



# **BLUE ENERGY INDIGO 2D 2007 SEISMIC SURVEY**



## **OPERATIONS REPORT**

**NOVEMBER - 2007**

**BY**

**T.R. ERNST**

**OF**

**CREW # 401**

**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 Indigo 2D Seismic Survey. Acquisition commenced on Saturday the 17<sup>th</sup> November and was completed on Saturday the 24<sup>th</sup> November 2007.

### 1.1 GEOGRAPHICAL AREA

The Cobalt 2D prospect is located approximately 30 km North-East of Goondiwindi in QLD.

The surrounding area of the Indigo 2D prospect consisted mainly of open flat ground working on the verge of both main and local roads. There were also some lines that ran through farmland areas which consisted mainly of black soil country with grass plain areas and fence lines in between. All 2D lines required either slashing or clearing and were then surveyed at 15m group intervals.

Main and local roads, farm tracks and seismic lines were used for access to and from the field.



**Vibrators working along local road used as receiver line**

## 1.2 WEATHER

Hot and humid weather was experienced on a regular basis throughout the program.

Both late afternoon and early morning thunderstorms were encountered during the Indigo 2D with some heavy rain throughout making line conditions wet, slippery and very boggy in most places on the prospect, 23.5 hours of down time was recorded due to the weather conditions.

## 1.3 LOGISTICS

All equipment and vehicles were mobilised from the previous prospect by Terrex personnel.

Vehicle washdowns and certified inspections were required prior to the commencement of the Indigo 2D survey for Blue Energy due to local council weed control programs.

Access to and from all seismic lines was via local roads and landowners' tracks.

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

No Traffic Control was required for the survey, however signage was placed out and moved along the lines by the HSE as required.

Line clearing of all lines was carried out by Blue Energy sub-contractor personnel.

The crew stayed at the Jolly Swagman Motel in Goondiwindi, QLD for the duration of the contract.

The crew's lunches and meals were all supplied by the Jolly Swagman Motel in Goondiwindi, QLD.

All supplies including freight were transported via AAE, Australia Post, or TNT.

Fuel for all vehicles was supplied by the BP roadhouse in Goondiwindi, QLD.

An induction was held by the Permit Man & Client Representative at the Toolbox Meeting before commencement of the Indigo 2D.

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

## 2. SURVEYING

### 2.1 RANGING / CHAINING / SURVEYING

Line Chaining, Survey and Maps for the entire program were supplied by Dynamic Satellite Survey's personnel from Yepoon, QLD.

### 2.2 LINE CLEARING

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

### 2.3 PERMITTING & CLIENT REPRESENTATIVE

Permitting was carried out by Mr.D.Ayling for Blue Energy.

Client Representative duties were carried out by Mr.N.Holding for Blue Energy.

Both were on site throughout the entire survey.



**Microwave links set up across the Cunningham Highway**

## 3.0 RECORDING / PROCESSING

### 3.1 RECORDING PARAMETERS

#### General Survey Details

- Survey: Indigo 2D.
- ATP 818P, Yelarbon, QLD.

#### Instrumentation

Instruments	:	Sercel 388 24 bit system.
No. Channels	:	260
Tape Format	:	SEGD, 8058IEEE Demultiplexed, 3490 Cartridge.
Filters	:	0.8 Nyquist - Lin Phase
Sample Rate	:	2 ms
Record Length	:	4 sec
RTC	:	Yes
Correlation Type	:	Zero Phase after sum
Stack	:	Diversity stack plus burst edit

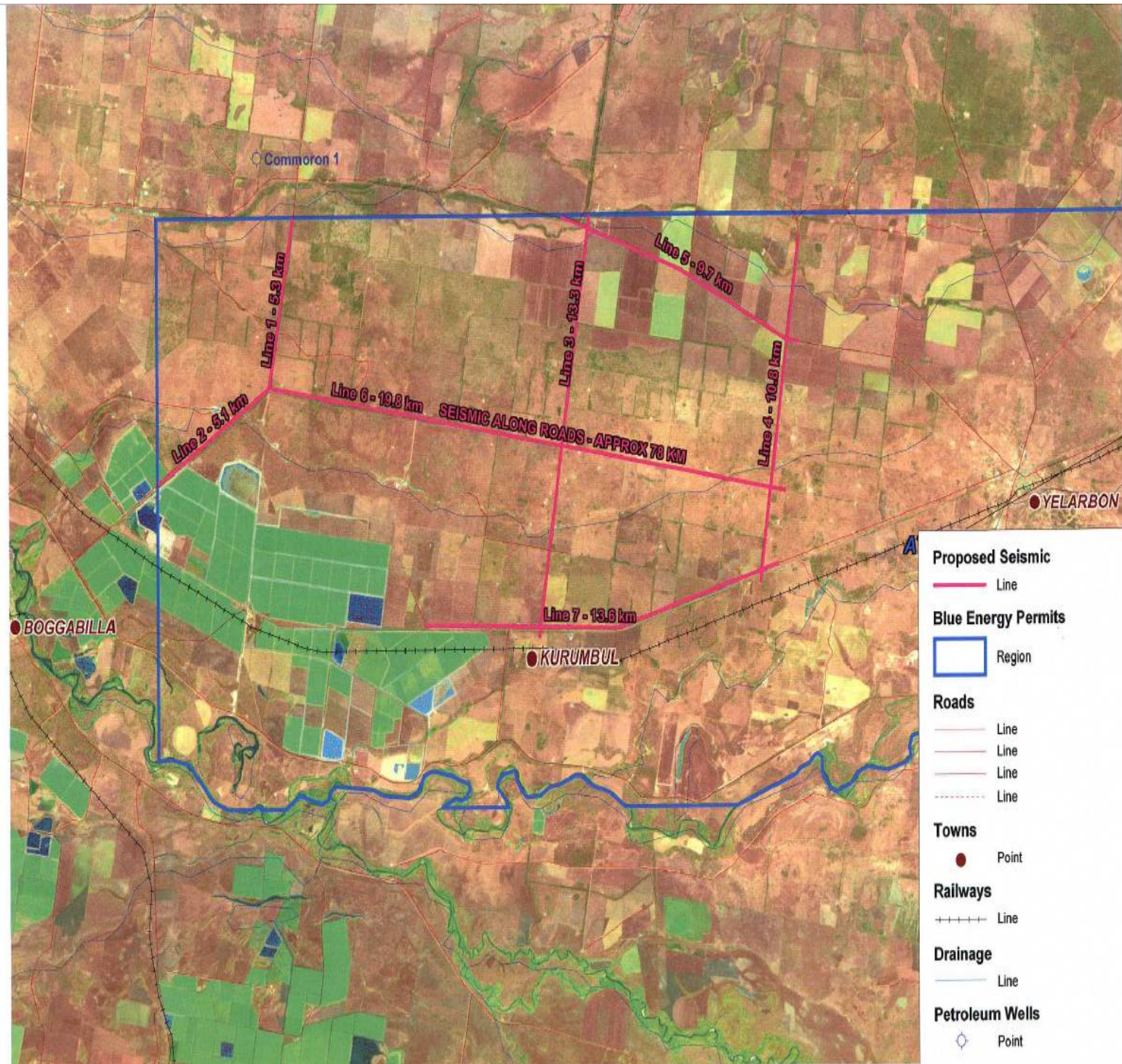
#### Source Data

Vibrators	:	3 x Input-Output Hemi 44's 44000lb + 1 x Spare
Electronics	:	Pelton Advance 2 Model 5 VCE
Sweep Type	:	Monosweep
Sweep Frequency	:	6-110 Hz
Sweep Length	:	10 sec
No. Sweeps	:	1 & 2 standing
VP Interval	:	15m
Vibrator Array	:	3 vibs in line, 12.5m pad to pad centered on half station
Sweep Taper	:	200msec taper
Drive Level	:	Max Varied by amplitude control function
End Tapers (cosine)	:	0.2s
Phase Locking Type	:	Ground Force using M5 accelerometers.
Amplitude Control	:	Peak to Peak

#### Receivers

Receiver Group Interval	:	15m
Spread	:	Symmetric Split, 1942.5 – 7.5 - 0 – 7.5 – 1942.5m.
Geophones	:	600 strings Sensor SM4 10 Hz. Hi Spec super phones. (12 per string)
Array	:	6 phones in-line, centered on station, 2.50m spacing.
Connection	:	Single (6x1)
Multiplicity	:	130 fold with 7.5m CDP interval.

### 3.2 BLUE ENERGY – INDIGO 2D





### **3.3 RECORDING**

Terrex Seismic was contracted by Blue Energy to conduct the Indigo 2D Seismic Survey. Acquisition commenced on Saturday the 17<sup>th</sup> November and was completed on Saturday the 24<sup>th</sup> November 2007. Six separate 2D lines with a total of 106.575 linear km were to be recorded. Hardwire and Pointsource tests were conducted before any production VP's were taken. Four x Input-Output Hemi 44's 44000lb International Paystar vibrators were used to complete the survey, three operating on line with one spare on standby.

#### **Line 07-IND-02**

Recording commenced on this line on the 17<sup>th</sup> November at station 200.5 and was completed two days later at station 1955.5, a total of 26.325 kms recorded with 46 skipped VP's due to culverts, fence lines, boggy ground and proximity dwellings etc.

#### **Line 07-IND-04**

Recording commenced on this line on the 19<sup>th</sup> November at station 140.5 and was completed the following day at station 1020.5, a total of 13.20 kms recorded with 29 skipped VP's due to culverts, fence lines, boggy ground and proximity dwellings etc.

#### **Line 07-IND-03**

Recording commenced on this line on the 20<sup>th</sup> November at station 200.5 and was completed the following day at station 1273.5, a total of 16.095 kms recorded with 19 skipped VP's due to culverts, fence lines, boggy ground and proximity dwellings etc.

#### **Line 07-IND-07**

Recording commenced on this line on the 21<sup>st</sup> November at station 2700.5 and was completed two days later at station 450.5, a total of 33.75 kms recorded with 94 skipped VP's due to culverts, fence lines, boggy ground and proximity dwellings etc.

#### **Line 07-IND-01**

Recording commenced on this line on the 23<sup>rd</sup> November at station 200.5 and was completed the following day at station 555.5, a total of 5.325 kms recorded.

### **Line 07-IND-05**

Recording commenced on this line on the 24<sup>th</sup> November at station 200.5 and was completed that same day at station 992.5, a total of 11.88 kms recorded with 32 skipped VP's due to culverts, fence lines, boggy ground and proximity dwellings etc. The end of this line represented the completion of the Indigo 2D contract, the line crew picked up and packed all equipment that day and demobilized to Toowoomba on the 25<sup>th</sup> November.

Production rates throughout the program were good with a best day of 16.41 km on Tuesday the 20<sup>th</sup> November. Using 15m group intervals for receiver lines, an average of 768 VP's and 11.85 km per day was acquired. The Indigo 2D survey was completed in nine days on the 24<sup>th</sup> November 2007, this included washdowns, mobilisation, recording, spread layout and pickup.

### **3.4 PROCESSING**

All final data shipments were sent to the below locations.

“A” tapes for the Indigo 2D were sent to MBA Head Office – in Brisbane, QLD.

“B” tapes for the Indigo 2D were given to the Client Rep to be handcarried.

## APPENDIX A

### EQUIPMENT SPECIFICATIONS

#### RECORDING EQUIPMENT (2D Survey)

##### SERCEL 388 - 24 Bit 3D Seismic Data Acquisition System

- Sun Monitor and Sun Sparc 5 Computer
- OYO DFM 480 Plotter, UPS, LIM
- One (1) APM
- Two (2) Fujitsu 3490 Tape Drives
- One Hundred (100) 6 x T/O 2D 388 Seismic Cables (600 Channels)
- Four (4) CSU Patch Cables
- One Hundred and Ten (100) SU6 Telemetry Units (600 Channels)
- Sixteen (16) Sercel PSU's and Four (4) Sercel CSU's
- Twenty (20) Line Batteries
- Four (4) Sercel Battery Chargers
  
- **Pelton** Real Time Similarity System
- One (1) 10 metre 6 DB Boost High Gain Antenna on Recording Truck
- **Sensor SM24 10Hz High Specification Geophones**
- One Thousand two Hundred (1200) Geophone strings with 6 ph/group

#### SOURCE EQUIPMENT

- **Four (4) Hemi 44 6x6 International Paystar Vibrators:**
- **Peak force is 44000 lbs per Vibe and**
- **Hold-Down weight is 442000 lbs per Vibe**
  
- **Four (4) Pelton Advance 2 Model 5 Vibrator Control Electronics**
- **One (1) Pelton 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
Landcruiser - Wagon	1BWF-930
Landcruiser - Wagon	1BYK-183
Landcruiser - Wagon	1CCL-562
Landcruiser - Trayback	302-JCO
Landcruiser - Trayback	1CET-468
Landcruiser - Trayback	1BSJ-242
Landcruiser - Trayback	1BRJ-753
Landcruiser - Trayback	1BHD-550
Landcruiser - Trayback	1BEK-496
Landcruiser - Trayback	013-IZQ
Nissan - Turbo Diesel Trayback	176-JNA
Nissan - Turbo Diesel Trayback	175-JNA
Nissan - Turbo Diesel Trayback	XMJ-224
Hino - 4x4 Service Truck	1ALU-225
Isuzu – 4x4 Recorder Truck	1CAA-534
Isuzu - Mechanics Truck	1CCC-561
International Paystar - Spread Truck	626-JAH
Isuzu – 4x4 Cable Repair	YBH-15S
Isuzu – Crane Truck	9DL-970
Paystar - Hemi 44 - Vibrator	372-JCN
Paystar - Hemi 44 - Vibrator	373-JCN
Paystar - Hemi 44 - Vibrator	374-JCN
Paystar - Hemi 44 - Vibrator	375-JCN

## **APPENDIX C**

### **TAPE LISTINGS**

BLUE ENERGY - INDIGO 2D								
Tape #	#ID	Line	First FFID	Last FFID	First VP	Last VP	Date Recorded	Comments
1A	1	07-IND-02	1	9	200.5	201.5	17-Nov-07	Hardwires & Pointsource Tests.
		07-IND-02	10	60	200.5	250.5	17-Nov-07	Start Indigo 2D Line # 02.
		07-IND-02	61	359	251.5	561.5	18-Nov-07	
2A	2	07-IND-02	360	734	562.5	936.5	18-Nov-07	
3A	3	07-IND-02	735	1109	937.5	1311.5	18-Nov-07	
4A	4	07-IND-02	1110	1115	1312.5	1317.5	18-Nov-07	
		07-IND-02	1116	1454	1318.5	1688.5	19-Nov-07	
5A	5	07-IND-02	1455	1719	1689.5	1955.5	19-Nov-07	Finish Line # 02.
6A	6	07-IND-04	1720	1981	141.5	411.5	19-Nov-07	Start Line # 04.
7A	7	07-IND-04	1982	2147	412.5	585.5	19-Nov-07	
		07-IND-04	2148	2340	586.5	782.5	20-Nov-07	
8A	8	07-IND-04	2341	2571	783.5	1020.5	20-Nov-07	Finish Line # 04.
9A	9	07-IND-03	2572	2940	200.5	572.5	20-Nov-07	Start Line # 03.
10A	10	07-IND-03	2941	3223	573.5	859.5	20-Nov-07	
11A	11	07-IND-03	3224	3594	860.5	1241.5	21-Nov-07	
12A	12	07-IND-03	3595	3626	1242.5	1273.5	21-Nov-07	Finish Line # 03.
13A	13	07-IND-07	3627	3995	2700.5	2315.5	21-Nov-07	Start Line # 07. Omits # 3940
14A	14	07-IND-07	3996	4050	2314.5	2260.5	21-Nov-07	
		07-IND-07	4051	4364	2259.5	1945.5	22-Nov-07	Omits # 4051.
15A	15	07-IND-07	4365	4741	1944.5	1958.5	22-Nov-07	
16A	16	07-IND-07	4742	5085	1557.5	1189.5	22-Nov-07	
								<b>BOX 1 OF 2</b>

BLUE ENERGY - INDIGO 2D								
Tape #	#ID	Line	First FFID	Last FFID	First VP	Last VP	Date Recorded	Comments
17A	17	07-IND-07	5086	5092	1188.5	1182.5	22-Nov-07	Continue Line # 07.
		07-IND-07	5093	5274	1181.5	1000.5	23-Nov-07	
18A	18	07-IND-07	5275	5644	999.5	594.5	23-Nov-07	
19A	19	07-IND-07	5645	5785	593.5	450.5	23-Nov-07	Finish Line # 07.
20A	20	07-IND-01	5786	6141	200.5	555.5	23-Nov-07	Start & Finish Line # 01.
21A	21	07-IND-05	6142	6503	200.5	569.5	24-Nov-07	Start Line # 05.
22A	22	07-IND-05	6504	6902	570.5	992.5	24-Nov-07	Finish Line # 05.
								<b>BOX 2 OF 2.</b>
								<b>FINISH BLUE ENERGY - INDIGO 2D.</b>

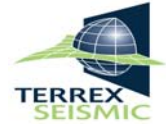
## APPENDIX D

### HSE POLICY and OCCUPATIONAL HEALTH & SAFETY STANDARDS

- Site specific inductions / daily toolbox meetings / weekly safety meetings
  - Monthly Section head meetings
    - Personal protective equipment
      - Traffic Management Safety
        - 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

Indigo 2D\_ ATP 818P Seismic Survey  
17th - 24th Nov 2007

**Client** Blue Energy  
**Location** ATP 818P  
**Camp Site** Jolly Swagman Motel

**HSE Advisor** Ray Auckram  
**Combined Personnel** 24  
**BAC Tests Conducted** 28

**Camp Location** Goondiwindi

**Preliminary Drug Tests Conducted**

**Sub-Contractors** DSS

**Standard Operating Procedure Revisions**

### Summary:

17/11/2007: Commence production Line #2 / 6.  
Blanket Breath Test conducted.  
19/11/2007: Brett McDonald Incident see Meet&Reports tab.  
21/11/2007: Random Breath Test conducted.  
Brett McDonald Incident see Meet&Reports tab.  
24/11/2007: EOC

Report compiled by: Ray Auckram HSE

### Safety Statistics

Terrex Seismic Man-hours	2,436
Sub-Contractor Man-hours	216
Fatalities	0
LTI's	0
MTI's	0
Days since last MTI/LTI	268
First Aid Incidents	0
Incident / Accident Reports	2
Work Days Lost	0
Hazard Identification Reports	0
Training Hours	2
Tool Box / Safety Meeting Man-hours	23
Audits / Inspections	22
Drills	0
Land Spills (< 5 litres)	0

### Medical Statistics

Clinic Attendance	
Referral	
Eye infections, injuries	
Heat	
GIT: Diarrhoea, Nausea, Vomiting	
Headaches	
Bites and Stings	
Misc	
Muscular Skeletal: Soft tissue injury, Sprain/Strain	
Skin Conditions: Rash, Fungal Infection	4
Colds, Influenza type symptoms	
Throat infection, Tonsillitis	
Wound Care: Lacerations, Dressings, Suture removal	
<b>TOTAL</b>	<b>4</b>

## APPENDIX F

### PERSONNEL – CREW LIST

POSITION	NAMES
Crew Manager	Ernst Terry
HSE Advisor	Auckram Ray
<b>Admin Staff</b>	
Observer	O'Donnell Peter
Observer	Carry Joel
Cable Repair	Fadian Scott
<b>Technical</b>	
Vib Op	Bann Abby
Vib Op	Harland June
Vib Op	Marsh Lloyd Guy
Vib Op	McDonald Brett
<b>Vibrator Crew</b>	
Vib Tech	Sharam Colin
<b>Vib Tech</b>	
Line Boss	Goodwill Jamie
<b>Snr Line</b>	
Trouble Shooter	Moody Andrew
<b>Trouble Shooters</b>	
Traffic Signs	Feeley Graham
<b>Traffic Control</b>	
Line Crew	Bishoff Daryn
Line Crew	Brooks Mark
Line Crew	Bryan-Robertson Amy
Line Crew	Carroll Dan
Line Crew	Clayton Ray
Line Crew	Collom Eileen
Line Crew	Dowling Daniel
Line Crew	Lovell Mick
Line Crew	Mitchell Madelaine
Line Crew	Ngatai Bryan
Line Crew	Parkes Robert
Line Crew	Roll Mitchell
Line Crew	Watty Dion
Line Crew	Zimmerman Steve
<b>Line Crew</b>	

## PERSONNEL – CREW NUMBERS

POSITION	NAMES
Crew Manager	1
Observer	1
Cable Repair	1
Vib Op	4
Vib Tech	1
Line Boss	1
Trouble Shooter	1
Traffic Signs	1
Line Crew	13

## APPENDIX G

### DAILY REPORTS



**Terrex Seismic Crew 401 - Indigo 2D  
Daily Report**

**CREW 401**

Client..... Blue Energy  
 Survey Name... Indigo 2D  
 Area..... Yelarbon - ATP 818P - Bowen Basin  
 State..... QLD

Party Manager.. Terry Ernst  
 Client Rep..... Nick Holding  
 Weather..... Fine / Humid  
 Date..... Friday, 16 November 2007

Line	VP	VP	File	File	Skips	km	VPS	Stns	TOTALS
						0.0000			VPs... 0 Skips... 0 Lin.km... 0.000 Cum.Lin.km... 0.000
									%Completed... 0.00% Cum.Total Vps (Job)... 0 Lin.km.Remaining... 90.000
									Av.Daily Production Lin.km 0.000

Chargeable Hrs:		Non Charge (Downtime) Hours:		Cum.L/Spread Hrs...	0.00
Recording.....				Cum.P/Spread Hrs...	0.00
Recorder Move.....					
Prospect Move.....	2.10	Human Error.....			
Detours/Terrain.....		QC Spread.....			
Daily Tests.....		Recorder.....			
Travel.....		Vibes.....			
P/Source, H/Wires, Tap Test.....		WOS.....	Total Hrly Work Rate (Day)...	2.10	
QC Spread.....		Other.....	Cum.Hrly Work rate (Job)...	2.10	
Layout Spread.....			Total Work Hrs (Day)...	2.10	
Pickup Spread.....					
WOS.....			Total St/By Rate Hrs (Day)...	0.00	
		Total Down Time.....	0.00	Cum.St/By Rate Hrs (Job)...	0.00
Other St/By.....		Toolbox Meeting.....	0.00		
Weather St/By.....		Safety Meeting.....	0.00		
Washdown St/By.....		Cum.Non-Charge (Downtime).....	0.00	Cum.Total Hrs (Job)	2.10

**COMMENTS:**  
 Complete Cobalt 2D.  
 Prospect Move from Injune, Roma to Miles. Crew Overnighed @ Miles = 2.1 Hrs, 220 km  
 Vibrators Floated from Injune to Goondiwindi by Joe Taylor of Injune = 436 km  
 2 x Line Crew persons arrived on site.  
 Light vehicles = 13.  
 Heavy vehicles = 1 x Service, 1 x Recorder, 1 x Mechos, 1 x Cable Repair, 1 x Spread = 5  
 Heavy Vehicles = 4 x Vibrators, Total Trucks = 9.  
 Personnel = 15 x Persons on Line, 4 x Vibe Operators.  
 Personnel = 1 x PM, 1 x Cable repair, 1 x Vibe Tech, 1 x HSE, 1 x Observer.  
 Total Personnel = 24.

Spread Movement						
Client: Blue Energy - Indigo 2D						
Layout			Pickup			
Line	Station #	Tot	Line	Station #	Tot	Tot
		1				1
<b>Total Stations:</b>		1	<b>Total Stations:</b>			1
				Bad Cables	0	
				Bad Phones	0	
				Bad Boxes	0	

**DSS - SURVEY**  
**COMMENTS:**  
 16th Nov 2007 - Survey @ Goondiwindi, Indigo 2D.

Crew Manager \_\_\_\_\_ Client Rep \_\_\_\_\_

**Terrex Seismic Crew 401 - Indigo 2D**

**Daily Report**

**CREW 401**

Client..... Blue Energy  
 Survey Name... Indigo 2D  
 Area..... Yelarbon - ATP 818P - Bowen Basin  
 State..... QLD

Party Manager.. Terry Ernst  
 Client Rep..... Nick Holding  
 Weather..... Fine / Humid  
 Date..... Saturday, 17 November 2007

Line	VP	VP	File	File	Skips	km	VPs	Stns	TOTALS	
									VPs...	51
07-IND-02	200.5	201.5	1	9	0	<b>WIRELINES + POINTSOURCE</b>			Skips...	0
07-IND-02	200.5	250.5	10	60	0	0.7500	51	50	Lin.km...	0.750
									Cum.Lin.km...	0.750
									%Completed...	0.83%
									Cum.Total Vps (Job)...	51
									Lin.km.Remaining...	89.250
									Av.Daily Production Lin.km	0.750

**Chargeable Hrs:**

Recording..... 0.40  
 Recorder Move.....  
 Prospect Move..... 3.50  
 Detours/Terrain.....  
 Daily Tests..... 0.10  
 Travel..... 0.60  
 P/Source, H/Wires..... 0.50  
 QC Spread.....  
 Layout Spread..... 1.90  
 Pickup Spread.....  
 WOS.....  
 Other St/By..... 4.70  
 Weather St/By.....  
 Washdown St/By.....

**Non Charge (Downtime) Hours:**

Human Error.....  
 QC Spread.....  
 Recorder.....  
 Vibes.....  
 WOS.....  
 Other.....  
 Total Down Time..... 0.00  
 Toolbox Meeting..... 0.30  
 Safety Meeting..... 0.00  
 Cum.Non-Charge (Downtime)..... 0.00

Cum.L/Spread Hrs... 1.90  
 Cum.P/Spread Hrs... 0.00  
 Total Hrly Work Rate (Day)... 7.00  
 Cum.Hrly Work rate (Job)... 9.10  
 Total Work Hrs (Day)... 12.00  
 Total St/By Rate Hrs (Day)... 5.00  
 Cum.St/By Rate Hrs (Job)... 5.00  
 Cum.Total Hrs (Job) 14.10

**COMMENTS:**

Prospect Move from Miles to Goondiwindi = 3.5 Hrs, 216 km  
 Spread truck sent to field, parked on first line.  
 Unable to start laying spread due to no pegs in the ground + no survey lead.  
 Recording Crew on St/By due to No Survey lead = 4.70 Hrs.  
 Start laying spread later on in afternoon = 1.90 Hrs.  
 Pointsource + Hardwires performed.  
 Start Production, Line # 02, 51 VPs, 0.750 km, 0 Skips.  
 1 x Person hired to move signs while working along roads.  
 1 x Line Crew person arrived on site.  
 Light vehicles = 13.  
 Heavy vehicles = 1 x Service, 1 x Recorder, 1 x Mechos, 1 x Cable Repair, 1 x Spread = 5  
 Heavy Vehicles = 4 x Vibrators, Total Trucks = 9.  
 Personnel = 16 x Persons on Line, 4 x Vibe Operators.  
 Personnel = 1 x Sign Mover.  
 Personnel = 1 x PM, 1 x Cable repair, 1 x Vibe Tech, 1 x HSE, 1 x Observer.  
 Total Personnel = 26.

**Spread Movement**

**Client: Blue Energy - Indigo 2D**

Layout				Pickup			
Line	Station #	Tot		Line	Station #	Tot	
07-IND-02	200	400	201				1
<b>Total Stations:</b>			201	<b>Total Stations:</b>			1

**DSS - SURVEY**

**COMMENTS:**

17th Nov 2007 - Survey @ Goondiwindi, started Indigo 2D.

Bad Cables	0
Bad Phones	0
Bad Boxes	0



**Terrex Seismic Crew 401 - Indigo 2D**

**Daily Report**

**CREW 401**

Client..... Blue Energy  
 Survey Name... Indigo 2D  
 Area..... Yelarbon - ATP 818P - Bowen Basin  
 State..... QLD

Party Manager.. Terry Ernst  
 Client Rep..... Nick Holding  
 Weather..... Fine / Humid  
 Date..... Sunday, 18 November 2007

Line	VP	VP	File	File	Skips	km	VPs	Stns	TOTALS	
07-IND-02	250.5	1317.5	61	1115	12	16.0050	1067	1067	VPs...	1067
									Skips...	12
									Lin.km...	16.005
									Cum.Lin.km...	16.755
									%Completed...	18.62%
									Cum.Total Vps (Job)...	1118
									Lin.km.Remaining...	73.245
									Av.Daily Production Lin.km	8.378

**Chargeable Hrs:**

Recording..... 8.60  
 Recorder Move..... 2.70  
 Prospect Move.....  
 Detours/Terrain.....  
 Daily Tests..... 0.20  
 Travel..... 0.70  
 P/Source, H/Wires.....  
 QC Spread.....  
 Layout Spread.....  
 Pickup Spread.....  
 WOS.....  
 Other St/By.....  
 Weather St/By.....  
 Washdown St/By.....

**Non Charge (Downtime) Hours:**

Human Error.....  
 QC Spread.....  
 Recorder.....  
 Vibes.....  
 WOS.....  
 Other.....  
 Total Down Time..... 0.00  
 Toolbox Meeting..... 0.00  
 Safety Meeting..... 0.30  
 Cum.Non-Charge (Downtime)..... 0.00

Cum.L/Spread Hrs... 1.90  
 Cum.P/Spread Hrs... 0.00  
 Total Hrly Work Rate (Day)... 12.20  
 Cum.Hrly Work rate (Job)... 21.30  
 Total Work Hrs (Day)... 12.50  
 Total St/By Rate Hrs (Day)... 0.30  
 Cum.St/By Rate Hrs (Job)... 5.30  
 Cum.Total Hrs (Job) 26.60

**COMMENTS:**

Crew Safety Meeting, 0.3 Hrs St/By.  
 Continue Production, Line # 02, 1067 VPs, 16.005 km, 12 Skips.  
 Light vehicles = 13.  
 Heavy vehicles = 1 x Service, 1 x Recorder, 1 x Mechos, 1 x Cable Repair, 1 x Spread = 5  
 Heavy Vehicles = 4 x Vibrators, Total Trucks = 9.  
 Personnel = 16 x Persons on Line, 4 x Vibe Operators.  
 Personnel = 1 x Sign Mover.  
 Personnel = 1 x PM, 1 x Cable repair, 1 x Vibe Tech, 1 x HSE, 1 x Observer.  
 Total Personnel = 26.

**Spread Movement**

Client: Blue Energy - Indigo 2D

Layout				Pickup			
Line	Station #	Tot		Line	Station #	Tot	
07-IND-02	401	1500	1100	07-IND-02	200	1150	951
<b>Total Stations:</b>			1100	<b>Total Stations:</b>			951

**DSS - SURVEY**

**COMMENTS:**

18th Nov 2007 - Survey @ Goondiwindi, continue Indigo 2D.

Bad Cables	0
Bad Phones	0
Bad Boxes	0

**Terrex Seismic Crew 401 - Indigo 2D**

**Daily Report**

**CREW 401**

Client..... Blue Energy  
 Survey Name... Indigo 2D  
 Area..... Yelarbon - ATP 818P - Bowen Basin  
 State..... QLD

Party Manager.. Terry Ernst  
 Client Rep..... Nick Holding  
 Weather..... Fine / Humid  
 Date..... Monday, 19 November 2007

Line	VP	VP	File	File	Skips	km	VPs	Stns	TOTALS	
07-IND-02	1317.5	1955.5	1116	1719	34	9.5700	604	638	VPs...	1032
07-IND-04	140.5	585.5	1720	2147	18	6.6750	428	445	Skips...	52
									Lin.km...	16.245
									Cum.Lin.km...	33.000
									%Completed...	36.67%
									Cum.Total Vps (Job)...	2150
									Lin.km.Remaining...	57.000
									Av.Daily Production Lin.km	11.000

**Chargeable Hrs:**

Recording..... 8.50  
 Recorder Move..... 1.10  
 Line Move..... 0.60  
 Detours/Terrain..... 0.10  
 Daily Tests..... 0.20  
 Travel..... 1.60  
 P/Source, H/Wires.....  
 QC Spread.....  
 Layout Spread.....  
 Pickup Spread.....  
 WOS.....  
 Other St/By.....  
 Weather St/By.....  
 Washdown St/By.....

**Non Charge (Downtime) Hours:**

Human Error.....  
 QC Spread.....  
 Recorder.....  
 Vibes.....  
 WOS..... 0.40  
 Other.....  
 Total Down Time..... 0.40  
 Toolbox Meeting..... 0.30  
 Safety Meeting..... 0.00  
 Cum.Non-Charge (Downtime)..... 0.40

Cum.L/Spread Hrs... 1.90  
 Cum.P/Spread Hrs... 0.00  
 Total Hrly Work Rate (Day)... 12.10  
 Cum.Hrly Work rate (Job)... 33.40  
 Total Work Hrs (Day)... 12.80  
 Total St/By Rate Hrs (Day)... 0.30  
 Cum.St/By Rate Hrs (Job)... 5.60  
 Cum.Total Hrs (Job) 39.40

**COMMENTS:**

Crew Toolbox Meeting, 0.3 Hrs St/By.  
 Complete Production, Line # 02, 604 VPs, 9.570 km, 34 Skips.  
 Continue Production, Line # 04, 428 VPs, 6.675 km, 18 Skips.  
 D/Time WOS = 0.4 Hrs, waiting on cable truck to plug into Recorder on Line Move.  
 PM & HSE scouting road lines + access.  
 Light vehicles = 13.  
 Heavy vehicles = 1 x Service, 1 x Recorder, 1 x Mechos, 1 x Cable Repair, 1 x Spread = 5  
 Heavy Vehicles = 4 x Vibrators, Total Trucks = 9.  
 Personnel = 16 x Persons on Line, 4 x Vibe Operators.  
 Personnel = 1 x Sign Mover.  
 Personnel = 1 x PM, 1 x Cable repair, 1 x Vibe Tech, 1 x HSE, 1 x Observer.  
 Total Personnel = 26.

**Spread Movement**

Client: Blue Energy - Indigo 2D

Layout				Pickup			
Line	Station #	Tot		Line	Station #	Tot	
07-IND-02	1501	1955	455	07-IND-02	1151	1955	805
07-IND-04	140	750	611	07-IND-04	140	425	286
<b>Total Stations:</b>			1066	<b>Total Stations:</b>			1091

**DSS - SURVEY**

**COMMENTS:**

19th Nov 2007 - Survey @ Goondiwindi, continue Indigo 2D.

Bad Cables	0
Bad Phones	1
Bad Boxes	0

**Terrex Seismic Crew 401 - Indigo 2D**

**Daily Report**

**CREW 401**

Client..... Blue Energy  
 Survey Name... Indigo 2D  
 Area..... Yelarbon - ATP 818P - Bowen Basin  
 State..... QLD

Party Manager.. Terry Ernst  
 Client Rep..... Nick Holding  
 Weather..... Fine / Hot / Humid  
 Date..... Tuesday, 20 November 2007

Line	VP	VP	File	File	Skips	km	VPs	Stns	TOTALS	
07-IND-04	585.5	1020.5	2148	2571	11	6.5250	435	435	VPs...	1087
07-IND-03	200.5	859.5	2572	3223	8	9.8850	652	659	Skips...	19
									Lin.km...	16.410
									Cum.Lin.km...	49.410
									%Completed...	54.90%
									Cum.Total Vps (Job)...	3237
									Lin.km.Remaining...	40.590
									Av.Daily Production Lin.km	12.353

**Chargeable Hrs:**

Recording..... 8.90  
 Recorder Move..... 0.90  
 Line Move..... 0.60  
 Detours/Terrain.....  
 Daily Tests..... 0.20  
 Travel..... 1.70  
 P/Source, H/Wires.....  
 QC Spread.....  
 Layout Spread.....  
 Pickup Spread.....  
 WOS.....  
 Other St/By.....  
 Weather St/By.....  
 Washdown St/By.....

**Non Charge (Downtime) Hours:**

Human Error.....  
 QC Spread..... 0.20  
 Recorder.....  
 Vibes.....  
 WOS.....  
 Other.....  
 Total Down Time..... 0.20  
 Toolbox Meeting..... 0.30  
 Safety Meeting..... 0.00  
 Cum.Non-Charge (Downtime)..... 0.60

Cum.L/Spread Hrs... 1.90  
 Cum.P/Spread Hrs... 0.00  
 Total Hrly Work Rate (Day)... 12.30  
 Cum.Hrly Work rate (Job)... 45.70  
 Total Work Hrs (Day)... 12.80  
 Total St/By Rate Hrs (Day)... 0.30  
 Cum.St/By Rate Hrs (Job)... 5.90  
 Cum.Total Hrs (Job) 52.20

**COMMENTS:**

Crew Toolbox Meeting, 0.3 Hrs St/By.  
 Complete Production, Line # 04, 435 VPs, 6.525 km, 11 Skips.  
 Continue Production, Line # 03, 652 VPs, 9.885 km, 8 Skips.  
 D/Time QC Spread = 0.2 Hrs, bad cable.  
 PM & HSE set up Microwave Links across Cunningham Hwy. Check Line # 03.  
 1 x Observer in from break.  
 Light vehicles = 13.  
 Heavy vehicles = 1 x Service, 1 x Recorder, 1 x Mechos, 1 x Cable Repair, 1 x Spread = 5  
 Heavy Vehicles = 4 x Vibrators, Total Trucks = 9.  
 Personnel = 16 x Persons on Line, 4 x Vibe Operators.  
 Personnel = 1 x Sign Mover.  
 Personnel = 1 x PM, 1 x Cable repair, 1 x Vibe Tech, 1 x HSE, 2 x Observer.  
 Total Personnel = 27.

**Spread Movement**

**Client: Blue Energy - Indigo 2D**

Layout				Pickup			
Line	Station #	Tot		Line	Station #	Tot	
07-IND-04	751	1020	270	07-IND-04	426	1020	595
07-IND-03	200	1085	886	07-IND-03	200	715	516
<b>Total Stations:</b>			1156	<b>Total Stations:</b>			1111

**DSS - SURVEY**

**COMMENTS:**

20th Nov 2007 - Survey @ Goondiwindi, continue Indigo 2D.

Bad Cables	2
Bad Phones	0
Bad Boxes	0

**Terrex Seismic Crew 401 - Indigo 2D**

**Daily Report**

**CREW 401**

Client..... Blue Energy  
 Survey Name... Indigo 2D  
 Area..... Yelarbon - ATP 818P - Bowen Basin  
 State..... QLD

Party Manager.. Terry Ernst  
 Client Rep..... Nick Holding  
 Weather..... Fine / Hot / Humid  
 Date..... Wednesday, 21 November 2007

Line	VP	VP	File	File	Skips	km	VPs	Stns	TOTALS	
07-IND-03	859.5	1273.5	3224	3626	11	6.2100	403	414	VPs...	826
07-IND-07	2700.5	2260.5	3627	4050	18	6.6000	423	440	Skips...	29
									Lin.km...	12.810
									Cum.Lin.km...	62.220
									%Completed...	69.13%
									Cum.Total Vps (Job)...	4063
									Lin.km.Remaining...	27.780
									Av.Daily Production Lin.km	12.444

**Chargeable Hrs:**

Recording..... 7.40  
 Recorder Move..... 0.80  
 Line Move..... 0.60  
 Detours/Terrain..... 0.40  
 Daily Tests..... 0.20  
 Travel..... 1.50  
 P/Source, H/Wires.....  
 QC Spread.....  
 Layout Spread.....  
 Pickup Spread.....  
 WOS.....  
 Other St/By..... 0.40  
 Weather St/By.....  
 Washdown St/By.....

**Non Charge (Downtime) Hours:**

Human Error.....  
 QC Spread..... 0.50  
 Recorder.....  
 Vibes..... 0.40  
 WOS.....  
 Other.....  
 Total Down Time..... 0.90  
 Toolbox Meeting..... 0.30  
 Safety Meeting..... 0.00  
 Cum.Non-Charge (Downtime)..... 1.50

Cum.L/Spread Hrs... 1.90  
 Cum.P/Spread Hrs... 0.00  
 Total Hrly Work Rate (Day)... 10.90  
 Cum.Hrly Work rate (Job)... 56.60  
 Total Work Hrs (Day)... 12.50  
 Total St/By Rate Hrs (Day)... 0.70  
 Cum.St/By Rate Hrs (Job)... 6.60  
 Cum.Total Hrs (Job) 64.70

**COMMENTS:**

Crew Toolbox Meeting, 0.3 Hrs St/By.  
 Complete Production, Line # 03, 403 VPs, 6.210 km, 11 Skips.  
 Continue Production, Line # 07, 423 VPs, 6.60 km, 18 Skips.  
 D/Time QC Spread = 0.5 Hrs.  
 D/Time Vibes = 0.40 Hrs.  
 St/By Other = 0.40 Hrs, Survey missed chaining 1 point, re-peg points, relay spread.  
 Line Crew caught survey lead, waiting on Survey.  
 1 x Observer + 1 x Line Crew person departed crew.  
 Light vehicles = 13.  
 Heavy vehicles = 1 x Service, 1 x Recorder, 1 x Mechos, 1 x Cable Repair, 1 x Spread = 5  
 Heavy Vehicles = 4 x Vibrators, Total Trucks = 9.  
 Personnel = 15 x Persons on Line, 4 x Vibe Operators.  
 Personnel = 1 x Sign Mover.  
 Personnel = 1 x PM, 1 x Cable repair, 1 x Vibe Tech, 1 x HSE, 1 x Observer.  
 Total Personnel = 25.

**Spread Movement**

Client: Blue Energy - Indigo 2D

Layout				Pickup			
Line	Station #	Tot		Line	Station #	Tot	
07-IND-03	1086	1273	188	07-IND-03	718	1273	556
07-IND-07	2700	2060	641	07-IND-07	2700	2450	251
<b>Total Stations:</b>			829	<b>Total Stations:</b>			807

**DSS - SURVEY**

**COMMENTS:**

21st Nov 2007 - Survey @ Goondiwindi, continue pegging Indigo 2D.

Bad Cables	1
Bad Phones	0
Bad Boxes	1

**Terrex Seismic Crew 401 - Indigo 2D**

**Daily Report**

**CREW 401**

Client..... Blue Energy  
 Survey Name... Indigo 2D  
 Area..... Yelarbon - ATP 818P - Bowen Basin  
 State..... QLD

Party Manager.. Terry Ernst  
 Client Rep..... Nick Holding  
 Weather..... Fine / Hot / Humid  
 Date..... Thursday, 22 November 2007

Line	VP	VP	File	File	Skips	km	VPs	Stns	TOTALS	
07-IND-07	2260.5	1182.5	4051	5092	37	16.1700	1041	1078	VPs...	1041
									Skips...	37
									Lin.km...	16.170
									Cum.Lin.km...	78.390
									%Completed...	78.39%
									Cum.Total Vps (Job)...	5104
									Lin.km.Remaining...	21.610
									Av.Daily Production Lin.km	13.065

**Chargeable Hrs:**

Recording..... 9.20  
 Recorder Move..... 1.20  
 Line Move.....  
 Detours/Terrain.....  
 Daily Tests..... 0.10  
 Travel..... 1.20  
 P/Source, H/Wires.....  
 QC Spread.....  
 Layout Spread.....  
 Pickup Spread.....  
 WOS.....  
 Other St/By.....  
 Weather St/By.....  
 Washdown St/By.....

**Non Charge (Downtime) Hours:**

Human Error.....  
 QC Spread..... 0.30  
 Recorder.....  
 Vibes.....  
 WOS.....  
 Other.....  
 Total Down Time..... 0.30  
 Toolbox Meeting..... 0.30  
 Safety Meeting..... 0.00  
 Cum.Non-Charge (Downtime)..... 1.80

Cum.L/Spread Hrs... 1.90  
 Cum.P/Spread Hrs... 0.00  
 Total Hrly Work Rate (Day)... 11.70  
 Cum.Hrly Work rate (Job)... 68.30  
 Total Work Hrs (Day)... 12.30  
 Total St/By Rate Hrs (Day)... 0.30  
 Cum.St/By Rate Hrs (Job)... 6.90  
 Cum.Total Hrs (Job) 77.00

**COMMENTS:**

Crew Toolbox Meeting, 0.3 Hrs St/By.  
 Continue Production, Line # 07, 1041 VPs, 16.170 km, 37 Skips.  
 D/Time QC Spread = 0.3 Hrs.  
 PM to field, check Line # 07.  
 Total Km remaining are approx only.  
 Light vehicles = 13.  
 Heavy vehicles = 1 x Service, 1 x Recorder, 1 x Mechos, 1 x Cable Repair, 1 x Spread = 5  
 Heavy Vehicles = 4 x Vibrators, Total Trucks = 9.  
 Personnel = 15 x Persons on Line, 4 x Vibe Operators.  
 Personnel = 1 x Sign Mover.  
 Personnel = 1 x PM, 1 x Cable repair, 1 x Vibe Tech, 1 x HSE, 1 x Observer.  
 Total Personnel = 25.

**Spread Movement**

**Client: Blue Energy - Indigo 2D**

Layout				Pickup			
Line	Station #	Tot		Line	Station #	Tot	
07-IND-07	2059	970	1090	07-IND-07	2449	1350	1100
<b>Total Stations:</b>			1090	<b>Total Stations:</b>			1100

**DSS - SURVEY**

**COMMENTS:**

22nd Nov 2007 - Survey @ Goondiwindi, continue pegging Indigo 2D.

Bad Cables	2
Bad Phones	0
Bad Boxes	0

**Terrex Seismic Crew 401 - Indigo 2D**

**Daily Report**

**CREW 401**

Client..... Blue Energy  
 Survey Name... Indigo 2D  
 Area..... Yelarbon - ATP 818P - Bowen Basin  
 State..... QLD

Party Manager.. Terry Ernst  
 Client Rep..... Nick Holding  
 Weather..... Fine / Hot / Humid  
 Date..... Friday, 23 November 2007

Line	VP	VP	File	File	Skips	km	VPs	Stns	TOTALS	
07-IND-07	1182.5	450.5	5093	5785	39	10.9800	693	732	VPs...	1049
07-IND-01	200.5	555.5	5786	6141	0	5.3250	356	355	Skips...	39
									Lin.km...	16.305
									Cum.Lin.km...	94.695
									%Completed...	86.88%
									Cum.Total Vps (Job)...	6153
									Lin.km.Remaining...	14.305
									Av.Daily Production Lin.km	13.528

**Chargeable Hrs:**

Recording..... 8.60  
 Recorder Move..... 1.20  
 Line Move..... 0.60  
 Detours/Terrain.....  
 Daily Tests..... 0.20  
 Travel..... 1.10  
 P/Source, H/Wires.....  
 QC Spread.....  
 Layout Spread.....  
 Pickup Spread.....  
 WOS.....  
 Other St/By.....  
 Weather St/By.....  
 Washdown St/By.....

**Non Charge (Downtime) Hours:**

Human Error.....  
 QC Spread..... 0.40  
 Recorder.....  
 Vibes.....  
 WOS.....  
 Other.....  
 Total Down Time..... 0.40  
 Toolbox Meeting..... 0.30  
 Safety Meeting..... 0.00  
 Cum.Non-Charge (Downtime)..... 2.20

Cum.L/Spread Hrs... 1.90  
 Cum.P/Spread Hrs... 0.00  
 Total Hrly Work Rate (Day)... 11.70  
 Cum.Hrly Work rate (Job)... 80.00  
 Total Work Hrs (Day)... 12.40  
 Total St/By Rate Hrs (Day)... 0.30  
 Cum.St/By Rate Hrs (Job)... 7.20  
 Cum.Total Hrs (Job) 89.40

**COMMENTS:**

Crew Toolbox Meeting, 0.3 Hrs St/By.  
 Complete Production, Line # 07, 693 VPs, 10.980 km, 39 Skips.  
 Continue Production, Line # 01, 356 VPs, 5.325 km, 0 Skips.  
 PM to field, check Line # 07, 01 & 05 to see how wet they are.  
 D/Time QC Spread = 0.40 Hrs.  
 1 x Line Crew gone on leave.  
 Light vehicles = 13.  
 Heavy vehicles = 1 x Service, 1 x Recorder, 1 x Mechos, 1 x Cable Repair, 1 x Spread = 5  
 Heavy Vehicles = 4 x Vibrators, Total Trucks = 9.  
 Personnel = 14 x Persons on Line, 4 x Vibe Operators.  
 Personnel = 1 x Sign Mover.  
 Personnel = 1 x PM, 1 x Cable repair, 1 x Vibe Tech, 1 x HSE, 1 x Observer.  
 Total Personnel = 24.

**Spread Movement**

**Client: Blue Energy - Indigo 2D**

Layout				Pickup			
Line	Station #	Tot		Line	Station #	Tot	
07-IND-07	969	450	520	07-IND-07	1349	450	900
07-IND-01	200	555	356	07-IND-01	200	450	251
07-IND-05	200	290	91				
<b>Total Stations:</b>			967	<b>Total Stations:</b>			1151

**DSS - SURVEY**

**COMMENTS:**

23rd Nov 2007 - Survey @ Goondiwindi, continue pegging Indigo 2D.

Bad Cables	2
Bad Phones	0
Bad Boxes	0

**Terrex Seismic Crew 401 - Indigo 2D**

**Daily Report**

**CREW 401**

Client..... Blue Energy  
 Survey Name... Indigo 2D  
 Area..... Yelarbon - ATP 818P - Bowen Basin  
 State..... QLD

Party Manager.. Terry Ernst  
 Client Rep..... Nick Holding  
 Weather..... Rain / Overcast / Humid  
 Date..... Saturday, 24 November 2007

Line	VP	VP	File	File	Skips	km	VPs	Stns	TOTALS	
07-IND-05	200.5	992.5	6142	6902	32	11.8800	761	792	VPs...	761
									Skips...	32
									Lin.km...	11.880
									Cum.Lin.km...	106.575
									%Completed...	100.00%
									Cum.Total Vps (Job)...	6914
									Lin.km.Remaining...	0.000
									Av.Daily Production Lin.km	13.322

**Chargeable Hrs:**

Recording..... 7.00  
 Recorder Move..... 1.10  
 Line Move..... 0.50  
 Detours/Terrain..... 0.60  
 Daily Tests..... 0.10  
 Travel..... 1.10  
 P/Source, H/Wires.....  
 QC Spread.....  
 Layout Spread.....  
 Pickup Spread..... 0.80  
 WOS.....  
 Other St/By.....  
 Weather St/By.....  
 Washdown St/By.....

**Non Charge (Downtime) Hours:**

Human Error.....  
 QC Spread..... 0.60  
 Recorder.....  
 Vibes..... 0.20  
 WOS.....  
 Other.....  
 Total Down Time..... 0.80  
 Toolbox Meeting..... 0.30  
 Safety Meeting..... 0.00  
 Cum.Non-Charge (Downtime)..... 3.00

Cum.L/Spread Hrs... 1.90  
 Cum.P/Spread Hrs... 0.80  
 Total Hrly Work Rate (Day)... 11.20  
 Cum.Hrly Work rate (Job)... 91.20  
 Total Work Hrs (Day)... 12.30  
 Total St/By Rate Hrs (Day)... 0.30  
 Cum.St/By Rate Hrs (Job)... 7.50  
 Cum.Total Hrs (Job) 101.70

**COMMENTS:**

Crew Toolbox Meeting, 0.3 Hrs St/By.  
 Complete Production, Line # 05, 761 VPs, 11.880 km, 32 Skips.  
 Complete Blue Energy - Indigo 2D.  
 PM & HSE to field, set up microwave Links at Hwy.  
 D/Time QC Spread = 0.60 Hrs. Leakage from overnight rain.  
 D/Time Vibes = 0.20 Hrs. Vibrator bogged near road.  
 Light vehicles = 13.  
 Heavy vehicles = 1 x Service, 1 x Recorder, 1 x Mechos, 1 x Cable Repair, 1 x Spread = 5  
 Heavy Vehicles = 4 x Vibrators, Total Trucks = 9.  
 Personnel = 14 x Persons on Line, 4 x Vibe Operators.  
 Personnel = 1 x Sign Mover.  
 Personnel = 1 x PM, 1 x Cable repair, 1 x Vibe Tech, 1 x HSE, 1 x Observer.  
 Total Personnel = 24.

**Spread Movement**

**Client: Blue Energy - Indigo 2D**

Layout				Pickup			
Line	Station #	Tot		Line	Station #	Tot	
07-IND-05	291	992	702	07-IND-01	451	555	105
				07-IND-05	200	992	793
<b>Total Stations:</b>			702	<b>Total Stations:</b>			898

**DSS - SURVEY**

**COMMENTS:**

24th Nov 2007 - Survey @ Goondiwindi, completed pegging Indigo 2D.

Bad Cables	1
Bad Phones	4
Bad Boxes	0

**Terrex Seismic Crew 401 - Indigo 2D**

**Daily Report**

**CREW 401**

Client..... Blue Energy  
 Survey Name... Indigo 2D  
 Area..... Yelarbon - ATP 818P - Bowen Basin  
 State..... QLD

Party Manager.. Terry Ernst  
 Client Rep..... Nick Holding  
 Weather..... Fine / Overcast / Humid  
 Date..... Sunday, 25 November 2007

Line	VP	VP	File	File	Skips	km	VPs	Stns	TOTALS
						0.0000			VPs... 0 Skips... 0 Lin.km... 0.000 Cum.Lin.km... 106.575
									%Completed... 100.00%
									Cum.Total Vps (Job)... 6914 Lin.km.Remaining... 0.000
									Av.Daily Production Lin.km 13.322

Chargeable Hrs:	Non Charge (Downtime) Hours:		
Recording.....		Cum.L/Spread Hrs...	1.90
Recorder Move.....		Cum.P/Spread Hrs...	0.80
Line Move.....	Human Error.....		
Detours/Terrain.....	QC Spread.....		
Daily Tests.....	Recorder.....		
Travel.....	Vibes.....		
P/Source, H/Wires.....	WOS.....	Total Hrly Work Rate (Day)...	0.00
QC Spread.....	Other.....	Cum.Hrly Work rate (Job)...	91.20
Layout Spread.....		Total Work Hrs (Day)...	0.00
Pickup Spread.....			
WOS.....		Total St/By Rate Hrs (Day)...	0.00
	Total Down Time..... 0.00	Cum.St/By Rate Hrs (Job)...	7.50
Other St/By.....	Toolbox Meeting..... 0.00		
Weather St/By.....	Safety Meeting..... 0.00		
Washdown St/By.....	Cum.Non-Charge (Downtime)..... 3.00	Cum.Total Hrs (Job)	101.70

**COMMENTS:**

Crew 401 demobe from Goondiwindi to Toowoomba = 223 km, 2.50 Hrs.  
 Vibrators, Service Truck parked at Goondiwindi.  
 Light vehicles = 13.  
 Heavy vehicles = 1 x Service, 1 x Recorder, 1 x Mechos, 1 x Cable Repair, 1 x Spread = 5  
 Heavy Vehicles = 4 x Vibrators, Total Trucks = 9.  
 Personnel = 14 x Persons on Line, 4 x Vibe Operators.  
 Personnel = 1 x Sign Mover.  
 Personnel = 1 x PM, 1 x Cable repair, 1 x Vibe Tech, 1 x HSE, 1 x Observer.  
 Total Personnel = 24.

Spread Movement							
Client: Blue Energy - Indigo 2D							
Layout				Pickup			
Line	Station #	Tot		Line	Station #	Tot	
			1				1
<b>Total Stations:</b>			1	<b>Total Stations:</b>			1

<b>DSS - SURVEY</b>	Bad Cables	0
<b>COMMENTS:</b>	Bad Phones	0
	Bad Boxes	0



## APPENDIX H

### RECORDING STATISTICS



Date	Travel Time	Downtime	Recording	Layout/Pick-up Spread	Daily Test	Recorder/ Vibrator/ Move	Detours & Terrain	Prospect Move	Line Move	H/Wires & P/Source & Tests	Weather/O ther	Safety Meetings	Total Stand- by	Total Hours	Total Kms
	Chargeable	Non- Chargeable	Chargeable	Chargeable	Chargeable	Chargeable	Chargeable	Chargeable	Chargeable	Chargeable	Stand-by	Stand-by	Chargeable	Chargeable	
16 November 2007								2.10					-	2.10	
17 November 2007	0.60		0.40	1.90	0.10			3.50		0.50	4.70	0.30	5.00	7.00	0.7500
18 November 2007	0.70		8.60		0.20	2.70						0.30	0.30	12.20	16.0050
19 November 2007	1.60	0.40	8.50		0.20	1.10	0.10		0.60			0.30	0.30	12.10	16.2450
20 November 2007	1.70	0.20	8.90		0.20	0.90			0.60			0.30	0.30	12.30	16.4100
21 November 2007	1.50	0.90	7.40		0.20	0.80	0.40		0.60		0.40	0.30	0.70	10.90	12.8100
22 November 2007	1.20	0.30	9.20		0.10	1.20						0.30	0.30	11.70	16.1700
23 November 2007	1.10	0.40	8.60		0.20	1.20			0.60			0.30	0.30	11.70	16.3050
24 November 2007	1.10	0.80	7.00	0.80	0.10	1.10	0.60		0.50			0.30	0.30	11.20	11.8800
<b>Total</b>	<b>9.5000</b>	<b>3.0000</b>	<b>58.6000</b>	<b>2.7000</b>	<b>1.3000</b>	<b>9.0000</b>	<b>1.1000</b>	<b>5.6000</b>	<b>2.9000</b>	<b>0.5000</b>	<b>5.1000</b>	<b>2.4000</b>	<b>7.5000</b>	<b>91.2000</b>	<b>106.5750</b>

## APPENDIX I

### PHOTOGRAPHS



Slothing



Cables

Water from recent rains lying alongside road

