

SAMPLE GEOLOGIST GRADUATE PROGRAMME

POSITION DESCRIPTION

Position: Geologist Graduate
Company: Solid Energy New Zealand Limited
Location: To be advised
Reports to: To be advised

PURPOSE

To work within Solid Energy's business, supporting strategic objectives, while gaining a range of experience and skills as described in the Geologist Graduate Training Programme.

Please Note: This programme can vary at each site depending on operational needs

GEOLOGIST GRADUATES - DEVELOPMENT PROGRAMME
Year 1

	<p>INDUCTION</p> <p>US 7146 Knowledge & understanding of working in underground mine</p> <p>US 17696 Knowledge & understanding of working opencast</p> <p>US 497 Occupational health & safety practice</p> <p>US 6400, 6401, 6402 First Aid Certificate</p> <p>GENERAL</p> <p>Environmental – Coal Mining & Environmental Issues</p> <p>Statutory / Legislative - Crown Minerals Act/ Resource Management Act/ HASE Act & other relevant legislation</p> <p>Solid Energy management systems - H & S / Environmental / Quality</p> <p>Surveying - working with the survey team</p> <p>EXPLORATION TECHNIQUES</p> <p>Mapping</p> <p>Trenching</p> <p>Sampling</p> <p>Drilling (surface / underground)</p> <p>Geophysical (including WellCAD)</p> <p>Logging / Records</p> <p>Structural interpretation methods / techniques</p> <p>Gas testing techniques/ Basic geotechnical-hydrological testing ie. packer.</p> <p>COAL QUALITY (Different requirements for either Resource or CQ / Production Geologist)</p> <p>Coal Quality Course</p> <p>Fundamental coal quality - typical coal quality</p> <p>Coal analysis and sampling</p> <p>Coal quality database</p> <p>Supply specifications</p> <p>Coal utilisation</p> <p>Quality control / coal quality assurance / managing out of specification ROM</p> <p>Blending coal</p> <p>GAS CERTIFICATE OF COMPETENCY (to be completed 1st yr CQ / Production Geologist & 2nd yr Resource Geologist)</p> <p>US 21281 Interpret and test for gases in an underground extraction site</p> <p>General training (Resource Geologist)</p>
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	<p>Outdoor safety 4WD Training Working around helicopters</p>
	<p>Production Activities (CQ / Production Geologist)</p>
	<p>Production activities Production rates / production planning Roof bolting patterns</p>
	<p>Personal and professional development as agreed with manager</p>
<p>Year 2</p>	
	<p>COAL RESOURCE MODELLING</p>
	<p>Intro to computer modeling & planning systems (Vulcan / AcQuire) Manual resource modeling methods Basic introduction to mine design & scheduling Computerised geological modeling Resources & reserves Data validation Data base management</p>
	<p>GENERAL</p>
	<p>Contract management</p>
	<p>Risk management</p>
	<p>Project Management System (Programme Office)</p>
	<p>GEOTECHNICAL (to be completed 1st yr CQ / Production Geologist & 2nd yr Resource Geologist)</p>
	<p>Rock / soil properties Analysis and understanding of geology hazards Understanding of ground stresses Understanding of various monitoring techniques Understanding of roof bolting principles Gas / Spontaneous combustion Water management Subsidence</p>
	<p>Personal and professional development as agreed with manager</p>
<p>Note 1: Developmental programme subject to change depending on individual and business requirements and opportunities</p>	
<p>Note 2: Developmental programme subject to six-monthly PPD achievement review interview. At this interview achievement against objectives will be reviewed and new objectives for the period ahead will be set (or re-organised if necessary). Solid Energy's Personal and Professional Development (PPD) system will be used to set objectives and measure achievements</p>	
<p>Note 3 Unit standards are subject to change as a result of NZQA review.</p>	
<p>Note 4 Some training may require attendance in out of work time.</p>	
<p>Note 5: There may be some opportunities for short term 'job swapping' between Production and Resource Geologists</p>	

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PERSON SPECIFICATION

	ESSENTIAL	PREFERRED
EDUCATION/ ACHIEVEMENTS	<ul style="list-style-type: none">• B.Sc Geology major or comparative relevant qualification	<ul style="list-style-type: none">• M.Sc Geology major or comparative relevant qualification
EXPERIENCE/ KNOWLEDGE	<ul style="list-style-type: none">• Good level of computer literacy• Good level of understanding of structural geology• Good physical fitness	<ul style="list-style-type: none">• Coal mining experience• Familiarity with Vulcan or some similar geological modelling system.
SPECIFIC SKILLS	<ul style="list-style-type: none">• Good communication ability – written, oral• Decisiveness• Analytical ability• Good at relationship building	