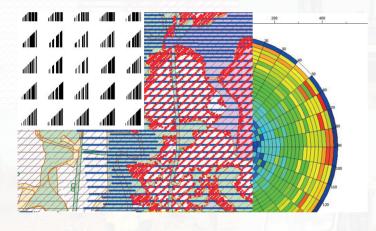


Velseis is widely regarded as Australia's most experienced seismic contractor, leading the industry in high resolution seismic data acquisition, processing and interpretation.

Operating throughout Australia as well as Internationally, Velseis provides a full suite of integrated seismic services across the entire resource sector including the oil and gas, minerals, coal, and coal seam gas industries.

The Company draws upon 35 years of practical and logistical know-how, along with high-level geophysical expertise, to consistently deliver quality results safely and with exceptional efficiency.



## SEISMIC SOURCE CAPABILITY

#### **Explosives**

Velseis has over 35 years' experience in highresolution Dynamite surveys. Shot hole drilling services are provided by our Seisdrill division, which has six truck-mounted Bourne 1000R drilling rigs, specifically suited to shot hole drilling. We are licensed to purchase and handle explosives, our pre-loaders are highly experienced, and our QHSE protocols are comprehensive.



# Integrated Seismic **Technologies**

#### SEISMIC SURVEY DESIGN

Using industry leading 3D design software, along with internally developed proprietary technology, we provide a comprehensive 2D and 3D design service which accommodates the technical, logistical and economic considerations of our clients

#### SEISMIC DATA ACQUISITION

With a diverse range of seismic source and recording hardware options along with experienced field personnel, Velseis can provide customised field crews suitable for most projects.



R&D

DESIGN

**DRILLING** 

Acquisition

**PROCESSING** 

INTERPRETATION

www.velseis.com















#### **Vibroseis**

# IVI Envirovibe (15,000lb) buggies

- Manoeuvrable
- Environmentally friendly (low impact)
- Easily transported

#### Inova Univib (26,000lb) buggies

- Manoeuvrable
- Environmentally friendly
- Adjustable hold-down for peak force variability

#### AHV-IV 380 Renegade (80,000lb)

Velseis has recently expanded its Vibroseis fleet to include INOVA's 80,000 lb Renegade buggies. The Renegade 380 is currently the largest vibrator in Australia and when compared with INOVA's standard 60,000lb vibrator, exhibits superior low frequency sweep characteristics, enhanced broadband capability and deeper stratigraphic imagery.



# Mini-SOSIE

In areas with particular environmental or access restrictions, Mini-SOSIE provides a seismic data acquisition method which is a geophysically viable alternative to Vibroseis. Utilising a Wacker Neuson compactor as an impactive energy source and smaller field crews, this technique is well suited to smaller projects with shallower targets. Mini-SOSIE is also effective as an alternative energy source for areas of a 3D Vibroseis survey where access is not possible for Vibroseis buggies due to environmental, topographical or cultural restrictions.

R&D

DESIGN

DRILLING

Acquisition

**PROCESSING** 

INTERPRETATION

www.velseis.com







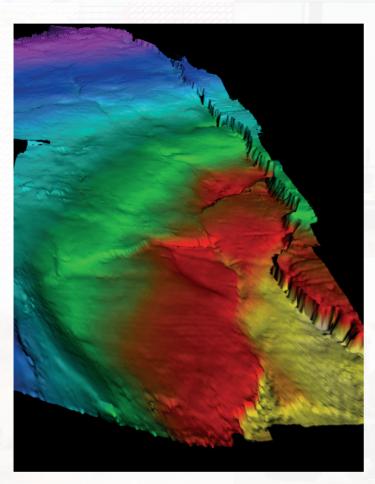


Health & S OHSAS 18 €saiglos



#### RECORDING HARDWARE

- 10,000 channels of Sercel 428/408 Telemetry recording hardware
- 6,000 channels of Sercel UNITE RAU eX-3 (wireless) recording equipment
- Up to 40,000 channels of Nodal recording equipment



of mining operations. Velseis work closely with mine planning staff to provide detailed stratigraphic and geotechnical analysis, highlighting faults and other stratigraphic anomalies. The information is used by mine staff for mine design, to prepare for drilling, and to help predict changing roof, floor and seam conditions.

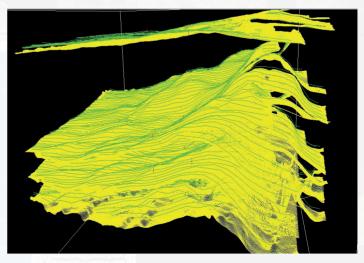
Velseis processing capabilities have rapidly expanded in past few years. With a significant and scalable computing processing facility, along with a world class suite of proprietary and licensed technology, Velseis is processing large 2D, 3D,



### SEISMIC DATA PROCESSING

Velseis Processing has provided quality seismic data processing and interpretation services to the oil & gas, coal, and mineral industries for over 25 years. We draw on a history of thousands of projects, and a staff of nearly 400 years' experience to extract valuable insights into the subsurface for our customers. Major oil & gas companies have consistently ranked our services as among the best available, and we have long been acknowledged as worldwide industry leaders in high resolution imaging for coal and minerals.

Our processing and interpretation services have been utilized by Australian Coal and Coal Seam Gas Industries for the past 15 years, and are of significant importance to the economics and safety



R&D DESIGN

DRILLING

Acquisition

PROCESSING

INTERPRETATION

www.velseis.com







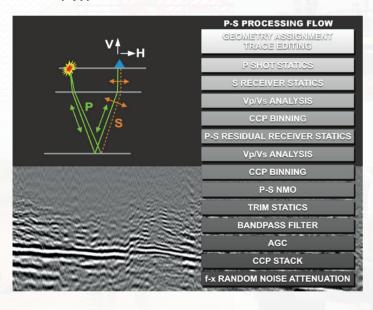


Health & Safet OHSAS 18001



and 4D seismic surveys both domestically and internationally. Whether it be land, marine, or transition zone environments, our people and technology are configured to take on the most challenging of projects. Our comprehensive technology catalogue includes solutions for:

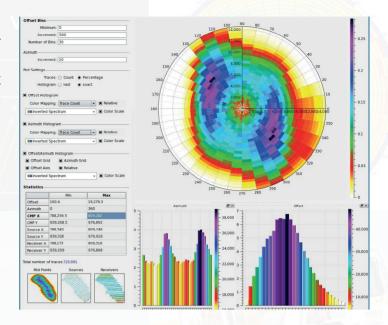
- Tomo-statics
- Cross spread noise attenuation
- COV binning
- De-Ghosting
- SRME
- Shallow Water De-multiple
- 5D Interpolation
- Azimuthally Aware Tomography
- HTI correction
- VTI/TTI Pre-Stack Time and Depth Imaging
- RTM
- FWI



#### **HEALTH AND SAFETY**

At Velseis, we strive to provide our clients with geophysical information of the highest possible quality. To achieve this aim, our operational procedures are based on rigorous geophysical procedures, and are carried out with strict quality control. This focus on technical excellence runs parallel to a stringent commitment to health, safety and the environment.

Furthermore, we aim to achieve technical products of the highest possible quality, to maintain an incident-free workplace, and to conduct our business with no adverse effects to people, to property, or to the natural environment.



#### RESEARCH AND DEVELOPMENT

Since its inception, Velseis has based its operations on sound geophysical principles and technical innovation. The company maintains an active R&D division, which carries out targeted research in applied seismology. Current research activities include embedded acquisition systems, multi-component seismology, and optimisation of high-resolution data processing.

R&D publications are available at: http://www.velseis.com/research/recent\_publications



R&D DESIGN DRILLING ACQUISITION PROCESSING INTERPRETATION

www.velseis.com





