. Kms: 5.8430
Average Daily Production Line Kms: 21.4145

Estimated Finish Date: Sunday, 27 July 2008

Explosives

Swath	Source	Receiver	Kms.	Skips	Sp's
			0		

HOURS

Daily Totals

Working Time -		Down Time -		Standby Time -	
Recording:	10.2	Human Error:		Toolbox/Safety Meeting:	0.3
Requested Experimental:		Troubleshooting:	0.1	Induction:	
Recorder Moveup:	0.6	Recorder:		Weather:	
Vibrator Moveup:		Vibes:		Spread Damage:	0.3
Detour:		WOS:			
Traverse Move:		Other:			
Swath Move:		Non-Charge Time -		Other -	
WOS:		Travel Time:	0.2	Spread Layout/Pickup:	
Interprospect/Panel Move:		Instrument Tests/Morning QC:	0.1	Crew Demobe/Remobe:	
Extras-		Panel Move:		Camp move prep:	
Vehicles:	0	Other:			
Mules:	3				
Tracked Buggies:	2				
Personnel(Security):	0	Total security Hours (Job):		678	
Personnel(Drillers):	0				
Personnel(Shot Firers):	0				

Working Time: 10.8
Standby Time: 0.6
Down Time: 0.1
Non-Charge Time: 0.3
Other: 0.0
Total Day Hrs: 11.8
Total Day Charge Hrs: 11.4

Cumulative Totals

Working Time(Job): 444.9
Standby Time(Job): 41.7
Down Time(Job): 10.0
Non-Charge Time(Job): 65.8
Total Hrs (Job): 562.4
Security & Offsider Hrs(Job): 678.0

COMMENTS:

*Excellent Production
*Trouble Shooting for LAUL Problems
*The Server Did not Generate the Logs for Jday196 ,the file to Big .
Got a Textual Obs Log with everything on it
*Spread damage was Cable Chewage
*Vibe Tech went out

Spread Movement

Client: Modiolus 3D

Date: Monday, 14 July 2008

Layout				Pickup			
Line	Station #		Tot	Line	Station #		Tot
1800	5408	5561	154	1695	5491	5549	59
1807	5408	5561	154	1702	5491	5554	64
1814	5408	5561	154	1709	5408	5554	147
1821	5408	5516	109	1716	5408	5554	147
				1723	5408	5554	147
				1730	5408	5554	147
				1737	5520	5561	42
Total Stations :		571		Total Stations:		753	

Total Crew #'s:41 Line Crew #'s:22 Vehicle #'s:18

Equipment Report

Bad Phones: 2

Bad Cable: 3

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Tony Hutchison
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Tuesday, 15 July 2008

PRODUCTION

Vibrators

Swath	Source	Receiver	Kms.	Skips	Vp's	See Production Map Tab
207	5464-5408	1737-1800	2.52	0	63	
208	5408-5562	1744-1807	6.44	0	161	
209	5562-5408	1751-1814	6.44	0	161	
210	5408-5562	1758-1821	6.44	6	155	
211	5562-5415	1765-1828	6.08	14	138	
			0			
			0			

Daily Totals

VP's: 678
Skips: 20
Lin.Kms: 27.9200
Day.Sq.Klms: 7.6184
Cumulative Totals
Cum. Skip Vp's: 476
Cum. VP's: 23920
Cum.Lin.Kms: 970.160
Cum.Sq.Klm: 264.7124
Lin.Kms.Remaining: 245.16
Sq.Kms.Remaining: 66.9076
% Completed: 79.82%

Explosives

Swath	Source	Receiver	Kms.	Skips	Sp's
			0		

Average Daily Production Sq. Kms: 5.8825
Average Daily Production Line Kms: 21.5591

Estimated Finish Date: Sunday, 27 July 2008

HOURS

Working Time -

Recording: 6.6
Requested Experimental:
Recorder Moveup:
Vibrator Moveup:
Detour: 0.5
Traverse Move: 3.5
Swath Move: 0.1
WOS:
Interprospect/Panel Move:
Extras-
Vehicles: 0
Mules: 3
Tracked Buggies: 2
Personnel(Security): 0
Personnel(Drillers): 0
Personnel(Shot Firers): 0

Down Time -

Human Error:
Troubleshooting: 0.2
Recorder:
Vibes:
WOS:
Other:
Non-Charge Time -
Travel Time: 0.3
Instrument Tests/Morning QC: 0.2
Panel Move:
Other:

Standby Time -

Toolbox/Safety Meeting: 0.3
Induction:
Weather:
Spread Damage:
Other -
Spread Layout/Pickup:
Crew Demobe/Remobe:
Camp move prep:

Daily Totals

Working Time: 10.7
Standby Time: 0.3
Down Time: 0.2
Non-Charge Time: 0.5
Other: 0.0
Total Day Hrs: 11.7
Total Day Charge Hrs: 11.0

Cumulative Totals

Working Time(Job): 455.6
Standby Time(Job): 42.0
Down Time(Job): 10.2
Non-Charge Time(Job): 66.3
Total Hrs (Job): 574.1
Security & Offsider Hrs(Job): 678.0

COMMENTS:

*Great Production
*Trouble Shooting for LAUL Problems
*Detour going around Salt Pan

Spread Movement

Client: Modiolus 3D

Date: Tuesday, 15 July 2008

Layout

Line	Station #		Tot
1821	5517	5596	80
1828	5408	5596	189
1835	5408	5596	189
1842	5408	5596	189
1849	5408	5506	99

Pickup

Line	Station #		Tot
1737	5408	5561	154
1744	5408	5561	154
1751	5408	5561	154
1758	5408	5561	154
1765	5465	5561	97

Total Stations : 746

Total Stations: 713

Total Crew #s:40 Line Crew #s:22 Vehicle #s:18

Equipment Report

Bad Phones: 4

Bad Cable: 1

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Tony Hutchison
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Wednesday, 16 July 2008

PRODUCTION

Vibrators

Swath	Source	Receiver	Kms.	Skips	Vp's	See Production Map Tab
211	5415-5408	1765-1828	0.36	0	9	
212	5408-5562	1772-1835	6.44	14	147	
213	5562-5408	1779-1842	6.44	10	151	
214	5408-5548	1786-1849	5.88	0	147	
215	5548-5408	1793-1856	5.88	5	142	
216	5408-5492	1800-1863	3.64	7	84	
			0			

Daily Totals

VP's: 680
Skips: 36
Lin.Kms: 28.6400
Day.Sq.Klms: 7.8149

Cumulative Totals

Cum. Skip Vp's: 476
Cum. VP's: 24600
Cum.Lin.Kms: 998.800
Cum.Sq.Klm: 272.5273
Lin.Kms.Remaining: 216.52
Sq.Kms.Remaining: 59.0927
% Completed: 82.18%

Average Daily Production Sq. Kms: 5.9245
Average Daily Production Line Kms: 21.7130

Estimated Finish Date: Saturday, 26 July 2008

Explosives

Swath	Source	Receiver	Kms.	Skips	Sp's
			0		

HOURS

Working Time -

Recording: 6.4
Requested Experimental:
Recorder Moveup:
Vibrator Moveup:
Detour: 0.3
Traverse Move: 3.5
Swath Move: 0.1
WOS:
Interprospect/Panel Move:
Extras-
Vehicles: 0
Mules: 3
Tracked Buggies: 2
Personnel(Security): 0
Personnel(Drillers): 0
Personnel(Shot Firers): 0

Down Time -

Human Error:
Troubleshooting: 0.1
Recorder:
Vibes: 0.2
WOS:
Other:
Non-Charge Time -
Travel Time: 0.2
Instrument Tests/Morning QC: 0.1
Panel Move:
Other:

Standby Time -

Toolbox/Safety Meeting: 0.3
Induction:
Weather:
Spread Damage: 0.5
Other -
Spread Layout/Pickup:
Crew Demobe/Remobe:
Camp move prep:

Daily Totals

Working Time: 10.3
Standby Time: 0.8
Down Time: 0.3
Non-Charge Time: 0.3
Other: 0.0
Total Day Hrs: 11.7
Total Day Charge Hrs: 11.1

Cumulative Totals

Working Time(Job): 465.9
Standby Time(Job): 42.8
Down Time(Job): 10.5
Non-Charge Time(Job): 66.6
Total Hrs (Job): 585.8
Security & Offsider Hrs(Job): 678.0

COMMENTS:

*Great Production
*Vibe Downtime was blown Hose
*Detour going around Salt Pan
*T/Shooting bad connection
*PM and HSE help out Dozer Crew with Camp move
*Spread Damage Chewage 2 Cables

Spread Movement

Client: Modiolus 3D

Date: Wednesday, 16 July 2008

Layout

Line	Station #	Tot
1849	5507	5596
1856	5408	5596
1863	5408	5596
1870	5452	5596

Pickup

Line	Station #	Tot
1765	5408	5464
1772	5408	5561
1779	5408	5561
1786	5408	5561
1793	5408	5561

Total Stations : 613

Total Stations: 673

Total Crew #'s:40 Line Crew #'s:22 Vehicle #'s:18

Equipment Report

Bad Phones: 4

Bad Cable: 3

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Tony Hutchison
Client Rep: Stewart Thirlwell
Weather: Fine / Cool/Windy
DATE: Thursday, 17 July 2008

PRODUCTION

Vibrators

Swath	Source	Receiver	Kms.	Skips	Vp's	See Production Map Tab
216	5499-5548	1800-1863	2.24	0	56	
217	5548-5408	1807-1870	5.88	7	140	
218	5408-5548	1814-1877	5.88	0	147	
219	5548-5408	1821-1884	5.88	0	147	
220	5408-5541	1828-1891	5.6	0	140	
			0			
			0			

Daily Totals

VP's: 630
Skips: 7
Lin.Kms: 25.4800
Day.Sq.Klms: 6.9526
Cumulative Totals
Cum. Skip Vp's: 476
Cum. VP's: 25230
Cum.Lin.Kms: 1024.280
Cum.Sq.Klm: 279.4799
Lin.Kms.Remaining: 191.04
Sq.Kms.Remaining: 52.1401
% Completed: 84.28%

Explosives

Swath	Source	Receiver	Kms.	Skips	Sp's
			0		

Average Daily Production Sq. Kms: 5.9464
Average Daily Production Line Kms: 21.7932

Estimated Finish Date: Saturday, 26 July 2008

HOURS

Working Time -

Recording: 5.9
Requested Experimental:
Recorder Moveup: 0.5
Vibrator Moveup:
Detour: 0.1
Traverse Move: 3.3
Swath Move: 0.1
WOS:
Interprospect/Panel Move:
Extras-
Vehicles: 0
Mules: 3
Tracked Buggies: 2
Personnel(Security): 0
Personnel(Drillers): 0
Personnel(Shot Firers): 0

Down Time -

Human Error:
Troubleshooting:
Recorder:
Vibes:
WOS: 0.8
Other:
Non-Charge Time -
Travel Time: 0.4
Instrument Tests/Morning QC: 0.1
Panel Move:
Other:

Standby Time -

Toolbox/Safety Meeting: 0.3
Induction:
Weather:
Spread Damage: 0.2
WOS: 0.8
Spread Layout/Pickup:
Crew Demobe/Remobe:
Camp move prep:

Daily Totals

Working Time: 9.9
Standby Time: 0.5
Down Time: 0.8
Non-Charge Time: 0.5
Other: 0.0
Total Day Hrs: 11.7
Total Day Charge Hrs: 10.4

Cumulative Totals

Working Time(Job): 475.8
Standby Time(Job): 43.3
Down Time(Job): 11.3
Non-Charge Time(Job): 67.1
Total Hrs (Job): 597.5
Security & Offsider Hrs(Job): 678.0

COMMENTS:

*Great Production
*Crew Change
*HSE went and got Shower Water
*WOS was from Crew Change

Spread Movement

Client: Modiolus 3D

Date: Thursday, 17 July 2008

Layout

Line	Station #		Tot
1870	5408	5451	44
1877	5408	5596	189
1884	5408	5596	189
1891	5408	5596	189
1898	5552	5596	45

Pickup

Line	Station #		Tot
1800	5408	5561	154
1807	5408	5561	154
1814	5408	5596	189
1821	5408	5596	189
1828	5408	5417	10

Total Stations : 656

Total Stations: 696

Total Crew #s:36 Line Crew #s:22 Vehicle #s:18

Equipment Report

Bad Phones: 2

Bad Cable: 2

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Tony Hutchison
Client Rep: Stewart Thirlwell
Weather: Fine / Cool
DATE: Friday, 18 July 2008

PRODUCTION

Vibrators

Swath	Source	Receiver	Kms.	Skips	Vp's	See Production Map Tab
220	5548-5548	1828-1891	0.28	0	7	
221	5548-5408	1835-1898	5.88	0	147	
222	5408-5548	1842-1905	5.88	0	147	
223	5548-5408	1849-1912	5.88	0	147	
224	5408-5534	1856-1919	5.32	0	133	
			0			
			0			

Daily Totals

VP's: 581
Skips: 0
Lin.Kms: 23.2400
Day.Sq.Klms: 6.3414
Cumulative Totals
Cum. Skip Vp's: 476
Cum. VP's: 25811
Cum.Lin.Kms: 1047.520
Cum.Sq.Klm: 285.8213
Lin.Kms.Remaining: 167.80
Sq.Kms.Remaining: 45.7987
% Completed: 86.19%

Explosives

Swath	Source	Receiver	Kms.	Skips	Sp's
			0		

Average Daily Production Sq. Kms: 5.9546
Average Daily Production Line Kms: 21.8233

Estimated Finish Date: Saturday, 26 July 2008

HOURS

Working Time -

Recording: 5.5
Requested Experimental:
Recorder Moveup:
Vibrator Moveup:
Detour: 0.1
Traverse Move: 2.8
Swath Move: 0.1
WOS:
Interprospect/Panel Move:
Extras-
Vehicles: 0
Mules: 3
Tracked Buggies: 2
Personnel(Security): 0
Personnel(Drillers): 0
Personnel(Shot Firers): 0

Down Time -

Human Error:
Troubleshooting:
Recorder:
Vibes:
WOS: 1.8
Other:
Non-Charge Time -
Travel Time: 0.4
Instrument Tests/Morning QC: 0.1
Panel Move:
Other:

Standby Time -

Toolbox/Safety Meeting: 0.3
Induction:
Weather:
Spread Damage: 0.6
WOS: 1.8
Travel Time: 0.4
Spread Layout/Pickup:
Crew Demobe/Remobe:
Camp move prep:

Daily Totals

Working Time: 8.5
Standby Time: 0.9
Down Time: 1.8
Non-Charge Time: 0.5
Other: 0.0
Total Day Hrs: 11.7
Total Day Charge Hrs: 9.4

Cumulative Totals

Working Time(Job): 484.3
Standby Time(Job): 44.2
Down Time(Job): 13.1
Non-Charge Time(Job): 67.6
Total Hrs (Job): 609.2
Security & Offsider Hrs(Job): 678.0

COMMENTS:

*Good Production
*PM into Moomba to pick up 3 more Personnel
*WOS was from Crew change

Spread Movement

Client: Modiolus 3D

Date: Friday, 18 July 2008

Layout

Line	Station #		Tot
1898	5408	5551	144
1905	5408	5596	189
1912	5408	5596	189
1919	5513	5596	84
1926	5513	5596	84
1933	5513	5596	84
1940	5589	5596	8

Pickup

Line	Station #		Tot
1828	5417	5596	180
1835	5408	5596	189
1842	5408	5596	189
1849	5408	5450	43

Total Stations : 782

Total Stations: 601

Total Crew #s:39 Line Crew #s:22 Vehicle #s:18

Equipment Report

Bad Phones: 2

Bad Cable: 3

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Tony Hutchison
Client Rep: Stewart Thirlwell
Weather: Fine / Cool / Windy
DATE: Saturday, 19 July 2008

PRODUCTION

Vibrators

Swath	Source	Receiver	Kms.	Skips	Vp's	See Production Map Tab
224	5541-5548	1856-1919	0.56	0	14	
225	5548-5408	1863-1926	5.88	0	147	
226	5408-5548	1870-1933	5.88	0	147	
227	5548-5408	1877-1940	5.88	0	147	
228	5513-5548	1884-1947	1.68	0	42	
229	5513-5548	1891-1954	1.68	0	42	
230	5548-5513	1898-1961	1.68	0	42	
231	5548-5513	1905-1968	1.68	0	42	
232	5513-5527	1912-1975	0.84	0	21	
233	5513-5527	1919-1982	0.84	0	21	

Daily Totals

VP's: 665
Skips: 0
Lin.Kms: 26.6000
Day.Sq.Klms: 7.2582
Cumulative Totals
Cum. Skip Vp's: 476
Cum. VP's: 26476
Cum.Lin.Kms: 1074.120
Cum.Sq.Klm: 293.0795
Lin.Kms.Remaining: 141.20
Sq.Kms.Remaining: 38.5405
% Completed: 88.38%

Average Daily Production Sq. Kms: 5.9812
Average Daily Production Line Kms: 21.9208

Estimated Finish Date: Saturday, 26 July 2008

HOURS

Working Time -

Recording: 6.6
Requested Experimental:
Recorder Moveup: 0.5
Vibrator Moveup:
Detour: 0.1
Traverse Move: 2.7
Swath Move: 0.5
WOS:
Interprospect/Panel Move:
Extras-
Vehicles: 0
Mules: 3
Tracked Buggies: 2
Personnel(Security): 0
Personnel(Drillers): 0
Personnel(Shot Firers): 0

Down Time -

Human Error:
Troubleshooting:
Recorder:
Vibes:
WOS:
Other:
Non-Charge Time -
Travel Time: 0.5
Instrument Tests/Morning QC:
Panel Move:
Other:

Standby Time -

Toolbox/Safety Meeting: 0.3
Induction:
Weather:
Spread Damage: 0.3
Other -
Spread Layout/Pickup:
Crew Demobe/Remobe:
Camp move prep:

Daily Totals

Working Time: 10.4
Standby Time: 0.6
Down Time: 0.0
Non-Charge Time: 0.6
Other: 0.0
Total Day Hrs: 11.6
Total Day Charge Hrs: 11.0

Cumulative Totals

Working Time(Job): 494.7
Standby Time(Job): 44.8
Down Time(Job): 13.1
Non-Charge Time(Job): 68.2
Total Hrs (Job): 620.8
Security & Offsider Hrs(Job): 678.0

COMMENTS:

*Good Production
*Mechanic into pickup Drinking Water
*Cable Repairer into Moomba to take Rubbish and Bad Transverse and pick up Freight
*Spread Damage was Chewage
*HSE went out

Spread Movement

Client: Modiolus 3D

Date: Saturday, 19 July 2008

Layout

Line	Station #	Tot
1940	5513	5588
1947	5513	5596
1954	5513	5596
1961	5513	5596
1968	5513	5596
1975	5513	5596
1982	5513	5596
1989	5513	5596
1996	5513	5596

Pickup

Line	Station #	Tot
1849	5451	5596
1856	5408	5596
1863	5408	5596
1870	5408	5596
1877	5408	5596
1884	5408	5530

Total Stations : 748

Total Stations: 1025

Total Crew #s:38 Line Crew #s:22 Vehicle #s:18

Equipment Report

Bad Phones: 3

Bad Cable: 2

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Tony Hutchison
Client Rep: Stewart Thirlwell
Weather: Fine / Cool / Windy
DATE: Sunday, 20 July 2008

PRODUCTION

Vibrators

Swath	Source	Receiver	Kms.	Skips	Vp's	See Production Map Tab
232	5534-5548	1912-1975	0.84	0	21	
233	5534-5548	1919-1982	0.84	0	21	
234	5548-5513	1926-1989	1.68	0	42	
235	5548-5513	1933-1996	1.68	0	42	
236	5548-5513	1940-1996	1.68	0	42	
237	5513-5548	1947-1996	1.68	0	42	
238	5513-5548	1954-1996	1.68	0	42	
239	5513-5548	1961-1996	1.68	0	42	
240	5555-5674	1996-1961	5.04	0	126	

Daily Totals

VP's: 420
Skips: 0
Lin.Kms: 16.8000
Day.Sq.Klms: 4.5842
Cumulative Totals
Cum. Skip Vp's: 476
Cum. VP's: 26896
Cum.Lin.Kms: 1090.920
Cum.Sq.Klm: 297.6637
Lin.Kms.Remaining: 124.40
Sq.Kms.Remaining: 33.9563
% Completed: 89.76%

Average Daily Production Sq. Kms: 5.9533
Average Daily Production Line Kms: 21.8184

Estimated Finish Date: Saturday, 26 July 2008

HOURS

Working Time -

Recording: 4.6
Requested Experimental:
Recorder Moveup: 0.5
Vibrator Moveup:
Detour: 0.3
Traverse Move: 1.1
Swath Move: 0.2
WOS:
Interprospect/Panel Move: 3.2
Extras-
Vehicles: 0
Mules: 3
Tracked Buggies: 2
Personnel(Security): 0
Personnel(Drillers): 0
Personnel(Shot Firers): 0

Down Time -

Human Error:
Troubleshooting:
Recorder:
Vibes:
WOS:
Other: 0.2
Non-Charge Time -
Travel Time: 0.9
Instrument Tests/Morning QC: 0.2
Panel Move:
Other:

Standby Time -

Toolbox/Safety Meeting: 0.3
Induction:
Weather:
Spread Damage:
Other -
Spread Layout/Pickup:
Crew Demobe/Remobe:
Camp move prep:

Daily Totals

Working Time: 9.9
Standby Time: 0.3
Down Time: 0.2
Non-Charge Time: 1.1
Other: 0.0
Total Day Hrs: 11.5
Total Day Charge Hrs: 10.2

Cumulative Totals

Working Time(Job): 504.6
Standby Time(Job): 45.1
Down Time(Job): 13.3
Non-Charge Time(Job): 69.3
Total Hrs (Job): 632.3
Security & Offsider Hrs(Job): 678.0

COMMENTS:

*Good Production
*Finish Panel D and Started Panel E
*Other is for a longer Safety Sunday

Spread Movement

Client: Modiolus 3D

Date: Sunday, 20 July 2008

Layout

Line	Station #	Tot
1996	5597	5694
1989	5597	5694
1982	5597	5694
1975	5597	5694
1968	5597	5694
1961	5597	5694
1954	5597	5694
1947	5597	5694
1940	5597	5675

Pickup

Line	Station #	Tot
1884	5531	5592
1891	5408	5584
1898	5408	5576
1905	5408	5576
1912	5408	5576

Total Stations : 863

Total Stations: 746

Total Crew #s:38 Line Crew #s:23 Vehicle #s:18

Equipment Report

Bad Phones: 3

Bad Cable: 0

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Tony Hutchison
Client Rep: Stewart Thirlwell
Weather: Fine / Cool / Windy
DATE: Monday, 21 July 2008

PRODUCTION

Vibrators

Swath	Source	Receiver	Kms.	Skips	Vp's	See Production Map Tab
240	5681-5695	1996-1961	0.84	0	21	
241	5695-5555	1996-1954	5.88	0	147	
242	5695-5555	1996-1947	5.88	0	147	
243	5555-5695	1996-1940	5.88	0	147	
244	5555-5695	1996-1933	5.88	0	147	
245	5695-5555	1989-1926	5.88	0	147	

Daily Totals

VP's: 756
Skips: 0
Lin.Kms: 30.2400
Day.Sq.Klms: 8.2515
Cumulative Totals
Cum. Skip Vp's: 476
Cum. VP's: 27652
Cum.Lin.Kms: 1121.160
Cum.Sq.Klm: 305.9152
Lin.Kms.Remaining: 94.16
Sq.Kms.Remaining: 25.7048
% Completed: 92.25%
Average Daily Production Sq. Kms: 5.9983
Average Daily Production Line Kms: 21.9835
Estimated Finish Date: Saturday, 26 July 2008

HOURS

Working Time -

Recording: 10.2
Requested Experimental:
Recorder Moveup:
Vibrator Moveup:
Detour:
Traverse Move:
Swath Move:
WOS:
Interprospect/Panel Move:
Extras-
Vehicles: 0
Mules: 3
Tracked Buggies: 2
Personnel(Security): 0
Personnel(Drillers): 0
Personnel(Shot Firers): 0

Down Time -

Human Error:
Troubleshooting: 0.1
Recorder:
Vibes:
WOS:
Other:
Non-Charge Time -
Travel Time: 0.7
Instrument Tests/Morning QC: 0.1
Panel Move:
Other:

Standby Time -

Toolbox/Safety Meeting: 0.3
Induction:
Weather:
Spread Damage: 0.3
Other -
Spread Layout/Pickup:
Crew Demobe/Remobe:
Camp move prep:

Daily Totals

Working Time: 10.2
Standby Time: 0.6
Down Time: 0.1
Non-Charge Time: 0.8
Other: 0.0
Total Day Hrs: 11.7
Total Day Charge Hrs: 10.8

Cumulative Totals

Working Time(Job): 514.8
Standby Time(Job): 45.7
Down Time(Job): 13.4
Non-Charge Time(Job): 70.1
Total Hrs (Job): 644.0
Security & Offsider Hrs(Job): 678.0

COMMENTS:

*Great Production
*Line Crew finish bringing sread from Panel D to Panel E
*Mechanic into Mooba to pick up Freight and Gas Bottles
*Cable Repairer went and got Shower water
*Crew working well together
*PM and Mecho arrived on crew

Spread Movement

Client: Modiolus 3D

Date: Monday, 21 July 2008

Layout

Line	Station #	Tot
1940	5676	5694
1933	5597	5694
1926	5597	5694
1919	5597	5694
1912	5618	5694

Pickup

Line	Station #	Tot
1996	5513	5694
1989	5606	5694

Total Stations : 390

Total Stations: 271

Total Crew #s:40 Line Crew #s:23 Vehicle #s:18

Equipment Report

Bad Phones: 3

Bad Cable: 1

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Tony Hutchison
Client Rep: Stewart Thirlwell
Weather: Fine / Cool / Windy
DATE: Tuesday, 22 July 2008

PRODUCTION

Vibrators

Swath	Source	Receiver	Kms.	Skips	Vp's	See Production Map Tab
246	5555-5695	1982-1919	5.88	0	147	
247	5695-5555	1975-1912	5.88	0	147	
248	5555-5695	1968-1905	5.88	0	147	
249	5695-5597	1961-1898	4.08	0	102	

Daily Totals

VP's: 543
Skips: 0
Lin.Kms: 21.7200
Day.Sq.Klms: 5.9267
Cumulative Totals
Cum. Skip Vp's: 476
Cum. VP's: 28195
Cum.Lin.Kms: 1142.880
Cum.Sq.Klm: 311.8419
Lin.Kms.Remaining: 72.44
Sq.Kms.Remaining: 19.7781
% Completed: 94.04%
Average Daily Production Sq. Kms: 5.9970
Average Daily Production Line Kms: 21.9785
Estimated Finish Date: Friday, 25 July 2008

HOURS

Working Time -

Recording: 5.3
Requested Experimental:
Recorder Moveup: 0.5
Vibrator Moveup:
Detour:
Traverse Move: 3.0
Swath Move: 0.1
WOS: 0.5
Interprospect/Panel Move:
Extras-
Vehicles: 0
Mules: 3
Tracked Buggies: 2
Personnel(Security): 0
Personnel(Drillers): 0
Personnel(Shot Firers): 0

Down Time -

Human Error:
Troubleshooting: 0.3
Recorder: 0.1
Vibes:
WOS: 0.5
Other:
Non-Charge Time -
Travel Time: 0.7
Instrument Tests/Morning QC: 0.1
Panel Move:
Other:

Standby Time -

Toolbox/Safety Meeting: 0.3
Induction:
Weather:
Spread Damage: 0.3
Other -
Spread Layout/Pickup:
Crew Demobe/Remobe:
Camp move prep:

Daily Totals

Working Time: 9.4
Standby Time: 0.6
Down Time: 0.9
Non-Charge Time: 0.8
Other: 0.0
Total Day Hrs: 11.7
Total Day Charge Hrs: 10.0

Cumulative Totals

Working Time(Job): 524.2
Standby Time(Job): 46.3
Down Time(Job): 14.3
Non-Charge Time(Job): 70.9
Total Hrs (Job): 655.7
Security & Offsider Hrs(Job): 678.0

COMMENTS:

*Good Production
*WOS is Linecrew Laying through Salt Pan

Spread Movement

Client: Modiolus 3D

Date: Tuesday, 22 July 2008

Layout

Line	Station #	Tot
1912	5513	5617
1905	5513	5694
1898	5513	5694
1891	5513	5694
1884	5618	5694

Pickup

Line	Station #	Tot
1989	5513	5606
1982	5513	5694
1975	5513	5694
1968	5513	5694
1961	5648	5694

Total Stations : 728

Total Stations: 687

Total Crew #s:40 **Line Crew #s:**23 **Vehicle #s:**18

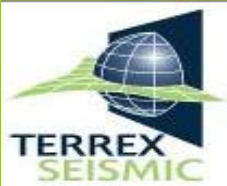
Equipment Report

Bad Phones: 2

Bad Cable: 1

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Shane Goossens
Client Rep: Stewart Thirlwell
Weather: Fine / Cool / Windy
DATE: Wednesday, 23 July 2008

PRODUCTION

Vibrators

Swath	Source	Receiver	Kms.	Skips	Vp's	See Production Map Tab
249	5590-5555	1961-1898	1.68	0	42	
250	5555-5695	1954-1891	5.24	9	122	
251	5695-5555	1947-1884	5.24	19	112	
252	5555-5695	1940-1877	5.56	27	112	
253	5695-5618	1933-1870	4.44	27	84	

Daily Totals

VP's: 523
Skips: 82
Lin.Kms: 24.2000
Day.Sq.Klms: 6.6034
Cumulative Totals
Cum. Skip Vp's: 476
Cum. VP's: 28718
Cum.Lin.Kms: 1167.080
Cum.Sq.Klm: 318.4453

Swath	Source	Receiver	Kms.	Skips	Sp's
249	5597-5597	1961-1898	0.12	0	3
250	5597-5604	1954-1891	0.64	0	16
251	5611-5583	1947-1884	0.64	0	16
252	5583-5611	1940-1877	0.32	0	8
253	5590-5583	1933-1870	0.32	0	8

Lin.Kms.Remaining: 48.24
Sq.Kms.Remaining: 13.1747
% Completed: 96.03%

Average Daily Production Sq. Kms: 6.0084
Average Daily Production Line Kms: 22.0204

Estimated Finish Date: Friday, 25 July 2008

HOURS

Working Time -

Recording: 6.6
Requested Experimental:
Recorder Moveup:
Vibrator Moveup:
Detour: 0.1
Traverse Move: 3.1
Swath Move: 0.1
WOS:
Interprospect/Panel Move:
Extras-
Vehicles: 0
Mules: 3
Tracked Buggies: 2
Personnel(Security): 0
Personnel(Drillers): 0
Personnel(Shot Firers): 0

Down Time -

Human Error:
Troubleshooting: 0.3
Recorder:
Vibes:
WOS:
Other:
Non-Charge Time -
Travel Time: 0.7
Instrument Tests/Morning QC: 0.1
Panel Move:
Other:

Standby Time -

Toolbox/Safety Meeting: 0.3
Induction:
Weather:
Spread Damage: 0.4
Other -
Spread Layout/Pickup:
Crew Demobe/Remobe:
Camp move prep:

Daily Totals

Working Time: 9.9
Standby Time: 0.7
Down Time: 0.3
Non-Charge Time: 0.8
Other: 0.0
Total Day Hrs: 11.7
Total Day Charge Hrs: 10.6

Cumulative Totals

Working Time(Job): 534.1
Standby Time(Job): 47.0
Down Time(Job): 14.6
Non-Charge Time(Job): 71.7
Total Hrs (Job): 667.4
Security & Offsider Hrs(Job): 678.0

COMMENTS:

*Good Production
*Trouble Shooting was for LAUL
*Spread Damage was Chewage 2 Cables

Spread Movement

Client: Modiolus 3D

Date: Wednesday, 23 July 2008

Layout

Line	Station #	Tot
1884	5506	5617
1877	5506	5694
1870	5506	5694
1863	5506	5680

Pickup

Line	Station #	Tot
1961	5513	5647
1954	5513	5694
1947	5513	5694
1940	5513	5694
1933	5668	5694

Total Stations : 665

Total Stations: 708

Total Crew #s:40 **Line Crew #s:**23 **Vehicle #s:**18

Equipment Report

Bad Phones:


3

Bad Cable:

3

Crew Manager

Client Rep



Terrex Seismic

Daily Report

Client.....

Survey Name.....

Area.....

State.....

Beach Petroleum

Modiolus 3D

PEL 91, PEL 92

SA

CREW 402

Party Manager: Shane Goossens

Client Rep: Stewart Thirlwell

Weather: Fine / Cool / Windy

DATE: Thursday, 24 July 2008

PRODUCTION

Vibrators

Swath	Source	Receiver	Kms.	Skips	Vp's	See Production Map Tab
253	5576-5555	1933-1870	1.12	0	28	
254	5555-5695	1926-1863	5.16	13	116	
255	5695-5555	1919-1856	5.56	4	135	
256	5555-5695	1912-1849	5.88	1	146	
257	5695-5611	1905-1842	3.64	0	91	

Daily Totals

VP's: 542

Skips: 18

Lin.Kms: 22.4000

Day.Sq.Klms: 6.1122

Cumulative Totals

Cum. Skip Vp's: 476

Cum. VP's: 29260

Cum.Lin.Kms: 1189.480

Cum.Sq.Klm: 324.5575

Lin.Kms.Remaining: 25.84

Sq.Kms.Remaining: 7.0625

% Completed: 97.87%

Average Daily Production Sq. Kms: 6.0103

Average Daily Production Line Kms: 22.0274

Estimated Finish Date: Friday, 25 July 2008

Swath	Source	Receiver	Kms.	Skips	Sp's
254	5583-5611	1926-1863	0.72	0	18
255	5604-5590	1919-1856	0.32	0	8

HOURS

Working Time -

Recording: 6.7

Requested Experimental:

Recorder Moveup:

Vibrator Moveup:

Detour:

Traverse Move: 2.8

Swath Move: 0.1

WOS:

Interprospect/Panel Move:

Extras-

Vehicles:

Mules: 3

Tracked Buggies: 2

Personnel(Security):

Personnel(Drillers):

Personnel(Shot Firers):

Down Time -

Human Error:

Troubleshooting: 0.6

Recorder:

Vibes:

WOS:

Other:

Non-Charge Time -

Travel Time: 0.7

Instrument Tests\Morning QC: 0.1

Panel Move:

Other: 0.2

Total security Hours (Job): 678

Standby Time -

Toolbox/Safety Meeting: 0.3

Induction:

Weather:

Spread Damage: 0.5

Other -

Spread Layout/Pickup:

Crew Demobe/Remobe:

Camp move prep:

Daily Totals

Working Time: 9.6

Standby Time: 0.8

Down Time: 0.6

Non-Charge Time: 1.0

Other: 0.0

Total Day Hrs: 12.0

Total Day Charge Hrs: 10.4

Cumulative Totals

Working Time(Job): 543.7

Standby Time(Job): 47.8

Down Time(Job): 15.2

Non-Charge Time(Job): 72.7

Total Hrs (Job): 679.4

Security & Offsider Hrs(Job): 678.0

COMMENTS:

*Good production

*All explosive work on salt lakes finished

*Spread damage caused by dingo chewage

*Troubleshooting time due to transverse and LAUL problems

Spread Movement

Client: Modiolus 3D				Date: Thursday, 24 July 2008			
Layout				Pickup			
Line	Station #		Tot	Line	Station #		Tot
1863	5681	5694	14	1933	5513	5667	155
1856	5506	5694	189	1926	5513	5694	182
1849	5506	5694	189	1919	5513	5694	182
1842	5506	5596	91	1912	5513	5615	103
1835	5506	5596	91				
1828	5506	5596	91				
Total Stations :		665		Total Stations:		622	

Total Crew #s:40 Line Crew #s:23 Vehicle #s:18

Equipment Report

Bad Phones: 4

Bad Cable: 3

Crew Manager

Client Rep



Terrex Seismic
Daily Report

CREW 402

Client.....
Survey Name.....
Area.....
State.....

Beach Petroleum
Modiolus 3D
PEL 91, PEL 92
SA

Party Manager: Shane Goossens
Client Rep: Stewart Thirlwell
Weather: Fine / Cool / Windy
DATE: Friday, 25 July 2008

PRODUCTION

Vibrators

Swath	Source	Receiver	Kms.	Skips	Vp's	See Production Map Tab
257	5604-5555	1905-1842	2.24	0	56	
258	5555-5695	1898-1835	5.88	0	147	
259	5695-5555	1891-1828	5.88	0	147	
260	5695-5555	1884-1821	5.88	0	147	
261	5597-5555	1877-1814	1.96	0	49	
262	5555-5597	1870-1807	1.96	0	49	
263	5597-5555	1863-1800	1.96	0	49	
264	5555	1856-1793	0.28	0	7	

Daily Totals

VP's: 651
Skips: 0
Lin.Kms: 26.0400
Day.Sq.Klms: 7.1054
Cumulative Totals
Cum. Skip Vp's: 476
Cum. VP's: 29911
Cum.Lin.Kms: 1215.520
Cum.Sq.Klm: 331.6629
Lin.Kms.Remaining: 3.64
Sq.Kms.Remaining: 0.9932
% Completed: 99.70%

Average Daily Production Sq. Kms: 6.0302
Average Daily Production Line Kms: 22.1004

Estimated Finish Date: Saturday, 26 July 2008

HOURS

Daily Totals

Working Time -		Down Time -		Standby Time -		Working Time:	10.4
Recording:	6.9	Human Error:		Toolbox/Safety Meeting:	0.3	Standby Time:	0.7
Requested Experimental:		Troubleshooting:		Induction:		Down Time:	0.0
Recorder Moveup:		Recorder:		Weather:		Non-Charge Time:	0.8
Vibrator Moveup:		Vibes:		Spread Damage:	0.4	Other:	0.0
Detour:	0.3	WOS:				Total Day Hrs:	11.9
Traverse Move:	3.2	Other:				Total Day Charge Hrs:	11.1
Swath Move:		Non-Charge Time -		Other -			
WOS:		Travel Time:	0.5	Spread Layout/Pickup:			
Interprospect/Panel Move:		Instrument Tests/Morning QC:	0.1	Crew Demobe/Remobe:			
Extras-		Panel Move:		Camp move prep:			
Vehicles:		Other:	0.2				
Mules:	3						
Tracked Buggies:	2						
Personnel(Security):		Total security Hours (Job):		678			
Personnel(Drillers):							
Personnel(Shot Firers):							

Cumulative Totals

Working Time(Job): 554.1
Standby Time(Job): 48.5
Down Time(Job): 15.2
Non-Charge Time(Job): 73.5
Total Hrs (Job): 691.3
Security & Offsider Hrs(Job): 678.0

COMMENTS:

*Good production
*Spread damage caused by dingo chewage

Spread Movement

Client: Modiolus 3D

Date: Friday, 25 July 2008

Layout

Line	Station #	Tot
1821	5506	5596
1814	5506	5596
1807	5506	5561
1800	5506	5561
1793	5506	5561
1786	5506	5561

Pickup

Line	Station #	Tot
1912	5615	5694
1905	5506	5694
1898	5506	5694
1891	5506	5694
1884	5506	5694
1877	5570	5694

Total Stations : 406

Total Stations: 961

Total Crew #'s:40 Line Crew #'s:23 Vehicle #'s:18


Equipment Report

Bad Phones: 2

Bad Cable: 1

Crew Manager

Client Rep



Terrex Seismic

Daily Report

CREW 402

Client.....

Beach Petroleum

Survey Name.....

Modiolus 3D

Area.....

PEL 91, PEL 92

State.....

SA

Party Manager: Shane Goossens

Client Rep: Stewart Thirlwell

Weather: Fine / Cool / Windy

DATE: Saturday, 26 July 2008

PRODUCTION

Vibrators

Swath	Source	Receiver	Kms.	Skips	Vp's	See Production Map Tab
264	5562-5597	1856-1793	1.68	0	42	
265	5597-5555	1849-1786	1.96	0	49	

Daily Totals

VP's: 91

Skips: 0

Lin.Kms: 3.6400

Day.Sq.Klms: 0.9932

Cumulative Totals

Cum. Skip Vp's: 476

Cum. VP's: 30002

Cum.Lin.Kms: 1219.160

Cum.Sq.Klm: 332.6561

Lin.Kms.Remaining: 0.00

Sq.Kms.Remaining: 0.0000

% Completed: 100.00%

Average Daily Production Sq. Kms: 5.9403

Average Daily Production Line Kms: 21.7707

Estimated Finish Date: Saturday, 26 July 2008

HOURS

Working Time -

Recording: 0.9

Requested Experimental:

Recorder Moveup: 0.6

Vibrator Moveup:

Detour:

Traverse Move: 0.5

Swath Move:

WOS:

Interprospect/Panel Move:

Extras-

Vehicles:

Mules: 3

Tracked Buggies: 2

Personnel(Security):

Personnel(Drillers):

Personnel(Shot Firers):

Down Time -

Human Error:

Troubleshooting:

Recorder:

Vibes:

WOS:

Other:

Non-Charge Time -

Travel Time: 0.5

Instrument Tests\Morning QC: 0.2

Panel Move:

Other:

Standby Time -

Toolbox/Safety Meeting: 0.3

Induction:

Weather:

Spread Damage:

Other -

Spread Layout/Pickup: 9.0

Crew Demobe/Remobe:

Camp move prep:

Daily Totals

Working Time: 2.0

Standby Time: 0.3

Down Time: 0.0

Non-Charge Time: 0.7

Other: 9.0

Total Day Hrs: 12.0

Total Day Charge Hrs: 2.3

Cumulative Totals

Working Time(Job): 556.1

Standby Time(Job): 48.8

Down Time(Job): 15.2

Non-Charge Time(Job): 83.2

Total Hrs (Job): 703.3

Security & Offsider Hrs(Job): 678.0

COMMENTS:

*Production on 3D completed

*Spread pick up continued for remainder of day

*Some spread layed on Padollus 2D

Spread Movement

Client: Modiolus 3D				Date: Saturday, 26 July 2008			
Layout				Pickup			
Line	Station #	Tot		Line	Station #	Tot	
				1877	5506	5570	65
				1870	5506	5694	189
				1863	5506	5694	189
				1856	5506	5694	189
				1849	5506	5694	189
				1842	5506	5596	91
				1835	5506	5596	91
				1828	5506	5596	91
				1821	5506	5596	91
				1814	5506	5555	50
Total Stations :		0		Total Stations:		1235	

Total Crew #'s:43 Line Crew #'s:25 Vehicle #'s:18

Equipment Report

Bad Phones:

Bad Cable:

Crew Manager

Client Rep

APPENDIX H

RECORDING STATISTICS

BEACH PETROLEUM MODIOLUS 3D

Date	Travel Time	Downtime	Mobilisation / Camp Move	Laying Out, QC & Pickup Spread	Recording Time	Recorder Move	Line Move / Panel Move	Waiting on Spread	Swath Move	Traverse Move	Detours & Terrain	Other	Safety & Other Charge	Spread Damage	Weather Time	Total Stand-by Rate	Total Working Hours	Total Mobilisation Hours	Total Operational Hours	Total Km's	Extras	Extras	Extras	Extras
	Non Chargeable	Non Chargeable	Non Chargeable	Non Chargeable	Chargeable	Chargeable	Chargeable	Chargeable	Chargeable	Chargeable	Chargeable	Non Chargeable	Stand-by	Stand-by	Stand-by						Mules	Vehicles	Security	Security Hrs
28 May 2008			13.00															13.00	13.00					
29 May 2008			9.00	2.70								12.50	0.80			0.80		9.00	12.50					
30 May 2008				11.70								12.00	0.30			0.30	-		12.00					
31 May 2008	0.70	1.20		6.00	2.10				0.20	1.30	0.30	8.20	0.30			0.30	3.90		8.20	8.1200				
1 June 2008	0.70	0.20			5.40	0.70			0.30	2.70	1.30	0.50	0.30			0.30	10.40		12.10	20.4400	3			
2 June 2008	0.70				4.50			1.80	0.20	2.70	0.60	0.40	0.30	0.90		1.20	9.80		12.10	15.9600	3			
3 June 2008	0.60				4.00	0.60		2.80		2.30	0.40	0.30	0.30	0.80		1.10	10.10		12.10	14.5600	3			
4 June 2008	0.80				4.00			2.30	0.10	2.10	0.40	0.40	0.30	1.50		1.80	8.90		11.90	14.5600	3			
5 June 2008	0.50	1.60			4.30	0.50		1.50		2.70		0.10	0.30	0.70		1.00	9.00		12.20	16.5200	3		2	
6 June 2008	0.50				6.40				0.50	3.50		0.30	0.30	0.60		0.90	10.40		12.10	22.6800	3		2	18
7 June 2008	0.50				6.80	0.50			0.30	3.60		0.30	0.30			0.30	11.20		12.30	23.5200	3		2	24
8 June 2008													0.30		9.70	10.00	-		10.00	-	3		2	24
9 June 2008	0.50	0.60			3.80				0.10	2.20	0.10	0.30	0.30	2.30		2.60	6.20		10.20	13.7200	3		2	24
10 June 2008	0.50	0.10			6.50				0.20	4.00		0.30	0.30	0.20		0.50	10.70		12.10	24.3600	3		2	24
11 June 2008	0.50				6.00	0.50			0.20	3.20	1.30	0.10	0.30			0.30	11.20		12.10	24.9200	3		2	24
12 June 2008	0.50				6.50	0.50			0.20	3.80	0.30	0.10	0.30			0.30	11.30		12.20	26.3200	3		2	24
13 June 2008	0.50				6.80				0.30	3.50		0.10	0.30	0.80		1.10	10.60		12.30	24.9200	3		2	24
14 June 2008	0.40				6.80	0.50			0.20	3.80		0.20	0.30			0.30	11.30		12.20	25.4800	3		2	24
15 June 2008	0.60				6.30	1.10			0.20	2.90		0.40	0.30	0.40		0.70	10.50		12.20	22.9600	3		2	24
16 June 2008	0.60				1.40		9.00		0.20	0.60		0.10	0.30			0.30	11.20		12.20	5.0400	3	1	2	24
17 June 2008	0.80				6.80				0.60	3.50		0.30	0.30			0.30	10.90		12.30	24.9200	3	1	2	24
18 June 2008	0.70				6.80	0.50			0.30	3.40	0.20	0.10	0.30			0.30	11.20		12.30	26.0400	3	1	2	24
19 June 2008	0.80				6.10	0.50			0.40	3.60	0.50	0.10	0.30			0.30	11.10		12.30	25.4800	3	1	2	24
20 June 2008	0.80				7.20		0.20		0.20	3.10		0.10	0.30	0.40		0.70	10.70		12.30	26.3200	3	1	2	24
21 June 2008	0.80				7.00	0.60			0.40	3.00		0.20	0.30			0.30	11.00		12.30	26.6000	3	1	2	24
22 June 2008	0.80	1.80			5.40	0.60			0.10	2.80		0.20	0.30			0.30	8.90		12.00	21.0000	3	1	2	24
23 June 2008	0.70				5.20			1.30	0.20	2.80	0.10	0.30	0.30	1.20		1.50	9.60		12.10	18.4800	3	1	2	24
24 June 2008	0.70	0.20			5.20	0.50		0.80	0.30	3.00	0.20	0.30	0.30	0.70		1.00	10.00		12.20	19.8800	3	1	2	24
25 June 2008	0.70	0.20			5.80	0.50			0.30	3.50		0.40	0.30	0.80		1.10	10.10		12.50	23.5200	3	1	2	24
26 June 2008	0.70				6.40				0.30	3.60	0.20	0.10	0.30	0.70		1.00	10.50		12.30	26.0400	3	1	2	24
27 June 2008	0.70	0.90			5.80	0.50			0.20	3.10		0.10	0.30	0.50		0.80	9.60		12.10	22.6800	3	1	2	24
28 June 2008	0.60				6.30				0.40	3.70		0.10	0.30	0.80		1.10	10.40		12.20	25.2000	3	1	2	24
29 June 2008	0.90				6.10	0.50		0.30	0.20	3.10	0.20	0.30	0.30	0.10		0.40	10.40		12.00	22.1200	3	1	2	24
30 June 2008	0.70	0.50			6.60				0.10	2.60	0.70	0.20	0.30	0.20		0.50	10.00		11.90	22.1200	3	1	2	24
16 July 2008	0.20	0.30		0.10	6.40				0.10	3.50	0.30		0.30	0.50		0.80	10.30		11.70	28.6400	3			
17 July 2008	0.40	0.80		0.10	5.90	0.50			0.10	3.30	0.10		0.30	0.20		0.50	9.90		11.70	25.4800	3			
18 July 2008	0.40	1.80		0.10	5.50				0.10	2.80	0.10		0.30	0.60		0.90	8.50		11.70	23.2400	3			
19 July 2008	0.50			0.10	6.60	0.50			0.50	2.70	0.10		0.30	0.30		0.60	10.40		11.60	26.6000	3			
20 July 2008	0.90	0.20		0.20	4.60	0.50	3.20		0.20	1.10	0.30		0.30			0.30	9.90		11.50	16.8000	3			
21 July 2008	0.70	0.10		0.10	10.20								0.30	0.30		0.60	10.20		11.70	30.2400	3			
22 July 2008	0.70	0.90		0.10	5.30	0.50		0.50	0.10	3.00			0.30	0.30		0.60	9.40		11.70	21.7200	3			
23 July 2008	0.70	0.30		0.10	6.60				0.10	3.10	0.10		0.30	0.40		0.70	9.90		11.70	24.2000	3			
24 July 2008	0.70	0.60		0.10	6.70				0.10	2.80		0.20	0.30	0.50		0.80	9.60		12.00	22.4000	3			
25 July 2008	0.50			0.10	6.90					3.20	0.30	0.20	0.30	0.40		0.70	10.40		11.90	26.0400	3			
26 July 2008	0.50			9.20	0.90	0.60				0.50			0.30			0.30	2.00		12.00	3.6400	3			
Total	25.7000	12.3000	22.0000	30.7000	233.9000	11.7000	12.4000	11.3000	8.5000	115.7000	8.1000	39.8000	13.7000	17.1000	9.7000	40.5000	401.6000	13.0000	536.0000	883.4800	123	15	52	594

*Final Operations Report
on the*

2008 PEL91/PEL92

Modiolus 3D Seismic Survey

for

***Beach Petroleum NL and Terrex Seismic Pty
Ltd***

April - July 2008



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**Dynamic Satellite Surveys Pty Ltd has a Quality Management System,
externally certified to AS/NZS ISO 9001:2000 standards by
SAI Global Pty Ltd. (Lic# QEC10046)**

This project was undertaken for Terrex Seismic Pty Ltd and Beach Petroleum NL.

The sole purpose of the job was to install and survey 3D Seismic Lines and support the dozing operations. The use of the data for any other purpose is not authorised.

All data contained in this report and on the attached CD is deemed to be final and overrides any previous data received from DSS, unless otherwise stated.

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1

INTRODUCTION

The following report covers the **2008 Modiolus 3D Seismic Survey**, performed by **Dynamic Satellite Surveys Pty Ltd** (DSS) whilst contracted to **Terrex Seismic Pty Ltd** (Terrex) for **Beach Petroleum NL** (Beach). DSS worked closely with Terrex Contracting (TC) to undertake the line clearing operations.

The survey area was located in the Cooper Basin, 150 kilometres northwest of Moomba, South Australia. See **Appendix A - Project Map**.

A total of **2383.68 kilometres** of 3D seismic lines were surveyed consisting of **1201.28 kilometres of receiver and 1182.40 kilometres source**, pegged at forty-metre station intervals.

The survey operations were completed between the 29th of April 2008 and the 16th of July 2008.



2

INSTRUMENTATION AND PERSONNEL

2.1 *Personnel and Logistics*

DSS personnel involved in the survey were as follows.

Ben Allsopp	- Bachelor of Surveying
	- Senior Surveyor
	- 4 years seismic experience
Cristian Gordini	- PhD in Topographic and Geodetic Science
	- Surveyor
Rob Heyer	- Operations Manager
	- 25 years seismic experience
Ben Mason	- Bachelor of Science (Major in Geography)
	- Surveyor
Sam Hartgrove	- Survey Assistant
Patrick Stebbing	- Survey Assistant
Andrew Tonkin	- Survey Assistant
Denny Wijedasa	- Survey Assistant

Personnel and equipment logistics were supported by the DSS Yeppoon office.

Survey operations were based from the Terrex contracting, Crew 2 camp.

2.2 *Equipment*

Equipment provided by DSS and used on this project:

	Description	Qty
Vehicles	DSS Toyota Landcruiser Traybacks	4
	DSS Caravan	1
	DSS Peg Trailer	1
Communications	Iridium satellite phone and car kit	1
	HF radio	1
	UHF radio	4
	Telstra NextG mobile phone and car kit	2
GPS receivers	NovAtel GPS receiver with VHF telemetry	4
	Garmin 172	6
Survey Instruments	Survey Master 3	1
	Rapid Elevation Metre (REM)	1
Computers	Toshiba A7	1
	Dell Inspiron 5150	1
	Fujitsu XP tablet	4
	iPAQ PCs	2
Software	Nav05 field software - DSS	Ver 4.27
	MIB for Windows - DSS	Ver 6.55
	MapInfo Professional	Ver 8.5
	GrafNet	Ver 7.8
Miscellaneous	Digital Camera	1
	Canon iX4000 printer	1
	Sundry office and transport equipment	
	Field and Office Consumables	



3

SURVEY REFERENCE SYSTEMS

3.1 Geodetic Datum

This project was based on the Geocentric Datum of Australia 1994 (GDA94), which is based on the Geodetic Reference System 1980 (GRS80) model defined by the following parameters:

<i>Datum:</i>	GDA94(Geocentric Datum of Australia 1994)
<i>Spheroid:</i>	GRS80
<i>Reference Frame:</i>	ITRF92 (International Terrestrial Reference Frame)
<i>Semi-Major Axis Length:</i>	6 378 137.0
<i>Inverse Flattening:</i>	298.257222101
<i>The Unit of Measure:</i>	International Metre

3.2 Map Projection

Final rectangular coordinates were based on the Map Grid of Australia 1994 (MGA94). Parameters for this projection are as follows:

<i>Projection:</i>	Universal Transverse Mercator (MGA Zone 54)
<i>Latitude of Origin:</i>	0°
<i>Central Meridian (CM):</i>	141° E
<i>Scale Factor at CM:</i>	0.9996
<i>False Easting:</i>	500 000
<i>False Northing:</i>	10 000 000
<i>The Unit of Measure:</i>	International Metre

3.3 Height Datum

All elevations obtained relative to GDA94 have been reduced to the Australian Height Datum (AHD) using the AUSGeoid98 Geoid - Spheroid separation model to determine the geoid-ellipsoid separation (N) for the particular area.

GPS observations are made on the GDA94 datum. The height associated with this datum is an ellipsoidal height (h). The Australian Height Datum (AHD), the height datum associated with MGA94, is an orthometric height, which is measured as the height above mean sea level, or the geoid (H).

The function that defines the relationship between the ellipsoid and orthometric heights is:

$$H = h - N$$

Or

$$AHD = GDA94 - (Geoid / Ellipsoid Separation)$$

The value for the geoid/spheroid separation is interpolated from a national model called AUSGeoid98.

AUSGeoid98 is the third in a series of national geoid models produced for Australia by the Australian Surveying and Land Information Group (AUSLIG). The geoid-ellipsoid data is prepared for the Australian region from:

- EGM96 Global Geopotential Model;
- 1996 Australian Gravity DataBase, from the Australian Geological Survey Organisation (AGSO);
- AUSLIG / AGSO GEODATA nine-second digital elevation model;
- Satellite altimeter - derived free air gravity anomalies offshore;
- Theories, techniques and software developed by Associate Professor Will Featherstone, Curtin University of Technology¹.

AUSGeoid98 N values were interpolated using the GrafNet Version 7.80 software, distributed by Waypoint Consulting Inc.

¹ Johnston, G.M., Featherstone, W.E. (1998) AUSGeoid98: A New Gravimetric Model for Australia



4

SURVEY CONTROL

Survey control was established via a static tie to **PM438** and **NER01** from the Nertius 3D and **MYT01** from the Mytilus 2D survey in the area.

Station	Easting	Northing	AHD	Comments
PM438	336346.820	6912776.170	18.770	Pioneer
NER01	335556.576	6906940.337	23.981	Pioneer
MYT01	333618.287	6903115.272	21.237	DSS

A combined control network was developed for the Modiolus 3D and Padollus 2D. An additional six (6) new control points were installed specifically for the 3D. In addition, three (3) control points were installed for the 2D with seven (7) AUSPOS² coordinate calculation checks made to check the control network.

The misclose values of control checks can be seen in **Appendix B - Survey Control**.

² AUSPOS - Geoscience Australia at website: <http://www.ga.gov.au/bin/gps.pl>



5

MONUMENTATION

All lines were pegged at a 40-metre station interval.

Wooden pegs, numbered front and back, were placed at every second station on source lines, and every fifth station along receivers. Additional white pegs were placed along access points with line names. Pink pegs were used on source lines and blue pegs on receiver lines. Pink pin flags on source and blue on receiver were installed between the pegs.

Permanent Markers were used for all GPS base stations. These consisted of a star picket with associated tag stating DSS job number and identification number.

Uphole pegs consisted of a white peg, numbered on the front and back, topped with yellow flagging. These pegs were placed on the opposite side of the track to the line pegs to prevent de-pegging by the crew. **Appendix G - Upholes Listing.**

Five (5) new EMP's were distributed through the survey area consisting of a star picket and tag and was documented with photographs. **Appendix D - Environmental Monitoring Points (EMPs).**



6

METHOD OF SURVEY

6.1 *Line Preparation*

Line clearing was done by Terrex Contracting Crew 2 using DSS machine guidance and support from a line pointer.

MapInfo software was used and a database of line clearing was updated each day.

6.2 *GPS Surveying*

There are three modes of use in GPS surveying; static, kinematic and real-time kinematic. On assessment, it was decided the survey would be completed using DSS' OEMV-4 real-time kinematic (RTK) surveying technique. This method enabled both position and elevation coordinates to be acquired in real-time and on the appropriate datum.

The survey method utilised phase data received from US Navy NAVSTAR satellites to provide three-dimensional positioning. When RTK surveying, one receiver was set up as a base station at a known location while the other receiver was used as a remote rover. To obtain real-time capabilities, VHF telemetry was required between the base and the remote GPS receiver.

NovAtel real-time kinematic methods can achieve accuracies of better than +/-0.05m in position and elevation, depending on base line length. The expected precision for

locating pegged positions is better than 0.3 metres and is generally better than 0.2 metres.

Initialisation of the OEMV-4 rover GPS usually takes as little as one minute, although this is greatly dependant on satellite geometry, availability and base line length.

6.3 *Processing and Quality Control*

All survey data was immediately recorded internally on the Fujitsu XP Tablets and subsequently downloaded to the office computer each evening.

Quality of the satellite data was monitored by careful examination of the various on-screen quality control statistics produced by the Nav05 software. These checks on data integrity are in the form of standard deviation (or sigma) values for Easting, Northing and Height and are generally better than 0.05 metres.

Any recording of positions where the standard deviation values exceeded 0.1 metre was highlighted to the surveyor at the time of recording. Following this, it was possible to re-initialise the GPS in order to obtain a more accurate solution. Any recorded position falling outside the required tolerances was flagged for further investigation and re-recording if necessary.

Numerous checks on pre-recorded marks were observed during each days survey in order to confirm the integrity of the GPS base receiver and the placed markers.

Coordinates were also checked in the office by determining point to point direction and distance. Profile plots were examined in detail to identify any height anomalies. Any points showing unusual position or height details were flagged and checked in the field.



7

DATA PRESENTATION

All line files were checked and finalised before the survey crew demobilised from the prospect.

All final data was in UTM grid coordinate format on the MGA94 datum on the GRS80 reference spheroid. All elevations were on the Australian Height Datum (AHD71).

Final data produced were:

Daily Reports Folder	- PDF file of each daily report
Maps Folder	- PDFs of general maps throughout the area.
MapInfo Folder	- Associated TAB files
Photos Folder	- JPG files of all job photographs.
Survey Data Folder	
SXXXX.uka	Source line data in UKOOA format.
SXXXX.seg	Source line data in SEGP1 format.
RXXXX.uka	Receiver line data in UKOOA format.
RXXXX.seg	Receiver line data in SEGP1 format.
 08022 Receiver.UKA	 All receiver line data in UKOOA format.
08022 Source.UKA	All source line data in UKOOA format
08022 Receiver.SEG	All receiver line data in SEGP1 format
08022 Source.SEG	All source line data in SEGP1 format

Upholes.xls

Upholes Listing

All files are backed up on digital disks in the Yeppoon office for future reference.

No hard copy data was provided.



8

HEALTH, SAFETY AND ENVIRONMENT

DSS personnel are aware of safety conditions concerning all exploration seismic surveys. The DSS “**Quality Policy Statement**” and “**Health, Safety and Environment Policy**” were adhered to at all times.

DSS produced a **Safety Management Plan** specific for this project.

Each DSS vehicle was fitted with a UHF radio, shovel, first-aid kit, CO₂ and water fire extinguishers, vehicle recovery equipment, rotating beacon and weekly vehicle maintenance check lists. The senior surveyors vehicle was also fitted with a NextG mobile phone kit, Satellite phone kit and HF radio.

The survey was conducted adhering to Beach Petroleum’s guidelines and the seismic industries best practices to minimise the environmental impact. Daily toolbox meetings were held to discuss current and upcoming issues. Weekly safety meetings were held to refresh the crews safety approach and address new hazards.

Cultural heritage clearance information was in the machine guidance GPS units and referenced a detailed description in a spreadsheet. Personnel continually were watchful for unidentified sites by the clearance team. These sites were then reported to the senior surveyor, who document the site. **Appendix E - Environmental Report Forms.**



9

OPERATIONAL ASPECTS

Access west of Moomba is continually improving and was better than previous projects completed by DSS in the area. The experience of both DSS and TC working in remote areas and the improvements to equipment, techniques, and camp facilities are constantly advancing the service provided to the client.

Being a large 3D project on the outskirts of the Cooper Basin, access was primarily via our own lines. Delays to issuing the finalised shooting orders hampered the team's ability to work efficiently. This later caused lead problems, placed greater stress on the survey team, and ran the risk of holding up the main crew.

Unfortunately, the late notice of the extension and changes to the panel design coincided with the arrival of the main crew, causing lost time for survey and dozing leap-frogging around the prospect. The result was an inefficiently planned clearing order, which resulted in increased travel times and required two camp moves.

Dozer production was slowed by dunes. In some flatter areas lumpy ground required just as much work. In order to minimise dune cuts, sections of receiver lines were cut using a +/- 25m weave to approach dunes at an optimal location to reduce the impact. If existing lines were found, preference was given to reopening the cutting rather than creating a new one. The source lines were then brought through utilising the existing receiver line dune cuts.

It took a total of 72 days to complete the 2383.68 kilometre program (1201.28km of receiver and 1182.40km of source) with 1.5 days down time for wet weather, giving an average survey production of 33.1 kilometres per day.



10

CONCLUSIONS AND RECOMMENDATIONS

Personnel found the cultural heritage induction conducted by Shane Kemp and Rod Lucas very valuable and informative.

This job was undertaken as efficiently and professionally as could be expected under the circumstances. All parties worked together effectively and the depth of experience in DSS' senior staff was a major contributing factor to successfully completing the survey.

The job was completed without any accidents or injuries.

DSS continually strive to improve the service provided to the clients, and welcome both positive and negative feedback so we can achieve this goal.

Signed,

Dynamic Satellite Surveys Pty Ltd

Ben Allsopp

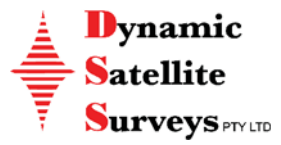
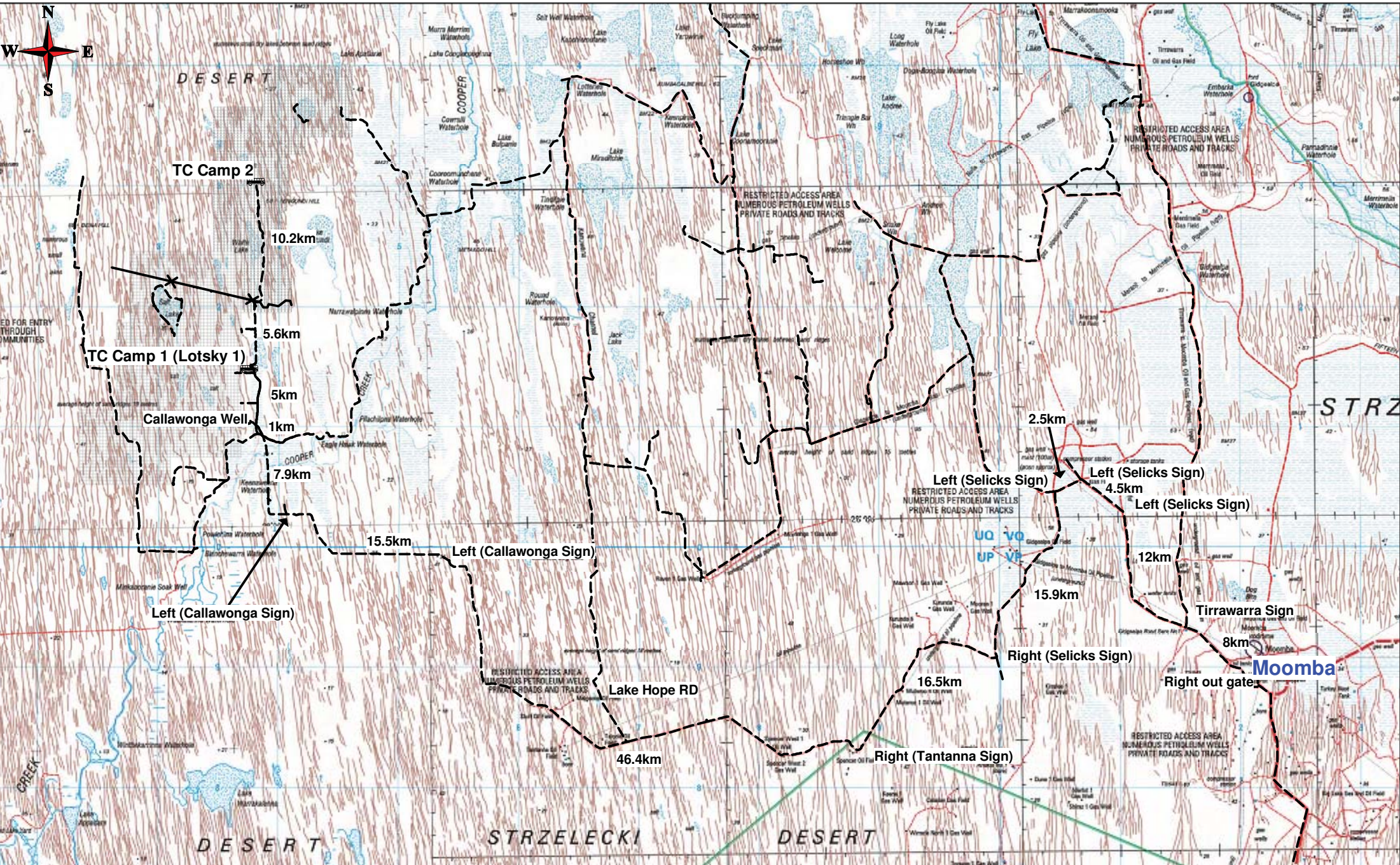
Senior Surveyor



11

APPENDICES

Project Map



2008 Beach Modiolus 3D Location Map

The purpose of this map is to represent the surveyed digital data in a pictorial manner only. The accuracy of the underlying topographic image in no way relates to the accuracy of the surveyed digital data. Features on the topographic map have not necessarily been surveyed by DSS. Any use of this map for reasons other than the purpose for which it was created is not authorised.

Scale	1mm = 400m
Drawn	Surveyor
File	Location.pdf
Rev	0.0
Date	17/07/08

Survey Control, Miscloses and Ties

Survey Control, Miscloses and Ties

All values are MGA 94 (Zone 54), AHD71

Initial Control Used

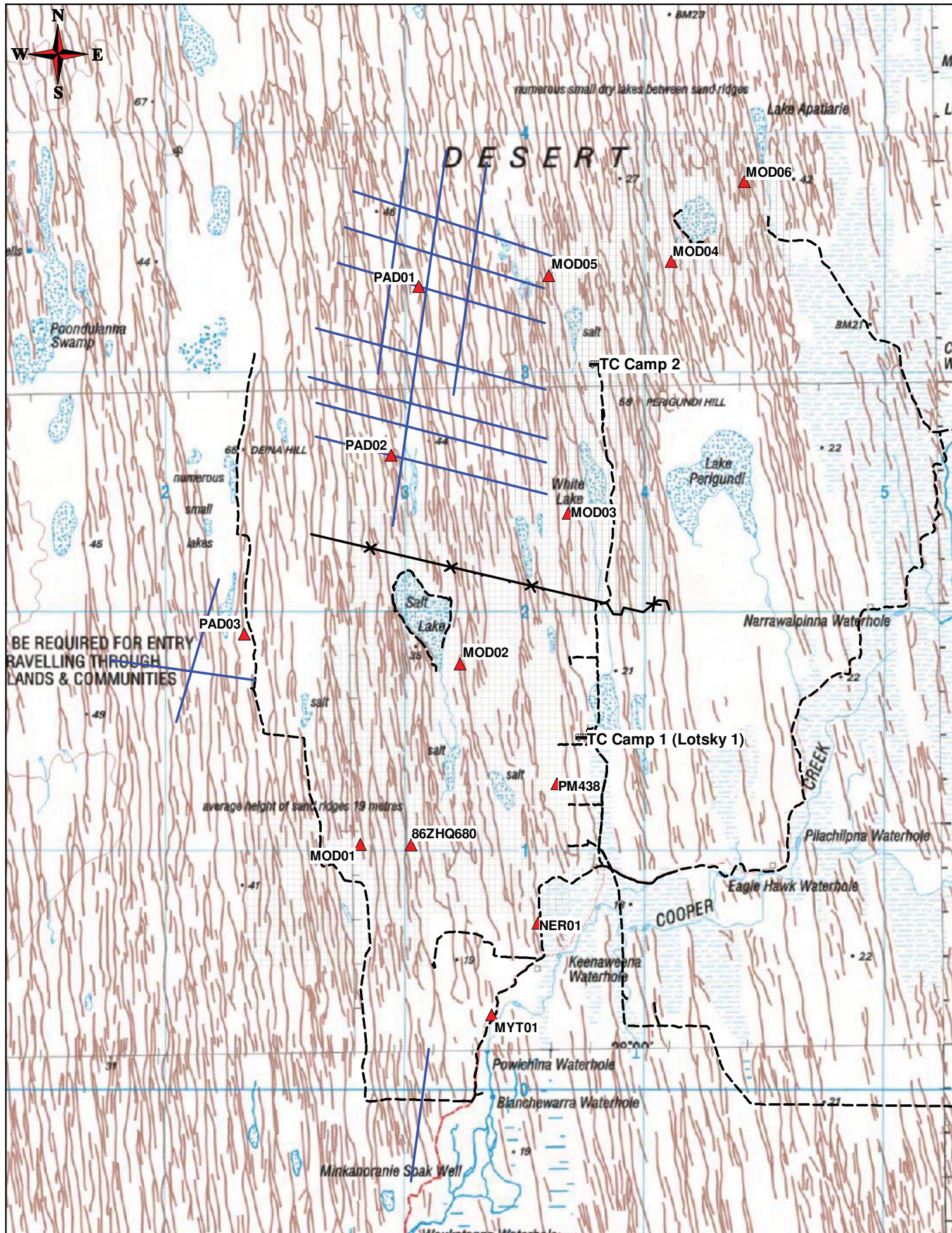
Station	Easting	Northing	AHD	Comments
PM438	336346.820	6912776.170	18.770	Pioneer
NER01	335556.576	6906940.337	23.981	Pioneer
MYT01	333618.287	6903115.272	21.237	DSS

AUSPOS Control Checks

Station	Easting	Northing	AHD	Comments
MOD02	332302.60	6917777.06	44.79	AUSPOS
	332302.40	6917776.94	44.37	DSS
	-0.20	-0.12	-0.42	Misclose

Station	Easting	Northing	AHD	Comments
NER01	335556.76	6906940.45	24.40	AUSPOS
	335556.58	6906940.34	23.98	DSS
	-0.19	-0.11	-0.42	Misclose

The checks using AUSPOS are well within seismic survey specifications.



2008 Beach Modiolus 3D and Padollus 2D Control Network

The purpose of this map is to represent the surveyed digital data in a pictorial manner only. The accuracy of the underlying topographic image in no way relates to the accuracy of the surveyed digital data. Features on the topographic map have not necessarily been surveyed by DSS. Any use of this map for reasons other than the purpose for which it was created is not authorised.

Scale	1mm = 200m
Drawn	BA
File	Network.pdf
Rev	0.0
Date	17/07/08

Line Length Summary

Receiver Lines

Station Interval = 40 m

Seismic Line	Start	End	Distance
1128	5128	5316	7.52
1135	5128	5316	7.52
1142	5128	5316	7.52
1149	5128	5316	7.52
1156	5128	5316	7.52
1163	5128	5316	7.52
1170	5128	5316	7.52
1177	5128	5316	7.52
1184	5128	5463	13.40
1191	5128	5463	13.40
1198	5128	5463	13.40
1205	5128	5463	13.40
1212	5128	5463	13.40
1219	5128	5463	13.40
1226	5128	5463	13.40
1233	5128	5463	13.40
1240	5128	5463	13.40
1247	5128	5463	13.40
1254	5128	5463	13.40
1261	5128	5463	13.40
1268	5128	5463	13.40
1275	5128	5463	13.40
1282	5128	5463	13.40
1289	5205	5463	10.32
1296	5205	5463	10.32
1303	5205	5463	10.32
1310	5205	5463	10.32
1317	5205	5463	10.32
1324	5205	5463	10.32
1331	5205	5463	10.32
1338	5205	5463	10.32
1345	5205	5463	10.32
1352	5205	5463	10.32
1359	5205	5463	10.32
1366	5205	5463	10.32

Seismic Line	Start	End	Distance
1373	5205	5463	10.32
1380	5205	5463	10.32
1387	5205	5463	10.32
1394	5205	5463	10.32
1401	5205	5463	10.32
1408	5205	5463	10.32
1415	5205	5463	10.32
1422	5205	5463	10.32
1429	5205	5463	10.32
1436	5205	5463	10.32
1443	5205	5463	10.32
1450	5205	5463	10.32
1457	5205	5463	10.32
1464	5205	5463	10.32
1471	5233	5463	9.20
1478	5233	5463	9.20
1485	5233	5568	13.40
1492	5233	5568	13.40
1499	5233	5568	13.40
1506	5233	5568	13.40
1513	5233	5568	13.40
1520	5233	5568	13.40
1527	5233	5568	13.40
1534	5233	5568	13.40
1541	5233	5568	13.40
1548	5233	5568	13.40
1555	5233	5568	13.40
1562	5233	5561	13.12
1569	5233	5561	13.12
1576	5233	5560	13.08
1583	5233	5561	13.12
1590	5233	5561	13.12
1597	5233	5561	13.12
1604	5233	5561	13.12
1611	5233	5554	12.84
1618	5408	5554	5.84
1625	5408	5486	3.12
	5501	5554	2.12

Seismic Line	Start	End	Distance
1632	5408	5485	3.08
	5496	5547	2.04
1639	5408	5485	3.08
	5495	5547	2.08
1646	5408	5485	3.08
	5491	5547	2.24
1653	5408	5547	5.56
1660	5408	5547	5.56
1667	5408	5547	5.56
1674	5408	5547	5.56
1681	5408	5547	5.56
1688	5408	5547	5.56
1695	5408	5549	5.64
1702	5408	5554	5.84
1709	5408	5554	5.84
1716	5408	5554	5.84
1723	5408	5554	5.84
1730	5408	5561	6.12
1737	5408	5561	6.12
1744	5408	5561	6.12
1751	5408	5561	6.12
1758	5408	5561	6.12
1765	5408	5561	6.12
1772	5408	5561	6.12
1779	5408	5561	6.12
1786	5408	5561	6.12
1793	5408	5561	6.12
1800	5408	5561	6.12
1807	5408	5561	6.12
1814	5408	5596	7.52
1821	5408	5596	7.52
1828	5408	5596	7.52
1835	5408	5596	7.52
1842	5408	5596	7.52
1849	5408	5694	11.44
1856	5408	5694	11.44
1863	5408	5694	11.44
1870	5408	5694	11.44

Seismic Line	Start	End	Distance
1877	5408	5694	11.44
1884	5408	5694	11.44
1891	5408	5694	11.44
1898	5408	5694	11.44
1905	5408	5694	11.44
1912	5408	5694	11.44
1919	5513	5694	7.24
1926	5513	5694	7.24
1933	5513	5694	7.24
1940	5513	5694	7.24
1947	5513	5694	7.24
1954	5513	5694	7.24
1961	5513	5694	7.24
1968	5513	5694	7.24
1975	5513	5694	7.24
1982	5513	5694	7.24
1989	5513	5694	7.24
1996	5513	5694	7.24
TOTAL			1201.28

Source

Station Interval = 40 m

Seismic Line	Start	End	Distance
5128	1128	1281	6.12
5135	1128	1281	6.12
5142	1128	1281	6.12
5149	1128	1281	6.12
5156	1128	1281	6.12
5163	1128	1281	6.12
5170	1128	1281	6.12
5177	1128	1281	6.12
5184	1128	1281	6.12
5191	1128	1281	6.12
5198	1128	1281	6.12
5205	1128	1463	13.40
5212	1128	1463	13.40
5219	1128	1463	13.40
5226	1128	1463	13.40
5233	1128	1169	1.64
	1183	1610	17.08
5240	1128	1610	19.28
5247	1128	1610	19.28
5254	1128	1610	19.28
5261	1128	1610	19.28
5268	1128	1610	19.28
5275	1128	1610	19.28
5282	1128	1610	19.28
5289	1128	1490	14.48
	1536	1610	2.96
5296	1128	1480	14.08
	1540	1610	2.80
5303	1128	1474	13.84
	1532	1610	3.12
5310	1128	1465	13.48
	1522	1610	3.52
5317	1128	1457	13.16
	1513	1610	3.88

Seismic Line	Start	End	Distance
5324	1184	1444	10.40
	1508	1610	4.08
5331	1184	1470	11.44
	1509	1610	4.04
5338	1184	1314	5.20
	1349	1610	10.44
5345	1184	1342	6.32
	1356	1610	10.16
5352	1184	1610	17.04
5359	1184	1610	17.04
5366	1184	1610	17.04
5373	1184	1610	17.04
5380	1184	1610	17.04
5387	1184	1313	5.16
	1326	1610	11.36
5394	1184	1296	4.48
	1323	1610	11.48
5401	1184	1291	4.28
	1311	1610	11.96
5408	1184	1911	29.08
5415	1184	1822	25.52
	1842	1911	2.76
5422	1184	1911	29.08
5429	1184	1911	29.08
5436	1184	1911	29.08
5443	1184	1911	29.08
5450	1184	1911	29.08
5457	1185	1911	29.04
5464	1184	1790	24.24
	1811	1911	4.00
5471	1485	1788	12.12
	1813	1911	3.92
5478	1485	1911	17.04
5485	1485	1632	5.88
	1665	1911	9.84
5492	1485	1599	4.56
	1652	1911	10.36
5499	1485	1911	17.04

Seismic Line	Start	End	Distance
5506	1485	1911	17.04
5513	1485	1995	20.40
5520	1485	1995	20.40
5527	1485	1995	20.40
5534	1485	1995	20.40
5541	1485	1995	20.40
5548	1485	1995	20.40
5555	1485	1624	5.56
	1698	1995	11.88
5562	1485	1603	4.72
	1730	1995	10.60
5569	1485	1554	2.76
	1814	1995	7.24
5576	1814	1995	7.24
5583	1814	1894	3.20
	1919	1995	3.04
5590	1814	1886	2.88
	1926	1995	2.76
5597	1814	1882	2.72
	1929	1995	2.64
5604	1849	1890	1.64
	1926	1995	2.76
5611	1849	1890	1.64
	1923	1995	2.88
5618	1849	1995	5.84
5625	1849	1995	5.84
5632	1849	1995	5.84
5639	1849	1995	5.84
5646	1849	1995	5.84
5653	1849	1995	5.84
5660	1849	1995	5.84
5667	1849	1995	5.84
5674	1849	1995	5.84
5681	1849	1995	5.84
5688	1849	1995	5.84
5695	1849	1995	5.84
TOTAL			1182.40

Environmental Monitoring Points



Environmental Monitoring Point

EMP NAME: EMP 1 (Tagged: 2008 Modiolus 3D SS EMP1)

PROJECT: 2008 Beach Modiolus 3D Seismic Survey

LOCATION: MGA94 Z54 E 326490
N 6911325

DATE DOCUMENTED: 05-May-08

INSTALLED BY: Dynamic Satellite Surveys

LOCATION DESCRIPTION

EMP 1 is located at the intersection of S5205 and R1282 approximately 200m off the eastern side of Boomer Road.

PHOTOGRAPHS



Photograph facing North along S5205.

(08022_EMP1N.JPG)



Photograph facing East along R1282.

(08022_EMP1E.JPG)



Photograph facing South along S5205.

(08022_EMP1S.JPG)



Photograph facing West along R1282.

(08022_EMP1W.JPG)



Environmental Monitoring Point

EMP NAME: EMP 2 (Tagged: 2008 Modiolus 3D SS EMP2)

PROJECT: 2008 Beach Modiolus 3D Seismic Survey

LOCATION: MGA94 Z54 E 331812
N 6920012

DATE DOCUMENTED: 21-May-08

INSTALLED BY: Dynamic Satellite Surveys

LOCATION DESCRIPTION

EMP 2 is located on the Salt Lake at the intersection of S5337 and R1499.

PHOTOGRAPHS



Photograph facing North along S5337.

(08022_EMP2N.JPG)



Photograph facing East along R1499.

(08022_EMP2E.JPG)



Photograph facing South along S5337.

(08022_EMP2S.JPG)



Photograph facing West along R1499.

(08022_EMP2W.JPG)



Environmental Monitoring Point

EMP NAME: EMP 3 (Tagged: 2008 Modiolus 3D SS EMP3)

PROJECT: 2008 Beach Modiolus 3D Seismic Survey

LOCATION: MGA94 Z54 E 328454
N 6907129

DATE DOCUMENTED: 30-May-08

INSTALLED BY: Dynamic Satellite Surveys

LOCATION DESCRIPTION

This EMP is located in the intersection between source line 5254 and receiver line 1177 approximately 20 meters west of Boomer Road. Close by the eastern side there is a sand dune and on the west, low vegetation.

PHOTOGRAPHS



Photograph facing North along S5254.

(08022_EMP3N.JPG)



Photograph facing East along R1177.

(08022_EMP3E.JPG)



Photograph facing South along S5254.

(08022_EMP3S.JPG)



Photograph facing West along R1177.

(08022_EMP3W.JPG)



Environmental Monitoring Point

EMP NAME: EMP 4 (Tagged: 2008 Modiolus 3D SS EMP4)

PROJECT: 2008 Beach Modiolus 3D Seismic Survey

LOCATION: MGA94 Z54 E 336524
N 6908796

DATE DOCUMENTED: 03-Jun-08

INSTALLED BY: Dynamic Satellite Surveys

LOCATION DESCRIPTION

This EMP is located in the intersection between source line 5457 and receiver line 1219 approximately 10 meters west of Boomer Road. Close by the eastern side there is a sand dune and on the west, low vegetation.

PHOTOGRAPHS



Photograph facing North along S5457.

(08022_EMP4N.JPG)



Photograph facing East along R1219.

(08022_EMP4E.JPG)



Photograph facing South along S5457.

(08022_EMP4S.JPG)



Photograph facing West along R1219.

(08022_EMP4W.JPG)



Environmental Monitoring Point

EMP NAME: EMP 5 (Tagged: 2008 Modiolus 3D SS EMP5)

PROJECT: 2008 Beach Modiolus 3D Seismic Survey

LOCATION: MGA94 Z54 E 345252
N 6935683

DATE DOCUMENTED: 22-Jun-08

INSTALLED BY: Dynamic Satellite Surveys

LOCATION DESCRIPTION

EMP 5 is located at the intersection of S5674 and R1891. Approximately 100m off the track to Ballaparudda 1 well.

PHOTOGRAPHS



Photograph facing North along S5674.

(08022_EMP5N.JPG)



Photograph facing East along R1891.

(08022_EMP5E.JPG)



Photograph facing South along S5674.

(08022_EMP5S.JPG)



Photograph facing West along R1891.

(08022_EMP5W.JPG)

Environmental Report Forms



Environmental Report Form

ERF NAME: ERF 1

PROJECT: 2008 Beach Modiolus 3D Seismic Survey

LOCATION: MGA94 Z54 E 334394
N 6914700

DATE DOCUMENTED: 10-May-08

LOCATED BY: Rob Pugno (Terrex Contracting) / Ben Allsopp (Dynamic Satellite Surveys)

LOCATION DESCRIPTION

ERF 1 is located approximately 10m South of receiver line 1366 at station 5402. Its a collection of stones that have been work on a claypan.

PHOTOGRAPHS



Photograph facing south from R1366.

(08022_ERF01a.JPG)



Closeup photograph.

(08022_ERF01b.JPG)



Closeup photograph.

(08022_ERF01c.JPG)



Photograph facing north from site to R1366.

(08022_ERF01d.JPG)



Environmental Report Form

ERF NAME: ERF 2

PROJECT: 2008 Beach Modiolus 3D Seismic Survey

LOCATION: MGA94 Z54 E 334560
N 6914683

DATE DOCUMENTED: 10-May-08

LOCATED BY: Rob Pugno (Terrex Contracting) / Ben Allsopp (Dynamic Satellite Surveys)

LOCATION DESCRIPTION

ERF 2 is located approximately 20m North of receiver line 1366 at station 5406. Its a collection of stones and top stone on a claypan.

PHOTOGRAPHS



Photograph facing North from R1366.

(08022_ERF2a.JPG)



Closeup photograph of top stone.

(08022_ERF2b.JPG)



Closeup photograph.

(08022_ERF2c.JPG)



Photograph facing South from site to seismic line.

(08022_ERF2d.JPG)



Environmental Report Form

ERF NAME: ERF 3

PROJECT: 2008 Beach Modiolus 3D Seismic Survey

LOCATION: MGA94 Z54 E 331868
N 6924208

DATE DOCUMENTED: 24-May-08

LOCATED BY: Sam Hartgrove (DSS Contracting) / Ben Allsopp (Dynamic Satellite Surveys)

LOCATION DESCRIPTION

ERF 3 is located in the northern side of the intersection of receiver line 1604 and source line 5338, Approximately 15 metres of track. Its a collection of stones with tooling marks.

PHOTOGRAPHS



Photograph facing North from R1604.

(08022_ERF03a.JPG)



Closeup photograph of top stone.

(08022_ERF03b.JPG)



Photograph facing North from seismic line to site
(08022_ERF03c.JPG)



Photograph facing South from site to seismic line.

(08022_ERF03d.JPG)



Environmental Report Form

ERF NAME: ERF 4

PROJECT: 2008 Beach Modiolus 3D Seismic Survey

LOCATION: MGA94 Z54 E 329470
N 6917850

DATE DOCUMENTED: 18-May-08

LOCATED BY: Barry Marrini (Terrex Contracting) / Ben Allsopp (Dynamic Satellite Surveys)

LOCATION DESCRIPTION

ERF 4 is located approximately 25 m North of the receiver line R1450. It's a top stone and part of a grind stone.

Note: Line detour after operator spotted stones

PHOTOGRAPHS



Photograph facing North from R1450.

(08022_ERF04a.JPG)



Closeup photograph of top stone.

(08022_ERF04b.JPG)



Photograph facing North from seismic line to site
(08022_ERF04d.JPG)



Photograph facing South from site to seismic line.

(08022_ERF04c.JPG)



Environmental Report Form

ERF NAME: ERF 5

PROJECT: 2008 Beach Modiolus 3D Seismic Survey

LOCATION: MGA94 Z54 E 333192
N 6915183

DATE DOCUMENTED: 30-May-08

LOCATED BY: Bill Anderson (Terrex Contracting) /Cristian Gordini (Dynamic Satellite Surveys)

LOCATION DESCRIPTION

ERF 5 is located approximately 25 m West of source line 5373, near receiver line 1380. It's a grind stone and scatters.

PHOTOGRAPHS



Photograph facing North from R1380.

(08022_ERF5a.JPG)



Closeup photograph of Grindstone.

(08022_ERF5b.JPG)



Photograph facing West from S5373 to site.

(08022_ERF5c.JPG)



Photograph facing South from site to S5373.

(08022_ERF5d.JPG)



Environmental Report Form

ERF NAME: ERF 6

PROJECT: 2008 Beach Modiolus 3D Seismic Survey

LOCATION: MGA94 Z54 E 333155
N 6913450

DATE DOCUMENTED: 30-May-08

LOCATED BY: Bill Anderson (Terrex Contracting) /Cristian Gordini (Dynamic Satellite Surveys)

LOCATION DESCRIPTION

ERF 6 is located approximately 25 m East of source line 5373. It's a group of scatters and worked stones.

PHOTOGRAPHS



Closeup photograph of scatters.

(08022_ERF06a.JPG)



Closeup photograph of worked stones.

(08022_ERF06b.JPG)



Photograph facing East from S5373

(08022_ERF06c.JPG)



Photograph facing South from site to seismic line.

(08022_ERF06d.JPG)



Environmental Report Form

ERF NAME: ERF 7

PROJECT: 2008 Beach Modiolus 3D Seismic Survey

LOCATION: MGA94 Z54 E 334102
N 6913833

DATE DOCUMENTED: 04-Jul-08

LOCATED BY: Ben Allsopp (Dynamic Satellite Surveys)

LOCATION DESCRIPTION

ERF 7 is a collection of numerous worked stones on a claypan, either side of R1345

PHOTOGRAPHS



Closeup photograph of worked stone.

(08022_ERF07a.JPG)



Closeup photograph of worked stone.

(08022_ERF07b.JPG)



Closeup photograph of worked stone.

(08022_ERF07c.JPG)



Closeup photograph of worked stone.

(08022_ERF07d.JPG)



Closeup photograph of worked stone.

(08022_ERF07e.JPG)



Closeup photograph of worked stone.

(08022_ERF07f.JPG)



Closeup photograph of worked stone.

(08022_ERF07g.JPG)



Photograph facing North from R1345.

(08022_ERF07h.JPG)



Photograph facing South from R1345.

(08022_ERF07i.JPG)

Environmental Report Form

ERF NAME: ERF 8

PROJECT: 2008 Beach Modiolus 3D Seismic Survey

LOCATION: MGA94 Z54 E 341733
N 6933993

DATE DOCUMENTED: 24-Jun-08

LOCATED BY: Gene Greenhalgh (Terrex Contracting) /Ben Allsopp (Dynamic Satellite Surveys)

LOCATION DESCRIPTION

ERF 8 is scatters along with a grind stone and top stone, on a small claypan beside a little dune.

Note: The dozer approached the site from the backside of the dune pushing some sand onto the claypan. Once the site was spotted he backed out and made a detour around the claypan.

PHOTOGRAPHS



Photograph facing North from R1849.

(08022_ERF08j.JPG)



Closeup photograph of grind stone.

(08022_ERF08a.JPG)



Closeup photograph of top stone.

(08022_ERF08c.JPG)



Photograph of worked stones.

(08022_ERF08b.JPG)



Photograph of worked stones.

(08022_ERF08d.JPG)



Photograph of worked stones.

(08022_ERF08e.JPG)



Photograph of worked stones.

(08022_ERF08f.JPG)



Photograph of worked stones.

(08022_ERF08h.JPG)



Over veiw photograph of site facing north.

(08022_ERF08g.JPG)



Photograph from grind stone to R1849.

(08022_ERF08i.JPG)

Photographs



GPS base station along seismic line.



DSS Camp



Pat and Sam backpacking on a salt lake.



Rigs

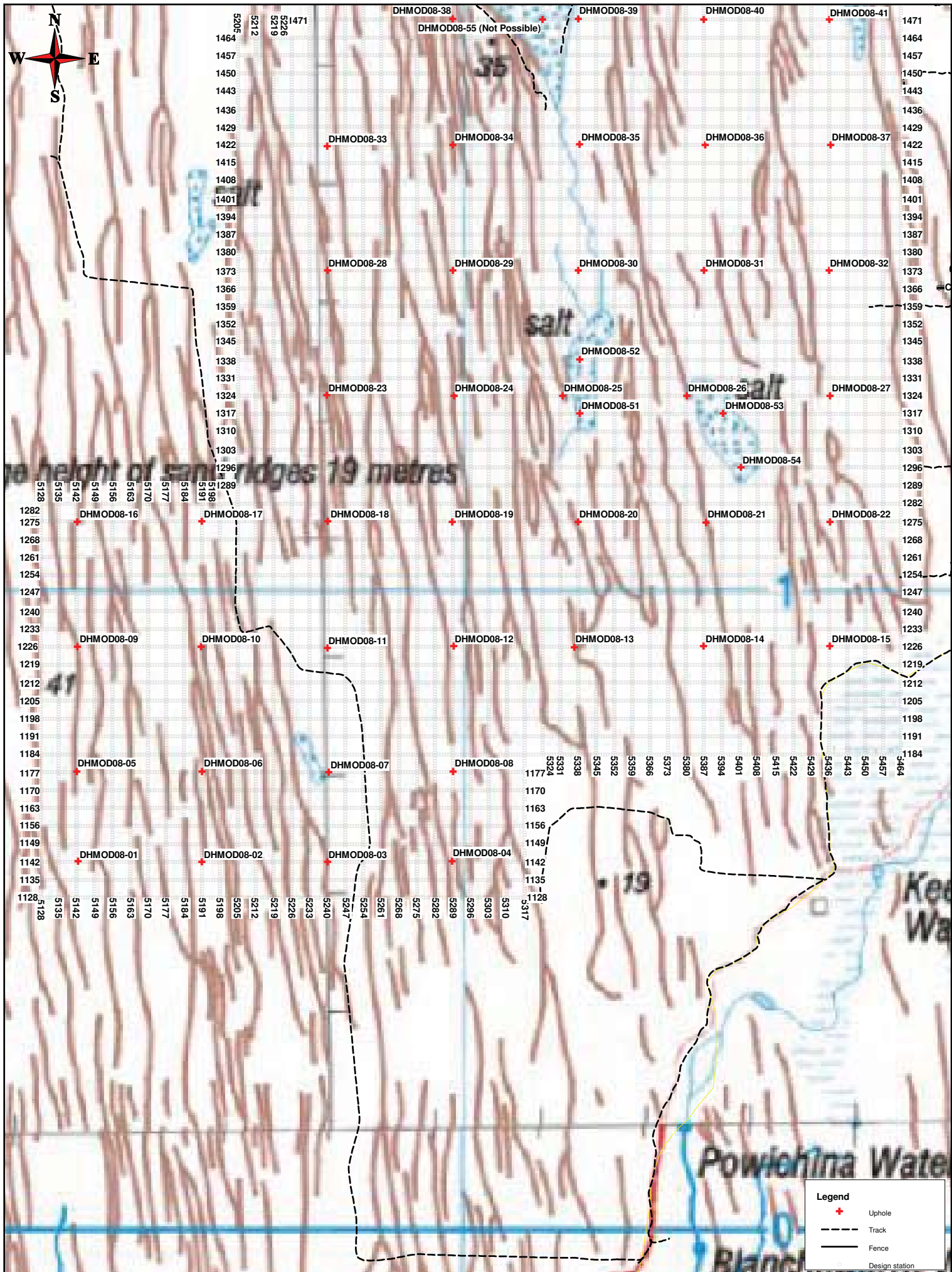
Upholes Listing

Uphole #	Line	Station	East	North	RL	Comments
DHMOD08-01	R1142	11425142	323998.5	6905733.1	32.3	
DHMOD08-02	R1142	11425190	325930.5	6905728.3	25.9	
DHMOD08-03	R1142	11425239	327898.1	6905730.3	17.0	
DHMOD08-04	R1142	11425288	329840.1	6905734.4	19.2	
DHMOD08-05	R1177	11775141	323978.4	6907133.0	28.4	
DHMOD08-06	R1177	11775190	325934.2	6907143.5	30.1	
DHMOD08-07	R1177	11775240	327912.9	6907131.5	17.2	
DHMOD08-08	R1177	11775289	329859.0	6907142.4	27.0	
DHMOD08-09	R1226	12265141	323986.8	6909089.5	35.0	
DHMOD08-10	S5191	51911225	325919.5	6909083.3	31.9	
DHMOD08-11	R1226	12265239	327894.5	6909071.5	21.4	
DHMOD08-12	S5289	52891225	329864.6	6909091.8	26.3	
DHMOD08-13	R1226	12265336	331748.1	6909079.4	21.9	
DHMOD08-14	R1226	12265386	333768.7	6909101.0	20.7	
DHMOD08-15	R1226	12265435	335740.7	6909104.3	19.2	
DHMOD08-16	R1275	12755142	323981.2	6911039.5	27.4	
DHMOD08-17	S5191	51911274	325931.1	6911044.7	29.4	
DHMOD08-18	R1275	12755239	327899.1	6911047.4	41.5	
DHMOD08-19	R1275	12755288	329844.4	6911039.2	21.0	
DHMOD08-20	R1275	12755338	331805.8	6911041.4	17.3	
DHMOD08-21	R1275	12755387	333805.6	6911029.6	15.8	
DHMOD08-22	R1275	12755435	335746.2	6911037.9	21.8	
DHMOD08-23	R1324	13245239	327883.8	6913020.3	38.1	
DHMOD08-24	R1324	13245288	329868.2	6913012.2	31.4	
DHMOD08-25	R1324	13245331	331567.4	6913012.4	14.6	
DHMOD08-26	R1324	13245379	333506.6	6913006.9	14.5	

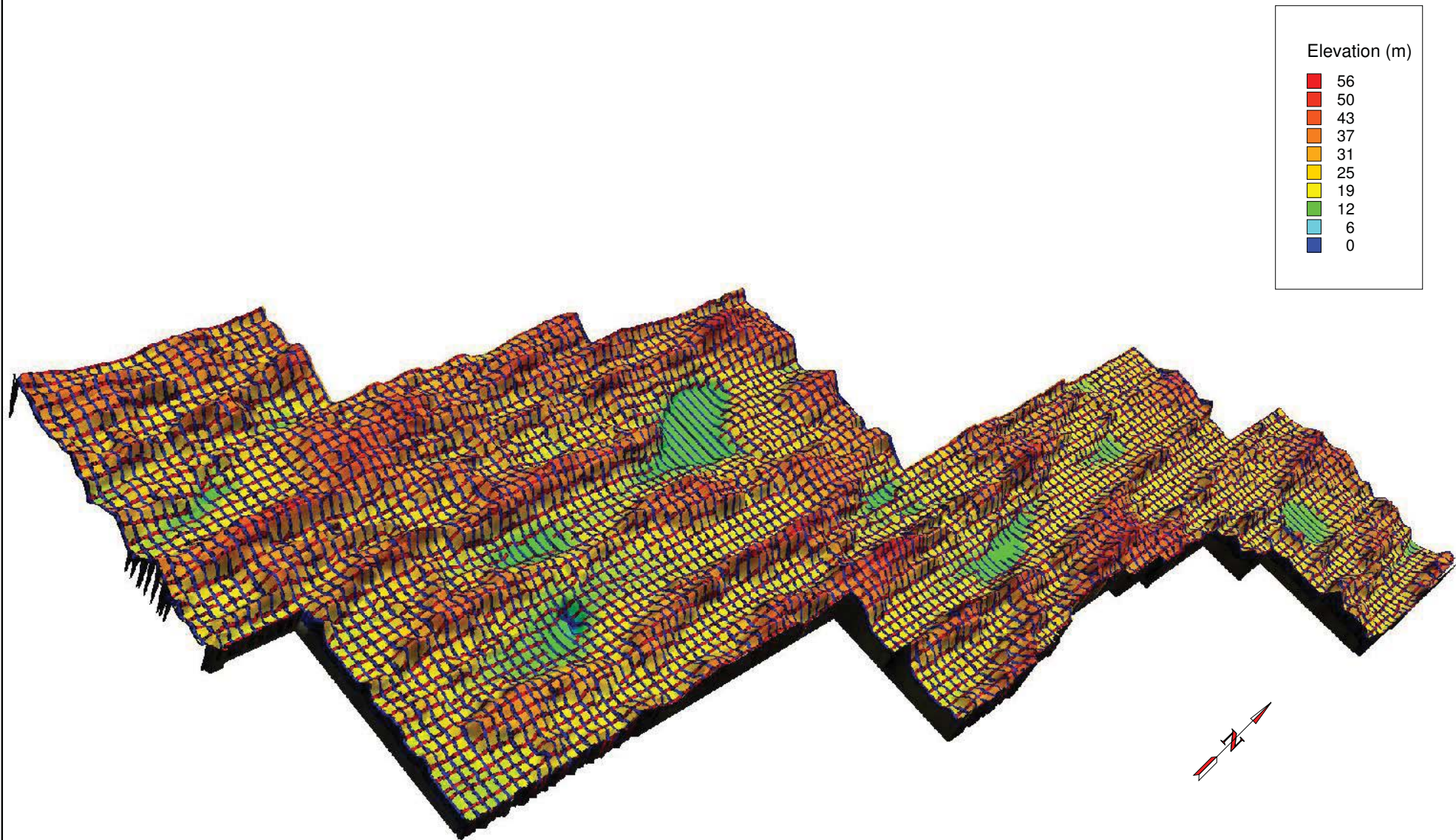
Uphole #	Line	Station	East	North	RL	Comments
DHMOD08-27	R1324	13245435	335743.6	6913006.6	19.5	
DHMOD08-28	R1373	13735239	327896.6	6914969.6	29.5	
DHMOD08-29	R1373	13735288	329851.4	6914969.4	18.7	
DHMOD08-30	R1373	13735337	331813.9	6914965.3	17.1	
DHMOD08-31	R1373	13735386	333774.1	6914966.9	16.5	
DHMOD08-32	R1373	13735435	335732.5	6914962.1	18.7	
DHMOD08-33	R1422	14225239	327889.2	6916908.4	37.6	
DHMOD08-34	R1422	14225288	329851.8	6916922.7	18.7	
DHMOD08-35	R1422	14225337	331830.9	6916933.6	18.6	
DHMOD08-36	R1422	14225387	333792.8	6916928.6	19.5	
DHMOD08-37	R1422	14225436	335753.6	6916924.1	19.3	
DHMOD08-38	R1471	14715288	329847.0	6918895.1	18.8	
DHMOD08-39	R1471	14715337	331813.1	6918898.7	16.4	
DHMOD08-40	R1471	14715386	333772.5	6918891.7	18.5	
DHMOD08-41	R1471	14715435	335733.3	6918887.8	19.3	
DHMOD08-42	R1520	15205274	329310.9	6920845.4	23.2	
DHMOD08-43	R1520	15205337	331810.4	6920833.8	20.0	
DHMOD08-44	R1520	15205386	333772.7	6920833.1	27.0	
DHMOD08-45	R1520	15205436	335787.3	6920849.2	21.5	
DHMOD08-46	R1569	15695288	329845.8	6922813.7	24.5	
DHMOD08-47	R1569	15695337	331812.2	6922810.4	25.1	
DHMOD08-48	R1569	15695387	333800.5	6922822.3	31.4	
DHMOD08-49	R1485	14855435	335732.5	6922816.3	17.4	
DHMOD08-50	R1583	15835260	328737.4	6923364.1	36.1	
DHMOD08-51	R1317	13175338	331835.1	6912727.7	11.4	
DHMOD08-52	R1338	13385338	331833.3	6913575.9	11.2	

Uphole #	Line	Station	East	North	RL	Comments
DHMOD08-53	R1317	13175394	334072.8	6912728.6	11.2	
DHMOD08-54	R1296	12965401	334353.0	6911889.1	11.4	
DHMOD08-55	R1471	14715323	331253.4	6918889.7	10.6	Not drilled by bobcat
DHMOD08-56	R1499	14995295	330132.7	6920010.1	10.5	Not drilled by bobcat
DHMOD08-57	R1499	14995323	331253.1	6920008.7	10.8	Not drilled by bobcat
DHMOD08-58	R1527	15275295	330132.4	6921125.7	10.8	
DMHOD08-59	R1548	15485421	335175.0	6921960.8	17.5	
DMHOD08-60						Not possible lake
DHMOD08-61	R1520	15205492	337993.1	6920843.7	19.4	
DHMOD08-62	R1520	15205548	340233.3	6920871.4	18.9	
DHMOD08-63	R1569	15695491	337979.4	6922814.5	17.5	
DHMOD08-64	R1569	15695547	340204.3	6922803.4	34.7	
DHMOD08-65	S5436	54361617	335769.3	6924765.1	16.6	
DHMOD08-66	R1618	16185491	337973.0	6924768.4	12.4	
DHMOD08-67	R1618	16185540	339950.4	6924755.4	28.1	
DHMOD08-68	S5436	54361666	335732.9	6926728.8	20.6	
DHMOD08-69	R1667	16675492	337992.7	6926730.2	22.1	
DHMOD08-70	R1667	16675534	339673.6	6926724.5	34.9	
DHMOD08-71	R1716	17165435	335741.5	6928667.7	36.2	
DHMOD08-72	R1716	17165492	337992.9	6928687.5	20.9	
DHMOD08-73	R1716	17165541	339952.8	6928698.7	36.2	
DHMOD08-74	R1765	17655435	335732.5	6930643.2	24.4	
DHMOD08-75	R1765	17655491	337986.1	6930656.5	22.7	
DHMOD08-76	R1765	17655547	340213.2	6930666.3	39.3	
DHMOD08-77	R1800	18005470	337133.7	6932048.5	14.1	
DHMOD08-78	R1814	18145435	335731.4	6932609.1	21.4	

Uphole #	Line	Station	East	North	RL	Comments
DHMOD08-79	R1814	18145491	337977.5	6932603.3	30.3	
DHMOD08-80	R1814	18145547	340209.5	6932606.4	19.8	
DHMOD08-81	R1863	18635435	335734.7	6934580.9	23.5	
DHMOD08-82	R1863	18635491	337954.3	6934570.0	38.5	
DHMOD08-83	R1863	18635547	340214.5	6934568.2	22.7	
DHMOD08-84	R1863	18635603	342448.9	6934554.3	21.5	
DHMOD08-85	R1863	18635659	344676.6	6934576.5	24.9	
DHMOD08-86	R1912	19125547	340201.0	6936501.6	21.7	
DHMOD08-87						Not possible lake
DHMOD08-88	R1912	19125659	344693.1	6936541.6	30.1	
DHMOD08-89	R1961	19615547	340216.4	6938487.4	32.3	
DHMOD08-90	R1961	19615603	342453.0	6938476.4	24.9	
DHMOD08-91	R1961	19615659	344693.2	6938509.3	28.5	
DHMOD08-92						Not possible lake
DHMOD08-93	R1646	16465491	337973.2	6925888.6	12.3	
DHMOD08-94	R1898	18985596	342172.9	6935969.0	13.9	
DHMOD08-?	S5296	52961520	330133.5	6920869.0	10.4	Drilled via bobcat and not surveyed by DSS interpolated position
DHMOD08-?	S5310	53101506	330696.8	6920308.8	10.6	Drilled via bobcat and not surveyed by DSS interpolated position
DHMOD08-?	S5331	53311484	331526.8	6919429.0	10.9	Drilled via bobcat and not surveyed by DSS interpolated position



3D Plot



Data Processing Report

For

BEACH PETROLEUM

MODIOLUS 3D

WesternGeco (Australia) Pty Ltd



INTRODUCTION

This report details the processing of the Modiolus 3D seismic survey recorded from 31st May – 26th July, 2008. The survey was located in PEL 91/92 of South Australia.

The report also covers the reprocessing of the Neritus survey that was recorded from 10th November 2006 – 11th January 2007. This survey was merged with the Modiolus survey to form one volume.

Modiolus consisted of 125 receiver lines, 1128-1996 incrementing by 7. The lines were 280m apart. There were 82 source lines, 5128-5695 also incrementing by 7 and 280m apart.

Neritus consisted of 90 receiver lines, 1000-1623, and 57 source lines, 5000-5392, at 280m spacing.

To merge the two surveys together, the Neritus source and receiver lines were renumbered to match the Modiolus numbering. The receiver lines had 117 subtracted from the original numbering and the source lines had 282 added to the original number.

PROCESSING OUTLINE

Convert from SEG-D to internal format
Geometry update and grid define
Amplitude recovery
Minimum phase conversion
Noise attenuation
Deconvolution
CMP sort
Velocity analysis and application
Residual statics
Velocity analysis and application
Trim statics
Offset sort
Migration velocity analysis
Kirchhoff PSTM
Trim statics
Radon demultiple
Stack
Whitening
Filter
Trace balance

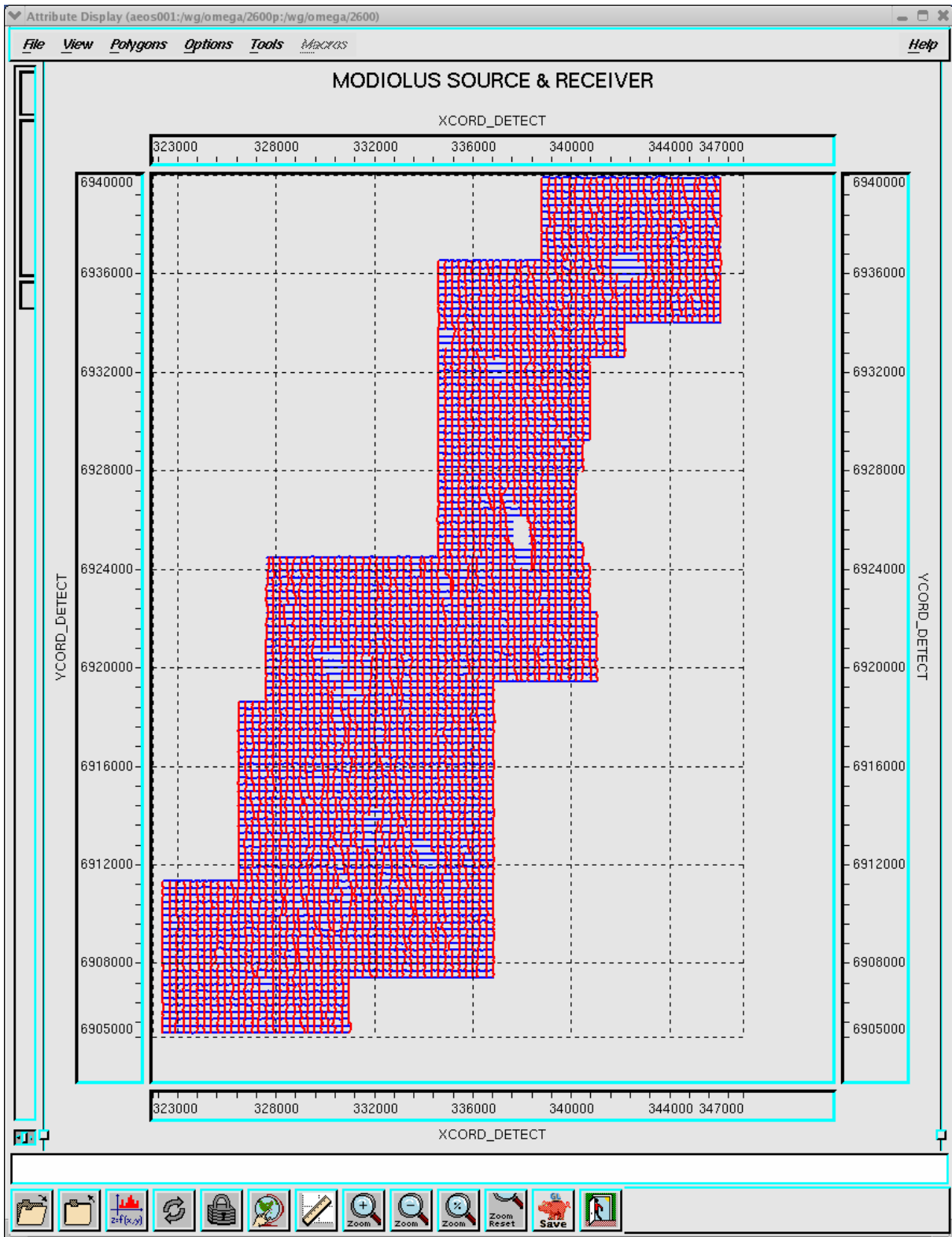
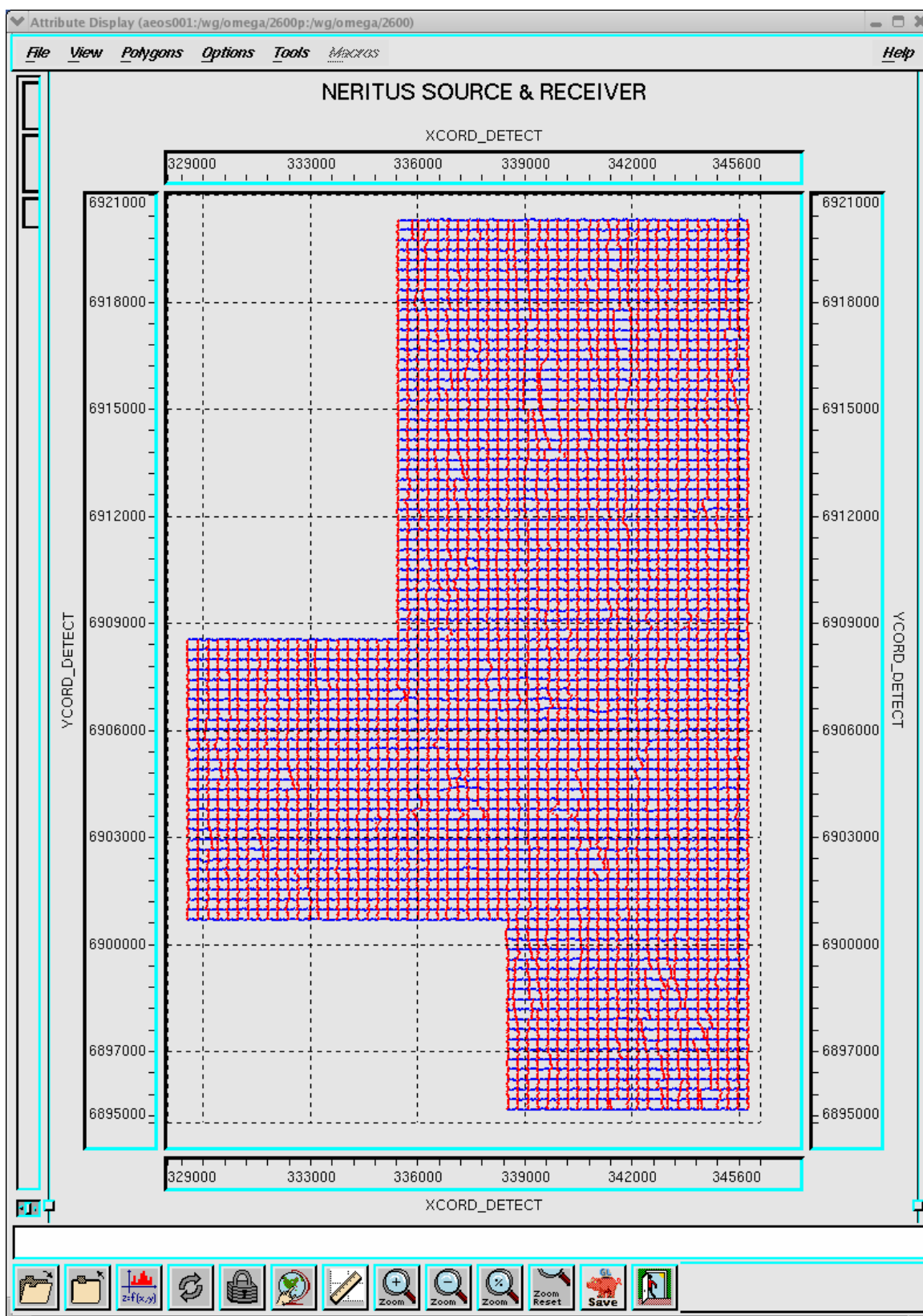


Fig 1. Modiolus source and receiver positions



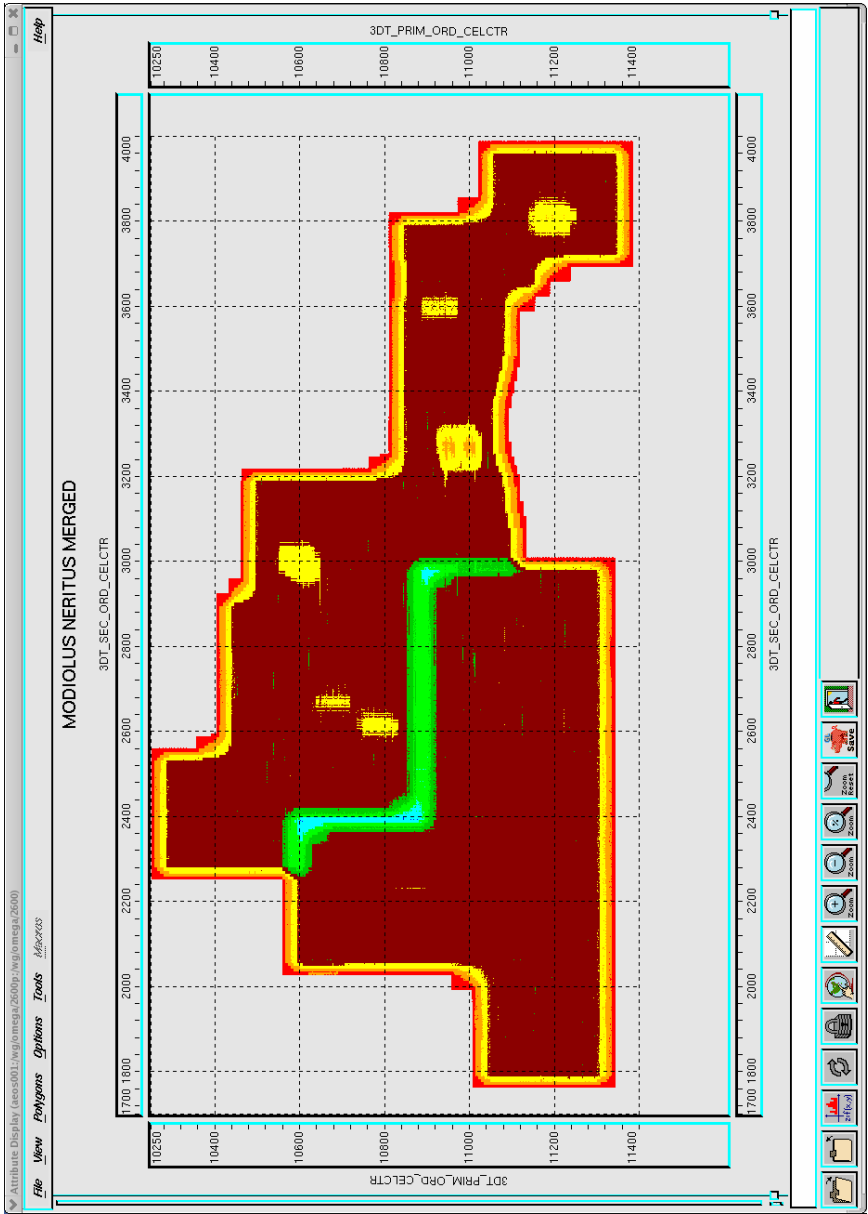


Fig 3. Fold plot – merged survey

PROCESSING PARAMETERS

FORMAT CONVERSION

Field data for Modiolus was recorded in SEG-D format onto five LTO2 tapes. The field data for Neritus was supplied on a USB disk drive, also in SEG-D format. This was converted to WesternGeco's internal format.

GEOMETRY UPDATE

Geometry information was applied to the data. The elevation and statics were also written to the trace headers. The static model was supplied by Beach and based on interpretation of upholes using a statics modelling process based on a 2 layer model and tied back to the upholes.

GRID DEFINE

A processing grid was defined to allow sorting to the CMP domain. The primary ordinal number was defined to be two times the source line number and the secondary ordinal number was defined to be two times the detector line number.

X COORD	Y COORD	PRIMARY ORDINAL	SECONDARY ORDINAL
322323.00	6894057.00	10200	1700
347123.00	6894057.00	11440	1700
322323.00	6940897.00	10200	4042
347123.00	6940897.00	11440	4042

The cell size for this grid is 20.0 m x 20.0 m.

A display of the processing grid is shown below.

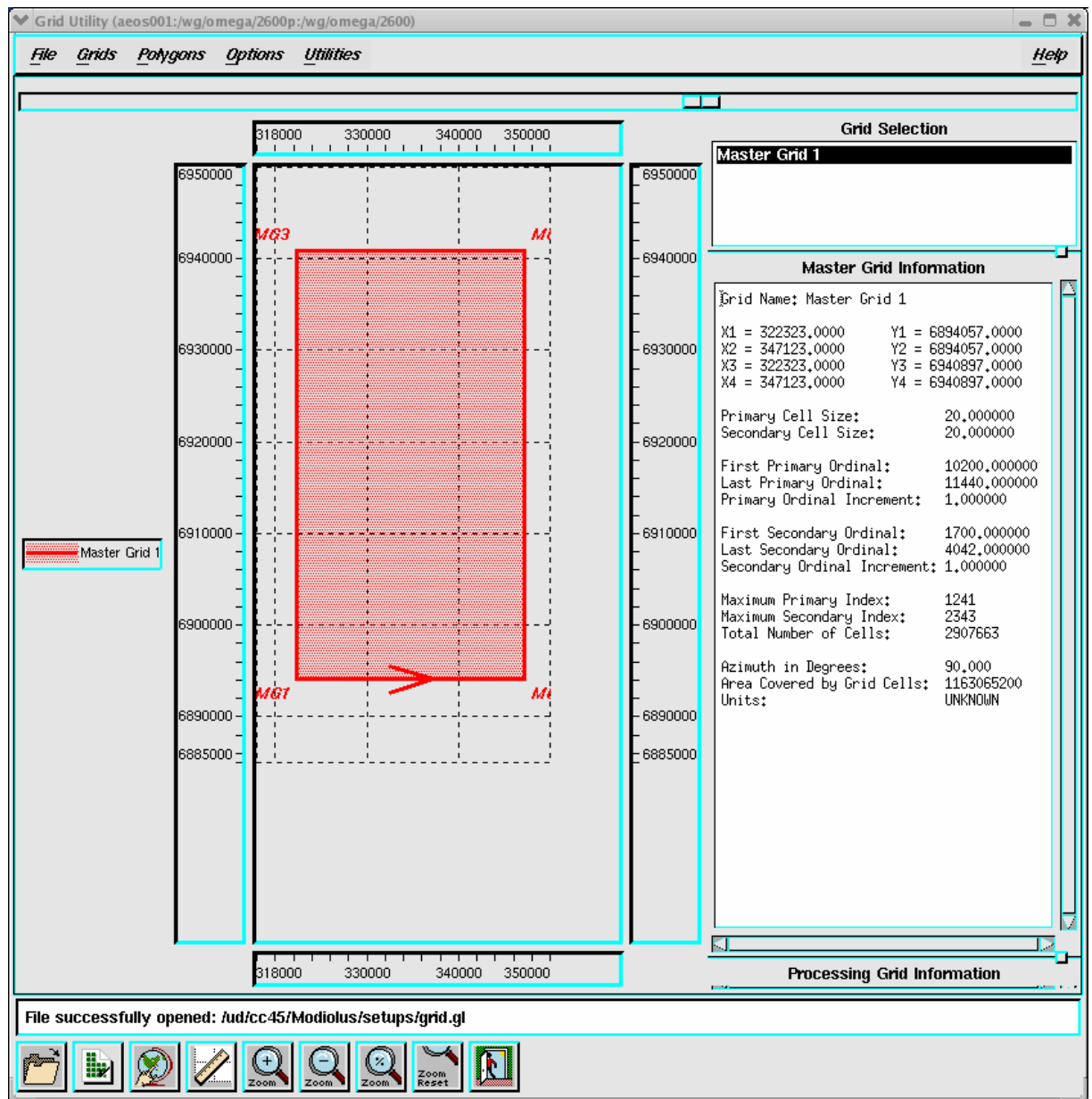


Fig 4. Grid definition

AMPLITUDE RECOVERY

Spherical Divergence Compensation & Exponential Gain 4 dB/sec was applied.

MINIMUM PHASE CONVERSION

An operator was derived from the filtered sweep trace (aux channel 2) and used to convert that data from zero to minimum phase. The autocorrelated sweep before and after the application of the operator is displayed below. There was also some dynamite data recorded on the Modiolus survey over some lakes. This data was phase matched to the vibroseis data by applying a 180 degree phase shift and a +4ms time shift. Displays of this process are included on this report CD in the file **dynamite.ppt**.

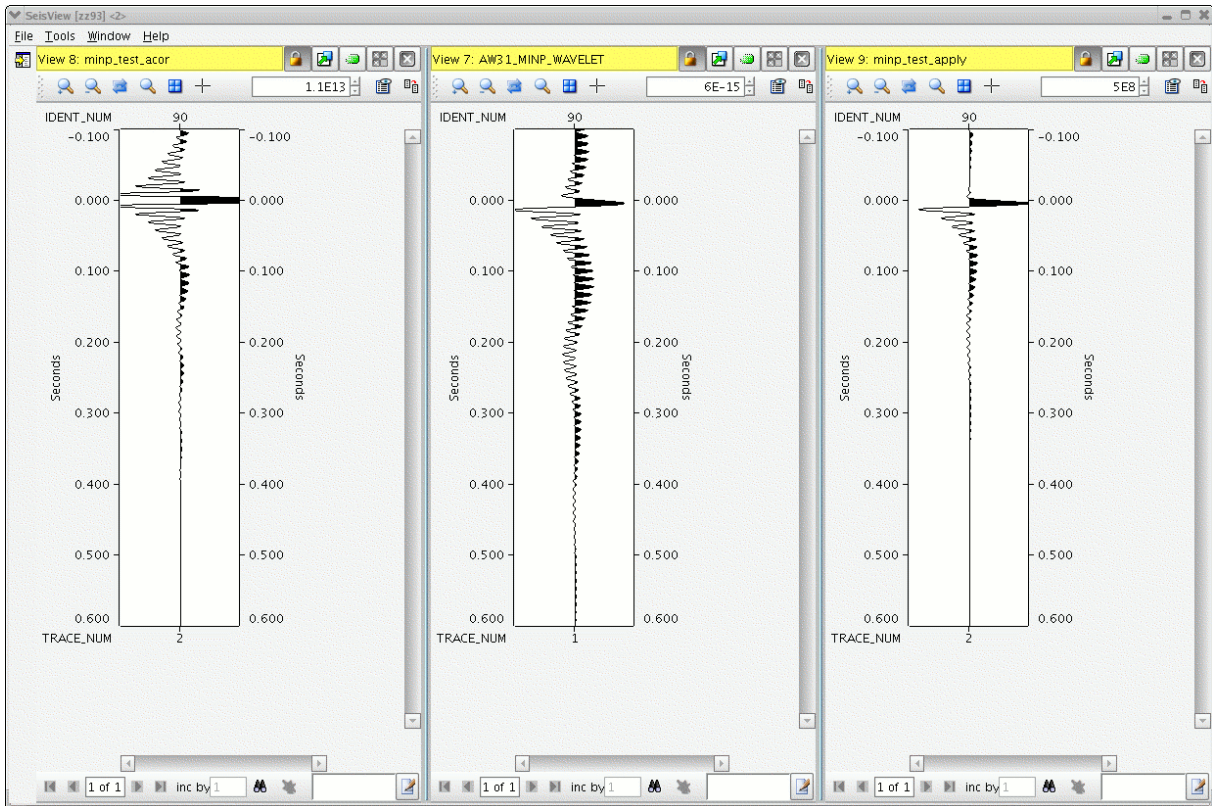


Fig 5. Sweep before and after minimum phase operator.

NOISE ATTENUATION

The data was sorted into the cross spread gather domain - that is a gather with a common detector line and common source line.

A very mild AAA (anomalous amplitude attenuation) was used, initially, to remove spikes or excessive noise from any traces.

3D-RNA (FX deconvolution) was then applied to reduce the random noise.

This allowed the **3D-FK** to work more effectively.

Dips of 8, 12, 16 and 20 ms/tr were evaluated. Test display were produced on gathers and on stacks. The test lines were inlines 2310, 2536 and 3863.

The noise reduction increased with decreasing applied dip.

Displays of the noise attenuation tests are included on this CD in the file **noise_attenuation.ppt**.

The dip selected was **16.0 ms/tr**

DECONVOLUTION

Deconvolution tests were performed on the same inlines as the noise attenuation tests. All tests were run using surface consistent deconvolution with a design window at the near trace of 900 – 2200 ms. Stacks panels were produced on all three lines with

- 1) No deconvolution
- 2) 80 ms spike
- 3) 120 ms spike
- 4) 160 ms spike
- 5) 200 ms spike

The test results are on this CD in files **decon_part1.ppt**, **decon_part2.ppt** and **decon_part3.ppt**.

It was decided to use a surface consistent **160 ms Spiking Deconvolution**.

PRE STACK GAIN

For the residual & trim static computation processing, 500ms gates with 10% overlap were applied.

COMMON MIDPOINT SORT

The data was sorted to common midpoint order.

VELOCITY ANALYSIS

Velocities were run at 1 km intervals.

Velocity interpretation was done using WesternGeco's InVA software

MUTE

Pre Stack Mute applied

Offset (m)	Time (ms)
350	0
450	500
650	700
1450	1300
1900	1550

A brute stack was produced at this stage.

RESIDUAL STATICS

The determination of residual statics consists of two parts, the statics deviation picker and the statics computation. The picker derives reflection times and quality factors. The statics are obtained by decomposing the reflection pick times into surface consistent source and receiver statics using the Gauss-Seidel iterative algorithm. The window used for Residual Statics Analysis was, 800 – 2400 ms.

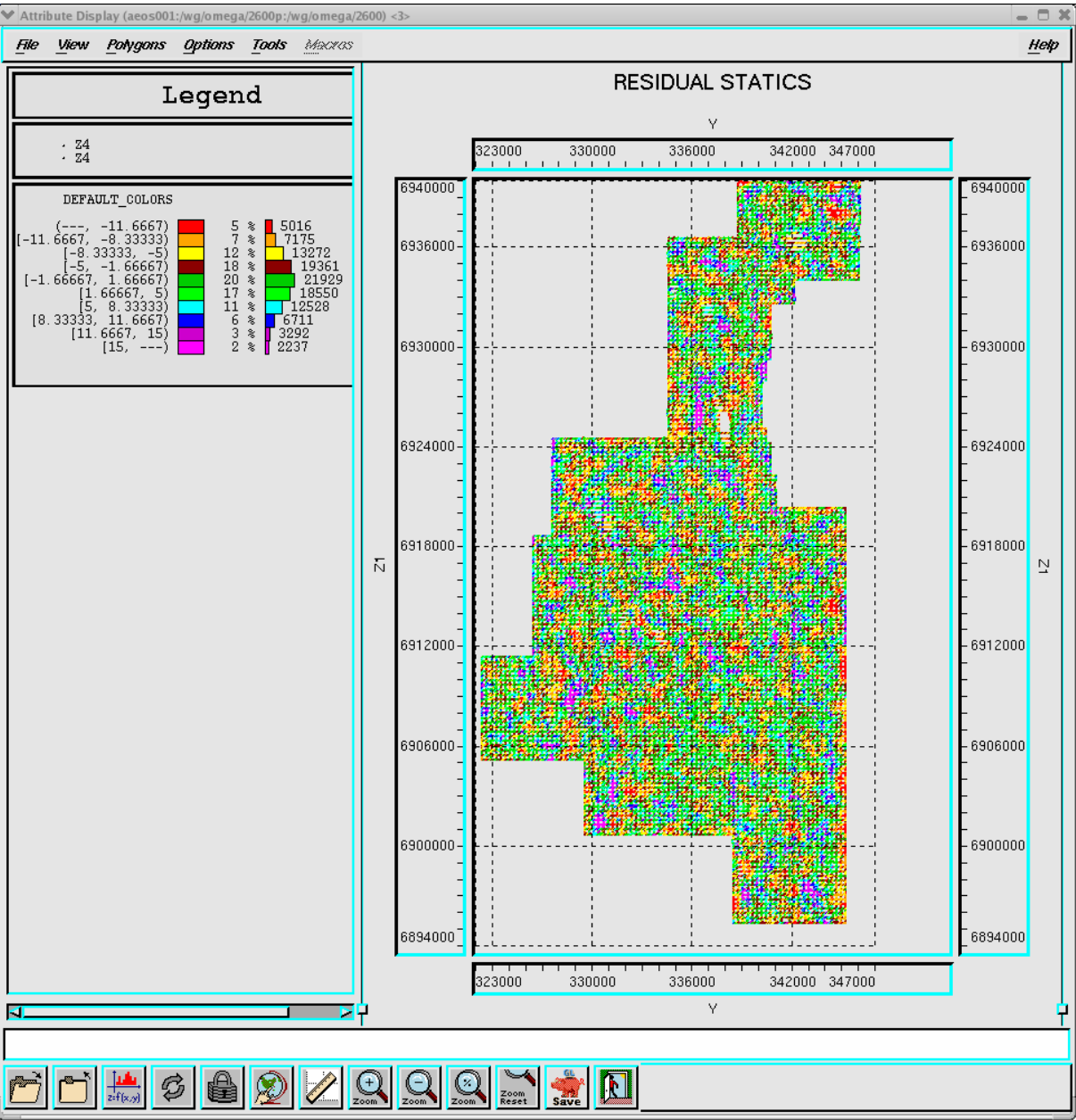


Fig 6. Residual statics.

VELOCITY ANALYSIS

Velocities were run at 500 m intervals.

Velocity interpretation was done using WesternGeco's InVA software

TRIM STATICS ANALYSIS

Trim Statics analysis were run over a 500 – 2400 ms window with a maximum shift of 24 ms allowed.

The trim statics were applied and the volume was stacked and a post stack migration was produced.

COMMON OFFSET GATHER

Surface consistent deconvolved data with the noise reduction was sorted into common offset gathers using a statistical equal trace distribution method.

Residual statics and the trim statics were applied.

AMPLITUDE RECOVERY

The Spherical Divergence Compensation & Exponential Gain were removed prior to the PreStack Time Migration

TIME MIGRATED VELOCITY ANALYSIS

A targeted velocity line migration was run to output fully migrated gathers along selected velocity lines. Velocities were run at 500 m intervals on these pre stack time migrated gathers. Velocity interpretation was done using WesternGeco's InVA software. The velocity field was smoothed for use in the full Kirchhoff migration.

PRE STACK TIME MIGRATION

The Kirchhoff Time Migration Seismic Function Module (SFM) performs seismic time migration using the Kirchhoff summation method. The migrated image is constructed by summing weighted amplitudes along diffraction curves or curved surfaces for the 3D case. These diffraction curves are determined by two-way travel times from the surface to subsurface scatterers that are computed from the user-supplied velocity field. In prestack mode, migration is performed on common offset volumes for 3D data.

Prestack migration is achieved by migrating the sorted common-offset panels into individual zero-offset panels. During migration the traces are effectively NMO-corrected; however, inverse NMO using the migration velocity is typically applied prior to output of the data. This allows a final velocity analyses and moveout to be performed on the data prior to stacking it.

The data was moved back to the smoothed surface from the mean sea level datum

PRE STACK TIME MIGRATED VELOCITY ANALYSIS

The migrated output data was sorted to cmp order and the smoothed migration velocity field was removed. Post migration velocities were run at 500 m intervals. Velocity interpretation was done using WesternGeco's InVA software

NMO

The velocity functions were applied to the data

PRE STACK GAIN

A prestack gain was applied to the data of 500ms gates with 10% overlap.

TRIM STATICS ANALYSIS

Trim Statics analysis were run over a 500 – 2400 ms window.
The trim statics were applied and a trim stack was produced at this stage.

RADON DEMULTIPLE

A radon demultiple using a 96 pct velocity mute was tested and applied to the data.
The test results can be seen in the file **radon.ppt** on this CD.

PRE STACK TIME MIGRATED STACK

The data was stacked and subsequently shifted from the smoothed surface to the mean sea level datum.

WHITENING

A range of spectral whitening options were tested. The results of these tests are in the files **sw_2310.ppt**, **sw_2536.ppt** and **sw_3863.ppt** on this CD. As a result of these tests it was decided to produce two final stack volumes, one with monk whitening and one with a 5-80 Hz spectral whitening.

FILTER

A 5-85 Hz post stack filter was applied. Filter panels were produced both with and without whitening and can be found in the file **filter.ppt**.

GAIN

A post stack trace balance was applied.

ANGLE STACKS

Angle stacks were produced for the 0-20 degree and 20-40 degree angle ranges. Examples of gathers and angle stack can be found in the files **angle.ppt** and **angle_stacks.ppt**.

DELIVERABLES

Intermediate stacks were output in SEG Y format on DVD.

Final PSTM gathers both with and without radon were output in SEG Y format to LTO tapes.

The final stack archives were produced in SEG Y on DVD.

- Raw final PSTM – 1 copy (2 disks)
- Final PSTM (monk) – 3 copies (2 disks each)
- Final PSTM (sw) – 1 copy (2 disks)
- Final PSTM (northern area) – 1 copy (1 disk)
- Angle stack 0-20 deg – 1 copy (2disks)
- Angle stack (20-40 deg) – 1 copy (2disks)

The processing report, final velocities in text format and residual statics in text format were written to DVD.

SEG Y HEADER

The following is an example of the segy ebcdic header showing the byte locations of stored trace header information.

*** SEGY EBCDIC HEADER ***

```

C01 CLIENT      : BEACH PETROLEUM
C02 AREA       : MODIOLUS/NERITUS
C03 INLINE     : 1766-2169
C04 XLINE      : 11011-11314
C05 RAW FINAL STACK part1
C 6 SAMPLE INTERVAL  4.00    SAMPLES/TRACE  1001 BITS/IN    BYTES/SAMPLE
4
C 7 RECORDING FORMAT          FORMAT THIS REEL SEG-Y  MEASUREMENT SYSTEM
METERS
C08 SEGY BYTE LOCATIONS
C09 XCORD CELL CENTRE  81-84    YCORD CEL CENTRE  85-89
C10 SOURCE STATIC      99-100    DETECT STATIC      101-102
C11 SOURCE RESID       185-188    DETECT RESID      189-192
C12 INLINE ORDINAL     197-200    XLINE ORDINAL     201-204
C13 SOURCE ELEV        225-228    DETECT ELEV      229-232
C14 CMP DATCOR         233-236
C15 GRID              X              Y              PRIM ORD      SEC ORD
C16      322323.00      6894057.00      10200      1700
C17      347123.00      6894057.00      11440      1700
C18      322323.00      6940897.00      10200      4042
C19      347123.00      6940897.00      11440      4042
C20
C21 PROCESSING PARAMETERS
C22 CONVERT FROM SEG-D TO OMEGA FORMAT
C23 APPLICATION OF GEOMETRY AND GRID
C24 CONVERT TO MINIMUM PHASE  RESAMPLE TO 4MS
C25 GAIN APPLICATION AND DESPIKE
C26 3DFK NOISE ATTENUATION ON CROSS SPREAD GATHERS
C27 DECON SURFACE CONSISTENT 160MS SPIKE
C28 VELOCITY ANALYSIS  RESIDUAL STATICS
C29 VELOCITY ANALYSIS  TRIM STATICS
C30 MIGRATION VELOCITY ANALYSIS
C31 KIRCHHOFF PSTM
C32 VELOCITY ANALYSIS
C33 TRIM STATICS
C34 RADON DEMULTIPLE
C35
C36
C37
C38
C39
C40 END EBCDIC

```