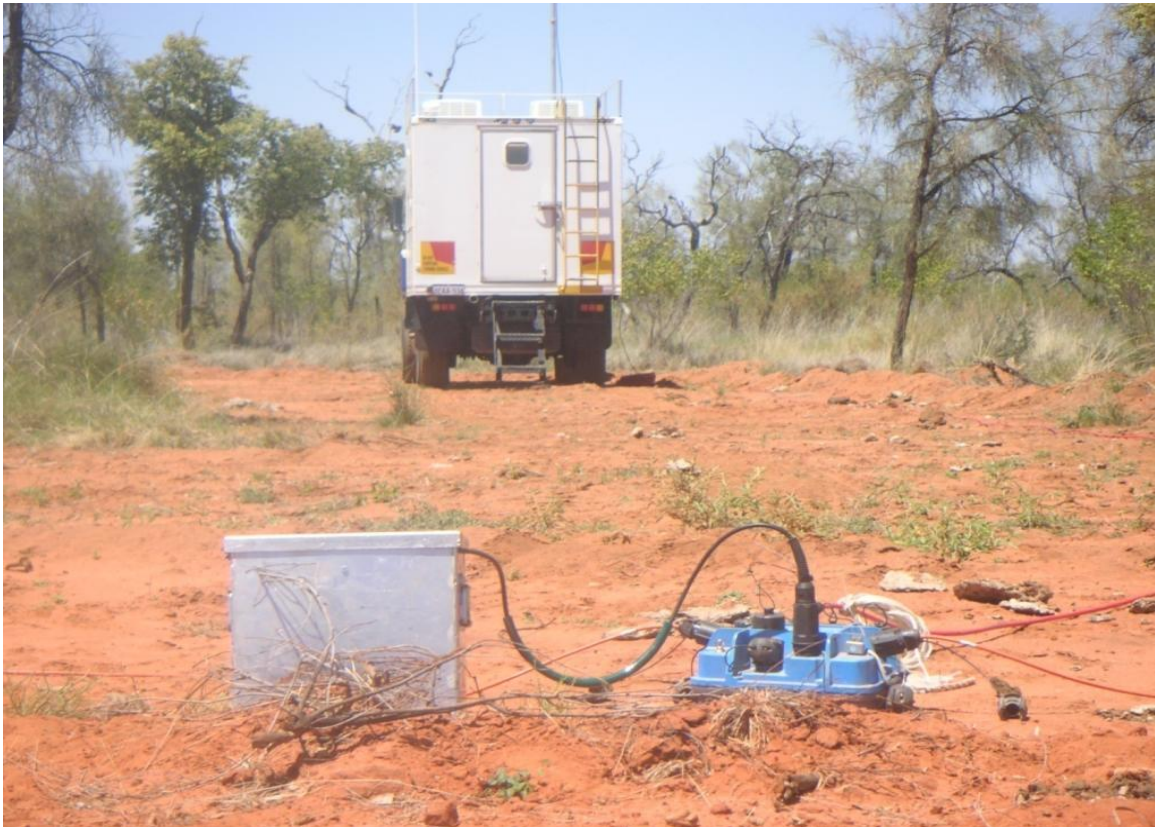




# **BLUE ENERGY 2008 ARAMAC 2D SEISMIC SURVEY**



## **OPERATIONS REPORT**

**OCTOBER 2008**

**BY**

**TONY HUTCHISON  
CREW # 404**

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

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## 1. INTRODUCTION

Terrex Seismic was contracted by Blue Energy to conduct the Aramac 2D Seismic Survey. Recording was completed in 4 days for a total of 64.06 linear Km. Acquisition commenced on the 05<sup>th</sup> of October 2008 and was completed on the 08<sup>th</sup> October 2008.

### 1.1 GEOGRAPHICAL AREA

The Aramac 2D grid is located approximately 64km North of Aramac in Qld. The lines were pegged along dirt roads and old farm tracks through low, flat scrub country.



**Line Conditions on the Aramac 2D.**

## 1.2 WEATHER

The weather was fine throughout the whole prospect.

No standby time was encountered due to adverse weather and temperatures were in the mid 27 degree range.

## 1.3 LOGISTICS

All equipment and vehicles were mobilised from Moranbah in QLD by Terrex personnel on Saturday the 04<sup>th</sup> October 2008.

Vehicle wash downs were performed prior to the commencement of the Blue Energy – Aramac 2D seismic survey. Access to and from the field was via main bitumen roads and local farm tracks. Seismic lines were also used for access to and from the field and while in production.

All approved access roads, fences and local farm tracks were indicated on the maps supplied by Dynamic Satellite Surveys from Yeppoon, QLD.

Line clearing was required for the Blue Energy 2D seismic survey, this was all performed by Blue Energy sub-contractor personnel.

No Traffic Control was required for the 2D seismic survey; however, some signage was used and placed out along roads by the Terrex Seismic HSE representative to warn any third party vehicles that may be driving in the area.

The crew stayed at three locations for the duration of the program; the Aramac Hotel and the Travelling Motel, both in Aramac, QLD and the Artesian Hotel in Barcaldine.

All supplies including freight was transported via AAE, Australia Post or Star track Express. Fuel was supplied by the BP Service Station at Aramac.

An induction / toolbox meeting was held by the Client Representative, Permit Man and Crew Manager before commencement of the Blue Energy Aramac 2D seismic survey.

Two vibrators were floated from the last prospect at Moranbah in QLD.

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

## **2. SURVEYING**

### **2.1 RANGING / CHAINING / SURVEYING**

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

### **2.2 LINE CLEARING**

All line clearing was performed by Blue Energy sub-contractor personnel.

### **2.3 PERMITTING**

All permitting was carried out by Blue Energy.

Mike Swift was the Permit Man and Mark Kneipp was the client representative.

### 3. RECORDING / PROCESSING

#### GENERAL SURVEY DETAILS:

Survey: 2008 Blue Energy – Aramac 2D Seismic Survey ATP813P

#### 3.1 RECORDING PARAMETERS:

Instruments:	Sercel 428XL
No. Channels:	240
Tape Drives:	IBM Ultrium LT02 (dual drive – 200 Gbyte per tape)
Tape Format:	SEGD Revision 1 8058IEEE Demultiplexed, Noise edited correlated
Filters:	Hi cut 200 Hz, (0.8 Nyquist - Linear)
Sample Rate:	2 ms
Record Length:	3 sec
RTC:	Yes
Correlation Type:	Zero Phase, After Sum
Stack:	Di versity stack plus burst edit

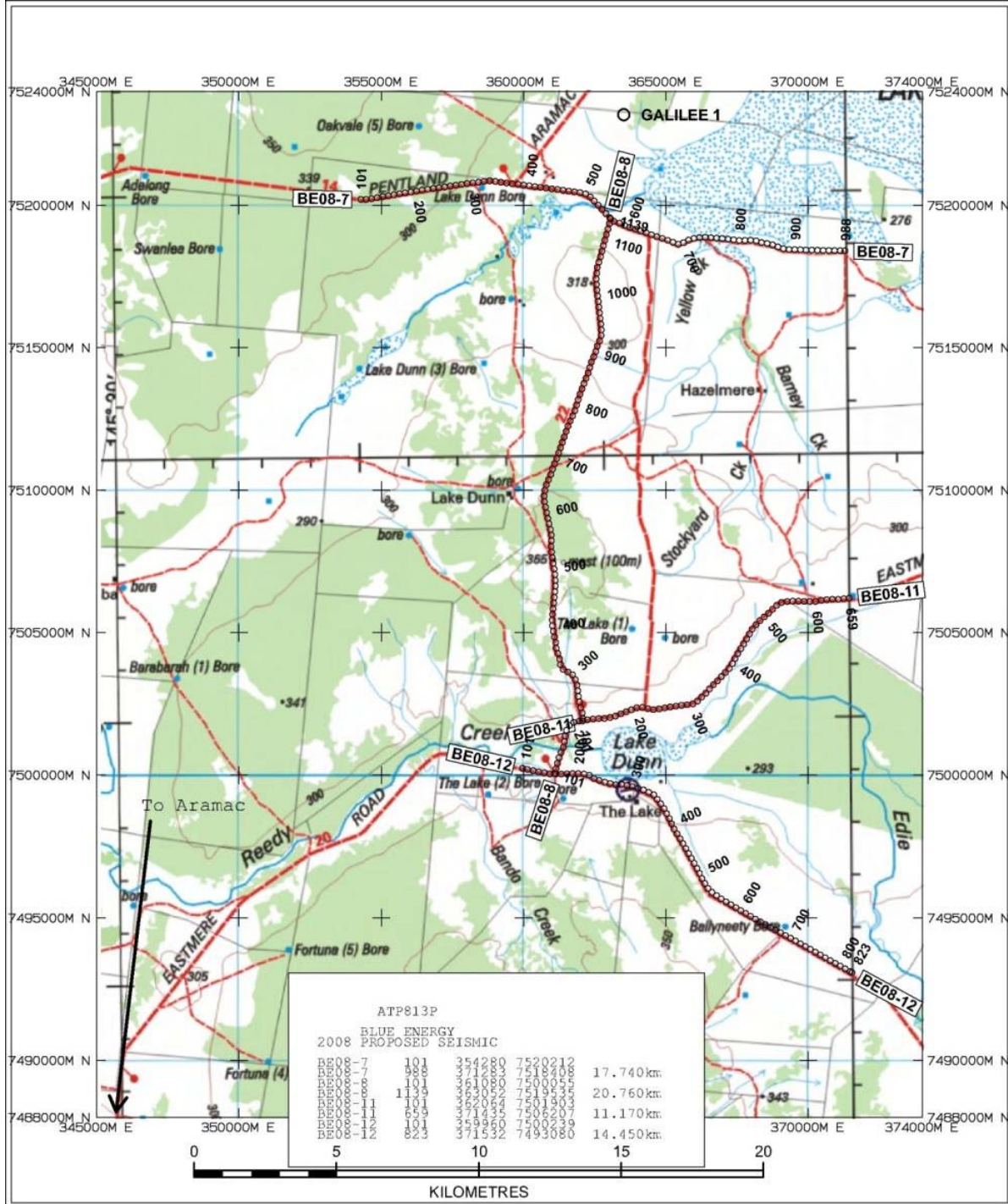
#### Source Data:

Vibrators:	2 x Hemi 44 6x6 Truck Mounted Vibrators
Electronics:	Pelton Advance 2, Model 5 Vibrator Control Electronics
Sweep Frequency:	Mono-sweep, 04-64 Hz
Sweep Length:	10 seconds
No. Sweeps:	1 standing
VP Interval:	20m
Vibrator Array:	1 vibe in line, centered on half station
Sweep Amplitude Taper:	100% (none)
Drive Level:	90% varied by amplitude control function
End Tapers (cosine):	0.3s
Phase Locking Type:	Ground Force
Amplitude Control:	Peak to Peak

#### Receivers:

Receiver Group Interval:	20m
Number of live traces:	120
Spread:	Symmetric Split, 1792.5 – 7.5 - 0 – 7.5 – 1792.5
Geophones:	Sensor SM4 10 Hz
Array:	6 over 0.7m, Centered on peg, Group plant on hanger

3.2 PROSPECT MAP



Aramac 2D Prospect



### **3.3 RECORDING**

The Aramac 2D was located approx 64km North of Aramac in Qld. The program consisted of four lines for a total of 64.06 linear km. Production commenced on the 05<sup>th</sup> of October 2008 and was completed in 4 days, finishing production on the 08<sup>th</sup> of October 2008. At the request of the client the geophone strings were left on the hasp and planted as a 'grouped set' at the station peg.

#### **BE08-11**

Recording commenced after vibrator testing & line QC had been completed. Production started on VP 101.5 on the 5<sup>th</sup> October and was completed that same day at station 654.5 for a total of 11.08 linear km. This line was recorded from low to high station numbers in a West to East direction.

#### **BE08-12**

Production started on VP 101.5 on the 6<sup>th</sup> October and was completed that same day at station 823.5 for a total of 14.46 linear km. This line was recorded from high to low station numbers in a West to East direction.

#### **BE08-08**

Production started on VP 101.5 on the 6<sup>th</sup> October and was completed the following day at station 1136.5 for a total of 20.72 linear km. This line was recorded from low to high station numbers in a South to North direction.

#### **BE08-07**

Production started on VP 990.5 on the 7<sup>th</sup> October and was completed the following day at station 101.5 for a total of 17.80 linear km. This line was recorded from high to low station numbers in an East to West direction. The end of line 07 represented the completion of the Aramac 2D contract. Production rates were good throughout the program with a best day of 19.46 km on the 06<sup>th</sup> October and an average of 16.28 km for the entire prospect.

### 3.4 PROCESSING

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

Blue Energy LTD  
Suite 15C Brunswick Central, 421  
Brunswick Street  
Fortitude Valley, Qld, 4006



# APPENDIX A

## EQUIPMENT SPECIFICATIONS

### RECORDING EQUIPMENT (2D Surveys)

#### 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
- One Hundred and Fifty (150) Seismic Cables with 4 x FDUs per cable  
Separated by 55 meters between takeouts (600 Ch)
- Twenty Five (25) Power Harness Leads
- Twenty Five (25) Line Batteries
- Three (3) Transverse Cable
- Two (2) LAUX's
- Two (2) Repeaters
- Fifteen (15) LAUL's
- Two (2) Battery Charging units
- **Pelton** Real Time VibPro Similarity System
- One (1) 10 meter 6 DB Boost High Gain Antenna on Recording Truck
  
- **Sensor SM4 10Hz High Specification Super phones**
- Six Hundred (600) Geophone strings with 6 ph/group  
(Equivalent of 300 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) Hemi 44 6x6 Truck Mounted Vibrators:**  
Peak force is 44200lbs per Vibe and Hold-Down weight is 44600lbs per Vibe
- **Four (4) Pelton Advance 2 Model 5 Vibrator Control Electronics**
- One (1) Pelton Advance 2 Encoder Sweep Generator for Recorder
- One(1) operating Online and One (1) on Standby
- Electronics are capable of Trade Marked **Varisweep**

## APPENDIX B

### VEHICLE EQUIPMENT LIST

VEHICLE	REGISTRATION
Landcruiser – 100 series - Wagon	759 – KZP
Landcruiser – 100 series - Wagon	762 – KZP
Landcruiser – 100 series - Wagon	763 – KZP
Landcruiser – 100 series - Wagon	765 – KZP
Landcruiser – 79 series - Trayback	766 – KZP
Landcruiser – 79 series - Trayback	767 – KZP
Landcruiser – 79 series - Trayback	760 – KZP
Landcruiser – 79 series - Trayback	761 – KZP
Landcruiser – 79 series - Trayback	764 – KZP
Landcruiser – 79 series - Trayback	768 – KZP
Landcruiser – 79 series - Trayback	769 – KZP
Isuzu – 4x4 Service Truck	9DL – 970
Isuzu – 4x4 Recorder Truck	1CAA – 534
Volvo – Spread Truck	1CPZ – 645
Paystar – Hemi 44 – Vibrator	372 – JCN
Paystar – Hemi 44 – Vibrator	376– JCN

# APPENDIX C

## TAPE LISTINGS





## APPENDIX D

### HSE POLICY and OCCUPATIONAL HEALTH & SAFETY STANDARDS

- 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





# **APPENDIX E**

## **END OF CONTRACT HSE REPORT**





# Health Safety & Environment End of Contract Report Blue Energy Ltd\_Aramac 2D

3rd - 8th Oct 2008

<b>Client</b>	Blue Energy Ltd	<b>HSE Advisor</b>	Ray Auckram
<b>Location</b>	Gallilee Basin	<b>Combined Personnel</b>	26
<b>Camp Site</b>	Aramac Hotel Travellers Rest, Aramac Artesian Hotel, Barcaldine	<b>DoA Tests Conducted</b>	
<b>Sub-Contractors</b>	Dynamic Satellite Surveys	<b>BAC Tests Conducted</b>	8

**Summary:**

03/10/2008: Certified wash downs.  
 04/10/2008: Mobilise to Aramac.  
 05/10/2008: Layout spread, tests completed, commence production.  
 07/10/2008: 761 KZP\_Kangaroo Incident Report see Meet&Reports tab  
 08/10/2008: Complete production.  
 EOC

Report compiled by: Ray Auckram HSE

**Safety Statistics**

Terrex Seismic Man-hours	1,872
Sub-Contractor Man-hours	216
Fatalities	0
LTI's	0
MTI's	0
Days since last MTI/LTI	0
First Aid Incidents	0
Incident / Accident Reports	1
Work Days Lost	0
Hazard Identification Reports	0
Training Hours	0
Tool Box / Safety Meeting Man-hours	46
Audits / Inspections	68
Drills	0
Land Spills (< 5 litres)	0

**Medical Statistics**

Clinic Attendance	
Refferal	
Eye infections, injuries	
Heat	
GIT: Diarrhoea, Nausea, Vomiting	
Headaches	1
Bites and Stings	
Wound	
Muscular Skeletal: Soft tissue injury, Sprain/Strain	
Skin Conditions: Rash, Fungal Infection	
Colds, Influenza type symptoms	
FAC	
Wound Care: Lacerations, Dressings, Suture removal	
<b>TOTAL</b>	<b>1</b>



## APPENDIX F

### PERSONNEL – CREW LIST

POSITION	NAMES
Crew Manager	Ernst Terry
Crew Manager	Hutchison Tony
HSE Advisor	Auckram Ray
<b>Admin Staff</b>	
Observer H	elme Nik
Observer M	cCann James
Observer K	onta Tom
Junior Observer	Kingston Dean
Cable Repair	Bryan-Robinson Amy
Cable Repair	Grainger Noel
<b>Technical</b>	
Vib Op	Harland June
Vib Op	Cooney Michael
Vib Op	Little Greg
Vib Op	Bobrowski Shirley
Vib Op	Robinson Tim
Vib Op	Turner Karen
Vib Op	Ey John
<b>Vibrator Crew</b>	
Vib Tech	Phillipson John
<b>Vib Tech</b>	
Line Boss	Rees Phillip
Line Boss	McLeod Hamish
<b>Snr Line</b>	
Trouble Shooter	Bann Megan
<b>Trouble Shooters</b>	
Line Crew	Alberts Livingstone
Line Crew	Bann Megan
Line Crew	Brooks Mark
Line Crew	Cameron Jason
Line Crew	Cooney Michael
Line Crew	Cox Mark
Line Crew	Eaves Matthew
Line Crew	Gardner Mitchell
Line Crew	Gemeiner Kym
Line Crew	Gilmour Alex
Line Crew	Ikink Nick
Line Crew	McCollin Simon
Line Crew	McLeod Rowan
Line Crew	Martin Adam
Line Crew	Morrisey Martin
Line Crew	Orrock Ricky
Line Crew	Phillips Chris
Line Crew	Place Brady
Line Crew	Rickit Corey
Line Crew	Robinson Tim
Line Crew	Simpson Kurt
Line Crew	Smith Bill
Line Crew	Waldron Ryan
Line Crew	Wallerstein John



## PERSONNEL – CREW NUMBERS

POSITION	NUMBERS
Crew Manager	2
HSE Advisor	1
Observer	4
Cable Repair	2
Vib Op	7
Vib Tech	1
Line Boss	2
Trouble Shooter	1
Line Crew	24



## **APPENDIX G**

### **DAILY REPORTS**

**Terrex Seismic  
Daily Report**

**Client.....** Blue Engery  
**Survey Name.** Aramac 2D  
**Area.....** ATP813P  
**State.....** Qld

**CREW 404**  
**Crew Manager..** Tony Hutchison  
**Client Rep.....** Mark Kneipp  
**Weather.....** Fine / Hot  
**DATE.....** Saturday, 4 October 2008

Line	Station	Station	Kms.	Skips	Vp's	File	File	Makeups	TOTALS	
			0.000						VP's...	0
									Skips...	0
									Kms...	0.000
									Cum.Kms...	0.000
									%Completed...	0.00%
									Cum.Total Vp's (Job)...	0
									Kms.Remaining...	64.1200
									<b>Average Daily Production Kms</b>	<b>0.0000</b>
									Estimated Completion Date	#DIV/0!

HOURS		Down Time -		Cum.L/Spread Hrs...	0.0000
Recording.....				Cum.P/Spread Hrs...	0.0000
Recorder Move.....					
Line Move.....			Human Error.....		
Detours/Terrain.....			Troubleshooting.....		
Travel Time.....			Recorder.....		
Vibe Testing - Daily test/QC...			Vibes-NC.....		
QC Spread....			W / on Spread.....		
Troubleshooting / Other....			Other.....	0.7	
WOS....					
L/Spread....			<b>Toolbox/Induction.....</b>	<b>0.3</b>	
P/Spread....			Total Down Time.....	0.7	
Prospect / Camp Move.....	10.7				
Washdowns / Weather / Other St/By....			<b>Cum. Down Time (Job).....</b>	<b>0.7</b>	
				<b>Cum.Total Hrs (Job)....</b>	<b>11.70</b>

**Production:** Vp's: 0 K.M's: 0.0000 Personnel # 26  
 Skips: 0 Terrex Field # 25  
 Terrex Line # 18  
 Terrex Light vehicles # 11  
 Terrex Heavy vehicles # 7  
 Hire vehicles # 0  
 Traffic Control Persons # 0  
 Traffic Control Vehicles # 0

**Weather:** Fine / Hot **Temp:** 8 to 35

Spread Movement							
Client: Blue Energy							
Layout				Pickup			
Line	Station #	Tot		Line	Station #	Tot	
		1			0	0	1
<b>Total Stations:</b>			1	<b>Total Stations:</b>			1
Bad Cables			0	Bad Phones			0

**Comments:**

\*Toolbox @ Mornabah 5:45am -6:00  
 \*Crew mobilizing from Mornabah to Aramac 510km 6:00am -14:30pm  
 \*Refueling Vehicles and getting rooms etc 14:30pm-15:15pm  
 \*Putting spread on trucks 15:15pm -17:30pm  
 \*Camp move was good only 1 Flat tyre  
 \*Other is filling up and accomadation

\*Third (3rd) Cable truck being used today.

**Downtime:**  
**Recorder:**  
**T/Shooting:**  
**Vibrators:**  
**WOS/Other:**

Crew Manager: Tony Hutchison.....

Client Rep: Mark Kneipp.....

**Terrex Seismic  
Daily Report**

**Client.....** Blue Engery  
**Survey Name.** Aramac 2D  
**Area.....** ATP813P  
**State.....** Qld

**CREW 404**  
**Crew Manager..** Tony Hutchison  
**Client Rep.....** Mark Kneipp  
**Weather.....** Fine / Hot  
**DATE.....** Sunday, 5 October 2008

Line	Station	Station	Kms.	Skips	Vp's	File	File	Makeups	TOTALS	
BE08-11	101.5	654.5	11.080	60	494	1	497		VP's...	494
									Skips...	60
									Kms...	11.080
									Cum.Kms...	11.080
									%Completed...	17.28%
									Cum.Total Vp's (Job)...	494
									Kms.Remaining...	53.0400
									<b>Average Daily Production Kms</b>	<b>11.0800</b>
									<b>Estimated Completion Date</b>	<b>10-Oct-08</b>

HOURS		Down Time -		TOTALS	
Recording.....	4.3			Cum.L/Spread Hrs...	2.0000
Recorder Move.....	0.4			Cum.P/Spread Hrs...	0.0000
Line Move.....		Human Error.....			
Detours/Terrain.....		Troubleshooting.....	0.3		
Travel Time.....	2.0	Recorder.....			
Vibe Testing - Daily test/QC....	1.2	Vibes-NC.....	1.3		
QC Spread....		W / on Spread.....			
Troubleshooting / Other....		Other.....			
WOS....				<b>Total Day Hrs...</b>	<b>12.00</b>
L/Spread....	2.0	<b>Toolbox/Induction.....</b>	<b>0.5</b>	<b>Day Charge Hrs...</b>	<b>9.90</b>
P/Spread....		Total Down Time.....	1.6	<b>Cum.Chargeable Hrs (Job)...</b>	<b>20.60</b>
Prospect / Camp Move.....				<b>Standby Hrs...</b>	<b>0.50</b>
Washdowns / Weather / Other St/By....		<b>Cum. Down Time (Job).....</b>	<b>2.3</b>	<b>Cum.Standby Hrs (Job)...</b>	<b>0.80</b>
				<b>Cum.Total Hrs (Job)....</b>	<b>23.70</b>

**Production:** Vp's: 494 K.M's: 11.0800 Personnel # 26  
 Skips: 60 Terrex Field # 25  
 Terrex Line # 18  
 Terrex Light vehicles # 11  
 Terrex Heavy vehicles # 7  
 Hire vehicles # 0  
 Traffic Control Persons # 0  
 Traffic Control Vehicles # 0

**Weather:** Fine / Hot **Temp:** 8 to 35

Spread Movement								
Client: Blue Energy								
Layout				Pickup				
Line	Station #	Tot		Line	Station #	Tot		
BE08-11	101	654	554	BE08-11	101	560	460	
BE08-12	101	420	320					
<b>Total Stations:</b>			874	<b>Total Stations:</b>			460	
Bad Cables			0	Bad Phones			4	

**Comments:**  
 \*Toolbox and Induction @Aramac 6:00am-6:30am  
 \*Crew laying out spread on new prospect Aramac 2D  
 \*Crew working well in Hot condition  
 \*A few problems but not a bad days Production  
 \*60 Skips was a fold made by Clients between STN 360-480  
 \*Vibe testing was Sweep test and Hardwires

\*Third (3rd) Cable truck being used today.

**Downtime:**  
**Recorder:**  
**T/Shooting:** 0.3 Was for a bad Battery Harness  
**Vibrators:** 1.3 Blown Hose and also Pressure Problems  
**WOS/Other:**

Crew Manager: Tony Hutchison.....

Client Rep: Mark Kneipp.....

**Terrex Seismic  
Daily Report**

**Client.....** Blue Enery  
**Survey Name.** Aramac 2D  
**Area.....** ATP813P  
**State.....** Qld

**CREW 404**  
**Crew Manager..** Tony Hutchison  
**Client Rep.....** Mark Kneipp  
**Weather.....** Fine / Hot  
**DATE.....** Monday, 6 October 2008

Line	Station	Station	Kms.	Skips	Vp's	File	File	Makeups	TOTALS	
BE08-12	101.5	823.5	14.460	102	621	1	624		VP's...	865
BE08-08	101.5	350.5	5.000	6	244	1	244		Skips...	108
									Kms...	19.460
									Cum.Kms...	30.540
									%Completed...	47.63%
									Cum.Total Vp's (Job)...	1359
									Kms.Remaining...	33.5800
									<b>Average Daily Production Kms</b>	<b>15.2700</b>
									<b>Estimated Completion Date</b>	<b>09-Oct-08</b>

HOURS		Down Time -		Cum.L/Spread Hrs...		
Recording.....	7.3			Cum.L/Spread Hrs...	2.0000	
Recorder Move.....	0.5			Cum.P/Spread Hrs...	0.0000	
Line Move.....	1.7		Human Error.....			
Detours/Terrain.....			Troubleshooting.....	0.3		
Travel Time.....	1.8		Recorder.....			
Vibe Testing - Daily test/QC...			Vibes-NC.....	0.2		
QC Spread....	0.2		W / on Spread.....			
Troubleshooting / Other....			Other.....			
WOS....						
L/Spread....			Toolbox/Induction.....	0.3		
P/Spread....			Total Down Time.....	0.5		
Prospect / Camp Move.....						
Washdowns / Weather / Other St/By....						
			<b>Cum. Down Time (Job).....</b>	<b>2.8</b>	<b>Cum.Total Hrs (Job)....</b>	<b>36.00</b>

**Production:** Vp's: 865 K.M's: 19.4600 Personnel # 26  
 Skips: 108 Terrex Field # 25  
 Terrex Line # 18  
 Terrex Light vehicles # 11  
 Terrex Heavy vehicles # 7  
 Hire vehicles # 0  
 Traffic Control Persons # 0  
 Traffic Control Vehicles # 0

**Weather:** Fine / Hot **Temp:** 10 to 36

Spread Movement											
Client: Blue Energy											
Layout						Pickup					
Line	Station #	Tot	Line	Station #	Tot	Line	Station #	Tot	Line	Station #	Tot
BE08-12	421	823	403	BE08-11	561	654	94				
BE08-087	101	688	588	BE08-12	101	823	723				
				BE08-08	101	275	175				
<b>Total Stations:</b>			991	<b>Total Stations:</b>			992				
Bad Cables			0	Bad Phones			4				

**Comments:**

\*Toolbox and Induction @Aramac 5:45am -6:00am  
 \*Crew working well in Hot condition  
 \*Great days Production  
 \*100 Skips were fold made by clients and the rest was,Bridge , Airstrip and Floodway

\*Third (3rd) Cable truck being used today.

**Downtime:**

**Recorder:**

**T/Shooting:** 0.3 Was needed a LAUL in Skip cap when recorder did move  
**Vibrators:** 0.2 Checking machine  
**WOS/Other:**

Crew Manager: Tony Hutchison.....

Client Rep: Mark Kneipp.....

**Terrex Seismic  
Daily Report**

**Client.....** Blue Enery  
**Survey Name.** Aramac 2D  
**Area.....** ATP813P  
**State.....** Qld

**CREW 404**  
**Crew Manager..** Tony Hutchison  
**Client Rep.....** Mark Kneipp  
**Weather.....** Fine / Hot  
**DATE.....** Tuesday, 7 October 2008

Line	Station	Station	Kms.	Skips	Vp's	File	File	Makeups	TOTALS	
BE08-08	350.5	1136.5	15.720	0	786	245	1031		VP's...	916
BE08-07	990.5	861.5	2.600	0	130	1	130		Skips...	0
									Kms...	18.320
									Cum.Kms...	48.860
									%Completed...	76.20%
									Cum.Total Vp's (Job)...	2275
									Kms.Remaining...	15.2600
									<b>Average Daily Production Kms</b>	<b>16.2867</b>
									Estimated Completion Date	08-Oct-08

HOURS		Down Time -		TOTALS	
Recording.....	7.7	Cum.L/Spread Hrs...	2.0000		
Recorder Move.....	0.6	Cum.P/Spread Hrs...	0.0000		
Line Move.....	0.5	Human Error.....			
Detours/Terrain.....		Troubleshooting.....	0.6		
Travel Time.....	2.0	Recorder.....			
Vibe Testing - Daily test/QC...		Vibes-NC.....	0.2		
QC Spread....	0.4	W / on Spread.....			
Troubleshooting / Other....		Other.....			
WOS.....					
L/Spread....		Toolbox/Induction.....	0.3		
P/Spread....		Total Down Time.....	0.8		
Prospect / Camp Move.....					
Washdowns / Weather / Other St/By....		Cum. Down Time (Job).....	3.6		
		Cum.Total Hrs (Job)....	48.30		
		Total Day Hrs...	12.30		
		Day Charge Hrs...	11.20		
		Cum.Chargeable Hrs (Job)...	43.30		
		Standby Hrs...	0.30		
		Cum.Standby Hrs (Job)...	1.40		

**Production:** Vp's: 916 K.M's: 18.3200 Personnel # 26  
 Skips: 0 Terrex Field # 25  
 Terrex Line # 18  
 Terrex Light vehicles # 11  
 Terrex Heavy vehicles # 7  
 Hire vehicles # 0  
 Traffic Control Persons # 0  
 Traffic Control Vehicles # 0

**Weather:** Fine / Hot **Temp:** 9 to 36

Spread Movement								
Client: Blue Energy								
Layout				Pickup				
Line	Station #	Tot		Line	Station #	Tot		
BE08-08	689	1136	448	BE08-08	276	1136	861	
BE08-07	990	420	571	BE08-07	990	930	61	
<b>Total Stations:</b>			1019	<b>Total Stations:</b>			922	
Bad Cables			0	Bad Phones			6	

**Comments:**

\*Toolbox @Aramac 5:45am -6:00am  
 \*Crew working well in Hot condition  
 \*Great days Production

\*Third (3rd) Cable truck being used today.

**Downtime:**  
**Recorder:**  
**T/Shooting:** 0.6 Dodgy Connection and LAUL problems  
**Vibrators:** 0.2 Checking machine  
**WOS/Other:**

Crew Manager: Tony Hutchison..... Client Rep: Mark Kneipp.....



**Terrex Seismic  
Daily Report**

**Client.....** Blue Enery  
**Survey Name.** Aramac 2D  
**Area.....** ATP813P  
**State.....** Qld

**CREW 404**  
**Crew Manager..** Tony Hutchison  
**Client Rep.....** Mark Kneipp  
**Weather.....** Fine / Hot  
**DATE.....** Wednesday, 8 October 2008

Line	Station	Station	Kms.	Skips	Vp's	File	File	Makeups	TOTALS	
BE08-07	861.5	101.5	15.200	0	760	131	886		VP's...	760
									Skips...	0
									Kms...	15.200
									Cum.Kms...	64.060
									%Completed...	100.00%
									Cum.Total Vp's (Job)...	3035
									Kms.Remaining...	0.0000
									<b>Average Daily Production Kms</b>	<b>21.3533</b>
									<b>Estimated Completion Date</b>	<b>09-Oct-08</b>

HOURS		Down Time -		TOTALS	
Recording.....	6.1	Cum.L/Spread Hrs...	2.0000		
Recorder Move.....	0.5	Cum.P/Spread Hrs...	1.7000		
Line Move.....		Human Error.....			
Detours/Terrain.....		Troubleshooting.....			
Travel Time.....	2.1	Recorder.....			
Vibe Testing - Daily test/QC....		Vibes-NC.....			
QC Spread....	0.7	W / on Spread.....		<b>Total Day Hrs...</b>	<b>11.40</b>
Troubleshooting / Other....		Other.....		<b>Day Charge Hrs...</b>	<b>11.10</b>
WOS....				<b>Cum.Chargeable Hrs (Job)...</b>	<b>54.40</b>
L/Spread....		<b>Toolbox/Induction.....</b>	<b>0.3</b>	<b>Standby Hrs...</b>	<b>0.30</b>
P/Spread....	1.7	Total Down Time.....	0.0	<b>Cum.Standby Hrs (Job)...</b>	<b>1.70</b>
Prospect / Camp Move.....				<b>Cum.Total Hrs (Job)....</b>	<b>59.70</b>
Washdowns / Weather / Other St/By....		<b>Cum. Down Time (Job).....</b>	<b>3.6</b>		

**Production:** Vp's: 760 K.M's: 15.2000 Personnel # 26  
 Skips: 0 Terrex Field # 25  
 Terrex Line # 18  
 Terrex Light vehicles # 11  
 Terrex Heavy vehicles # 7  
 Hire vehicles # 0  
 Traffic Control Persons # 0  
 Traffic Control Vehicles # 0

**Weather:** Fine / Hot **Temp:** 9 to 36

Spread Movement							
Client: Blue Energy							
Layout				Pickup			
Line	Station #	Tot		Line	Station #	Tot	
BE08-07	419	101	319	BE08-07	929	101	829
<b>Total Stations:</b>			319	<b>Total Stations:</b>			829
Bad Cables			1	Bad Phones			5

**Comments:**

\*Toolbox @Aramac 5:45am -6:00am  
 \*Crew working well in Hot condition  
 \*Good days Production  
 \*Q/C was chew transverse cable and Heavy Roo and Cattle Damage  
 \*Finish of the Prospect for Blue Energy -Aramac 2D

\*Third (3rd) Cable truck being used today.

**Downtime:**  
**Recorder:**  
**T/Shooting:**  
**Vibrators:**  
**WOS/Other:**

Crew Manager: Tony Hutchison.....

Client Rep: Mark Kneipp.....



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# APPENDIX H

## RECORDING STATISTICS

## RECORDING STATISTICS

Date	Travel Time	Downtime	Recording	Layout/Pick-up Spread	Experimental	Daily Test	Recorder/Vibrator Move	Detours & Terrain	Prospect Move	Line Move	Parameter Change Traverse	Safety Meeting's	Total Stand-by	Total Hours	Total Km's	Extra Cable Truck
	Chargeable	Non-Chargeable	Chargeable	Chargeable	Chargeable	Chargeable	Chargeable	Chargeable	Chargeable	Chargeable	Chargeable	Stand-by	Chargeable	Chargeable		Chargeable
4 October 2008		0.70							10.70			0.30	0.30	10.70		1
5 October 2008	2.00	1.60	4.30	2.00		1.20	0.40					0.50	0.50	9.90	11.0800	1
6 October 2008	1.80	0.50	7.30			0.20	0.50			1.70		0.30	0.30	11.50	19.4600	1
7 October 2008	2.00	0.80	7.70			0.40	0.60			0.50		0.30	0.30	11.20	18.3200	1
8 October 2008	2.10		6.10	1.70		0.70	0.50					0.30	0.30	11.10	15.2000	1
<b>Total</b>	<b>7.9000</b>	<b>3.6000</b>	<b>25.4000</b>	<b>3.7000</b>	<b>0.0000</b>	<b>2.5000</b>	<b>2.0000</b>	<b>0.0000</b>	<b>10.7000</b>	<b>2.2000</b>	<b>0.0000</b>	<b>1.7000</b>	<b>1.7000</b>	<b>54.4000</b>	<b>64.0600</b>	<b>5</b>