

Pine Cliff HSE&R KPI Tracking

| | Units | 2016 | 2017 | 2018 | 2019 | 2018 Group Average* |
|--|-------------------------|------------|------------|-----------|------------|---------------------|
| Net Oil Production | bbbls/day | 1,677 | 1,122 | 1,166 | 1,521 | 27,617 |
| Net Production, Annual Averages | BOE/d | 22,465 | 21,408 | 19,684 | 19,142 | 87,030 |
| Fresh Water Withdrawal | m3 | 0 | 0 | 3,176 | 6,627 | 605,727 |
| Non-Potable Water Withdrawal | m3 | 0 | 0 | 0 | 0 | Insufficient Data** |
| Fresh Water Intensity | m3/mBOE | 0 | 0 | 0.4 | 0 | 26 |
| Total Gross Active Wells | Gross Wells | 7,642 | 7,682 | 7,659 | 7,943 | 3,173 |
| Total Gross Inactive Wells | Gross Wells | 1,468 | 1,410 | 1,458 | 1,372 | 1,418 |
| Gross Active/Inactive (not including Abandoned with no rec cert) | % | 83.9% | 84.5% | 84.0% | 84.5% | 69.1% |
| Total Net Active Wells | Net Wells | 5,674 | 5,697 | 5,671 | 5,968 | 1,901 |
| Total Net Inactive Wells | Net Wells | 1,087 | 1,035 | 1,028 | 996 | 869 |
| Net Active/Inactive | % | 83.9% | 84.6% | 84.7% | 85.7% | 54.3% |
| Total Gross Abandoned Wells but no Rec Cert | Gross Wells | 741 | 797 | 853 | 875 | Insufficient Data** |
| Total Net Abandoned Wells but no Rec Cert | Net Wells | 533 | 585 | 623 | 647 | Insufficient Data** |
| Annual Reclamation Certificates Received | Gross Wells | 26 | 40 | 9 | 6 | 28 |
| Number of reportable spills | # | 4 | 2 | 4 | 2 | 16 |
| Total volume of reportable spills | m3 | 5.1 | 4.6 | 11.2 | 1.4 | 277.5 |
| Average reportable spill volume | m3 | 1.3 | 2.3 | 2.8 | 0.7 | 6.3 |
| Number of reportable spills/production | spills/MMBoe | 0.5 | 0.26 | 0.56 | 0.29 | 1.25 |
| Volume of reportable spills/production | m3/MMBoe | 0.62 | 0.59 | 1.56 | 0.20 | 11.10 |
| Number of Pipeline Leaks | # | 4 | 1 | 3 | 2 | Insufficient Data** |
| Total Spill Volume caused by P/L leaks | m3 | 5.1 | 0.1 | 1.2 | 1.4 | Insufficient Data** |
| KM of Pipeline In operation | km | 7,075 | 7,075 | 7,031 | 7567 | Insufficient Data** |
| Number of pipeline leaks/1000 km of pipeline | #/1000 km | 0.57 | 0.14 | 0.43 | 0.26 | Insufficient Data** |
| Volume of pipeline leaks/ 1000 km of pipeline | m3/1000 km | 0.72 | 0.01 | 0.17 | 0.19 | Insufficient Data** |
| Number of fines and penalties | \$ | 0 | 0 | 0 | 0 | Insufficient Data** |
| Direct GHG Emissions | tonnesCO ₂ e | 208,731 | 194,451 | 172,914 | 179,393 | 662,138 |
| Direct GHG Emissions Intensity | kgCO ₂ e/Boe | 25.5 | 24.9 | 24.1 | 25.7 | 24.5 |
| Indirect GHG Emissions | tonnesCO ₂ e | 17,474 | 13,235 | 14,128 | 17,573 | 204,790 |
| Indirect GHG Emissions Intensity | kgCO ₂ e/Boe | 2.1 | 1.7 | 2.0 | 2.5 | 6.6 |
| Total GHG Emissions Intensity | kgCO ₂ e/Boe | 27.6 | 26.6 | 26.0 | 28.2 | 31.1 |
| Nox Emissions | tonnes | 6,131.3 | 5,652.2 | 5,045.1 | 5,025.2 | 2,116 |
| Nox Emissions Intensity | tonnes/MMBoe | 747.7 | 723.4 | 702.2 | 719.2 | 60.7 |
| Sox Emissions | tonnes | 30.7 | 28.9 | 27.1 | 24.9 | 488.7 |
| Sox Emissions Intensity | Tonnes/MMBoe | 3.7 | 3.7 | 3.8 | 3.6 | 32.1 |
| Total Gas Flared | e3m3 | 128.3 | 99.6 | 140.6 | 217.4 | 26,334 |
| Gas Flared as a % of Production | % | 0.0092% | 0.0075% | 0.0115% | 0.0183% | 0.4884% |
| Total Gas Flared Emissions Intensity | e3m3/MMBoe | 15.6 | 12.7 | 19.6 | 31.1 | 2,325 |
| Total Gas Flared Emissions Intensity | mcf/bbls oil and NGL | 0.0074 | 0.0086 | 0.0117 | 0.0139 | 0.1036 |
| Total Gas Vented | e3m3 | 251.2 | 361.7 | 276.8 | 193.9 | 13,374 |
| Gas Vented as a % of Production | % | 0.0181% | 0.0273% | 0.0227% | 0.0164% | 0.2481% |
| Total Gas Vented Emissions Intensity | e3m3/MMBoe | 30.6 | 46.3 | 38.5 | 27.8 | 631 |
| Total Gas Vented Emissions Intensity | mcf/bbls oil and NGL | 0.0146 | 0.0313 | 0.0231 | 0.0124 | 0.0333 |
| Lost-time Injury (Employees and Contractors) | # | 0 | 0 | 1 | 0 | 2 |
| Recordable Injury Incidents | # | 2 | 6 | 3 | 0 | 13 |
| Lost-time Frequency (Employees and Contractors) | #/200,000 man hours | 0.0 | 0.0 | 0.2 | 0 | 0.1 |
| Recordable Injury Frequency (Employees and Contractors) | #/200,000 man hours | 0.41 | 1.36 | 0.69 | 0 | 0.66 |
| Fatalities (Employees and Contractors) | # | 0 | 0 | 0 | 0 | 0 |
| Calgary Staff | # | 45 | 45 | 42 | 39 | 72 |
| Field Staff | # | 100 | 99 | 97 | 95 | 76 |
| Total Staff (Employees and Contractors) | # | 145 | 144 | 139 | 134 | 259 |
| Staff Exposure Hours | # | 302,760 | 300,672 | 290,232 | 279,792 | Insufficient Data** |
| Third Party Calculated Exposure Hours | # | 655,387 | 576,649 | 579,217 | 610,080 | Insufficient Data** |
| Total Exposure Hours | # | 958,147 | 877,321 | 869,449 | 889,872 | 1,920,664 |
| Gross ARO Spending | \$ | 190,377 | 2,503,126 | 3,034,740 | 2,113,810 | Insufficient Data** |
| Net ARO Spending | \$ | 166,669 | 2,423,023 | 2,739,097 | 1,929,446 | Insufficient Data** |
| Annual Corporate Cash Flow | \$ | 12,632,000 | 25,009,000 | 8,616,000 | 15,536,000 | Insufficient Data** |
| % ARO Spend as a function of Cash Flow | | 1.3% | 9.7% | 31.8% | 12.4% | Insufficient Data** |

* 2018 Group Average includes reported data from NuVista Energy Ltd, Tourmaline Oil Corp, Cardinal Energy Ltd, Torc Oil and Gas Ltd, Peyto Exploration and Whitecap Resources Inc

** 2018 Group Average was included only if at least three of the six companies provided data for that category; otherwise it was listed as Insufficient Data