### Detection Limit Ranges

<table>
<thead>
<tr>
<th>Isotopic Abundance</th>
<th>Detection Limit Ranges</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 0.1 ppt</td>
<td>ELAN DRC II Limit</td>
</tr>
<tr>
<td>0.1-1 ppt</td>
<td>ELAN 9000 Limit</td>
</tr>
<tr>
<td>1-10 ppt</td>
<td></td>
</tr>
<tr>
<td>10-100 ppt</td>
<td></td>
</tr>
<tr>
<td>0.1-1 ppb</td>
<td></td>
</tr>
<tr>
<td>1-10 ppb</td>
<td></td>
</tr>
</tbody>
</table>

**Most Abundant Isotope**

- B: 11
- C: 12
- N: 14
- O: 16
- F: 19
- Ne: 20
- Al: 27
- Si: 28
- P: 31
- S: 32
- Cl: 35
- Ar: 40
- K: 39
- Ca: 40
- Sc: 45
- Ti: 48
- V: 51
- Cr: 52
- Mn: 55
- Fe: 56
- Co: 59
- Ni: 58
- Cu: 63
- Zn: 64
- Ga: 69
- Ge: 74
- As: 75
- Se: 80
- Br: 79
- Kr: 84
- Rb: 85
- Sr: 88
- Y: 89
- Zr: 90
- Nb: 93
- Mo: 99
- Tc: 100
- Ru: 102
- Rh: 103
- Pd: 106
- Ag: 107
- Cd: 113
- In: 114
- Sn: 115
- Sb: 119
- Te: 121
- I: 123
- Xe: 136
- Cs: 133
- Ba: 138
- La: 139
- Hf: 180
- Ta: 181
- W: 184
- Re: 187
- Os: 192
- Ir: 193
- Pt: 195
- Au: 197
- Hg: 202
- Ti: 205
- Pb: 208
- Bi: 209
- Po: 210
- At: 217
- Rn: 222

**Atomic Symbol**

- Se
- He

**The ELAN® Series of ICP-Mass Spectrometers**

Simplifying Ultratrace Analysis

**DRC-e performance typically between DRC II and ELAN 9000**
### Relative Abundance of the Natural Isotopes

<table>
<thead>
<tr>
<th>Isotope</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>Isotope</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>H</td>
<td>99.965</td>
<td>0.015</td>
<td>He</td>
<td>0.000137</td>
<td>He</td>
<td>99.999863</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Li</td>
<td>61</td>
<td>62</td>
<td>63</td>
<td>Cu</td>
<td>69.17</td>
<td>Zn</td>
<td>48.6</td>
<td>Ni</td>
<td>1.140</td>
<td>Ni</td>
</tr>
<tr>
<td>Si</td>
<td>64</td>
<td>65</td>
<td>66</td>
<td>Al</td>
<td>30.83</td>
<td>Zn</td>
<td>27.9</td>
<td>Ni</td>
<td>0.926</td>
<td>Sn</td>
</tr>
<tr>
<td>Sb</td>
<td>67</td>
<td>68</td>
<td>69</td>
<td>Ge</td>
<td>21.23</td>
<td>Zn</td>
<td>18.8</td>
<td>Ga</td>
<td>60.108</td>
<td>Ba</td>
</tr>
<tr>
<td>I</td>
<td>71</td>
<td>72</td>
<td>73</td>
<td>Ga</td>
<td>39.892</td>
<td>Ba</td>
<td>0.101</td>
<td>Cs</td>
<td>100</td>
<td>Ca</td>
</tr>
<tr>
<td>Sr</td>
<td>74</td>
<td>75</td>
<td>76</td>
<td>Br</td>
<td>50.69</td>
<td>Br</td>
<td>51.54</td>
<td>Br</td>
<td>49.31</td>
<td>As</td>
</tr>
<tr>
<td>Rb</td>
<td>77</td>
<td>78</td>
<td>79</td>
<td>Ca</td>
<td>92.23</td>
<td>Sr</td>
<td>7.00</td>
<td>Sr</td>
<td>82.58</td>
<td>Rb</td>
</tr>
<tr>
<td>Ba</td>
<td>81</td>
<td>82</td>
<td>83</td>
<td>Mg</td>
<td>78.99</td>
<td>Mg</td>
<td>78.99</td>
<td>Ba</td>
<td>15.74</td>
<td>Ca</td>
</tr>
<tr>
<td>Sc</td>
<td>84</td>
<td>85</td>
<td>86</td>
<td>Zr</td>
<td>11.22</td>
<td>Mo</td>
<td>14.84</td>
<td>Nb</td>
<td>100</td>
<td>Nd</td>
</tr>
<tr>
<td>Ti</td>
<td>87</td>
<td>88</td>
<td>89</td>
<td>Zr</td>
<td>17.15</td>
<td>Mo</td>
<td>14.84</td>
<td>Nb</td>
<td>100</td>
<td>Nd</td>
</tr>
<tr>
<td>V</td>
<td>90</td>
<td>91</td>
<td>92</td>
<td>Zr</td>
<td>17.15</td>
<td>Mo</td>
<td>14.84</td>
<td>Nb</td>
<td>100</td>
<td>Nd</td>
</tr>
<tr>
<td>Cr</td>
<td>93</td>
<td>94</td>
<td>95</td>
<td>Zr</td>
<td>17.15</td>
<td>Mo</td>
<td>14.84</td>
<td>Nb</td>
<td>100</td>
<td>Nd</td>
</tr>
<tr>
<td>Mn</td>
<td>96</td>
<td>97</td>
<td>98</td>
<td>Zr</td>
<td>17.15</td>
<td>Mo</td>
<td>14.84</td>
<td>Nb</td>
<td>100</td>
<td>Nd</td>
</tr>
<tr>
<td>Fe</td>
<td>99</td>
<td>100</td>
<td>K</td>
<td>93.2581</td>
<td>Ca</td>
<td>96.941</td>
<td>Ca</td>
<td>96.941</td>
<td>Ca</td>
<td>96.941</td>
</tr>
</tbody>
</table>

---