#### FLOTEK INDUSTRIES INC/CN/

Form 10-K

March 08, 2019

```
false--12-31FY20182018-12-3110-K0000928054YesfalseAccelerated FilerFLOTEK INDUSTRIES
INC/CN/falsetrueNoNo0.0010.0010.950.95P3M673000119000000.00010.000180000000800000005675529357342279P2Y00
0000928054\ 2018-01-01\ 2018-12-31\ 0000928054\ 2018-06-30\ 0000928054\ 2019-02-28\ 0000928054\ 2017-12-31
0000928054\ 2018 - 12 - 31\ 0000928054\ 2016 - 01 - 01\ 2016 - 12 - 31\ 0000928054\ 2017 - 01 - 01\ 2017 - 12 - 31\ 0000928054
us-gaap:AccumulatedOtherComprehensiveIncomeMember 2016-01-01 2016-12-31 0000928054
us-gaap:AdditionalPaidInCapitalMember 2017-12-31 0000928054 us-gaap:AdditionalPaidInCapitalMember
2016-12-31 0000928054 us-gaap: Accumulated Other Comprehensive Income Member 2017-01-01 2017-12-31
0000928054 us-gaap:CommonStockMember 2016-12-31 0000928054 us-gaap:TreasuryStockMember 2017-01-01
2017-12-31 0000928054 us-gaap: Additional Paid In Capital Member 2017-01-01 2017-12-31 0000928054
us-gaap:AdditionalPaidInCapitalMember 2016-01-01 2016-12-31 0000928054 us-gaap:TreasuryStockMember
2017-12-31 0000928054 us-gaap:NoncontrollingInterestMember 2015-12-31 0000928054
us-gaap:AdditionalPaidInCapitalMember 2015-12-31 0000928054 us-gaap:NoncontrollingInterestMember
2018-01-01 2018-12-31 0000928054 us-gaap:NoncontrollingInterestMember 2018-12-31 0000928054
us-gaap:TreasuryStockMember 2018-01-01 2018-12-31 0000928054 us-gaap:CommonStockMember 2016-01-01
2016-12-31 0000928054 us-gaap:CommonStockMember 2018-12-31 0000928054 us-gaap:RetainedEarningsMember
2015-12-31 0000928054 ftk:InternationalArtificialLiftLLCMember 2016-01-01 2016-12-31 0000928054
us-gaap:AdditionalPaidInCapitalMember 2018-01-01 2018-12-31 0000928054 us-gaap:TreasuryStockMember
2015-12-31 0000928054 us-gaap: Accumulated Other Comprehensive Income Member 2015-12-31 0000928054
2016-12-31 0000928054 us-gaap:TreasuryStockMember 2018-12-31 0000928054
ftk:InternationalArtificialLiftLLCMember us-gaap:CommonStockMember 2016-01-01 2016-12-31 0000928054
us-gaap:TreasuryStockMember 2016-01-01 2016-12-31 0000928054 ftk:InternationalPolymericsIncMember
us-gaap; Additional Paid In Capital Member 2017-01-01 2017-12-31 0000928054 us-gaap; Common Stock Member
2017-01-01 2017-12-31 0000928054 us-gaap:CommonStockMember 2017-12-31 0000928054
us-gaap:RetainedEarningsMember 2016-01-01 2016-12-31 0000928054 us-gaap:CommonStockMember 2015-12-31
0000928054 us-gaap: Accumulated Other Comprehensive Income Member 2017-12-31 0000928054
us-gaap:RetainedEarningsMember 2016-12-31 0000928054 us-gaap:RetainedEarningsMember 2018-12-31
0000928054 us-gaap: Additional Paid In Capital Member 2018-12-31 0000928054
ftk:InternationalArtificialLiftLLCMember us-gaap:AdditionalPaidInCapitalMember 2016-01-01 2016-12-31
0000928054 ftk:InternationalPolymericsIncMember us-gaap:CommonStockMember 2017-01-01 2017-12-31
0000928054 us-gaap: Accumulated Other Comprehensive Income Member 2018-12-31 0000928054 2015-12-31
0000928054 us-gaap:RetainedEarningsMember 2017-01-01 2017-12-31 0000928054
us-gaap:AccumulatedOtherComprehensiveIncomeMember 2018-01-01 2018-12-31 0000928054
us-gaap:TreasuryStockMember 2016-12-31 0000928054 us-gaap:CommonStockMember 2018-01-01 2018-12-31
0000928054 us-gaap:NoncontrollingInterestMember 2017-12-31 0000928054 us-gaap:NoncontrollingInterestMember
2016-12-31 0000928054 us-gaap: Accumulated Other Comprehensive Income Member 2016-12-31 0000928054
us-gaap:RetainedEarningsMember 2017-12-31 0000928054 us-gaap:RetainedEarningsMember 2018-01-01
2018-12-31 0000928054 ftk:InternationalPolymericsIncMember 2017-01-01 2017-12-31 0000928054
srt:MinimumMember us-gaap:ComputerSoftwareIntangibleAssetMember 2018-01-01 2018-12-31 0000928054
us-gaap:AccountingStandardsUpdate201602Member us-gaap:ScenarioForecastMember 2019-01-01 0000928054
srt:MaximumMember 2018-01-01 2018-12-31 0000928054 srt:MaximumMember
us-gaap:ComputerSoftwareIntangibleAssetMember 2018-01-01 2018-12-31 0000928054 2015-01-01 2015-12-31
0000928054 us-gaap:FurnitureAndFixturesMember 2018-01-01 2018-12-31 0000928054 srt:MinimumMember
2018-01-01 2018-12-31 0000928054 srt:MinimumMember us-gaap:OtherMachineryAndEquipmentMember
2018-01-01 2018-12-31 0000928054 srt:MinimumMember ftk:BuildingsAndLeaseholdImprovementsMember
2018-01-01 2018-12-31 0000928054 srt:MinimumMember us-gaap:TransportationEquipmentMember 2018-01-01
2018-12-31 0000928054 srt:MaximumMember ftk:BuildingsAndLeaseholdImprovementsMember 2018-01-01
2018-12-31 0000928054 srt:MinimumMember ftk:ComputerEquipmentandSoftwareMember 2018-01-01 2018-12-31
0000928054 srt:MaximumMember us-gaap:OtherMachineryAndEquipmentMember 2018-01-01 2018-12-31
```

```
0000928054 srt:MaximumMember us-gaap:TransportationEquipmentMember 2018-01-01 2018-12-31 0000928054
srt:MaximumMember ftk:ComputerEquipmentandSoftwareMember 2018-01-01 2018-12-31 0000928054
us-gaap:DiscontinuedOperationsDisposedOfBySaleMember ftk:ProductionTechnologiesMember 2017-08-16
0000928054 ftk:NationalOilwellVarcoL.P.Member us-gaap:DiscontinuedOperationsDisposedOfBySaleMember
ftk:DrillingMember 2017-05-22 0000928054 ftk:DrillingTechnologiesAndProductionTechnologiesMember
2017-12-31 0000928054 ftk:NationalOilwellVarcoL.P.Member
us-gaap:DiscontinuedOperationsDisposedOfBySaleMember ftk:DrillingMember 2017-05-22 2017-05-22 0000928054
us-gaap:DiscontinuedOperationsDisposedOfBySaleMember ftk:ProductionTechnologiesMember 2017-05-23
0000928054 us-gaap:DiscontinuedOperationsHeldForSaleOrDisposedOfBySaleMember ftk:DrillingMember
2016-12-30 2016-12-30 0000928054 us-gaap:DiscontinuedOperationsHeldforsaleMember
ftk:ConsumerandIndustrialChemicalTechnologiesMember 2017-12-31 0000928054
us-gaap:DiscontinuedOperationsHeldforsaleMember ftk:ConsumerandIndustrialChemicalTechnologiesMember
2018-12-31 0000928054 us-gaap:DiscontinuedOperationsHeldforsaleMember ftk:ProductionTechnologiesMember
2016-01-01 2016-12-31 0000928054 us-gaap:DiscontinuedOperationsHeldforsaleMember ftk:DrillingMember
2017-01-01 2017-12-31 0000928054 us-gaap:DiscontinuedOperationsHeldforsaleMember
ftk:ProductionTechnologiesMember 2017-01-01 2017-12-31 0000928054
us-gaap:DiscontinuedOperationsHeldforsaleMember ftk:DrillingMember 2016-01-01 2016-12-31 0000928054
us-gaap:DiscontinuedOperationsHeldforsaleMember ftk:ConsumerandIndustrialChemicalTechnologiesMember
2017-01-01 2017-12-31 0000928054 us-gaap:DiscontinuedOperationsHeldforsaleMember
ftk:ConsumerandIndustrialChemicalTechnologiesMember 2018-01-01 2018-12-31 0000928054
us-gaap:DiscontinuedOperationsHeldforsaleMember ftk:ConsumerandIndustrialChemicalTechnologiesMember
2016-01-01 2016-12-31 0000928054 country:US 2015-12-31 0000928054 2016-01-01 2016-03-31 0000928054
country:US 2016-04-01 0000928054 ftk:DrillingMember 2016-01-01 2016-03-31 0000928054
ftk:ProductionTechnologiesMember 2016-01-01 2016-03-31 0000928054 2016-04-01 2016-06-30 0000928054
2016-10-01 2016-12-31 0000928054 2016-07-01 2016-09-30 0000928054
us-gaap:DisposalGroupDisposedOfBySaleNotDiscontinuedOperationsMember
ftk:BusinessLineWithinEnergyChemistryTechnologiesSegmentMember 2018-09-10 2018-09-10 0000928054
us-gaap:DisposalGroupHeldforsaleNotDiscontinuedOperationsMember
ftk:BusinessLineWithinEnergyChemistryTechnologiesSegmentMember 2018-04-01 2018-06-30 0000928054
us-gaap:DisposalGroupDisposedOfBySaleNotDiscontinuedOperationsMember
ftk:BusinessLineWithinEnergyChemistryTechnologiesSegmentMember 2018-07-01 2018-09-30 0000928054
us-gaap:DisposalGroupHeldforsaleNotDiscontinuedOperationsMember
ftk:BusinessLineWithinEnergyChemistryTechnologiesSegmentMember 2017-12-31 0000928054
ftk:InternationalPolymericsIncMember 2016-07-27 0000928054 ftk:InternationalPolymericsIncMember 2016-07-27
2016-07-27 0000928054 us-gaap:ProductMember 2016-01-01 2016-12-31 0000928054 us-gaap:ServiceMember
2017-01-01 2017-12-31 0000928054 us-gaap:ServiceMember 2018-01-01 2018-12-31 0000928054
us-gaap:ProductMember 2017-01-01 2017-12-31 0000928054 us-gaap:ServiceMember 2016-01-01 2016-12-31
0000928054 us-gaap:ProductMember 2018-01-01 2018-12-31 0000928054
us-gaap;BuildingAndBuildingImprovementsMember 2018-12-31 0000928054 us-gaap;FurnitureAndFixturesMember
2017-12-31 0000928054 ftk:ComputerEquipmentandSoftwareMember 2017-12-31 0000928054
us-gaap: AssetUnderConstructionMember 2018-12-31 0000928054
us-gaap:BuildingAndBuildingImprovementsMember 2017-12-31 0000928054
us-gaap:MachineryAndEquipmentMember 2017-12-31 0000928054 us-gaap:LandMember 2017-12-31 0000928054
ftk:ComputerEquipmentandSoftwareMember 2018-12-31 0000928054 us-gaap:TransportationEquipmentMember
2018-12-31 0000928054 us-gaap:MachineryAndEquipmentMember 2018-12-31 0000928054
us-gaap:TransportationEquipmentMember 2017-12-31 0000928054 us-gaap:LandMember 2018-12-31 0000928054
us-gaap:FurnitureAndFixturesMember 2018-12-31 0000928054 us-gaap:AssetUnderConstructionMember 2017-12-31
0000928054 ftk:ChemicalsMember 2017-12-31 0000928054 ftk:ChemicalsMember 2018-12-31 0000928054
ftk:ChemicalsMember 2018-01-01 2018-12-31 0000928054 ftk:ChemicalsMember 2016-12-31 0000928054
ftk:ChemicalsMember 2017-01-01 2017-12-31 0000928054 ftk:EnergyChemicalTechnologiesMember 2018-04-01
2018-06-30 0000928054 us-gaap:TradeNamesMember 2017-12-31 0000928054 us-gaap:TradeNamesMember
```

```
2017-12-31 0000928054 us-gaap:CustomerListsMember 2017-12-31 0000928054
ftk:DeferredFinancingCostsMember 2018-12-31 0000928054 us-gaap:PatentedTechnologyMember 2017-12-31
0000928054 us-gaap:TradeNamesMember 2018-12-31 0000928054 us-gaap:TradeNamesMember 2018-12-31
0000928054 us-gaap:PatentedTechnologyMember 2018-12-31 0000928054 us-gaap:CustomerListsMember
2018-12-31 0000928054 ftk:AcquiredIntangibleAssetsMember 2018-12-31 0000928054
ftk:AcquiredIntangibleAssetsMember 2017-12-31 0000928054 ftk:DeferredFinancingCostsMember 2017-12-31
0000928054 ftk:RestatedRevolvingCreditTermLoanandSecurityAgreementMember us-gaap:LineOfCreditMember
2018-06-13 0000928054 ftk:RestatedRevolvingCreditTermLoanandSecurityAgreementMember
us-gaap:NotesPayableToBanksMember 2016-09-30 0000928054 us-gaap:RevolvingCreditFacilityMember
ftk:RestatedRevolvingCreditTermLoanandSecurityAgreementMember us-gaap:LineOfCreditMember
us-gaap:BaseRateMember 2018-12-31 0000928054 us-gaap:RevolvingCreditFacilityMember
ftk:RestatedRevolvingCreditTermLoanandSecurityAgreementMember us-gaap:LineOfCreditMember 2018-12-31
0000928054 ftk:RestatedRevolvingCreditTermLoanandSecurityAgreementMember 2013-05-10 2013-05-10
0000928054 ftk:RestatedRevolvingCreditTermLoanandSecurityAgreementMember
us-gaap:NotesPayableToBanksMember 2016-09-30 2016-09-30 0000928054 srt:MaximumMember
us-gaap:RevolvingCreditFacilityMember ftk:RestatedRevolvingCreditTermLoanandSecurityAgreementMember
us-gaap:LineOfCreditMember us-gaap:LondonInterbankOfferedRateLIBORMember 2018-01-01 2018-12-31
0000928054 us-gaap:RevolvingCreditFacilityMember
ftk:RestatedRevolvingCreditTermLoanandSecurityAgreementMember us-gaap:LineOfCreditMember 2018-01-01
2018-12-31 0000928054 ftk:RestatedRevolvingCreditTermLoanandSecurityAgreementMember
us-gaap:LineOfCreditMember 2018-12-31 0000928054 us-gaap:RevolvingCreditFacilityMember
ftk:RestatedRevolvingCreditTermLoanandSecurityAgreementMember us-gaap:LetterOfCreditMember 2013-05-10
0000928054 srt:MinimumMember us-gaap:RevolvingCreditFacilityMember
ftk:RestatedRevolvingCreditTermLoanandSecurityAgreementMember us-gaap:LineOfCreditMember
us-gaap:BaseRateMember 2018-01-01 2018-12-31 0000928054 us-gaap:RevolvingCreditFacilityMember
ftk:RestatedRevolvingCreditTermLoanandSecurityAgreementMember us-gaap:LineOfCreditMember
us-gaap:LondonInterbankOfferedRateLIBORMember 2018-12-31 0000928054
us-gaap:RevolvingCreditFacilityMember ftk:RestatedRevolvingCreditTermLoanandSecurityAgreementMember
us-gaap:LineOfCreditMember 2018-06-13 2018-06-13 0000928054 srt:MaximumMember
us-gaap:RevolvingCreditFacilityMember ftk:RestatedRevolvingCreditTermLoanandSecurityAgreementMember
us-gaap:LineOfCreditMember us-gaap:BaseRateMember 2018-01-01 2018-12-31 0000928054 srt:MinimumMember
us-gaap:RevolvingCreditFacilityMember ftk:RestatedRevolvingCreditTermLoanandSecurityAgreementMember
us-gaap:LineOfCreditMember us-gaap:LondonInterbankOfferedRateLIBORMember 2018-01-01 2018-12-31
0000928054 ftk:RestatedRevolvingCreditTermLoanandSecurityAgreementMember us-gaap:LineOfCreditMember
2013-05-10 0000928054 ftk:RestatedRevolvingCreditTermLoanandSecurityAgreementMember
us-gaap:LineOfCreditMember 2018-06-13 2018-06-13 0000928054
ftk:RestatedRevolvingCreditTermLoanandSecurityAgreementMember 2018-01-01 2018-12-31 0000928054
us-gaap:RevolvingCreditFacilityMember ftk:RestatedRevolvingCreditTermLoanandSecurityAgreementMember
us-gaap:LineOfCreditMember 2013-05-10 0000928054 us-gaap:RevolvingCreditFacilityMember 2018-12-31
0000928054 us-gaap:RevolvingCreditFacilityMember 2017-12-31 0000928054
us-gaap:EstimateOfFairValueFairValueDisclosureMember 2018-12-31 0000928054
us-gaap:CarryingReportedAmountFairValueDisclosureMember 2017-12-31 0000928054
us-gaap:EstimateOfFairValueFairValueDisclosureMember 2017-12-31 0000928054
us-gaap:CarryingReportedAmountFairValueDisclosureMember 2018-12-31 0000928054
us-gaap:RestrictedStockUnitsRSUMember 2018-01-01 2018-12-31 0000928054
us-gaap:RestrictedStockUnitsRSUMember 2016-01-01 2016-12-31 0000928054
us-gaap:RestrictedStockUnitsRSUMember 2017-01-01 2017-12-31 0000928054
us-gaap:EmployeeStockOptionMember 2016-01-01 2016-12-31 0000928054 us-gaap:EmployeeStockOptionMember
2017-01-01 2017-12-31 0000928054 us-gaap:EmployeeStockOptionMember 2018-01-01 2018-12-31 0000928054
2018-07-01 2018-12-31 0000928054 ftk:ShareRepurchaseProgramNovember2012Member 2017-01-01 2017-12-31
0000928054 ftk:ShareRepurchaseProgramNovember2012Member 2016-01-01 2016-12-31 0000928054
```

```
us-gaap:RestrictedStockMember 2018-12-31 0000928054 2009-11-09 0000928054 ftk:Plan6Member 2018-12-31
0000928054 us-gaap:RestrictedStockMember 2018-01-01 2018-12-31 0000928054 ftk:Plan5Member 2018-12-31
0000928054 ftk:ShareRepurchaseProgramJune2015Member 2015-06-30 0000928054
us-gaap:EmployeeStockMember 2012-05-18 2012-05-18 0000928054 ftk:RestrictedStockPerformancebasedMember
2018-01-01 2018-12-31 0000928054 ftk:RestrictedStockTimeVestingMember 2018-01-01 2018-12-31 0000928054
us-gaap:RestrictedStockMember 2017-01-01 2017-12-31 0000928054 us-gaap:EmployeeStockMember 2016-01-01
2016-12-31 0000928054 us-gaap:EmployeeStockMember 2012-05-18 0000928054 us-gaap:RestrictedStockMember
2016-01-01 2016-12-31 0000928054 us-gaap:EmployeeStockMember 2018-01-01 2018-12-31 0000928054
ftk:ShareRepurchaseProgramNovember2012Member 2012-11-30 0000928054
ftk:ShareRepurchaseProgramNovember2012Member 2012-11-01 2018-12-31 0000928054
us-gaap:RestrictedStockUnitsRSUMember 2018-12-31 0000928054 2009-11-09 2009-11-09 0000928054
us-gaap:EmployeeStockMember 2017-01-01 2017-12-31 0000928054 ftk:Plan3Member 2018-12-31 0000928054
ftk:Plan4Member 2018-12-31 0000928054 ftk:ShareRepurchaseProgramJune2015Member 2015-06-01 2018-12-31
0000928054 ftk:AwardDate2018Member us-gaap:RestrictedStockUnitsRSUMember 2018-01-01 2018-12-31
0000928054 ftk:AwardDate2017Member us-gaap:RestrictedStockUnitsRSUMember 2018-01-01 2018-12-31
0000928054 us-gaap:RestrictedStockUnitsRSUMember 2017-12-31 0000928054 us-gaap:RestrictedStockMember
2017-12-31 0000928054 ftk:DefinedContributionPlanMatchingRangeupto2PercentMember 2018-01-01 2018-12-31
0000928054 ftk:PunitiveLawsuitsFiledintheUnitedStatesDistrictCourtfortheSouthernDistrictofTexasMember
2015-11-01 2015-11-30 0000928054 ftk:DerivativeLawsuitAgainstOfficersandDirectorsMember 2016-01-01
2016-01-31 0000928054 ftk:GatesCapitalManagementIncMember 2016-12-01 2016-12-31 0000928054
ftk:DefinedContributionPlanMatchingRangefrom4to8PercentMember srt:MaximumMember 2018-01-01 2018-12-31
0000928054 ftk:DerivativeLawsuitFiledinDistrictCourtofHarrisCountyTexasMember 2016-01-01 2016-01-31
0000928054 ftk:DerivativeLawsuitFiledinDistrictCourtofHarrisCountyTexasMember 2016-02-01 2018-12-31
0000928054 ftk:DefinedContributionPlanMatchingRangefrom4to8PercentMember 2018-01-01 2018-12-31
0000928054 ftk:PunitiveLawsuitsFiledintheUnitedStatesDistrictCourtfortheSouthernDistrictofTexasMember
2016-01-01 2016-01-31 0000928054 ftk:DefinedContributionPlanMatchingRangefrom4to8PercentMember
srt:MinimumMember 2018-01-01 2018-12-31 0000928054 us-gaap:CorporateNonSegmentMember 2016-01-01
2016-12-31 0000928054 us-gaap: Operating Segments Member ftk: Chemicals Member 2016-01-01 2016-12-31
0000928054 us-gaap:CorporateNonSegmentMember 2018-01-01 2018-12-31 0000928054
us-gaap:OperatingSegmentsMember ftk:ChemicalsMember 2018-01-01 2018-12-31 0000928054
us-gaap:CorporateNonSegmentMember 2017-01-01 2017-12-31 0000928054 us-gaap:OperatingSegmentsMember
ftk:ChemicalsMember 2017-01-01 2017-12-31 0000928054 ftk:CustomerBMember
us-gaap:SalesRevenueNetMember us-gaap:CustomerConcentrationRiskMember 2016-01-01 2016-12-31 0000928054
ftk:CustomerCMember us-gaap:SalesRevenueNetMember us-gaap:CustomerConcentrationRiskMember 2016-01-01
2016-12-31 0000928054 ftk:CustomerBMember us-gaap:SalesRevenueNetMember
us-gaap:CustomerConcentrationRiskMember 2018-01-01 2018-12-31 0000928054 ftk:CustomerCMember
us-gaap:SalesRevenueNetMember us-gaap:CustomerConcentrationRiskMember 2017-01-01 2017-12-31 0000928054
ftk:CustomerMember us-gaap;SalesRevenueNetMember us-gaap;CustomerConcentrationRiskMember 2018-01-01
2018-12-31 0000928054 country:US 2017-01-01 2017-12-31 0000928054 country:US 2016-01-01 2016-12-31
0000928054 us-gaap:NonUsMember 2018-01-01 2018-12-31 0000928054 us-gaap:NonUsMember 2016-01-01
2016-12-31 0000928054 country:US 2018-01-01 2018-12-31 0000928054 us-gaap:NonUsMember 2017-01-01
2017-12-31 0000928054 us-gaap:OperatingSegmentsMember ftk;ChemicalsMember 2017-12-31 0000928054
us-gaap:CorporateNonSegmentMember 2018-12-31 0000928054 us-gaap:OperatingSegmentsMember 2018-12-31
0000928054 us-gaap:OperatingSegmentsMember ftk:ChemicalsMember 2018-12-31 0000928054
us-gaap:OperatingSegmentsMember 2017-12-31 0000928054 us-gaap:CorporateNonSegmentMember 2017-12-31
0000928054\ 2017-04-01\ 2017-06-30\ 0000928054\ 2018-04-01\ 2018-06-30\ 0000928054\ 2018-10-01\ 2018-12-31
0000928054\ 2017-10-01\ 2017-12-31\ 0000928054\ 2017-07-01\ 2017-09-30\ 0000928054\ 2018-07-01\ 2018-09-30
0000928054 2017-01-01 2017-03-31 0000928054 2018-01-01 2018-03-31 0000928054 srt:MaximumMember
us-gaap:DiscontinuedOperationsDisposedOfBySaleMember
ftk:ConsumerandIndustrialChemicalTechnologiesMember us-gaap:SubsequentEventMember 2019-02-28 0000928054
ftk:WorkingAdjustmentPeriod2Member us-gaap:DiscontinuedOperationsDisposedOfBySaleMember
```

ftk:ConsumerandIndustrialChemicalTechnologiesMember us-gaap:SubsequentEventMember 2019-02-28 2019-02-28 0000928054 ftk:WorkingAdjustmentPeriod1Member us-gaap:DiscontinuedOperationsDisposedOfBySaleMember ftk:ConsumerandIndustrialChemicalTechnologiesMember us-gaap:SubsequentEventMember 2019-02-28 2019-02-28 0000928054 ftk:WorkingAdjustmentPeriod24Member us-gaap:DiscontinuedOperationsDisposedOfBySaleMember ftk:ConsumerandIndustrialChemicalTechnologiesMember us-gaap:SubsequentEventMember 2019-02-28 0000928054 us-gaap:DiscontinuedOperationsDisposedOfBySaleMember

ftk:ConsumerandIndustrialChemicalTechnologiesMember us-gaap:SubsequentEventMember 2019-02-28 0000928054 ftk:WorkingAdjustmentPeriod1Member us-gaap:DiscontinuedOperationsDisposedOfBySaleMember

ftk:ConsumerandIndustrialChemicalTechnologiesMember us-gaap:SubsequentEventMember 2019-02-28 0000928054 ftk:WorkingAdjustmentPeriod4Member us-gaap:DiscontinuedOperationsDisposedOfBySaleMember

ftk:ConsumerandIndustrialChemicalTechnologiesMember us-gaap:SubsequentEventMember 2019-02-28 2019-02-28 0000928054 srt:MinimumMember us-gaap:DiscontinuedOperationsDisposedOfBySaleMember

ftk:ConsumerandIndustrialChemicalTechnologiesMember us-gaap:SubsequentEventMember 2019-02-28 0000928054 ftk:WorkingAdjustmentPeriod3Member us-gaap:DiscontinuedOperationsDisposedOfBySaleMember

ftk:ConsumerandIndustrialChemicalTechnologiesMember us-gaap:SubsequentEventMember 2019-02-28 2019-02-28 xbrli:pure ftk:filing group iso4217:USD ftk:country ftk:rig ftk:reporting unit ftk:segment iso4217:USD xbrli:shares xbrli:shares ftk:lawsuit ftk:series

#### **UNITED STATES**

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## **FORM 10-K**

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT  $\circ_{\mathsf{OF}}$  1934

For the fiscal year ended December 31, 2018

.. TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE **ACT OF 1934** 

For the transition period from to **Commission File Number 1-13270** 

## FLOTEK INDUSTRIES, INC.

(Exact name of registrant as specified in its charter)

#### Delaw90e0023731

(State

(LR.S. other jurisdict**iom** ployer Identification

incorpor**Mto**on

organization)

10603

W.

Sam

Houston

Parkwax064

N.

#300

Houston,

TX

(Address of principal(Zip Code) executive offices)

(713) 849-9911

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of

the Act:

Title of each exchange on which registered

Common

Stock, New York \$0.0001 Stock par Exchange

value

Securities registered pursuant to Section 12(g) of the Act:

None

Indicate by check mark:

- if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes "No ý
- if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes "No ý
- whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ý No "
- whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes \(\delta\) No "
- if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.
- whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer " Accelerated filer  $\circ$  Non-accelerated filer "

Smaller reporting company ý Emerging growth company "

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. "

• whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes "No  $\circ$ 

The aggregate market value of voting stock held by non-affiliates of the registrant as of June 30, 2018 (based on the closing market price on the NYSE Composite Tape on June 30, 2018) was approximately \$150,815,000. At February 28, 2019, there were 57,350,015 outstanding shares of the registrant's common stock, \$0.0001 par value.

#### DOCUMENTS INCORPORATED BY REFERENCE

The information required in Part III of the Annual Report on Form 10-K is incorporated by reference to the registrant's definitive proxy statement to be filed pursuant to Regulation 14A for the registrant's 2019 Annual Meeting of Stockholders.

## TABLE OF CONTENTS

PART I	<u>1</u>
Item 1. Business	1
Item 1A. Risk Factors	<u>4</u>
Item 1B. Unresolved Staff Comments	<u>14</u>
Item 2. Properties	<u>14</u>
Item 3. Legal Proceedings	<u>14</u>
Item 4. Mine Safety Disclosures	<u>15</u>
PART II	<u>16</u>
Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equit Securities	<u>16</u>
Item 6. Selected Financial Data	<u>17</u>
Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations	<u>19</u>
Item 7A. Quantitative and Qualitative Disclosures About Market Risk	<u>37</u>
Item 8. Financial Statements and Supplementary Data	<u>39</u>
Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure	<u>75</u>
Item 9A. Controls and Procedures	<u>75</u>
Item 9B. Other Information	<u>75</u>
PART III	<u>76</u>
Item 10. Directors, Executive Officers and Corporate Governance	<u>76</u>
Item 11. Executive Compensation	<u>76</u>
Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	<u>s 76</u>
Item 13. Certain Relationships and Related Transactions, and Director Independence	<u>76</u>
Item 14. Principal Accounting Fees and Services	<u>76</u>
PART IV	<u>77</u>
Item 15. Exhibits and Financial Statement Schedules	<u>77</u>

SIGNATURES 79

i

#### FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K (the "Annual Report"), and in particular, Part II, Item 7 – "Management's Discussion and Analysis of Financial Condition and Results of Operations," contains "forward-looking statements" within the meaning of the safe harbor provisions, 15 U.S.C. § 78u-5, of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are not historical facts but instead represent the Company's current assumptions and beliefs regarding future events, many of which, by their nature, are inherently uncertain and outside the Company's control. The forward-looking statements contained in this Annual Report are based on information available as of the date of this Annual Report. The forward looking statements relate to future industry trends and economic conditions, forecast performance or results of current and future initiatives and the outcome of contingencies and other uncertainties that may have a significant impact on the Company's business, future operating results and liquidity. These forward-looking statements generally are identified by words such as "anticipate," "believe," "estimate," "continue," "intend," "expect," "plan," "forecast," "project" and similar

expressions, or future-tense or conditional constructions such as "will," "may," "should," "could" and "would," or the negative thereof or other variations thereon or comparable terminology. The Company cautions that these statements are merely predictions and are not to be considered guarantees of future performance. Forward-looking statements are based upon current expectations and assumptions that are subject to risks and uncertainties that can cause actual results to differ materially from those projected, anticipated or implied. A detailed discussion of potential risks and uncertainties that could cause actual results and events to differ materially from forward-looking statements include, but are not limited to, those discussed in Part I, Item 1A – "Risk Factors" of this Annual Report and periodically in future reports filed with the Securities and Exchange Commission (the "SEC").

The Company has no obligation to publicly update or revise any forward-looking statements, whether as a result of new information or future events, except as required by law.

ii

#### **PART I**

#### Item 1. Business.

#### General

Flotek Industries, Inc. ("Flotek" or the "Company") is a global, diversified, technology-driven company that develops and supplies chemistry and services to the oil and gas industries. Flotek also supplied high value compounds to companies that make food and beverages, cleaning products, cosmetics, and other products that are sold in consumer and industrial markets, classified as discontinued operations at December 31, 2018.

The Company was originally incorporated in the Province of British Columbia on May 17, 1985. In October 2001, the Company moved the corporate domicile to Delaware and effected a 120 to 1 reverse stock split by way of a reverse merger with CESI Chemical, Inc. ("CESI"). Since then, the Company has grown through a series of acquisitions and organic growth.

In December 2007, the Company's common stock began trading on the New York Stock Exchange ("NYSE") under the stock ticker symbol "FTK." Annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") are posted to the Company's website, www.flotekind.com, as soon as practicable subsequent to electronically filing or furnishing to the SEC. Information contained in the Company's website is not to be considered as part of any regulatory filing. As used herein, "Flotek," the "Company," "we," "our," and "us" refers to Flotek Industries, Inc. and/or the Company's wholly owned subsidiaries. The use of these terms is not intended to connote any particular corporate status or relationship.

#### **Recent Developments**

During the fourth quarter of 2018, the Company initiated a strategic plan to sell its Consumer and Industrial Chemistry Technologies segment, which was completed in the first quarter of 2019. An investment banking advisory services firm was engaged and actively marketed this segment. Effective December 31, 2018, the Company has classified the assets, liabilities, and results of operations for this segment as "Discontinued Operations" for all periods presented. During the fourth quarter of 2016, the Company initiated a strategic restructuring of its business to enable a greater focus on its core businesses in energy chemistry and consumer and industrial chemistry. During 2017, the Company completed the sale of substantially all of the assets and transfer of certain specified liabilities and obligations of each of the Drilling Technologies and Production Technologies segments. An investment banking advisory services firm was engaged and actively marketed these segments. The Company has classified the assets, liabilities, and results of operations for

these two segments as "Discontinued Operations" for all periods presented.

In August 2016, the Company opened its new Global Research & Innovation Center. This state-of-the-art research facility fosters the development of next-generation innovative chemistries and permits expanded collaboration between clients, leaders from academia, and Company scientists. These collaborative opportunities are important and distinguish the Company's chemistry technologies and capability within the industry.

In July 2016, the Company acquired 100% of the stock and interests in International Polymerics, Inc. ("IPI") and related entities for \$7.9 million in cash consideration, net of cash acquired, and 247,764 shares of the Company's common stock. IPI is a U.S. based manufacturer of high viscosity guar gum and guar slurry for the oil and gas industry with a wide selection of stimulation chemicals. During the third quarter of 2018, the Company discontinued the manufacturing of guar gum and guar slurry and sold the fixed assets used in this business line.

### **Description of Operations and Segments**

The Company's continuing operations have one strategic business segment: Energy Chemistry Technologies. The Consumer and Industrial Chemistry Technologies segment is classified as discontinued operations. In addition, the Drilling Technologies and Production Technologies segments were sold during 2017 and all historical information is classified as discontinued operations.

The Company offers competitive products and services derived from technological advances, some of which are patented, and experience in fluid systems applications that are responsive to industry demands in both domestic and international markets. Flotek operates and/or distributes its products in over 20 domestic and international markets.

Financial information about operating segments and geographic concentration is provided in Note 19 – "Segment and Geographic Information" in Part II, Item 8 – "Financial Statements and Supplementary Data" of this Annual Report. Information about the Company's one operating segment is below.

### **Energy Chemistry Technologies**

The Energy Chemistry Technologies ("ECT") segment designs, develops, manufactures, packages, distributes, delivers, and markets reservoir-centric fluid systems, including specialty and conventional chemistries, for use in oil and gas ("O&G") well drilling, cementing, completion, remediation, and stimulation activities designed to maximize recovery in both new and mature fields. Flotek's specialty

chemistries possess enhanced performance characteristics and are manufactured to perform in a broad range of basins and reservoirs with varying downhole pressures, temperatures and other well-specific conditions customized to customer specifications. This segment has technical services laboratories and a research and innovation laboratory that focus on design improvements, development and viability testing of new chemistry formulations, and continued enhancement of existing products. Flotek's flagship patented chemistry technologies include Complex nano-Flui®, Pressure reducing Fluids®, and MicroSolv<sup>TM</sup>.

Chemistries branded Complex nano-Fluid® technologies ("Cn® products") are patented both domestically and internationally and are proven strategically cost-effective performance additives within both oil and natural gas markets. The CnF® product mixtures are stable mixtures of plant derived oils, water, and surface active agents which organize molecules into nano structures. The combined advantage of solvents, surface active agents and water, and the resultant nano structures, improve well treatment results as compared to the independent use of solvents and surface active agents. CnF® products are composed of renewable, plant-derived ingredients and oils that are certified as biodegradable. CnF® chemistries help achieve improved operational and financial results for the Company's customers in low permeability sand and shale reservoirs.

Chemistries branded Pressure reducing Fluids® technologies ("Prl® products") are a patented line of high molecular weight polymers used as friction reducers that reduce turbulence and maximize the use of the polymer at a lower loading rate. The products have proven efficacy in a broad range of water quality, including high brine and high iron environments.

Introduced in April 2018, chemistries branded MicroSolv<sup>TM</sup> are a patented line of microemulsion technologies designed to deliver cost-effective performance.

#### **Discontinued Operations**

Consumer and Industrial Chemistry Technologies. The Consumer and Industrial Chemistry Technologies ("CICT") segment, reported as discontinued operations, sourced citrus oil domestically and internationally and processed citrus oils. Products produced from processed citrus oil include (1) high value compounds used as additives by companies in the flavors and fragrances markets and (2) environmentally friendly chemistries for use in the oil & gas industry and numerous other industries around the world. The CICT segment designed, developed, and manufactured products that were sold to companies in the flavor and fragrance industries and specialty chemical industry. These technologies are used within food and beverage, fragrance, and household and industrial cleaning products industries.

*Drilling Technologies.* The Drilling Technologies segment, reported as discontinued operations, provided downhole drilling tools for use in energy and mining activities. This segment assembled, rented, sold, inspected, and marketed

specialized equipment used in energy, mining, and industrial drilling activities. Established tool rental operations were located throughout the United States (the "U.S.") and in a number of international markets.

**Production Technologies.** The Production Technologies segment, reported as discontinued operations, provided pumping system components, electric submersible pumps ("ESPs"), gas separators, production valves, and complementary services. Through the Company's acquisition of International Artificial Lift, LLC ("IAL"), the Company provided a line of next generation hydraulic pumping units that served to increase and maximize production for oil and natural gas wells.

#### **Seasonality**

Overall, operations are not significantly affected by seasonality; however, winter weather conditions can pose delays in clients' activity levels, primarily in oil and gas. Certain working capital components build and recede throughout the year in conjunction with established purchasing and selling cycles that can impact operations and financial position. With respect to the Company's discontinued CICT segment, citrus oil inventories increase during the first and second quarters in-line with the citrus crop harvest and processing season. The performance of certain services within the Company's remaining ECT segment can be susceptible to both weather and naturally occurring phenomena, including, but not limited to, the following:

the severity and duration of winter temperatures in North America, which impacts natural gas storage levels, drilling activity, and commodity prices;

the timing and duration of the Canadian spring thaw and resulting restrictions that impact activity levels;

the timing and impact of hurricanes upon coastal and offshore operations; and

the adverse weather and disease that affect citrus crops in Florida and Brazil which can negatively impact the availability of citrus oils and increase raw material costs for the ECT business unit.

#### **Product Demand and Marketing**

Demand for the Company's energy chemistry products and services is dependent on levels of conventional and non-conventional oil and natural gas well drilling and completion activity, both domestically and internationally. Products in the Energy Chemistry Technologies segment are marketed directly to customers through the Company's own sales force and through certain contractual agency arrangements. Established customer relationships provide repeat sales opportunities. The Company participates in industry trade shows and publishes technical papers and case studies examining the performance of its chemistries and methodologies for evaluating chemistries more effectively. While the Company's primary marketing efforts remain focused in North America, a growing amount of resources and effort are focused on emerging international markets,

especially in the Middle East and North Africa ("MENA") and South America. In addition to direct marketing and relationship development, the Company also markets products and services through the use of third party agents primarily in international markets.

#### **Customers**

The Company's customers primarily include major integrated oil and natural gas companies, oilfield service companies, independent oil and natural gas companies, pressure pumping service companies, international supply chain management companies, and national and state-owned oil companies. In addition, customers in the discontinued operations at December 31, 2018, include household and commercial cleaning product companies, fragrance and cosmetic companies, and food and beverage manufacturing companies. In the one segment reported in continuing operations, the Company had two major customers for the year ended December 31, 2018, which accounted for 12% and 10% of consolidated revenue, one major customers for the year ended December 31, 2017, which accounted for 17% of consolidated revenue, and two major customers for the year ended December 31, 2016, which accounted for 22% and 16% of consolidated revenue. In aggregate, the Company's largest three customers collectively accounted for 30%, 32%, and 48% of consolidated revenue for the years ended December 31, 2018, 2017, and 2016, respectively.

#### **Research and Innovation**

The Company is engaged in research and innovation activities focused on the design of reservoir specific, customized chemistries in the Energy Chemistry Technologies segment. In this segment, for the years ended December 31, 2018, 2017, and 2016, the Company incurred \$10.4 million, \$13.1 million, and \$9.3 million, respectively, of research and innovation expense. In 2018, research and innovation expense was approximately 5.8% of consolidated revenue. The Company expects that its 2019 research and innovation investment will continue to remain a significant portion of overall spending to support new product development and customization initiatives for its clients.

#### **Backlog**

Due to the nature of the Company's contractual customer relationships and the way they operate, the Company has historically not had significant backlog order activity.

#### **Intellectual Property**

The Company's policy is to protect its intellectual property, both within and outside of the U.S. The Company considers patent protection for all products and methods deemed to have commercial significance and that may qualify for patent protection. The decision to pursue patent protection is dependent upon several factors, including whether patent protection can be obtained, cost-effectiveness, and alignment with operational and commercial interests. The Company believes its patent and trademark portfolio, combined with

confidentiality agreements, trade secrets, proprietary designs, and manufacturing and operational expertise, are necessary and appropriate to protect its intellectual property and ensure continued strategic advantage. Within its continuing operations, the Company currently has 50 issued patents and over six dozen pending patent applications filed in the U.S. and abroad on various chemical compositions and methods and software methods. In addition, the Company currently has 55 registered trademarks and over a dozen pending trademark applications filed in the U.S. and abroad, covering a variety of its goods and services.

#### **Competition**

The ability to compete in the oilfield services industry is dependent upon the Company's ability to differentiate its products and services, provide superior quality and service, and maintain a competitive cost structure with sufficient raw material supplies. Activity levels in the oil field goods and services industry are impacted by current and expected oil and natural gas prices, oil and natural gas drilling activity, production levels, and customer drilling and completion designated capital spending. Domestic and international regions in which Flotek operates are highly competitive. The unpredictability of the energy industry and commodity price fluctuations creates both increased risk and opportunity for the products and services of both the Company and its competitors.

Certain oil and natural gas service companies competing with the Company are larger and have access to more resources. Such competitors could be better situated to withstand industry downturns, compete on the basis of price, and acquire and develop new equipment and technologies, all of which could affect the Company's revenue and profitability. Oil and natural gas service companies also compete for customers and strategic business opportunities. Thus, competition could have a detrimental impact upon the Company's business.

#### **Raw Materials**

Materials and components used in the Company's servicing and manufacturing operations, as well as those purchased for sale, are generally available on the open market from multiple sources. Collection and transportation of raw materials to Company facilities, however, could be adversely affected by extreme weather conditions. Additionally, certain raw materials are available from limited sources. Disruptions to supply could materially impact sales. The prices paid for raw materials vary based on energy, citrus, and other commodity price fluctuations, tariffs, duties on imported materials, foreign currency exchange rates, business cycle position, and global demand. Higher prices for chemistries, citrus, polymers, and other raw materials could adversely impact future sales and contract fulfillments. Citrus-based terpene (d-limonene) is an important feedstock for many of the Company's formulations. In addition, the Company utilizes naturally derived terpenes from other sources and bio-based solvents from other natural sources.

The Company is diligent in its efforts to identify alternate suppliers, in its contingency planning for potential supply shortages and in its proactive efforts to reduce costs through competitive bidding practices. When able, the Company uses multiple suppliers, both domestically and internationally, to purchase raw materials on the open market. In connection with the sale of the CICT segment, Flotek entered into a long-term supply agreement, which will secure Flotek's long-term supply of d-limonene.

Citrus greening disease has adversely affected the availability of citrus crops around the world, thereby negatively impacting the supply and increasing the price of citrus terpenes. The Company's market position, inventory, and forward purchases helps ensure availability for its patented CnF® technologies. As mentioned previously, the Company has also developed new CnF® formulations utilizing alternative solvents. These new formulations not only diversify the Company's dependence on citrus terpenes, but they also provide certain performance benefits necessary for specific customer and reservoir challenges.

#### **Government Regulations**

The Company is subject to federal, state, and local environmental, occupational safety, and health laws and regulations within the U.S. and other countries in which the Company does business. These laws and regulations strictly govern the manufacture, storage, transportation, sale, use, and disposal of chemistry products. The Company strives to ensure full compliance with all regulatory requirements and is unaware of any material instances of noncompliance.

The Company continually evaluates the environmental impact of its operations and attempts to identify potential liabilities and costs of any environmental remediation, litigation, or associated claims. Several products of the Energy Chemistry Technologies and discontinued Consumer and Industrial Chemistry Technologies segments are considered hazardous materials. In the event of a leak or spill in association with Company operations, the Company could be exposed to risk of material cost, net of insurance proceeds, to remediate any contamination. No environmental claims are currently being litigated, and the Company does not expect that costs related to remediation requirements will have a significant adverse effect on the Company's consolidated financial position or results of operations.

#### **Employees**

At December 31, 2018, the Company had 273 employees in its continuing operations and 77 employees in its discontinued operations, exclusive of existing worldwide agency relationships. None of the Company's employees are covered by a collective bargaining agreement and labor relations are generally positive. Certain international locations have staffing or work arrangements that are contingent upon local work councils or other regulatory approvals.

#### **Available Information and Website**

The Company's website is accessible at <u>www.flotekind.com</u>. Annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act are available (see the "Investor Relations" section of the Company's website), as soon as reasonably practicable, subsequent to electronically filing or otherwise providing reports to the SEC. Corporate governance materials, guidelines, by-laws, and code of business conduct and ethics are also available on the website. A copy of corporate governance materials is available upon written request to the Company.

The SEC maintains the <u>www.sec.gov</u> website, which contains reports, proxy and information statements, and other registrant information filed electronically with the SEC.

The 2018 Annual Chief Executive Officer Certification required by the NYSE was submitted on May 25, 2018. The certification was not qualified in any respect. Additionally, the Company has filed all principal executive officer and financial officer certifications as required under Sections 302 and 906 of the Sarbanes-Oxley Act of 2002 with this Annual Report. Information with respect to the Company's executive officers and directors is incorporated herein by reference to information to be included in the proxy statement for the Company's 2019 Annual Meeting of Stockholders.

The Company has disclosed and will continue to disclose any changes or amendments to the Company's code of business conduct and ethics as well as waivers to the code of ethics applicable to executive management by posting such changes or waivers on the Company's website.

The Company's business, financial condition, results of operations, and cash flows are subject to various risks and uncertainties. Readers of this report should not consider any descriptions of these risk factors to be a complete set of all potential risks that could affect Flotek. These factors should be carefully considered together with the other information contained in this Report and the other reports and materials filed by the Company with the SEC. Further, many of these

risks are interrelated and, as a result, the occurrence of certain risks could trigger and/or exacerbate other risks. Such a combination could materially increase the severity of the impact of these risks on the Company's business, results of operations, financial condition, or liquidity.

This Annual Report contains "forward-looking statements," as defined in the Private Securities Litigation Reform Act of 1995, that involve risks and uncertainties. Forward-looking

statements discuss Company prospects, expected revenue, expenses and profits, strategic and operational initiatives, and other activities. Forward-looking statements also contain suppositions regarding future oil and natural gas industry conditions, as well as market conditions impacting the consumer and industrial business, both domestically and internationally. The Company's results could differ materially from those anticipated in the forward-looking statements as a result of a variety of factors, including risks described below and elsewhere. See "Forward-Looking Statements" at the beginning of this Annual Report.

#### Risks Related to the Company's Business

The Company's business is largely dependent upon domestic and international oil and natural gas industry spending. Spending could be adversely affected by industry conditions or by new or increased governmental regulations, global economic conditions, the availability of credit, and lower oil and natural gas prices. All of these factors are beyond the Company's control. The resulting reductions in customers' expenditures could have a significant adverse effect on Company revenue, margins, and overall operating results.

The Company's energy segment is dependent upon customers' willingness to make operating and capital expenditures for exploration, development and production of oil and natural gas in both North American and global markets. Customers' expectations of a decline in future oil and natural gas market prices could result in curtailed spending, thereby reducing demand for the Company's products and services. Industry conditions are influenced by numerous factors over which the Company has no control, including the supply of and demand for oil and natural gas, domestic and international economic conditions, political instability in oil and natural gas producing countries and merger and divestiture activity among oil and natural gas producers and service companies.

The price for oil and natural gas is subject to a variety of factors, including, but not limited to: global demand for energy as a result of population growth, economic development, and general economic and business conditions;

the ability of the Organization of Petroleum Exporting Countries ("OPEC") to set and maintain production levels and the impact of non-OPEC producers on global supply;

availability and quantity of natural gas storage;

import and export volumes and pricing of liquefied natural gas;

pipeline capacity to critical markets and out of producing regions;

political and economic uncertainty and socio-political unrest;

eost of exploration, production and transport of oil and natural gas;

• technological advances impacting energy production and consumption; and

### weather conditions.

The volatility of oil and natural gas prices and the consequential effect on exploration and production activity could adversely impact the activity levels of the Company's customers.

One indicator of drilling and completion spending is drilling activity as measured by rig count, which the Company actively monitors to gauge market conditions and forecast product and

service demand. In addition, the U.S. Energy Information Administration ("EIA") and other industry data sources report completion activity which is utilized by the Company. A reduction in drilling and completion activity could cause a decline in the demand for, or negatively affect the price of, some of the Company's products and services. Domestic demand for oil and natural gas could also be uniquely affected by public attitude regarding drilling in environmentally sensitive areas, vehicle emissions and other environmental standards, alternative fuels, taxation of oil and gas, perception of "excess profits" of oil and gas companies, and anticipated changes in governmental regulation and policy. Volatile economic conditions could weaken customer exploration and production expenditures, causing reduced demand for the Company's products and services and a significant adverse effect on the Company's operating results. It is difficult to predict the pace of industry growth, the direction of oil and natural gas prices, the direction and magnitude of economic activity, and to what extent these conditions could affect the Company. However, reduced cash flow and capital availability could adversely impact the financial condition of the Company's customers, which could result in customer project modifications, delays or cancellations, general business disruptions, and delay in, or nonpayment of, amounts that are owed to the Company. This could cause a negative impact on the Company's results

of operations and cash flows.

Furthermore, if certain of the Company's suppliers were to experience significant cash flow constraints or become insolvent as a result of such conditions, a reduction or interruption in supplies or a significant increase in the price of supplies could occur, adversely impacting the Company's results of operations and cash flows.

The Company's inability to develop and/or introduce new products or differentiate existing products could have an adverse effect on its ability to be responsive to customers' needs and could result in a loss of customers, as well as adversely affecting the Company's future success and profitability.

The oil and natural gas industry is characterized by technological advancements that have historically resulted in, and will likely continue to result in, substantial improvements in the scope and quality of oilfield chemistries and their function and performance. Consequently, the Company's future success is dependent, in part, upon the Company's

continued ability to timely develop innovative products and services. Increasingly sophisticated customer needs and the ability to anticipate and respond to technological and operational advances in the oil and natural gas industry is critical. If the Company fails to successfully develop and introduce innovative products and services that appeal to customers, or if existing or new market competitors develop superior products and services, the Company's revenue and profitability could deteriorate.

Increased competition could exert downward pressure on prices charged for the Company's products and services. The Company operates in a competitive environment characterized by large and small competitors. Competitors with greater resources and lower cost structures or who are trying to gain market share may be successful in providing competing products and services to the Company's customers at lower prices than the Company currently charges. This may require the Company to lower its prices, resulting in an adverse impact on revenues, margins, and operating results.

## If the Company is unable to adequately protect intellectual property rights or is found to infringe upon the intellectual property rights of others, the Company's business is likely to be adversely affected.

The Company relies on a combination of patents, trademarks, copyrights, trade secrets, non-disclosure agreements, and other security measures to establish and protect the Company's intellectual property rights. Although the Company believes that existing measures are reasonably adequate to protect intellectual property rights, there is no assurance that the measures taken will prevent misappropriation of proprietary information or dissuade others from independent development of similar products or services. Moreover, there is no assurance that the Company will be able to prevent competitors from copying, reverse engineering, modifying, or otherwise obtaining and/or using the Company's technology and proprietary rights to create competitive products or services. The Company may not be able to enforce intellectual property rights outside of the U.S. Additionally, the laws of certain countries in which the Company's products and services are manufactured or marketed may not protect the Company's proprietary rights to the same extent as do the laws of the U.S. Furthermore, other third parties may infringe, challenge, invalidate, or circumvent the Company's patents, trademarks, copyrights and trade secrets. In each case, the Company's ability to compete could be significantly impaired.

A portion of the Company's products and services are without patent protection. The issuance of a patent does not guarantee validity or enforceability. The Company's patents may not necessarily be valid or enforceable against third parties. The issuance of a patent does not guarantee that the Company has the right to use the patented invention. Third parties may have blocking patents that could be used to prevent the Company from marketing the Company's own patented products and services and utilizing the Company's patented technology.

The Company is exposed and, in the future, may be exposed to allegations of patent and other intellectual property infringement from others. The Company may allege infringement of its patents and other intellectual property rights against others. Under either scenario, the Company could become involved in costly litigation or other legal proceedings regarding its patent or other intellectual property rights, from both an enforcement and defensive standpoint. Even if the Company chooses to enforce its patent or other intellectual property rights against a third party, there may be risk that the Company's patent or other intellectual property rights become invalidated or otherwise unenforceable through legal proceedings. If intellectual property infringement claims are asserted against the Company, the Company could defend itself from such assertions or could seek to obtain a license under the third party's intellectual property rights in order to mitigate exposure. In the event the Company cannot obtain a license, third parties could file lawsuits or other legal proceedings against the Company, seeking damages (including treble damages) or an injunction against the manufacture, use, sale, offer for sale, or importation of the Company's products and services. These could result in the Company having to discontinue the use, manufacture, and sale of certain products and services, increase the cost of selling certain products and services, or result in damage to the Company's reputation. An award of damages, including material royalty payments, or the entry of an injunction order against the use, manufacture, and sale of any of the Company's products and services found to be infringing, could have an adverse effect on the Company's results of operations and ability to compete.

The loss of key customers could have an adverse impact on the Company's results of operations and could result in a decline in the Company's revenue.

The Company has critical customer relationships which are dependent upon production and development activity related to a handful of customers. In the segment reported in continuing operations, revenue derived from the Company's three largest customers as a percentage of consolidated revenue for the years ended December 31, 2018, 2017, and 2016, totaled 30%, 32%, and 48%, respectively. Customer relationships are historically governed by purchase orders or other short-term contractual obligations as opposed to long-term contracts. The loss of one or more key customers could have an adverse effect on the Company's results of operations and could result in a decline in the Company's revenue.

Loss of key suppliers, the inability to secure raw materials on a timely basis, or the Company's inability to pass commodity price increases on to customers could have an adverse effect on the Company's ability to service customer's needs and could result in a loss of customers.

Materials used in servicing and manufacturing operations, as well as those purchased for sale, are generally available on the open market from multiple sources. Acquisition costs and transportation of raw materials to Company facilities have historically been impacted by extreme weather conditions.

Certain raw materials used by the Energy Chemistry Technologies segment are available only from limited sources; accordingly, any disruptions to critical suppliers' operations could adversely impact the Company's operations. Prices paid for raw materials could be affected by energy products and other commodity prices; weather and disease associated with the Company's crop dependent raw materials, specifically citrus greening; tariffs and duties on imported materials; foreign currency exchange rates; and phases of the general business cycle and global demand. The Energy Chemistry Technologies segment secures short and long term supply agreements for critical raw materials from both domestic and international vendors.

The prices of key raw materials including citrus terpenes and polymers are subject to market fluctuations which at times can be significant and unpredictable. The Company may be unable to pass along price increases to its customers, which could result in an adverse impact on margins and operating profits. The Company currently uses purchasing strategies designed, where possible, to align the timing of customer demand with supply commitments. However, the Company currently does not hedge commodity prices, but may consider such strategies in the future, and there is no guarantee that the Company's purchasing strategies will prevent cost increases from resulting in adverse impacts on margins and operating profits.

## The Company depends on a single-source supplier for citrus terpene, and the loss of this supplier could significantly harm the Company's business, financial condition, and results of operations.

Citrus-based terpene (d-limonene) is an important feedstock for many of the Company's formulations. The Company recently entered into a terpene Supply Agreement (the "Supply Agreement") with Flotek's former subsidiary, Florida Chemical Company, LLC ("FCC"), to serve as the Company's exclusive supplier of terpene. The Company depends on FCC to provide it with terpene in a timely manner that meets its quality, quantity, and cost requirements. FCC may encounter problems that preclude it from supplying terpene on the terms set forth in the Supply Agreement, including with respect to pricing and production volumes. In the event that FCC encounters such problems or otherwise breaches the Supply Agreement, the Company's inability to contract with alternative sources could result in a prolonged interruption in its ability to produce the Company's formulations. Any such delays or interruptions could ultimately result in a significant increase in the price of the various formulations or a significant reduction in the Company's margins on these formulations, which could adversely affect the Company's business, financial condition, and results of operations.

# If the Company loses the services of key members of management, the Company may not be able to manage operations and implement growth strategies.

The Company depends on the continued service of the Chief Executive Officer and President, the Chief Financial Officer, the Executive Vice President of Operations, and other key

members of the executive management team, who possess significant expertise and knowledge of the Company's business and industry. Furthermore, the Chief Executive Officer and President serves as Chairman of the Board of Directors. The Company has entered into employment agreements with certain of these key members; however, at December 31, 2018, the Company only carried key man life insurance for the Chief Executive Officer and the Executive Vice President of Operations. Any loss or interruption of the services of key members of the Company's management could significantly reduce the Company's ability to manage operations effectively and implement strategic business initiatives. On December 31, 2018, Matthew B. Marietta departed from the Company as the Executive Vice President of Finance and Corporate Development (Principal Financial Officer), and H. Richard Walton retired as the Company's Chief Accounting Officer. The Company can provide no assurance that appropriate replacements for key positions could be found should the need arise.

Failure to maintain effective disclosure controls and procedures and internal controls over financial reporting could have an adverse effect on the Company's operations and the trading price of the Company's common stock. Effective internal controls are necessary for the Company to provide reliable financial reports, effectively prevent fraud and operate successfully as a public company. If the Company cannot provide reliable financial reports or effectively prevent fraud, the Company's reputation and operating results could be harmed. If the Company is unable to maintain effective disclosure controls and procedures and internal controls over financial reporting, the Company may not be able to provide reliable financial reports, which in turn could affect the Company's operating results or cause the Company to fail to meet its reporting obligations. Ineffective internal controls could also cause investors to

lose confidence in reported financial information, which could negatively affect the trading price of the Company's common stock, limit the ability of the Company to access capital markets in the future, and require additional costs to improve internal control systems and procedures.

Network disruptions, security threats and activity related to global cyber-crime pose risks to the Company's key operational, reporting and communication systems.

The Company relies on access to information systems for its operations. Failures of, or interference with, access to these systems, such as network communications disruptions, could have an adverse effect on our ability to conduct operations and could directly impact consolidated reporting. Security breaches pose a risk to confidential data and intellectual property, which could result in damages to our competitiveness and reputation. The Company has policies and procedures in place, including system monitoring and data back-up processes, to prevent or mitigate the effects of these potential disruptions or breaches. However, there can be no assurance that existing or emerging threats will not have an adverse impact on our systems or communications networks.

## The Company may pursue strategic acquisitions, joint ventures, and strategic divestitures, which could have an adverse impact on the Company's business.

The Company's past and potential future acquisitions, joint ventures, and divestitures involve risks that could adversely affect the Company's business. Negotiations of potential acquisitions, joint ventures, or other strategic relationships, integration of newly acquired businesses, and/or sales of existing businesses could be time consuming and divert management's attention from other business concerns. Acquisitions and joint ventures could also expose the Company to unforeseen liabilities or risks associated with new markets or businesses. Unforeseen operational difficulties related to acquisitions and joint ventures could result in diminished financial performance or require a disproportionate amount of the Company's management's attention and resources. Additionally, acquisitions could result in the commitment of capital resources without the realization of anticipated returns. Divestitures could result in the loss of future earnings without adequate compensation and the loss of unrealized strategic opportunities.

# If the Company does not manage the potential difficulties associated with expansion successfully, the Company's operating results could be adversely affected.

The Company has grown over the last several years through internal growth, strategic alliances, and strategic business and asset acquisitions. The Company believes future success will depend, in part, on the Company's ability to adapt to market opportunities and changes, to successfully integrate the operations of any businesses acquired, expansion of existing product and service lines, and potentially expand into new product and service areas in which the Company may not have prior experience. Factors that could result in strategic business difficulties include, but are not limited to:

failure to effectively integrate acquisitions, joint ventures or strategic alliances;

failure to effectively plan for risks associated with expansion into areas in which management lacks prior experience; lack of experienced management personnel;

increased administrative burdens;

dack of customer retention:

technological obsolescence; and

•infrastructure, technological, communication and logistical problems associated with large, expansive operations. If the Company fails to manage potential difficulties successfully, the Company's operating results could be adversely impacted.

#### The Company's ability to grow and compete could be adversely affected if adequate capital is not available.

The ability of the Company to grow and be competitive in the market place is dependent on the availability of adequate capital. Access to capital is dependent, in large part, on the Company's cash flows and the availability of and access to equity and debt financing. The Company's revolving loan agreements require approval and place limits on certain capital transactions and various business acquisitions and combinations. The Company cannot guarantee that internally generated cash flows will be sufficient, or that the Company will continue to be able to obtain equity or debt financing on acceptable terms, or at all. As a result, the Company may not be able to finance strategic growth plans, take advantage of business opportunities, or to respond to competitive pressures. However, with the remaining proceeds from the sale of the CICT segment, the Company has formed a Strategic Capital Committee to evaluate and make recommendations to the board of directors regarding the manner in which the remaining net proceeds from the sale will be deployed. The Company filed a "universal" shelf registration on September 21, 2017, to permit the ability to sell securities to the public in a timely manner and which it expects to keep active.

# Failure to collect for goods and services sold to key customers could have an adverse effect on the Company's financial results, liquidity and cash flows.

The Company performs credit analysis on potential customers; however, credit analysis does not provide full assurance that customers will be willing and/or able to pay for goods and services purchased from the Company. Furthermore, collectability of international sales can be subject to the laws of foreign countries, which may provide more limited protection to the Company in the event of a dispute over payment. Because sales to domestic and international customers are generally made on an unsecured basis, there can be no assurance of collectability. If one or more major customers are unwilling or unable to pay its debts to the Company, it could have an adverse effect of the Company's financial results, liquidity and cash flows.

#### Unforeseen contingencies such as litigation could adversely affect the Company's financial condition.

The Company is, and from time to time may become, a party to legal proceedings incidental to the Company's business involving alleged injuries arising from the use of Company products, exposure to hazardous substances, patent infringement, employment matters, commercial disputes, and shareholder lawsuits. The defense of these lawsuits may require significant expenses, divert management's attention, and may require the Company to pay damages that could adversely affect the Company's financial condition. In

addition, any insurance or indemnification rights that the Company may have may be insufficient or unavailable to protect against potential loss exposures.

The Company's current insurance policies may not adequately protect the Company's business from all potential risks.

The Company's operations are subject to risks inherent in the oil and natural gas industry, such as, but not limited to, accidents, blowouts, explosions, fires, severe weather, oil and chemical spills, and other hazards. These conditions can result in personal injury or loss of life, damage to property, equipment and the environment, as well as suspension of customers' oil and gas operations. These events could result in damages requiring costly repairs, the interruption of Company business, including the loss of revenue and profits, and/or the Company being named as a defendant in lawsuits asserting large claims. The Company maintains insurance coverage it believes is adequate and customary to the oil and natural gas services industry to mitigate liabilities associated with these potential hazards. The Company does not have insurance against all foreseeable risks. Consequently, losses and liabilities arising from uninsured or underinsured events could have an adverse effect on the Company's business, financial condition, and results of operations.

Regulatory pressures, environmental activism, and legislation could result in reduced demand for the Company's products and services, increase the Company's costs, and adversely affect the Company's business, financial condition, and results of operations.

Regulations restricting volatile organic compounds ("VOC") exist in many states and/or communities which limit demand for certain products. Although citrus oil is considered a VOC, its health, safety, and environmental profile is preferred over other solvents (e.g., BTEX), which is currently creating new market opportunities around the world. Changes in the perception of citrus oils as a preferred VOC, increased consumer activism against hydraulic fracturing or other regulatory or legislative actions by governments could potentially result in materially reduced demand for the Company's products and services and could adversely affect the Company's business, financial condition, and results of operations.

The Company is subject to complex foreign, federal, state, and local environmental, health, and safety laws and regulations, which expose the Company to liabilities that could adversely affect the Company's business, financial condition, and results of operations.

The Company's operations are subject to foreign, federal, state, and local laws and regulations related to, among other things, the protection of natural resources, injury, health and safety considerations, chemical exposure assessment, waste management, and transportation of waste and other hazardous materials. The Company's operations expose the Company to risks of environmental liability that could result in fines,

penalties, remediation, property damage, and personal injury liability. In order to remain compliant with laws and regulations, the Company maintains permits, authorizations, registrations, and certificates as required from regulatory authorities. Sanctions for noncompliance with such laws and regulations could include assessment of administrative, civil and criminal penalties, revocation of permits, and issuance of corrective action orders.

The Company could incur substantial costs to ensure compliance with existing and future laws and regulations. Laws protecting the environment have generally become more stringent and are expected to continue to evolve and become more complex and restrictive into the future. Failure to comply with applicable laws and regulations could result in material expense associated with future environmental compliance and remediation. The Company's costs of compliance could also increase if existing laws and regulations are amended or reinterpreted. Such amendments or reinterpretations of existing laws or regulations, or the adoption of new laws or regulations, could curtail exploratory or developmental drilling for, and production of, oil and natural gas which, in turn, could limit demand for the Company's products and services. Some environmental laws and regulations could also impose joint and strict liability, meaning that the Company could be exposed in certain situations to increased liabilities as a result of the Company's conduct that was lawful at the time it occurred or conduct of, or conditions caused by, prior operators or other third parties. Remediation expense and other damages arising as a result of such laws and regulations could be substantial and have a material adverse effect on the Company's financial condition and results of operations.

Material levels of the Company's revenue are derived from customers engaged in hydraulic fracturing services, a process that creates fractures extending from the well bore through the rock formation to enable natural gas or oil to

flow more easily through the rock pores to a production well. Some states have adopted regulations which require operators to publicly disclose certain non-proprietary information. These regulations could require the reporting and public disclosure of the Company's proprietary chemistry formulas. The adoption of any future federal or state laws or local requirements, or the implementation of regulations imposing reporting obligations on, or otherwise limiting, the hydraulic fracturing process, could increase the difficulty of oil and natural gas well production activity and could have an adverse effect on the Company's future results of operations.

Regulation of greenhouse gases and/or climate change could have a negative impact on the Company's business. Certain scientific studies have suggested that emissions of certain gases, commonly referred to as "greenhouse gases," which include carbon dioxide, methane, and other volatile organic compounds, may be contributory to the warming effect of the Earth's atmosphere and other climatic changes. In response to such studies, the issue of climate change and the effect of greenhouse gas emissions, in particular emissions from fossil fuels, is attracting increasing worldwide attention.

For example, the Paris Agreement was signed in 2016, which sets forth a global framework to address climate change. However, in June 2017, the Trump Administration announced plans to withdraw from the Paris Agreement. Legislation and regulatory initiatives at the federal, regional, state, and local level have been considered and in some cases adopted in an effort to reduce greenhouse gases. Some states have individually or in regional cooperation imposed restrictions on greenhouse gas emissions under various policies and approaches, including establishing a cap on emissions, requiring efficiency measures, or providing incentives for pollution reduction, use of renewable energy sources, or use of replacement fuels with lower carbon content.

Existing or future laws, regulations, treaties, or international agreements related to greenhouse gases, climate change, and indoor air quality, including energy conservation or alternative energy incentives, could have a negative impact on the Company's operations, if regulations resulted in a reduction in worldwide demand for oil, natural gas, and citrus oils. Other results could be increased compliance costs and additional operating restrictions, each of which could have a negative impact on the Company's operations.

The Company and the Company's customers are subject to risks associated with doing business outside of the U.S., including political risk, foreign exchange risk, and other uncertainties.

Revenue from the sale of products to customers outside the U.S. has been steadily increasing. The Company and its customers are subject to risks inherent in doing business outside of the U.S., including, but not limited to: governmental instability;

corruption;

war and other international conflicts;

eivil and labor disturbances;

requirements of local ownership;

cartel behavior;

partial or total expropriation or nationalization;

eurrency devaluation; and

foreign laws and policies, each of which can limit the movement of assets or funds or result in the deprivation of contractual rights or appropriation of property without fair compensation.

Collections from international customers and agents could also prove difficult due to inherent uncertainties in foreign law and judicial procedures. The Company could experience significant difficulty with collections or recovery due to the political or judicial climate in foreign countries where Company operations occur or in which the Company's products are used.

The Company's international operations must be compliant with the Foreign Corrupt Practices Act (the "FCPA") and other

applicable U.S. laws. The Company could become liable under these laws for actions taken by employees or agents. Compliance with international laws and regulations could become more complex and expensive thereby creating increased risk as the Company's international business portfolio grows. Further, the U.S. periodically enacts laws and imposes regulations prohibiting or restricting trade with certain nations. The U.S. government could also change these laws or enact new laws that could restrict or prohibit the Company from doing business in identified foreign countries. The Company conducts, and will continue to conduct, business in currencies other than the U.S. dollar. Historically, the Company has not hedged against foreign currency fluctuations. Accordingly, the Company's profitability could be affected by fluctuations in foreign exchange rates.

The Company has no control over and can provide no assurances that future laws and regulations will not materially impact the Company's ability to conduct international business.

The Company's tax returns are subject to audit by tax authorities. Taxing authorities may make claims for back taxes, interest, and penalties.

The Company is subject to income, property, excise, employment, and other taxes in the U.S. and a variety of other jurisdictions around the world. Tax rules and regulations in the U.S. and around the world are complex and subject to interpretation. From time to time, taxing authorities conduct audits of the Company's tax filings and may make claims for increased taxes and, in some cases, assess interest and penalties. The assessments for back taxes, interest, and penalties could be significant. If the Company is unsuccessful in contesting these claims, the resulting payments could

result in a drain on the Company's capital resources and liquidity.

Recent U.S. tax legislation, as well as future U.S. tax legislation, may adversely affect our business, results of operations, financial condition and cash flow.

Comprehensive tax reform legislation enacted in December 2017, commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act"), made significant changes to U.S. federal income tax laws. The Tax Act, among other things, reduced the corporate income tax rate to 21%, partially limits the deductibility of business interest expense and net operating losses, imposes a one-time tax on unrepatriated earnings from certain foreign subsidiaries, taxes offshore earnings at reduced rates regardless of whether they are repatriated and allows the immediate deduction of certain new investments instead of deductions for depreciation expense over time. The Tax Act is complex and far-reaching, and the Company continues to evaluate the actual impact of its enactment on the Company. There may be material adverse effects resulting from the Tax Act that have not been identified and that could have an adverse effect on the Company's business, results of operations, financial condition and cash flow.

#### Risks Related to the Company's Industry

General economic declines (recessions), limits to credit availability, and industry specific factors could have an adverse effect on energy industry activity resulting in lower demand for the Company's products and services. Worldwide economic uncertainty can reduce the availability of liquidity and credit markets to fund the continuation and expansion of industrial business operations worldwide. The shortage of liquidity and credit combined with pressure on worldwide equity markets could continue to impact the worldwide economic climate. Geopolitical unrest around the world may also impact demand for the Company's products and services both domestically and internationally.

Demand for the Company's energy segment's products and services is dependent on oil and natural gas industry activity and expenditure levels that are directly affected by trends in oil and natural gas prices. Demand for the Company's energy products and services is particularly sensitive to levels of exploration, development, and production activity of, and the corresponding capital spending by, oil and natural gas companies, including national oil companies. One indication of drilling and completion activity and spending is rig count, which the Company monitors to gauge market conditions. In addition, the EIA and other industry data sources report completion activity which is utilized by the Company. Any prolonged reduction in oil and natural gas prices or drop in rig and/or completion count could depress current levels of exploration, development, and production activity. Perceptions of longer-term lower oil and natural gas prices by oil and natural gas companies could similarly reduce or defer major expenditures given the long-term nature of many large-scale development projects. Lower levels of activity could result in a corresponding decline in the demand for the Company's oil and natural gas well products and services, which could have a material adverse effect on the Company's revenue and profitability.

Events in global credit markets can significantly impact the availability of credit and associated financing costs for many of the Company's customers. Many of the Company's customers finance their drilling and completion programs through third-party lenders or public debt offerings. Lack of available credit or increased costs of borrowing could cause customers to reduce spending on drilling programs, thereby reducing demand and potentially resulting in lower prices for the Company's products and services. Also, the credit and economic environment could significantly impact the financial condition of some customers over a prolonged period, leading to business disruptions and restricted ability to pay for the Company's products and services. The Company's forward-looking statements assume that the Company's lenders, insurers, and other financial institutions will be able to fulfill their obligations under various credit agreements, insurance policies, and contracts. If any of the Company's significant lenders, insurers and others are unable to perform under such agreements, and if the Company was unable to find suitable replacements at a reasonable cost, the

Company's results of operations, liquidity, and cash flows could be adversely impacted.

A continuing period of depressed oil and natural gas prices could result in further reductions in demand for the Company's products and services and adversely affect the Company's business, financial condition, and results of operations.

The markets for oil and natural gas have historically been volatile. Such volatility in oil and natural gas prices, or the perception by the Company's customers of unpredictability in oil and natural gas prices, could adversely affect spending levels. The oil and natural gas markets may be volatile in the future. The demand for the Company's products and services is, in large part, driven by general levels of exploration and production spending and drilling activity by its customers. Future declines in oil or natural gas prices could adversely affect the Company's business, financial condition, and results of operations.

New and existing competitors within the Company's industry could have an adverse effect on results of operations. The oil and natural gas industry is highly competitive. The Company's principal competitors include numerous small companies capable of competing effectively in the Company's markets on a local basis, as well as a number of large companies that possess substantially greater financial and other resources than does the Company. Larger competitors may be able to devote greater resources to developing, promoting, and selling products and services. The Company may also face increased competition due to the entry of new competitors including current suppliers that decide to sell their products and services directly to the Company's customers. As a result of this competition, the Company could experience lower sales or greater operating costs, which could have an adverse effect on the Company's margins and

results of operations.

The Company's industry has a high rate of employee turnover. Difficulty attracting or retaining personnel or agents could adversely affect the Company's business.

The Company operates in an industry that has historically been highly competitive in securing qualified personnel with the required technical skills and experience. The Company's services require skilled personnel able to perform physically demanding work. Due to industry volatility, the demanding nature of the work, and the need for industry specific knowledge and technical skills, current employees could choose to pursue employment opportunities outside the Company that offer a more desirable work environment and/or higher compensation than is offered by the Company. As a result of these competitive labor conditions, the Company may not be able to find qualified labor, which could limit the Company's growth. In addition, the cost of attracting and retaining qualified personnel has increased over the past several years due to competitive pressures. In order to attract and retain qualified personnel, the Company may be required

to offer increased wages and benefits. If the Company is unable to increase the prices of products and services to compensate for increases in compensation, or is unable to attract and retain qualified personnel, operating results could be adversely affected.

### Severe weather could have an adverse impact on the Company's business.

The Company's business could be materially and adversely affected by severe weather conditions. Hurricanes, tropical storms, flash floods, blizzards, cold weather, and other severe weather conditions could result in curtailment of services, damage to equipment and facilities, interruption in transportation of products and materials, and loss of productivity. If the Company's customers are unable to operate or are required to reduce operations due to severe weather conditions, and as a result curtail purchases of the Company's products and services, the Company's business could be adversely affected.

#### A terrorist attack or armed conflict could harm the Company's business.

Terrorist activities, anti-terrorist efforts, and other armed conflicts involving the U.S. could adversely affect the U.S. and global economies and could prevent the Company from meeting financial and other obligations. The Company could experience loss of business, delays or defaults in payments from payors, or disruptions of fuel supplies and markets if pipelines, production facilities, processing plants, or refineries are direct targets or indirect casualties of an act of terror or war. Such activities could reduce the overall demand for oil and natural gas which, in turn, could also reduce the demand for the Company's products and services. Terrorist activities and the threat of potential terrorist activities and any resulting economic downturn could adversely affect the Company's results of operations, impair the ability to raise capital, or otherwise adversely impact the Company's ability to realize certain business strategies.

#### Risks Related to the Company's Securities

#### The market price of the Company's common stock has been and may continue to be volatile.

The market price of the Company's common stock has historically been subject to significant fluctuations. The following factors, among others, could cause the price of the Company's common stock to fluctuate significantly due to:

- variations in the Company's quarterly results of operations;
- changes in market valuations of companies in the Company's industry;
- fluctuations in stock market prices and volume;
- fluctuations in oil and natural gas prices;
- issuances of common stock or other securities in the future;
- additions or departures of key personnel;

announcements by the Company or the Company's competitors of new business, acquisitions, or joint ventures; and negative statements made by external parties, about the Company's business, in public forums.

The stock market has experienced significant price and volume fluctuations in recent years that have affected the price of common stock of companies within many industries including the oil and natural gas industry. The price of the Company's common stock could fluctuate based upon factors that have little to do with the Company's operational performance, and these fluctuations could materially reduce the Company's stock price. The Company could be a defendant in a legal case related to a significant loss of value for the shareholders. This could be expensive and divert management's attention and Company resources, as well as have an adverse effect on the Company's business, financial condition, and results of operations.

## If the Company cannot meet the New York Stock Exchange continued listing requirements, the NYSE may delist the Company's common stock.

The Company's common stock is currently listed on the NYSE. In the future, if it is not able to meet the continued listing requirements of the NYSE, which require, among other things, that the average closing price of our common stock be above \$1.00 over 30 consecutive trading days, the Company's common stock may be delisted. The Company's closing stock price on February 28, 2019 was \$3.20, but on December 24, 2018, closed at a low of \$1.01. If the Company is unable to satisfy the NYSE criteria for continued listing, its common stock would be subject to delisting. A delisting of its common stock could negatively impact the Company by, among other things, reducing the liquidity and market price of the its common stock; reducing the number of investors willing to hold or acquire the Company's common stock, which could negatively impact its ability to raise equity financing; decreasing the amount of news and

analyst coverage of the Company; and limiting the Company's ability to issue additional securities or obtain additional financing in the future. In addition, delisting from the NYSE might negatively impact the Company's reputation and, as a consequence, its business.

An active market for the Company's common stock may not continue to exist or may not continue to exist at current trading levels.

Trading volume for the Company's common stock historically has been very volatile when compared to companies with larger market capitalizations. The Company cannot presume that an active trading market for the Company's common stock will continue or be sustained. Sales of a significant number of shares of the Company's common stock in the public market could lower the market price of the Company's stock.

The Company has no plans to pay dividends on the Company's common stock, and, therefore, investors will have to look to stock appreciation for return on investments.

The Company does not anticipate paying any cash dividends on the Company's common stock within the foreseeable future. The Company currently intends, subject to Board approval of recommendations by the Strategic Capital Committee described above, to retain future earnings to fund the development and growth of the Company's business and to meet current debt obligations. Any payment of future dividends will be at the discretion of the Company's board of directors and will depend, among other things, on the Company's earnings, financial condition, capital requirements, level of indebtedness, statutory and contractual restrictions applying to the payment of dividends, and other considerations deemed relevant by the board of directors. Investors must rely on sales of common stock held after price appreciation, which may never occur, in order to realize a return on their investment.

Certain anti-takeover provisions of the Company's charter documents and applicable Delaware law could discourage or prevent others from acquiring the Company, which may adversely affect the market price of the Company's common stock.

The Company's certificate of incorporation and bylaws contain provisions that:

permit the Company to issue, without stockholder approval, up to 100,000 shares of preferred stock, in one or more series and, with respect to each series, to fix the designation, powers, preferences, and rights of the shares of the series;

prohibit stockholders from calling special meetings;

4imit the ability of stockholders to act by written consent;

prohibit cumulative voting; and

require advance notice for stockholder proposals and nominations for election to the board of directors to be acted upon at meetings of stockholders.

In addition, Section 203 of the Delaware General Corporation Law limits business combinations with owners of more than 15% of the Company's stock without the approval of the board of directors. Aforementioned provisions and other similar provisions make it more difficult for a third party to acquire the Company exclusive of negotiation. The Company's board of directors could choose not to negotiate with an acquirer deemed not beneficial to or synergistic with the Company's strategic outlook. If an acquirer were discouraged from offering to acquire the Company or prevented from successfully completing a hostile acquisition by these anti-takeover measures, stockholders could lose the opportunity to sell their shares at a favorable price.

Future issuance of additional shares of common stock could cause dilution of ownership interests and adversely affect the Company's stock price.

The Company is currently authorized to issue up to 80,000,000 shares of common stock. The Company may, in the future, issue previously authorized and unissued shares of common stock, which would result in the dilution of current stockholders ownership interests. Additional shares are subject to issuance through various equity compensation plans or through the exercise of currently outstanding options. The potential issuance of additional shares of common stock may create downward pressure on the trading price of the Company's common stock. The Company may also issue additional shares of common stock or other securities that are convertible into or exercisable for common stock in order to raise capital or effectuate other business purposes. Future sales of substantial amounts of common stock, or the perception that sales could occur, could have an adverse effect on the price of the Company's common stock. The Company filed a "universal" shelf registration on September 21, 2017, to permit the ability to sell securities to the public in a timely manner and which it expects to keep active.

The Company may issue shares of preferred stock or debt securities with greater rights than the Company's common stock.

Subject to the rules of the NYSE, the Company's certificate of incorporation authorizes the board of directors to issue one or more additional series of preferred stock and to set the terms of the issuance without seeking approval from holders of common stock. Currently, there are 100,000 preferred shares authorized, with no shares currently outstanding. Any preferred stock that is issued may rank senior to common stock in terms of dividends, priority and liquidation premiums, and may have greater voting rights than holders of common stock.

The Company's ability to use net operating loss carryforwards and tax attribute carryforwards to offset future taxable income may be limited as a result of transactions involving the Company's common stock.

Under section 382 of the Internal Revenue Code of 1986, as amended, a corporation that undergoes an "ownership change" is subject to limitations on the Company's ability to utilize pre-change net operating losses ("NOLs"), and certain other tax attributes to offset future taxable income. In general, an ownership change occurs if the aggregate stock ownership of certain stockholders increases by more than 50 percentage points over such stockholders' lowest percentage ownership during the testing period (generally three years). An ownership change could limit the Company's ability to utilize existing NOLs and tax attribute carryforwards for taxable years including or following an identified "ownership change." Transactions involving the Company's common stock, even those outside the Company's control, such as purchases or sales by investors, within the testing period could result in an "ownership change." In addition, under the Tax Act, the ability to carry back NOLs to prior taxable years is generally eliminated, and while NOLs arising in tax years beginning after 2017 may be carried forward indefinitely, these post-2017 NOLs may only reduce 80% of the Company's

taxable income in a tax year. Limitations imposed on the ability to use NOLs and tax credits to offset future taxable income could reduce or eliminate the benefit of the NOLs and tax attributes and could require the Company to pay U.S. federal income taxes in excess of that which would otherwise be required if such limitations were not in effect. Similar rules and limitations may apply for state income tax purposes.

#### **Disclaimer of Obligation to Update**

Except as required by applicable law or regulation, the Company assumes no obligation (and specifically disclaims any such obligation) to update these risk factors or any other forward-looking statement contained in this Annual Report to reflect actual results, changes in assumptions, or other factors affecting such forward-looking statements.

#### Item 1B. Unresolved Staff Comments.

Not applicable.

#### Item 2. Properties.

At December 31, 2018, the Company operated 16 manufacturing, warehouse, and research facilities in 7 U.S. states, one research facility in Calgary, Alberta, and sales offices in Tokyo, Japan and Dubai, United Arab Emirates. The Company owns 5 of these facilities and the remainder are leased with lease terms that expire from 2019 through 2037. In addition, the Company's corporate office is a leased facility located in Houston, Texas. The following table sets forth facility locations:

	Owned/Leased Location			
Energy Chemistry Technologies	Owned	Marlow, Oklahoma		

Owned Monahans, Texas Owned Raceland, Louisiana Owned Waller, Texas Leased Calgary, Alberta

Leased Canonsburg, Pennsylvania

Leased Denver, Colorado

#### **Segment** Owned/Leased Location

Energy Chemistry Technologies	y Lease	ed	Dub	ai, U	Inited Arab Emirates
_	-	1	**		TT.

Leased Houston, Texas Leased Midland, Texas Leased Natoma, Kansas

Leased Oklahoma City, Oklahoma Raceland, Louisiana Leased

#### **Discontinued Operations**

Consumer and

Industrial Owned Winter Haven, Florida Chemistry

**Technologies** 

Leased Tokyo, Japan

Drilling Wysox, Pennsylvania Leased **Technologies** 

The Company considers owned and leased facilities to be in good condition and suitable for the conduct of business.

#### Item 3. Legal Proceedings.

Class Action Litigation

On March 30, 2017, the U.S. District Court for the Southern District of Texas granted the Company's motion to dismiss the four consolidated putative securities class action lawsuits that were filed in November 2015, against the Company and certain of its officers. The lawsuits were previously consolidated into a single case, and a consolidated amended complaint had been filed. The consolidated amended complaint asserted that the Company made false and/or misleading statements, as well as failed to disclose material adverse facts about the Company's business, operations, and prospects. The complaint sought an award of damages in an unspecified amount on behalf of a putative class consisting of persons who purchased the Company's common stock between October 23, 2014 and November 9, 2015, inclusive. The lead plaintiff has appealed the District Court's decision granting the motion to dismiss. On February 7, 2019, a three-judge panel of the United States Court of Appeals for the Fifth

Circuit issued a unanimous opinion affirming the District Court's judgment of dismissal in its entirety. In January 2016, three derivative lawsuits were filed, two in the District Court of Harris County, Texas (which have since been consolidated into one case), and one in the United States District Court for the Southern District of Texas, on behalf of the Company against certain of its officers and its current directors. The lawsuits allege violations of law, breaches of fiduciary duty, and unjust enrichment against the defendants.

The Company believes the lawsuits are without merit and intends to vigorously defend against all claims asserted. Discovery has not yet commenced. At this time, the Company is unable to reasonably estimate the outcome of this litigation.

In addition, as previously disclosed, the U.S. Securities and Exchange Commission had opened an inquiry related to similar issues to those raised in the above-described litigation. On August 21, 2017, the Company received a letter from the

staff of the SEC stating that the inquiry has been concluded and that the staff does not intend to recommend an enforcement action against the Company.

# Other Litigation

The Company is subject to routine litigation and other claims that arise in the normal course of business. Management is not

aware of any pending or threatened lawsuits or proceedings that are expected to have a material effect on the Company's financial position, results of operations or liquidity.

# Item 4. Mine Safety Disclosures.

Not applicable.

# **PART II**

# Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

The Company's common stock began trading on the NYSE on December 27, 2007, under the stock ticker symbol "FTK." As of the close of business on February 28, 2019, there were 57,350,015 shares of common stock outstanding held by approximately 9,800 holders of record. The Company's closing sale price of the common stock on the NYSE on February 28, 2019 was \$3.20. The Company has never declared or paid cash dividends on common stock. While the

Company regularly assesses the dividend policy, the Company has no current plans to declare dividends on its common stock and intends, subject to Board approval of recommendations by the Strategic Capital Committee described in Part I, Item 1A – "Risk Factors" of this Annual Report, to continue to use earnings and other cash in the maintenance and expansion of its business.

# Securities Authorized for Issuance Under Equity Compensation Plans

Equity compensation plan information relating to equity securities authorized for issuance under individual compensation agreements at December 31, 2018 is as follows:

Plan Category	Number of Securities Issued Upon Exercise of Outstanding Options, Warrants and Rights <sup>(1)</sup>	Outstanding	Exercise Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column(a))
	(a)	<b>(b)</b>	(c)
Equity compensation plans approved by security holders	1,352,138	\$	- 1,492,737
Equity compensation plans not approved by security holders	_	\$	
Total	1,352,138	\$ -	- 1,492,737

<sup>(1)</sup> Includes shares for outstanding stock options (0 shares), restricted stock awards (1,050,372 shares), and restricted stock unit share equivalents (301,766 shares).

16

Number of Securities

The weighted-average exercise price is for outstanding stock options only and does not include outstanding restricted stock awards or restricted stock unit share equivalents that have no exercise price.

# **Issuer Purchases of Equity Securities**

In November 2012, the Company's Board of Directors authorized the repurchase of up to \$25 million of the Company's common stock. Repurchases may be made in open market or privately negotiated transactions. Through December 31, 2018, the Company has repurchased \$25 million of its common stock under this repurchase program.

In June 2015, the Company's Board of Directors authorized the repurchase of up to an additional \$50 million of the Company's common stock. Repurchases may be made in open market or privately negotiated transactions. Through December 31, 2018, the Company has repurchased \$0.3 million of its common stock under this authorization and \$49.7 million may yet be used to purchase shares.

Repurchases of the Company's equity securities during the three months ended December 31, 2018 are as follows:

			Tatal	Niaximum
			Total	Dollar
			Number of	Value
	Total	Average	Shares	of Shares
	Number	Price	Purchased	that May
	of Shares	Paid	as Part of	Yet be
	Purchased	per	Publicly	Purchased
	(1)	Share	Announced	<b>Under the</b>
			Plans or	Plans or
			<b>Programs</b>	<b>Programs</b>
			O	(2)
October 1 to October 31, 2018	1,639	\$ 2.44		\$49,704,947
November 1 to November 30, 2018		\$ —		\$49,704,947
December 1 to December 31, 2018	71,303	\$ 1.09		\$49,704,947
Total	72,942	\$ 1.12	_	

The Company purchases shares of its common stock (a) to satisfy tax withholding requirements and payment remittance obligations related to period vesting of (1) restricted shares and exercise of non-qualified stock options, (b) to satisfy payments required for common stock upon the exercise of stock options, and (c) as part of a publicly announced repurchase program on the open market.

<sup>(2)</sup> A covenant under the Company's Credit Facility limited the amount that may be used to repurchase the Company's common stock. ADecember 31, 2018, this covenant did not permit additional share repurchases. On March 1, 2019, the Company paid off the Credit Facility (see Note 21).

#### Item 6. Selected Financial Data.

The following table sets forth certain selected historical financial data and should be read in conjunction with Part II, Item 7 – "Management's Discussion and Analysis of Financial Condition and Results of Operations" and Part II, Item 8 – "Financial Statements and Supplementary Data" of this Annual Report. The selected operating and financial position data as of and for each of the five years presented has been derived from audited consolidated Company financial statements, some of which appear elsewhere in this Annual Report. Financial data has been adjusted for discontinued operations, as indicated.

During the fourth quarter of 2018, the Company initiated a strategic plan to sell its Consumer and Industrial Chemistry Technologies segment, which was completed in the first quarter of 2019. An investment banking advisory services firm was engaged and actively marketed this segment. Effective December 31, 2018, the Company has classified the assets, liabilities, and results of operations for this segment as "Discontinued Operations" for all periods presented.

During the fourth quarter of 2016, the Company initiated a strategic restructuring of its business to enable a greater focus on its core businesses in energy chemistry and consumer and industrial chemistry. During 2017, the Company completed the sale or disposal of the assets and transfer or liquidation of liabilities and obligations of each of the Drilling Technologies and Production Technologies segments. The Company has classified the assets, liabilities, and results of operations for these two segments as "Discontinued Operations" for all periods presented.

During 2016 and 2015, the Company made one small acquisition each year, and in 2014, the Company made two small acquisitions. Insignificant non-recurring charges were incurred related to these acquisitions. The net income and non-recurring charges related to these acquisitions do not materially affect comparability.

Impairments recognized in 2016 and 2015 relate to the Drilling Technologies and Production Technologies segments and, therefore, are included in discontinued operations.

	As of and for the year ended December 31,					
	2018	2017	2016	2015	2014	
	(in thousar					
Operating Data						
Revenue (1)	\$177,773		\$188,233	•	\$268,761	
(Loss) income from operations <sup>(1)</sup>	(69,811)	(10,320)	(16,968)	3,536	52,057	
(Loss) income from continuing operations (1)	\$(73.441.)	\$(17,504)	\$(4.447.)	\$1.480	\$33,260	
Income (loss) from discontinued operations, net of tax				(14,951)	20,343	
Net (loss) income		` '		\$(13,462)		
ret (loss) meone	Φ(70,070)	ι Ψ(21,373)	Ψ(¬),130 )	ψ(13,402)	\$33,003	
(1) Amounts exclude impact of discontinued operations.						
Per Share Data						
Basic earnings (loss) per share:						
Continuing operations	\$(1.26)	\$(0.30)	\$(0.08)	\$0.03	\$0.61	
Discontinued operations, net of tax	0.05	(0.17)	(0.80)	(0.27)	0.37	
Basic earnings (loss) per share	\$(1.21)	\$(0.47)	\$(0.88)	\$(0.24)	\$0.98	
Diluted earnings (loss) per share:						
Continuing operations	\$(1.26)	\$(0.30)	\$(0.08)	\$0.03	\$0.60	
Discontinued operations, net of tax	0.05	(0.17)	(0.80)	(0.27)	0.37	
Diluted earnings (loss) per share	\$(1.21)	\$(0.47)	\$(0.88)	\$(0.24)	\$0.97	
Financial Position Data						
Total assets	\$285,883	\$329,888	\$383,215	\$403,090	\$423,276	
Convertible senior notes, long-term debt, and capital lease obligations, less discount and current portion	_	_	7,833	18,255	25,398	

Stockholders' equity 201,624 264,900 287,343 293,651 306,003

# Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

The following discussion and analysis should be read in conjunction with the Consolidated Financial Statements and the related Notes to the Consolidated Financial Statements included elsewhere in this Annual Report. The following information contains forward-looking statements, which are subject to risks and uncertainties. Should one or more of these risks or uncertainties materialize, actual results could differ from those expressed or implied by the forward-looking statements. See "Forward-Looking Statements" at the beginning of this Annual Report.

# **Basis of Presentation**

During the fourth quarter of 2018, the Company classified the Consumer and Industrial Chemistry Technologies segment as held for sale based on management's intention to sell this business. During the fourth quarter of 2016, the Company also classified the Drilling Technologies and Production Technologies segments as held for sale based on management's intention to sell these businesses. The Company's historical financial statements have been revised to present the operating results of the Consumer and Industrial Chemistry Technologies, Drilling Technologies, and Production Technologies segments as discontinued operations. The results of operations of these segments are presented as "Loss from discontinued operations" in the statement of operations and the related cash flows of these segments have been reclassified to discontinued operations for all periods presented. The assets and liabilities of these segments have been reclassified to "Assets held for sale" and "Liabilities held for sale", respectively, in the consolidated balance sheet for all periods presented, as applicable.

During 2017, the Company completed the sale or disposal of the assets and transfer or liquidation of liabilities and obligations of the Drilling Technologies and Production Technologies segments.

Results of operations of the Consumer and Industrial Chemistry Technologies segment for the years ended December 31, 2018, 2017, and 2016 are discussed below. Results of operations of the Drilling Technologies and Production Technologies segments for the year ended December 31, 2016 are discussed below.

# **Executive Summary**

Flotek is a global, diversified, technology-driven company that develops and supplies chemistries and services to the oil and gas industries. Flotek also supplied high value compounds to companies that make food and beverages, cleaning products, cosmetics, and other products that are sold in consumer and industrial markets, classified as discontinued operations at December 31, 2018. Flotek operates in over 20 domestic and international markets.

The Company's oilfield business includes specialty chemistries and logistics which enable its customers in pursuing improved efficiencies in the drilling and completion of their wells. Customers include major integrated oil and gas ("O&G") companies, oilfield services companies, independent O&G companies, pressure-pumping service companies, national and state-owned oil companies, and international supply chain management companies. The Company also produced non-energy-related citrus oil and related products, classified as discontinued operations at December 31, 2018, including (1) high value compounds used as additives by companies in the flavors and fragrances markets and (2) environmentally friendly chemistries for use in numerous industries around the world, including the O&G industry. Additionally, the Company also provides automated bulk material handling, loading facilities, and blending capabilities.

# **Continuing Operations**

The operations of the Company are categorized into one reportable segment: Energy Chemistry Technologies. Energy Chemistry Technologies designs, develops, manufactures, packages, and markets specialty chemistries used in O&G well drilling, cementing, completion, and stimulation. These technologies developed by Flotek's Research and Innovation team enable customers to pursue improved efficiencies in the drilling and completion of wells.

# **Discontinued Operations**

In 2018, the Consumer and Industrial Chemistry Technologies segment qualified for classification as a discontinued operation. The Drilling Technologies and Production Technologies segments were sold during 2017 and are classified as discontinued operations, as well.

Consumer and Industrial Chemistry Technologies designed, developed, and manufactured products that are sold to companies in the flavor and fragrance industries and specialty chemical industry. These technologies are used by beverage and food companies, fragrance companies, and companies providing household and industrial cleaning

# products.

Drilling Technologies assembled, rented, sold, inspected, and marketed downhole drilling equipment used in energy, mining, and industrial drilling activities.

Production Technologies assembled and marketed production-related equipment, including pumping system components, electric submersible pumps ("ESP"), gas separators, valves, and services that support natural gas and oil production activities.

# **Market Conditions**

The Company's success is sensitive to a number of factors, which include, but are not limited to, drilling and well completion activity, customer demand for its advanced technology products, market prices for raw materials, and governmental actions.

Drilling and well completion activity levels are influenced by a number of factors, including the number of rigs in operation and the geographical areas of rig activity. Additional factors that influence the level of drilling and well completion activity include:

Historical, current, and anticipated future O&G prices,

Federal, state, and local governmental actions that may encourage or discourage drilling activity,

Customers' strategies relative to capital funds allocations,

Weather conditions, and

Technological changes to drilling and completion methods and economics.

Historical North American drilling activity is reflected in "TABLE A" below.

Customers' demand for advanced technology products and services provided by the Company are dependent on their recognition of the value of:

Chemistries that improve the economics of their O&G operations,

Chemistries that meet the need of consumer product markets, and

Chemistries that are economically viable, socially responsible, and ecologically sound.

Market prices for commodities, including citrus oils, can be influenced by:

Historical, current, and anticipated future production levels of the global citrus (primarily orange) crops,

Weather related risks.

Health and condition of citrus trees (e.g., disease and pests), and

International competition and pricing pressures resulting from natural and artificial pricing influences.

Governmental actions may restrict the future use of hazardous chemicals, including, but not limited to, the following industrial applications:

O&G drilling and completion operations,

O&G production operations, and

Non-O&G industrial solvents.

TABLE A	2018	2017	2016	2018 vs. 2017 % Change	2016	%
Average North American Active Drilling Rigs						
United States	1,032	876	509	17.8 %	72.1	%
Canada	191	206	130	(7.3)%	58.5	%
Total	1,223	1,082	639	13.0 %	69.3	%
Average U.S. Active Drilling Rigs by Type						
Vertical	63	70	60	(10.0)%	16.7	%
Horizontal	900	736	400	22.3 %	84.0	%
Directional	69	70	49	(1.4)%	42.9	%
Total	1,032	876	509	17.8 %	72.1	%
Average North American Drilling Rigs by Product						
Oil	961	812	471	18.3 %	72.4	%
Natural Gas	262	270	168	(3.0)%	60.7	%
Total	1,223	1,082	639	13.0 %	69.3	%
Source: Rig counts are per Baker Hughes (www.bakerhughes.com); R	ig counts	are the ar	nual ave	erage of the re	eported v	weekly rig

Source: Rig counts are per Baker Hughes (<u>www.bakerhughes.com</u>); Rig counts are the annual average of the reported weekly rig count activity. Completions are per the U.S. Energy Information Administration (<u>https://www.eia.gov/petroleum/drilling/</u>) as of January 22, 2019.

Average U.S. rig activity increased by 17.8% in 2018 compared to 2017, and increased 72.1% from 2016 to 2017. According to data collected by the U.S. Energy Information Administration ("EIA") as reported on January 22, 2019, completions in the seven most prolific areas in the lower 48 states increased 25.4% in 2018 compared to 2017 and decreased 43.2% from 2016 to 2017.

# Outlook for 2019

After a continuous decline in U.S. drilling activity beginning in mid-2014, the market began to gradually recover in the second quarter of 2016. Although oil and gas markets have improved, the level of drilling and completion activity remains lower than previous levels experienced before the downturn in 2014. Assuming the price for crude oil remains relatively stable and regulatory impediments are limited, the Company expects global oilfield activity to remain stable heading into 2019.

During 2018, the Company continued to analyze and promote the efficacy of its Complex nano-Fluid® ("Cn®") chemistries and its Prescriptive Chemistry Management® ("PCM®") offering. Although quarter-to-quarter performance may vary, the Company expects to continue to penetrate the market over time by demonstrating the efficacy of its CnF® chemistries and reservoir-centric full fluid systems via PCM®. The Company will continue to demonstrate the value and benefit of Flotek chemistries through comparative analysis of wells with and without Flotek chemistries and field validation results conducted in partnership with exploration and production ("E&P") companies. Flotek is experiencing a notable shift in purchasing behaviors in which E&P companies are seeking

greater transparency, control and efficacy in their fluid systems, as they see diminishing returns on mechanical factors in their completion designs, such as proppant loading, fluid loading, and lateral length in their completion. As a result, they are focusing more on sourcing consumables, including chemistry, directly from manufacturers and providers of these products. This trend has created significant changes in Flotek's customer base, product portfolio, and sales efforts and continues to influence changes in inventory and distribution strategies, capital allocation, and the business model for the Company. While these challenges are expected to persist in the near-term, the Company believes it can grow its client base and revenue opportunities over time. Additionally during the third quarter, the Company experienced increased demand for its products internationally, as unconventional activity has increased outside of the U.S. and international spending has begun to recover.

The Company continues to enhance and improve its patented and proven chemistries through its industry leading research and innovation staff who develop innovative and customer- responsive products, as well as create new chemistry technologies, which are expected to address oilfield challenges of the future and expand the Company's future product lines. Completed in 2016, the Company's Global Research & Innovation Center in Houston houses scientists, chemists, geologists, and reservoir, petroleum and geomechanical engineers who advance the development of next-generation innovative energy chemistries, as well as expanded collaboration among clients, leaders from academia, and Company scientists. These collaborative opportunities are an important and distinguishing capability within the industry

and provide real-time product and fluid system development direct to the consumer.

During the fourth quarter of 2018, the Company initiated a strategic plan to sell its Consumer and Industrial Chemistry Technologies segment, which was completed in the first quarter of 2019. The Company continues to focus on maximizing the profitability of its product and business portfolio, and may exit or enter new product lines or businesses which complement its current operations.

Capital expenditures for continuing operations totaled \$3.6 million in 2018. The Company expects maintenance capital spending to be between \$5 million and \$9 million in 2019 and does not have any specific growth capital projects currently planned or committed. During the first quarter of 2019, the Company formed a Strategic Capital Committee that will consider possible growth capital projects that could total as much as \$20 million to \$30 million for 2019 and beyond. The Company will remain nimble in its core capital expenditure plans, adjusting as market conditions warrant, and will focus

any growth capital spending program on uses that generate positive returns and to areas that pose a strategic long-term benefit.

Changes to geopolitical, global economic, and industry trends could have an impact, either positive or negative, on the Company's business. In the event of significant adverse changes to the demand for oil and gas production, the market price for oil and gas, weather patterns, and/or the availability of citrus crops, the market conditions affecting the Company could change rapidly and materially. Should such adverse changes to market conditions occur, management believes the Company has access to adequate liquidity to withstand the impact of such changes while continuing to make strategic capital investments and acquisitions, if opportunities arise. In addition, management believes the Company is well-positioned to take advantage of significant increases in demand for its products should market conditions improve dramatically in the near term.

<b>Results of Continuing Operations (in thousands):</b>						
	Year ended December 31,					
	2018		2017		2016	
Revenue	\$177,77	3	\$243,100	5	\$188,23	3
Operating expenses (excluding depreciation and amortization)	159,808		188,744		143,983	
Operating expenses %	89.9	%	77.6	%	76.5	%
Corporate general and administrative costs	31,467		41,492		43,745	
Corporate general and administrative costs %	17.7	%	17.1	%	23.2	%
Depreciation and amortization	9,216		9,768		8,172	
Research and development costs	10,356		13,130		9,319	
(Gain) loss on disposal of long-lived assets	(443	)	292		(18	)
Impairment of goodwill	37,180		_		_	
Loss from operations	(69,811	)	(10,320	)	(16,968	)
Operating margin %	(39.3	)%	(4.2	)%	(9.0	)%
Loss on sale of business	(360	)	_			
Loss on write-down of assets held for sale	(2,580	)	_			
Gain on legal settlement	_		_		12,730	
Interest and other expense, net	(7,906	)	(1,072	)	(2,413	)
Loss before income taxes	(80,657	)	(11,392	)	(6,651	)
	7,216		(6,112	)	2,204	
Loss from continuing operations	(73,441	)	(17,504	)	(4,447	)
Income (loss) from discontinued operations, net of tax	2,743		(9,891	)	(44,683	)
Net loss	\$(70,698	3)	\$(27,395	<b>(</b> )	\$(49,130	))
Net loss attributable to noncontrolling interests	358		_		_	
Net loss attributable to Flotek Industries, Inc. (Flotek)	\$(70,340	))	\$(27,395	<b>(</b> )	\$(49,130	))

# Results for 2018 compared to 2017—Consolidated

Consolidated revenue for the year ended December 31, 2018, decreased \$65.3 million, or 26.9%, from 2017. The decrease

in revenue was due to changes in product mix and an ongoing transition related to the Company selling progressively more to oil and gas company end users rather than through energy service companies.

Consolidated operating expenses for the year ended December 31, 2018, decreased \$28.9 million, or 15.3%, from 2017, and, as a percentage of revenue, increased to 89.9% for the year ended December 31, 2018, from 77.6% in 2017. The decrease in expenses was primarily attributable to decreased sales, lower stock compensation expense, and decreased headcount, partially offset by increased freight and other direct costs associated with manufacturing. Corporate general and administrative ("CG&A") expenses are not directly attributable to products sold or services provided. CG&A costs decreased \$10.0 million, or 24.2%, for the year ended December 31, 2018, from 2017. As a percentage of revenue, CG&A rose from 17.1% to 17.7% for the year ended December 31, 2018, compared to 2017. The decrease in CG&A costs was primarily due to aggressive cost reduction measures which began in the last quarter of 2017, as well as lower incentive and stock compensation expense.

Depreciation and amortization expense for the year ended December 31, 2018, decreased by \$0.6 million, or 5.7%, from 2017.

Research and Innovation ("R&I") expense for the year ended December 31, 2018, decreased \$2.8 million, or 21.1%, from 2017. The decrease in R&I is primarily attributable to reallocating personnel into operational roles.

During the second quarter of 2018, the Company recognized a goodwill impairment charge of \$37.2 million in the Energy Chemistry Technologies reporting unit, which resulted from sustained under-performance, lower expectations, and additional risks associated with the reporting unit.

During the second quarter of 2018, the Company committed to a plan to divest the revenue generating assets associated with the Dalton, Georgia facility within the Energy Chemistry Technologies segment. As a result of this planned divestiture, the Company recorded a loss on write-down of assets held for sale of \$2.6 million for the three months ended June 30, 2018. During the third quarter of 2018, the Company completed the sale and recorded a loss on the sale of the business of \$0.4 million for the three months ended September 30, 2018.

Interest and other expense increased \$6.8 million for the year ended December 31, 2018, compared to 2017, primarily due to \$1.2 million and \$1.9 million write-offs associated with the discontinuation of certain corporate projects during the second and fourth quarter of 2018, respectively, expenses related to winding down of certain business ventures, changes in foreign currency exchange rates, and increased borrowings on the revolving credit facility throughout 2018.

The Company recorded an income tax benefit of \$7.2 million, yielding an effective tax benefit rate of 8.9%, for the year ended December 31, 2018, compared to an income tax provision of \$6.1 million, yielding an effective tax rate of 53.7%, in 2017. In the second quarter of 2018, the Company determined that it was more likely than not that it will not realize the benefits of its gross deferred tax assets and, therefore, recorded a \$15.5

million valuation allowance against the carrying value of net deferred tax assets. As all available evidence should be taken into consideration when assessing the need for a valuation allowance, the subsequent events that occurred in the first quarter of 2019 (Note 21) provided a source of income to support the release of \$11.5 million of the valuation allowance. As such, the Company reversed this portion of the valuation allowance during the fourth quarter of 2018. During the fourth quarter of 2018, the Company initiated a strategic plan to sell its Consumer and Industrial Chemistry Technologies segment, which was completed in the first quarter of 2019. The Company recorded net income from discontinued operations of \$2.7 million for the year ended December 31, 2018 for the classification of this segment as held for sale. The completion of this sale is expected to occur in the first quarter of 2019.

# Results for 2017 compared to 2016—Consolidated

Consolidated revenue for the year ended December 31, 2017, increased \$54.9 million, or 29.2%, from 2016. The increase in revenue was driven by the upturn in oilfield market activity.

Consolidated operating expenses for the year ended December 31, 2017, increased \$44.8 million, or 31.1%, from 2016, and, as a percentage of revenue, increased to 77.6% for the year ended December 31, 2017, from 76.5% in 2016. These increases were primarily attributable to increased sales and associated headcount, as well as increased inventory, freight, and other direct costs associated with manufacturing.

CG&A expenses are not directly attributable to products sold or services provided. CG&A costs decreased \$2.3 million, or 5.2%, for the year ended December 31, 2017 from 2016. As a percentage of revenue, CG&A declined from 23.2% to 17.1% for the year ended December 31, 2017, compared to 2016. The decrease in CG&A costs was primarily due to lower legal expenses and stock compensation expense, partially offset by costs associated with

#### executive retirement.

Depreciation and amortization expense for the year ended December 31, 2017, increased \$1.6 million, or 19.5%, from 2016. This increase was primarily attributable to the completion and equipping of the Global Research & Innovation Center in August 2016, along with other improvements to manufacturing facilities.

Research and Innovation ("R&I") expense for the year ended December 31, 2017, increased \$3.8 million, or 40.9%, from 2016. The increase in R&I is primarily attributable to increased personnel for new product development and Flotek's commitment to remaining responsive to customer needs, increased demand, continued growth and refining of existing product lines, and the development of new chemistries which are expected to expand the Company's intellectual property portfolio.

Interest and other expense decreased \$1.3 million, or 55.6%, for the year ended December 31, 2017, compared to 2016, primarily due to the repayment of the term loan in May 2017,

as well as decreasing the outstanding balance of the revolving credit facility throughout 2017.

The Company recorded an income tax provision of \$6.1 million, yielding an effective tax provision rate of 53.7%, for the year ended December 31, 2017, compared to an income tax benefit of \$2.2 million, yielding an effective tax benefit rate of 33.1%, in 2016.

As part of the Company's strategic restructuring of its business to enable a greater focus on its core businesses in energy chemistry and consumer and industrial chemistry, the Company completed the sale or disposal of the assets and transfer or liquidation of liabilities and obligations of the Drilling Technologies and Production Technologies segments during 2017. The Company recorded a net loss from discontinued operations of \$14.3 million for the year ended December 31, 2017.

# **Results by Segment**

Energy Chemistry Technologies ("ECT")			
(dollars in thousands)	Year ended	<b>December</b>	31,
	2018	2017	2016
Revenue	\$177,773	\$243,106	\$188,233
(Loss) income from operations	(36,817)	33,611	29,014
Income from operations - excluding impairment	363	33,611	29,014
Operating margin % - excluding impairment	0.2 %	13.8 %	5 15.4

# Results for 2018 compared to 2017—Energy Chemistry Technologies

ECT revenue for the year ended December 31, 2018, decreased \$65.3 million, or 26.9%, from 2017, compared to a 25.4% increase in completion activity as measured by the EIA. ECT's under-performance when compared to these market indicators was primarily attributable to product mix and an ongoing transition related to the Company selling progressively more to oil and gas company end users rather than through energy service companies. Income from operations for the ECT segment decreased \$70.4 million for the year ended December 31, 2018, compared to 2017, partially due to the \$37.2 million goodwill impairment charge taken in the second quarter of 2018. Income from operations, excluding impairment, decreased \$33.2 million, or 98.9%, for the year ended December 31, 2018, compared to 2017. This decrease is primarily a result of gross margin compression caused by reduced sales activity coupled with increases in material and labor costs, inventory reserve adjustments, and higher logistics expenditures, partially offset by a reduction in overhead expenses.

# Results for 2017 compared to 2016—Energy Chemistry Technologies

ECT revenue for the year ended December 31, 2017, increased \$54.9 million, or 29.2%, from 2016, compared to a 39.9% increase in completion activity as measured by the EIA. ECT performed along these market indicators by continuing to promote the benefits of its CnF® chemistries. Revenues increased with the increased customer demand resulting from improved oilfield market conditions.

Income from operations for the ECT segment increased \$4.6 million, or 15.8%, for the year ended December 31, 2017, compared to 2016. This increase is primarily attributable to an increase in gross profit, increased activity associated with sales and marketing efforts in pursuit of growth opportunities, and cost reductions. The Company continues its commitment to research and innovation efforts within Energy Chemistry Technologies.

# **Discontinued Operations**

During the fourth quarter of 2018, the Company classified the Consumer and Industrial Chemistry Technologies segment as held for sale based on management's intention to sell the business. In addition, during the fourth quarter of 2016, the Company classified the Drilling Technologies and Production Technologies segments as held for sale based on management's intention to sell these businesses. The Company's historical financial statements have been revised to present the operating results of the Consumer and Industrial

Chemistry Technologies, Drilling Technologies, and Production Technologies segments as discontinued operations. During 2017, the Company completed the sale or disposal of the assets and transfer or liquidation of liabilities and obligations of the Drilling Technologies and Production Technologies segments.

#### Consumer and Industrial

Chemistry Technologies ("CICT")

(dollars in thousands) Year ended December 31, 2018 2017 2016

Revenue \$72,344 \$73,992 \$74,599 Income from operations \$3,054 \$7,465 \$9,668 Operating margin % 4.2 % 10.1 % 13.0 %

# Results for 2018 compared to 2017—Consumer and Industrial Chemistry Technologies

CICT revenue for the year ended December 31, 2018, decreased \$1.6 million, or 2.2%, from 2017, primarily due to a decline in the value of terpenes and some softness for flavor ingredients. The market for citrus oils was affected by the historic high prices experienced in 2017 and 2018, which limited market activity and top line revenue. Citrus greening reduced citrus crops globally, thereby limiting the Company's performance in comparison to the growth experienced in 2016 and 2017.

Income from operations for the CICT segment decreased \$4.4 million, or 59.1%, for the year ended December 31, 2018, from 2017, primarily due to higher raw material costs and reduced by-product sales, as well as increased expenses related to operations of the new still put into production in the third quarter of 2018.

# Results for 2017 compared to 2016—Consumer and Industrial Chemistry Technologies

CICT revenue for the year ended December 31, 2017, decreased \$0.6 million, or 0.8%, from 2016, primarily due to a decline in sales volumes. The high price for citrus oils limited market activity and top line revenue. Citrus greening and adverse weather reduced citrus crops globally, thereby limiting the Company's performance in comparison to the growth experienced in 2016 and 2015.

Income from operations for the CICT segment decreased \$2.2 million, or 22.8%, for the year ended December 31, 2017, from 2016, primarily due to higher raw material costs and increased headcount to facilitate growth in the food and beverages market through new research activities and the opening of a sales office in Japan.

Drilling Technologies (dollars in thousands)	Year ended Dec	cember 31,
	20182017	2016
Revenue	\$ \$11,534	\$27,627
Loss from operations	\$— \$(2,646)	\$(44,522)
Loss from operations - excluding impairment	\$— \$(2,646)	\$(8,000)
Operating margin % - excluding impairment	<b>-</b> % (22.9 )%	(29.0)%

# Results for 2017 compared to 2016—Drilling Technologies

On May 22, 2017, the Company completed the sale of substantially all of the assets and transfer of certain specified liabilities and obligations of the Company's Drilling Technologies segment to National Oilwell Varco, L.P. ("NOV") for \$17.0 million in cash consideration.

On August 16, 2017, the Company completed the sale of substantially all of the remaining assets of the Company's Drilling Technologies segment to Galleon Mining Tools, Inc. for \$1.0 million in cash consideration and a note receivable of \$1.0 million due in one year.

Upon completion of these sales, the Company ceased all operations for the Drilling Technologies segment.

Production Technologies		
(dollars in thousands)	Year ended De	cember 31,
	20182017	2016
Revenue	\$ \$4,002	\$8,292
Loss from operations	\$— \$(1,357)	\$(8,814)
Loss from operations - excluding impairment	\$— \$(1,357)	\$(4,901)
Operating margin % - excluding impairment	<b>-</b> % (33.9 )%	(59.1)%

# Results for 2017 compared to 2016—Production Technologies

On May 23, 2017, the Company completed the sale of substantially all of the assets and transfer of certain specified liabilities and obligations of the Company's Production

Technologies segment to Raptor Lift Solutions, LLC ("Raptor Lift") for \$2.9 million in cash consideration. Upon completion of this sale, the Company ceased all operations for the Production Technologies segment.

# **Capital Resources and Liquidity**

#### **Overview**

The Company's ongoing capital requirements arise from the Company's need to service debt, acquire and maintain equipment, fund working capital requirements, and when the opportunities arise, to make strategic acquisitions and repurchase Company stock. During 2018, the Company funded capital requirements primarily with cash on hand and debt financing. Future capital requirements will be funded with cash on hand, primarily due to the proceeds received from the sale of the CICT segment.

The Company's primary source of debt financing was its \$75 million Credit Facility with PNC Bank. This Credit Facility contained provisions for a revolving credit facility secured by substantially all of the Company's domestic real and personal property, including accounts receivable, inventory, land, buildings, equipment, and other intangible assets. As of December 31, 2018, the Company had \$49.7 million in outstanding borrowings under the revolving debt portion of the Credit Facility. At December 31, 2018, the Company was in compliance with all debt covenants. Significant terms of the Credit Facility are discussed in Note 13 – "Long-Term Debt and Credit Facility" in Part II, Item 8 – "Financial Statements and Supplementary Data" of this Annual Report. Upon closing of the sale of the CICT segment, the Company repaid the outstanding balance of the Credit Facility on March 1, 2019 (see Note 21). At December 31, 2018, the Company remained compliant with the continued listing standards of the NYSE. Cash and cash equivalents totaled \$3.0 million at December 31, 2018. The Company used \$20.8 million of cash

outflows from continuing operations (including \$2.1 million expended in working capital), \$3.6 million for capital expenditures, and \$1.6 million for purchases of various patents and other intangible assets. Offsetting these cash outflows, the Company received \$21.8 million for borrowings of debt, net of repayments, and \$0.3 million of proceeds from the sale of common stock.

#### Liquidity

The Company expects maintenance capital spending to be between \$5 million and \$9 million in 2019 and does not have any specific growth capital projects currently planned or committed. During the first quarter of 2019, the Company formed a Strategic Capital Committee that will consider possible growth capital projects that could total as much as \$20 million to \$30 million for 2019 and beyond. During 2019, the Company plans to use internally generated funds to fund operations and capital expenditures. With the proceeds from the sale of the CICT segment, the Company paid off its credit facility balance and has formed a Strategic Capital Committee to evaluate and make recommendations to the board of directors regarding the manner in which the remaining net proceeds from the sale will be deployed. Subject to Board approval of recommendations by the Strategic Capital Committee, the Company will continue to invest capital in what it believes to be economically attractive opportunities for its shareholders. This includes the potential for share repurchases as approved by the Board of Directors in June 2015.

Any excess cash generated may be used to pay down the revolving line of credit or be retained for future use.

# Net Debt

Net debt represents total debt less cash and cash equivalents and combines the Company's indebtedness and the cash and cash equivalents that could be used to repay that debt. Components of net debt are as follows (in thousands):

	December 31, December			31,
	2018		2017	
Cash and cash equivalents	\$ 3,044		\$ 4,584	
Current portion of long-term debt	(49,731	)	(27,950	)
Net debt	\$ (46,687	)	\$ (23,366	)

# Cash Flows

Cash flow metrics from the consolidated statements of cash flows are as follows (in thousands):

	y ear ende	oer 31,	
	2018	2017	2016
Net cash (used in) provided by operating activities	\$(20,816)	\$12,345	\$1,192
Net cash (used in) provided by investing activities	(2,109)	14,526	(21,419)
Net cash provided by (used in) financing activities	21,480	(27,285)	22,851
Net cash flows (used in) provided by discontinued operations	(7)	24	(6)
Effect of changes in exchange rates on cash and cash equivalents	(88)	151	(3)
Net (decrease) increase in cash and cash equivalents	\$(1,540)	\$(239)	\$2,615

# **Operating Activities**

During 2018, 2017, and 2016, cash (used in) provided by operating activities totaled \$(20.8) million, \$12.3 million, and \$1.2 million, respectively. Consolidated net loss for 2018, 2017, and 2016 totaled \$73.4 million, \$17.5 million and \$4.4 million, respectively.

Net non-cash contributions to net income in 2018, totaled \$54.4 million. Contributory non-cash items consisted primarily of \$37.2 million for the goodwill impairment charge in the second quarter of 2018, \$9.6 million for depreciation and amortization expense, \$7.1 million for stock compensation expense, \$3.3 million for provisions related to accounts receivables and inventory reserves, \$2.6 million for the loss on write-down of assets held for sale, \$0.7 million for reduction in incremental tax benefit related to share-based awards, and \$0.4 million for the loss on sale of business, partially offset by \$6.0 million for changes to deferred income taxes and \$0.4 million for net gain on sale of assets.

Net non-cash contributions to net income in 2017, totaled \$23.9 million. Contributory non-cash items consisted primarily of \$10.2 million for depreciation and amortization expense, \$10.6 million for stock compensation expense, \$2.0 million for reduction in incremental tax benefit related to share-based awards, \$0.5 million for provisions related to accounts receivables and inventory reserves, \$0.3 million for net loss on sale of assets, and \$0.2 million for changes to deferred income taxes.

Net non-cash contributions to net income in 2016, totaled \$3.3 million. Contributory non-cash items consisted primarily of \$8.6 million for depreciation and amortization expense, \$11.4 million for stock compensation expense, \$2.5 million for reduction in incremental tax benefit related to share-based awards and \$0.5 million for provisions related to accounts receivables, partially offset by \$19.7 million for changes to deferred income taxes. During 2018, changes in working capital used \$2.1 million in cash, primarily resulting from increasing accounts receivables and income taxes receivable by \$3.7 million and decreasing accrued liabilities and interest payable by \$8.8 million, partially offset by decreasing inventories and other current assets by \$5.8 million and increasing accounts payable by \$4.6 million.

During 2017, changes in working capital provided \$6.0 million in cash, primarily resulting from decreasing accounts receivables, income taxes receivable, and other current assets by \$24.1 million, partially offset by increasing inventories by \$3.4 million and decreasing accounts payable and accrued liabilities by \$14.7 million.

During 2016, changes in working capital provided \$2.3 million in cash, primarily resulting from increasing accounts

payable and accrued liabilities by \$39.1 million, partially offset by increasing accounts receivables, inventories, income taxes receivable, and other current assets by \$34.9 million and decreasing income taxes payable and interest payable by \$2.0 million.

# **Investing Activities**

Net cash used in investing activities was \$2.1 million during 2018. Cash used in investing activities primarily included \$3.6 million for capital expenditures and \$1.6 million for the purchase of various patents and other intangible assets, partially offset by \$1.7 million of proceeds received from the sale of revenue generating assets associated with a business line within the Energy Chemistry Technologies segment and \$1.4 million of proceeds received from the sale of fixed assets.

Net cash provided by investing activities was \$14.5 million during 2017. Cash provided by investing activities primarily included \$18.5 million of proceeds received from the sale of the Drilling Technologies and Production Technologies segments and \$0.7 million of proceeds received from the sale of fixed assets, partially offset by \$4.2 million for capital expenditures and \$0.5 million for the purchase of various patents and other intangible assets. Net cash used in investing activities was \$21.4 million during 2016. Cash used in investing activities primarily included \$13.1 million for capital expenditures, \$7.9 million associated with the purchase of 100% of the stock and interests of IPI, and \$0.6 million for the purchase of patents and intangible assets.

# Financing Activities

Net cash generated through financing activities was \$21.5 million during 2018, primarily due to receiving \$21.8 million for borrowings of debt, net of repayments, and receiving \$0.3 million in proceeds from the sale of common stock. Cash generated through financing activities was partially offset by a loss from noncontrolling interest of \$0.4 million, \$0.2 million for purchases of treasury stock for tax withholding purposes related to the vesting of restricted stock awards and the exercise of non-qualified stock options and \$0.1 million for payments of debt issuance costs. Net cash used in financing activities was \$27.3 million during 2017, primarily due to using \$20.4 million for repayments of debt, net of borrowings, \$5.2 million for the repurchase of common stock, \$1.7 million for purchases of treasury stock for tax withholding purposes related to the vesting of restricted stock awards and the exercise of non-qualified stock options, and \$0.6 million for payments of debt issuance costs. Cash used in financing activities was partially offset by receiving \$0.7 million in proceeds from the sale of common stock.

During 2016, net cash generated through financing activities was \$22.9 million. Cash generated through financing activities was primarily due to receiving \$30.9 million

Cash

generated through financing activities was partially offset by using \$2.1 million for repayments of debt, net of borrowings, reductions in tax benefit related to stock-based compensation of \$2.5 million, purchases of treasury stock for tax withholding purposes related to the vesting of restricted stock awards and the exercise of non-qualified stock options of \$2.4 million, and payments of debt issuance costs of \$1.2 million.

# **Off-Balance Sheet Arrangements**

There have been no transactions that generate relationships with unconsolidated entities or financial partnerships, such as entities often referred to as "structured finance" or "special purpose entities" ("SPEs"), established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. As of December 31, 2018, the Company was not involved in any unconsolidated SPEs.

The Company has not made any guarantees to customers or vendors nor does the Company have any off-balance sheet arrangements or commitments that have, or are reasonably likely to have, a current or future effect on the Company's financial condition, change in financial condition, revenue, expenses, results of operations, liquidity, capital expenditures, or capital resources that are material to investors.

# **Contractual Obligations**

Cash flows from operations are dependent on a variety of factors, including fluctuations in operating results, accounts receivable collections, inventory management, and the timing of payments for goods and services. Correspondingly, the impact of contractual obligations on the Company's liquidity and capital resources in future periods is analyzed in conjunction with such factors.

Material contractual obligations consist of repayment of amounts borrowed under the Company's Credit Facility and payment of operating lease obligations.

Contractual obligations at December 31, 2018 are as follows (in thousands):

# **Payments Due by Period**

	Total	Less than 1 year	1 - 3 years	3 -5 years	More than 5 years
Borrowings under revolving credit facility (1)	\$49,731	\$49,731	\$ —	\$ —	\$ —
Operating lease obligations	19,458	2,562	4,290	3,352	9,254
Total	\$69,189	\$52,293	\$ 4,290	\$ 3,352	\$ 9,254

The borrowing was classified as current debt. The weighted-average interest rate was 5.51% at December 31, 2018. Borrowings under the revolving credit facility were repaid in full on March 1, 2019.

# **Critical Accounting Policies and Estimates**

The Company's consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"). Preparation of these statements requires management to make judgments, estimates and assumptions that affect the amounts of assets and liabilities in the financial statements and revenue and expenses during the reporting period. Significant accounting policies are described in Note 2 – "Summary of Significant Accounting Policies" in Part II, Item 8 – "Financial Statements and Supplementary Data" of this Annual Report. The Company believes the following accounting policies are critical due to the significant, subjective, and complex judgments and estimates required when preparing the consolidated financial statements. The Company regularly reviews judgments, assumptions, and estimates to the critical accounting policies.

# Basis of Presentation

During the fourth quarter of 2018, the Company classified the Consumer and Industrial Chemistry Technologies reportable segment's operations as held for sale based on management's intention to sell this business. In addition, during the fourth quarter of 2016, the Company classified the Drilling Technologies and Production Technologies reportable segments' operations as held for sale based on management's intention to sell these businesses. The operating results of these segments have been reported as discontinued operations in the consolidated financial statements. Amounts previously reported have been reclassified to conform to this presentation to allow for meaningful comparison of continuing operations.

# Revenue Recognition

The Company recognizes revenues to depict the transfer of control of promised goods or services to its customers in an amount that reflects the consideration to which it expects to be entitled in exchange for those goods or services. Refer to Note 7 — "Revenue from Contracts with Customers" for further discussion on Revenue.

The Company recognizes revenue based on the Accounting Standards Codification ("ASC") 606 five-step model when all of the following criteria have been met: (i) a contract with a customer exists, (ii) performance obligations have been identified, (iii) the price to the customer has been determined,

(iv) the price to the customer has been allocated to the performance obligations, and (v) performance obligations are satisfied.

Products and services are sold with fixed or determinable prices. Certain sales include right of return provisions, which are considered when recognizing revenue and deferred accordingly. Deposits and other funds received in advance of delivery are deferred until the transfer of control is complete.

For certain contracts, the Company recognizes revenue under the percentage-of-completion method of accounting, measured by the percentage of "costs incurred to date" to the "total estimated costs of completion." This percentage is applied to the "total estimated revenue at completion" to calculate proportionate revenue earned to date. For the years ended December 31, 2018, 2017, and 2016, the percentage-of-completion revenue accounted for less than 0.1% of total revenue during the respective time periods. This resulted in immaterial unfulfilled performance obligations and immaterial contract assets and/or liabilities for which the Company did not record adjustments to opening retained earnings as of December 31, 2015 or for any periods previously presented.

As an accounting policy election, the Company excludes from the measurement of the transaction price all taxes assessed by a governmental authority that are both imposed on and concurrent with a specific revenue-producing transaction and collected by the entity from a customer.

Shipping and handling costs associated with outbound freight after control over a product has transferred to a customer are accounted for as a fulfillment cost and are included in cost of revenues.

# Allowance for Doubtful Accounts

The Company performs ongoing credit evaluations of customers and grants credit based upon historical payment history, financial condition, and industry expectations, as available. Determination of the collectability of amounts due from customers requires the Company to use estimates and make judgments regarding future events and trends, including monitoring customers' payment history and current credit worthiness, in order to determine that collectability is

reasonably assured. The Company also considers the overall business climate in which its customers operate. These uncertainties require the Company to make frequent judgments and estimates regarding a customers' ability to pay amounts due in order to assess and quantify an appropriate allowance for doubtful accounts. The primary factors used to quantify the allowance are customer delinquency, bankruptcy, and the Company's estimate of its ability to collect outstanding receivables based on the number of days a receivable has been outstanding.

The majority of the Company's customers operate in the energy industry. The cyclical nature of the industry may affect customers' operating performance and cash flows, which could impact the Company's ability to collect on these obligations. Additionally, some customers are located in international areas that are inherently subject to risks of economic, political, and civil instability.

The Company continues to monitor the economic climate in which its customers operate and the aging of its accounts receivable. The allowance for doubtful accounts is based on the aging of accounts and an individual assessment of each invoice. At December 31, 2018, the allowance was 3.1% of gross accounts receivable, compared to an allowance of 1.9% a year earlier. While credit losses have historically been within expectations and the provisions established, should actual write-offs differ from estimates, revisions to the allowance would be required.

# **Inventory Reserves**

Inventories consist of raw materials, work-in-process, and finished goods and are stated at the lower of cost or market, using the weighted-average cost method. Finished goods inventories include raw materials, direct labor, and production overhead. The Company's inventory reserve represents the excess of the inventory carrying amount over the amount expected to be realized from the ultimate sale or other disposal of the inventory.

The Company regularly reviews inventory quantities on hand and records provisions or impairments for excess or obsolete inventory based on the Company's forecast of product demand, historical usage of inventory on hand, market conditions, production and procurement requirements, and technological developments. Significant or unanticipated changes in market conditions or Company forecasts could affect the amount and timing of provisions for excess and obsolete inventory and inventory impairments.

Significant changes have not been made in the methodology used to estimate the reserve for excess and obsolete inventory or impairments during the past three years. Specific assumptions are updated at the date of each evaluation to consider Company experience and current industry trends. Significant judgment is required to predict the potential impact which the current business climate and evolving market conditions could have on the Company's assumptions.

Changes which may occur in the energy industry are hard to predict, and they may occur rapidly. To the extent that changes in market conditions result in adjustments to management assumptions, impairment losses could be realized in future periods.

At December 31, 2018 and 2017, the reserve for excess and obsolete inventory was \$2.1 million and \$0.4 million, or 7.2% and 1.1% of inventory, respectively.

# **Business Combinations**

The Company allocates the fair value of purchase consideration to the assets acquired, liabilities assumed, and any non-controlling interests in the acquired entity generally based on their fair values at the acquisition date. The excess of the fair value of purchase consideration over the fair value of these assets acquired, liabilities assumed, and any non-controlling interests in the acquired entity is recorded as goodwill. The primary items that generate goodwill include the value of the synergies between the acquired company and Flotek and the value of the acquired assembled workforce. Acquisition-related expenses are recognized separately from the business acquisition and are recognized as expenses as incurred.

The purchase price allocation process requires management to make significant estimates and assumptions at the acquisition date with respect to the fair value of:

intangible assets acquired from the acquiree;

tax assets and liabilities assumed from the acquiree;

stock awards assumed from the acquiree that are included in the purchase price; and

• pre-acquisition obligations and contingencies assumed from the acquiree.

Although the Company believes the assumptions and estimates it has made in the past have been reasonable and appropriate, they are based in part on historical experience and information obtained from the management of the acquired companies and are inherently uncertain.

# Goodwill

Goodwill is not subject to amortization, but is tested for impairment annually during the fourth quarter, or more frequently if an event occurs or circumstances change that would indicate a potential impairment. These circumstances may include, but are not limited to, a significant adverse change in the business climate, unanticipated competition, or a change in projected operations or results of a reporting unit. Goodwill is tested for impairment at a reporting unit level. At December 31, 2018, only the Consumer and Industrial Chemistry Technologies reporting unit had a goodwill balance.

During the annual testing, the Company assesses whether a goodwill impairment exists using both qualitative and quantitative assessments. The qualitative assessment involves determining whether events or circumstances exist that

indicate it is more likely than not that the fair value of a reporting unit is less than its carrying amount, including goodwill. If, based on this qualitative assessment, it is determined that it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, the Company does not perform a quantitative assessment. If the qualitative assessment indicates that it is more likely than not that the fair value of a reporting unit is less than its carrying amount or if the Company elects not to perform a qualitative assessment, a quantitative impairment test is performed to determine whether goodwill impairment exists at the reporting unit.

Effective during the fourth quarter of 2017, the Company adopted Accounting Standards Update ("ASU") 2017-04, "Simplifying the Test for Goodwill Impairment," which eliminated the second step of the two-step quantitative impairment test. Now, if quantitative impairment testing is performed, the Company compares the estimated fair value of each reporting unit which has goodwill to its carrying amount, including goodwill. To determine fair value estimates, the Company uses the income approach based on discounted cash flow analyses, combined, when appropriate, with a market-based approach. The market-based approach considers valuation comparisons of recent public sale transactions of similar businesses and earnings multiples of publicly traded businesses operating in industries consistent with the reporting unit. If the carrying amount of a reporting unit, including goodwill, exceeds its fair value, an impairment loss is recognized in an amount equal to that excess, limited to the amount of goodwill allocated to that reporting unit.

Prior to adoption of ASU 2017-04, if quantitative impairment testing was performed, the Company used a two-step quantitative impairment test to determine whether goodwill impairment exists at the reporting unit. The first step was to compare the estimated fair value of each reporting unit which has goodwill to its carrying amount, including goodwill. To determine fair value estimates, the Company used the income approach based on discounted cash flow analyses, combined, when appropriate, with a market-based approach. The market-based approach considers valuation comparisons of recent public sale transactions of similar businesses and earnings multiples of publicly traded businesses operating in industries consistent with the reporting unit. If the fair value of a reporting unit was less than its carrying amount, the second step of the impairment test was performed to determine the amount of impairment, if any. The second step compares the implied fair value of the reporting unit goodwill with the carrying amount of the goodwill. If the carrying amount of the reporting unit's goodwill exceeded its implied value, an impairment loss was recognized in an amount equal to that excess.

The Company determines fair value using widely accepted valuation techniques, including discounted cash flows and market multiples analyses, and through use of independent fixed asset valuation firms, as appropriate. These types of analyses contain uncertainties, as they require management to make assumptions and to apply judgments regarding industry

economic factors and the profitability of future business strategies. The Company's policy is to conduct impairment testing based on current business strategies, taking into consideration current industry and economic conditions as well as the Company's future expectations. Key assumptions used in the discounted cash flow valuation model include, among others, discount rates, growth rates, cash flow projections, and terminal value rates. Discount rates and cash flow projections are the most sensitive and susceptible to change as they require significant management judgment. Discount rates are determined using a weighted average cost of capital ("WACC"). The WACC considers market and industry data, as well as Company-specific risk factors for each reporting unit in determining the appropriate discount rate to be used. The discount rate utilized for each reporting unit is indicative of the return an investor would expect to receive for investing in a similar business. Management uses industry considerations and Company-specific historical and projected results to develop cash flow projections for each reporting unit. Additionally, if appropriate, as part of the market-based approach, the Company utilizes market data from publicly traded entities whose businesses operate in industries comparable to the Company's reporting units, adjusted for certain factors that increase comparability. During annual goodwill impairment testing in 2018 and 2017, the Company first assessed qualitative factors to determine whether it was necessary to perform the quantitative impairment test. During annual goodwill impairment testing in 2016, the Company first assessed qualitative factors to determine whether it was necessary to perform the two-step goodwill impairment test.

As of the fourth quarter of 2018, the Company concluded it was not more-likely-than-not that there was an impairment of goodwill for the Consumer and Industrial Technologies ("CICT") reporting unit based on the assessment

of qualitative factors. During the fourth quarter of 2018, the final criterion was met for classifying the CICT reporting unit as held for sale. Therefore, the CICT reporting unit was reported as discontinued operations. After receiving initial interests from potential buyers, it was determined that the disposal proceeds, after considering selling costs, would result in excess over book value. As this was in-line with quantitative impairment tests performed in previous quarters for the CICT reporting unit, no further impairment assessment was needed.

During the second quarter of 2018, the Company concluded it was not more-likely-than-not that there was an impairment of goodwill for the CICT reporting unit based on the assessment of qualitative factors. CICT revenues have increased 1.3% for the six months ended June 30, 2018, versus the same period in 2017, while gross margins, as a percentage of revenue, decreased 450 basis points driven by product mix and higher raw material costs. For the second quarter of 2018, the Company was not able to conclude that it was not more-likely-than-not that the estimated fair value of the Energy Chemistry Technologies ("ECT") reporting unit exceeded the carrying amount.

Therefore, the Company performed a quantitative impairment test for the reporting unit. The results of the impairment test indicated that the carrying amount of the ECT reporting unit exceeded the estimated fair value of the reporting unit by approximately \$37.8 million, or 25.6% of the carrying amount. To evaluate the sensitivity of the fair value calculations for the ECT reporting units, the Company applied a hypothetical 0.5% unfavorable change in the weighted average cost of capital, which would have reduced the estimated fair value of the ECT reporting unit by approximately \$5.7 million. Additionally, reducing the revenue projections by 1.0% and holding gross margins steady reduced the estimated fair value approximately \$4.4 million. These sensitivity analyses confirmed the need for an impairment for the ECT reporting unit. The Company recorded a full impairment of the goodwill for \$37.2 million in the ECT reporting unit during the second quarter of 2018.

Key assumptions and estimates were based on the experience of the Company's management, experience with past recessions within the oil and gas industry, and internal as well as published external perspectives of market activity. Key assumptions used in the discounted cash flow analysis included:

Revenue and expenses experience industry level growth rates annually beyond 2019;

Margins stay in the lower portion of historical ranges; and

Working capital ratios remain consistent with historical levels.

Some of the factors that affected the change in results of the impairment test from the fourth quarter of 2017 to the second quarter of 2018 included:

Declining revenue and margin compression in the first half of 2018.

Mid-year sensitivity analysis decreased 2018 and 2019 expectations.

Based on the Company's fourth quarter 2018 testing of goodwill for impairment for the CICT reporting unit, no impairment was recorded.

As of the fourth quarter of 2017, the Company was not able to conclude that it was not more-likely-than-not that the estimated fair value of the Energy Chemistry Technologies ("ECT") and Consumer and Industrial Chemistry Technologies ("CICT") reporting units exceeded the carrying amount of the respective reporting units. Therefore, the Company performed a quantitative impairment test for each of these reporting units. The results of the impairment test indicated that the estimated fair values of the two reporting units exceeded the carrying amount of their respective reporting units by approximately \$34.7 million and \$20.2 million, respectively, or an excess of 21% and 23%, respectively, over the carrying amount. Therefore, no impairment was deemed necessary for 2017. To evaluate the sensitivity of the fair value calculations of the ECT and CICT

reporting units, the company applied a hypothetical 10% unfavorable change in the weighted average cost of capital, which would have reduced the estimated fair value of the ECT and CICT reporting units by approximately \$23.7 million and \$12.4 million, respectively. These sensitivity analyses were not indicative of an impairment for the ECT and CICT reporting units.

Key assumptions and estimates were based on experience of the Company's management, experience with past recessions within the oil and gas industry (specifically the 2008/2009 recession), and internal as well as published external perspectives of recovery timing. Key assumptions used in the discounted cash flow analysis included:

Revenue and expenses grow 2% annually;

Margins stay in the lower portion of historical ranges;

Working capital ratios remain consistent with historical levels;

Risk premium related to foreign country security, government stability, and potential future foreign currency. Based on the Company's fourth quarter 2017 testing of goodwill for impairment at each reporting unit, no impairments were recorded.

As of the fourth quarter of 2016, the Company concluded it was not more likely than not that there was an impairment of goodwill for the Consumer and Industrial Chemistry Technologies or Energy Chemistry Technologies reporting units based on the assessment of qualitative factors. The Consumer and Industrial Chemistry Technologies reporting unit has outpaced prior years revenues and maintained strong margins. The Energy Chemistry Technologies reporting unit saw quarterly revenue improve throughout 2016 and reduced only 12% versus 2015 as market activity fell 43% during the same period. However, the segment continued to produce strong margins.

The Company was not able to conclude that it was not more likely than not that the estimated fair value of the Teledrift and Production Technologies reporting units exceeded the carrying amount of the respective reporting units, as of the fourth quarter of 2016. Therefore, the Company performed a Step 1 impairment test for each of these reporting units. The results of the Step 1 test indicated that the estimated fair values of the two reporting units exceeded the carrying amount of their respective reporting units by approximately \$13.2 million and \$6.7 million respectively, or an excess of 34% and 44%, respectively, over the carrying amount. Therefore, no further testing was required for these two reporting units. To evaluate the sensitivity of the fair value calculations of the Teledrift and Production Technologies reporting units, the Company applied a hypothetical 10% unfavorable change in the weighted average cost of capital, which would have reduced the estimated fair value of the Teledrift and Production Technologies reporting units by approximately \$5.3 million and \$4.2 million, respectively. These sensitivity analyses were

not indicative of an impairment for the Teledrift or Production Technologies reporting units.

As of the third quarter of 2016, the Company concluded it was not more likely than not that there was an impairment of goodwill for the Consumer and Industrial Chemistry Technologies reporting unit, the Energy Chemistry Technologies reporting unit, and the Teledrift reporting unit based on the assessment of qualitative factors. The Consumer and Industrial Chemistry Technologies reporting unit has seen increased revenues in 2016 compared to 2015 and has maintained margins in the range seen from 2014 through 2015. The Energy Chemistry Technologies reporting unit had an 11% decrease in revenue versus the 27% decline in market activity for the first quarter of 2016 compared to the fourth quarter of 2015, a 3% decrease in revenue versus the 35% decline in market activity for the second quarter of 2016 compared to the first quarter of 2016, and a 4% increase in revenue versus the 28% increase in market activity for the third quarter of 2016 compared to the second quarter of 2016, but continues to maintain gross margins. The Teledrift reporting unit, having passed the Step 1 impairment tests in the previous two quarters, had the highest revenue quarter for 2016 and improved margins. Teledrift revenue for the third quarter of 2016 increased 37% versus the second quarter of 2016 and improved gross margins by 8.4%.

For the first quarter of 2016, the Company was not able to conclude that it was not more likely than not that the estimated fair value of the Production Technologies and Teledrift reporting units exceeded the carrying amount of the respective reporting units. Therefore, the Company performed a Step 1 impairment test for each of these reporting units. The results of the Step 1 test indicated that the estimated fair values of the Production Technologies and the Teledrift reporting units exceeded the carrying amount of their respective reporting units by approximately \$34.9 million and \$2.1 million, respectively, or an excess of 153% and 5%, respectively, over the carrying amount. Therefore, no further testing was required for these two reporting units.

Again, for the second quarter of 2016, the Company was not able to conclude that it was not more likely than not that the estimated fair value of the Production Technologies and Teledrift reporting units exceeded the carrying amount of the respective reporting units. Therefore, the Company performed a Step 1 impairment test for each of these reporting units. The results of the Step 1 test indicated that the estimated fair values of the Production Technologies and the Teledrift reporting units exceeded the carrying amount of their respective reporting units by approximately \$17.1 million and \$2.2 million, respectively, or an excess of 77% and 6%, respectively, over the carrying amount. Therefore, no further testing was required for these two reporting units.

Once again, for the third quarter of 2016, the Company was not able to conclude that it was not more likely than not that the estimated fair value of the Production Technologies reporting unit exceeded the carrying amount of the reporting

unit. Therefore, the Company performed a Step 1 impairment test for this reporting unit. The results of the Step 1 test indicated that the estimated fair value of the Production Technologies reporting unit exceeded the carrying amount of the reporting unit by approximately \$8.1 million, or an excess of 36.9% over the carrying amount. Therefore, no further testing was required for this reporting unit.

Key assumptions and estimates were based on experience of the Company's management, experience with past recessions within the oil and gas industry (specifically the 2008/2009 recession), and internal as well as published external perspectives of recovery timing. Key assumptions used in the discounted cash flow analysis included: U.S. rig count bottoms during 2016 and begins to recover to average 532 rigs for the last two quarters of 2016. Average Rig count climbs to 725 in 2017, 880 in 2018, and 920 in 2019, and grows by 50 rigs annually for 2020 through 2023, and then holds flat through 2026;

International revenue grows 3% annually;

Domestic rental revenue per rig and total domestic revenue per rig dip to lows seen during the 2008/2009 downturn through 2017 and then slowly return to the lower end of the ranges seen between 2012 and 2014;

International indirect expenses remain 3.5% of total international revenue;

Domestic indirect expense percentages slowly return to historical levels:

Margins stay in the lower portion of historical ranges;

Working capital ratios remain consistent; and

Risk premium related to foreign country security and government stability.

Some of the factors that affected the change in results of the Step 1 impairment test from the fourth quarter of 2015 to the fourth quarter of 2016 included:

Impairment testing of long-lived assets excluding goodwill resulted in a reduction to the balance sheet of \$14.3 million for the Teledrift reporting unit in the first quarter of 2016.

Impairment of inventory resulted in a reduction to the balance sheet of \$1.3 million for the Teledrift reporting unit and \$3.9 million for the Production Technologies reporting unit in the first quarter of 2016.

Cost reduction initiatives during the first half of 2016 reduced direct and indirect expenses for the Drilling Technologies segment.

Due to the surplus of rental tools and the low levels of drilling rig activity, capital expenditures for new rental tools will be minimal through 2019 in the Teledrift reporting unit.

Based on the Company's fourth quarter 2016 testing of goodwill for impairment at each reporting unit, no impairments were recorded.

There are significant inherent uncertainties and judgments involved in estimating fair value. The Company cannot predict the occurrence of events or circumstances that could adversely affect the fair value of goodwill. Such events may include, but are not limited to, deterioration of the economic environment, increases in the Company's weighted average cost of capital, material negative changes in relationships with significant customers, reductions in valuations of other public companies in the Company's industry, or strategic decisions made in response to economic and competitive conditions. If actual results are not consistent with the Company's current estimates and assumptions, impairment of goodwill could be required.

# Long-Lived Assets Other than Goodwill

Long-lived assets other than goodwill consist of property and equipment and intangible assets that have determinable and indefinite lives. The Company makes judgments and estimates regarding the carrying amount of these assets, including amounts to be capitalized, depreciation and amortization methods to be applied, estimated useful lives, and possible impairments. Property and equipment and intangible assets with determinable lives are tested for impairment whenever events or changes in circumstances indicate the carrying amount of the asset may not be recoverable. For property and equipment, events or circumstances indicating possible impairment may include a significant decrease in market value or a significant change in the business climate. An impairment loss is recognized when the carrying amount of an asset exceeds the estimated undiscounted future cash flows expected to result from the use of the asset and its eventual disposition. The amount of the impairment loss is the excess of the asset's carrying amount over its fair value. Fair value is generally determined using an appraisal by an independent valuation firm or by using a discounted cash flow analysis.

For intangible assets with definite lives, events or circumstances indicating possible impairment may include an adverse change in the extent or manner in which the asset is being used or a change in the assessment of future operations. The Company assesses the recoverability of the carrying amount by preparing estimates of future revenue, margins, and cash flows. If the sum of expected future cash flows (undiscounted and without interest charges) is less than the carrying amount, an impairment loss is recognized. The impairment loss recognized is the amount by which the carrying amount exceeds the fair value. Fair value of these assets may be determined by a variety of methodologies, including discounted cash flows.

Intangible assets with indefinite lives are not subject to amortization, but are tested for impairment annually during the fourth quarter, or more frequently if an event occurs or circumstances change that would indicate a potential impairment. These circumstances may include, but are not limited to, a significant adverse change in the business climate, unanticipated competition, or a change in projected operations or results of a reporting unit.

The Company assesses whether an indefinite lived intangible impairment exists using both qualitative and quantitative assessments. The qualitative assessment involves determining whether events or circumstances exist that indicate it is more likely than not that the fair value of the indefinite lived intangible is less than its carrying amount. If, based on this qualitative assessment, it is determined that it is not more likely than not that the fair value of the indefinite lived intangible is less than its carrying amount, the Company does not perform a quantitative assessment. If the qualitative assessment indicates that it is more likely than not that the indefinite-lived intangible asset is impaired or if the Company elects to not perform a qualitative assessment, the Company then performs the quantitative impairment test. The quantitative impairment test for an indefinite-lived intangible asset consists of a comparison of the fair value of the asset with its carrying amount. If the carrying amount of an intangible asset exceeds its fair value, an impairment loss is recognized in an amount equal to that excess. Fair value of these assets may be determined by a variety of methodologies, including discounted cash flows.

The development of future net undiscounted cash flow projections requires management projections of future sales and profitability trends and the estimation of remaining useful lives of assets. These projections are consistent with those projections the Company uses to internally manage operations. When potential impairment is identified, a discounted cash flow valuation model similar to that used to value goodwill at the reporting unit level, incorporating discount rates commensurate with risks associated with each asset, is used to determine the fair value of the asset in order to measure potential impairment. Discount rates are determined by using a WACC. Estimated revenue and WACC assumptions are the most sensitive and susceptible to change in the long-lived asset analysis as they require significant management judgment. The Company believes the assumptions used are reflective of what a market

participant would have used in calculating fair value.

Valuation methodologies utilized to evaluate long-lived assets other than goodwill for impairment were consistent with prior periods. Specific assumptions discussed above are updated at each test date to consider current industry and Company-specific risk factors from the perspective of a market participant. The current business climate is subject to evolving market conditions and requires significant management judgment to interpret the potential impact to the Company's assumptions. To the extent that changes in the current business climate result in adjustments to management projections, impairment losses may be recognized in future periods.

The domestic drilling industry has continued to deteriorate since the end of 2015 to levels not seen since April 1999. As the business of the Drilling Technologies segment is closely aligned with the drilling rig count and average U.S. drilling rig count declined 27% during the first quarter of 2016, the drop off in rig count led to a decline in revenue and gross profit of 37% and 69%, respectively, from the fourth quarter of 2015

for the Drilling Technologies segment. As a result of the continued drop in rig count and the significant decline in operations in the first quarter of 2016, the Company concluded these were events or circumstances that caused the Company to test its long-lived assets for impairment within the segment.

During the three months ended March 31, 2016, the Company completed testing for impairment of long-lived assets within the Drilling Technologies segment for four asset groups:

Downhole Tools - primarily used in the vertical drilling market;

International Drill Pipe - primarily used in foreign mining operations;

Teledrift Domestic - primarily associated with the Measurement While Drilling ("MWD") market in the U.S.; and Teledrift International - primarily associated with the MWD market in international markets.

Impairment indicators affected both asset groups that are tied directly to the domestic drilling market. While impairment indicators are not present for the International Drill Pipe or Teledrift International asset groups, the Company performed recoverability tests for all four asset groups.

The recoverability test indicated that the undiscounted estimated cash flows of the International Drill Pipe and Teledrift International asset groups exceeded the carrying amount of their respective asset groups by approximately \$2.6 million and \$64.1 million, respectively, or an excess of 98% and 906%, respectively. However, the undiscounted estimated cash flows of the Downhole Tools and Teledrift Domestic asset groups did not exceed the carrying amount of their respective asset groups, and therefore, the Company performed a discounted cash flow analysis on each asset group to determine the fair values.

Since the assets in the asset groups are not highly specialized, the Company assumed the current use of each asset would be a similar use as if the assets were sold. As such, the cash flow used in the recoverability test is the same cash flow used to create the discounted cash flow for fair value analysis. This testing indicated that the carrying amount of the Downhole Tools and Teledrift Domestic asset groups exceeded the fair value by \$9.6 million and \$14.3 million, respectively, or an excess of 69% and 56%, respectively. As a result, a combined impairment loss for these two asset groups of \$23.9 million was recognized during the three months ended March 31, 2016.

Additionally, the business of the Production Technologies segment incurred similar declines with revenue and gross profit, falling approximately 30% and 42%, respectively. Therefore, the Company completed testing for impairment of long-lived assets within the Production Technologies segment. The recoverability test indicated that the undiscounted estimated cash flows for the segment exceeded the carrying amount of assets by \$3.0 million, or an excess of

23%. As a result, no impairment of long-lived assets was recognized for the Production Technologies segment. During the second quarter of 2016, the average U.S. drilling rig count fell 23% versus the first quarter of 2016. The Drilling Technologies segment held revenue relatively flat and improved margins when comparing the second and first quarters of 2016. As such, the Company determined that testing for impairment of long-lived assets was not warranted for the segment.

However, the Production Technologies segment results showed a decline in revenue of 8% and continuing negative margins when comparing the second and first quarters of 2016. Therefore, the Company completed testing for impairment of long-lived assets within the Production Technologies segment. The recoverability test indicated that the undiscounted estimated cash flows for the segment exceeded the carrying amount of assets by \$4.4 million, or an excess of 34%. As a result, no impairment of long-lived assets was recognized for the Production Technologies segment.

During the third quarter of 2016, the average U.S. drilling rig count rose 14% versus the second quarter of 2016. The Drilling Technologies segment revenue increased 13% and improved margins when comparing the third and second quarters of 2016, while the Production Technologies segment results showed an increase in revenue of 15% and improved margins when comparing the third and second quarters of 2016. As such, the Company determined that testing for impairment of long-lived assets was not warranted for either segment.

During the fourth quarter of 2016, the average U.S. drilling rig count rose 23% versus the third quarter of 2016. The Drilling Technologies segment revenue increased 6% and showed slightly lower margins when compared to the third quarter of 2016 but still exceeded second quarter 2016 margins. The Production Technologies segment results showed an increase in revenue of 5% and improved margins when comparing the fourth and third quarters of 2016. As such,

the Company determined that testing for impairment of long-lived assets was not warranted for either segment. Key assumptions and estimates used in performing these recoverability tests were based on experience of the Company's management, experience with past oil and gas industry downturns and recoveries, and internal, as well as published external, perspectives of recovery timing. Key assumptions used in the recoverability test included: Rental tools are the primary cash generating assets for each group;

Remaining estimated useful life for each group was determined to be 7 years;

Carrying amount of the asset group is the net book value of the assets as of March 31, 2016, for first quarter testing and June 30, 2016, for second quarter testing;

Estimates of future cash flows for the group assumed the sale of the group at the end of the remaining useful life of the primary asset; and

Since the Downhole Tools asset group includes product sales in the cash flow analysis, a portion of the inventory was included in the carrying amount of the asset group. The remaining portion of the inventory is

normally utilized to repair and fabricate rental tools and is included in cost of goods sold.

There are significant inherent uncertainties and judgments involved in estimating fair value. The Company cannot predict the occurrence of events or circumstances that could adversely affect the fair value of the asset (asset group). Such events may include, but are not limited to, deterioration of the economic environment, increases in the Company's weighted average cost of capital, material negative changes in relationships with significant customers, reductions in valuations of other public companies in the Company's industry, or strategic decisions made in response to economic and competitive conditions. If actual results are not consistent with the Company's current estimates and assumptions, additional impairment of long-lived assets could be required.

In 2018, 2017, and 2016, while testing annual indefinite lived intangible assets for impairment, the Company first assessed qualitative factors to determine whether it was necessary to perform the impairment test. Based on its qualitative assessment, the Company concluded there was no indication of the need for an impairment of indefinite lived intangibles, and therefore no further testing was required.

No impairment was recorded for property and equipment and intangible assets with determinable or indefinite lives during 2018 and 2017.

#### Fair Value Measurements

Fair value is defined as the amount that would be received for the sale of an asset or paid for the transfer of a liability in an orderly transaction between unrelated third party market participants at the measurement date. In determination of fair value measurements for assets and liabilities, the Company considers the principal, or most advantageous, market and assumptions that market participants would use when pricing the asset or liability. The Company categorizes financial assets and liabilities using a three-tiered fair value hierarchy, based upon the nature of the inputs used in the determination of fair value. Inputs refer broadly to the assumptions that market participants would use in pricing an asset or liability and may be observable or unobservable. Significant judgments and estimates are required, particularly when inputs are based on pricing for similar assets or liabilities, pricing in non-active markets, or when unobservable inputs are required.

#### Income Taxes

The Company's tax provision is subject to judgments and estimates necessitated by the complexity of existing regulatory tax statutes and the effect of these upon the Company due to operations in multiple tax jurisdictions. Income tax expense is based on taxable income, statutory tax rates, and tax planning opportunities available in the various

jurisdictions in which the Company operates. The Company's income tax expense will fluctuate from year to year as the amount of pretax income fluctuates. Changes in tax laws and the Company's profitability within and across the jurisdictions may impact the Company's tax liability. While the annual tax provision is based on the best information available to the Company at the time of preparation, several years may elapse before the ultimate tax liabilities are determined.

The Company uses the liability method in accounting for income taxes. Deferred tax assets and liabilities are recognized for temporary differences between financial statement carrying amounts and the tax bases of assets and liabilities and are measured using the tax rates expected to be in effect when the differences reverse. Deferred tax assets are also recognized for operating loss and tax credit carry forwards. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the results of operations in the period that includes the enactment date. A valuation allowance is used to reduce deferred tax assets when uncertainty exists regarding their realization. A valuation allowance is recorded to reduce previously recorded tax assets when it becomes more likely than not such assets will not be realized. The Company evaluates, at least annually, net operating loss carry forwards and other net deferred tax assets and considers all available evidence, both positive and negative, to determine whether a valuation allowance is necessary relative to net operating loss carry forwards and other net deferred tax assets. In making this determination, the Company considers cumulative losses in recent years as significant negative evidence. The Company considers recent years to mean the current year plus the two preceding years. The Company considers the recent cumulative income or loss position of its filings groups as objectively verifiable evidence for the projection of

future income, which consists primarily of determining the average of the pre-tax income of the current and prior two years after adjusting for certain items not indicative of future performance. Based on this analysis, the Company determines whether a valuation allowance is necessary.

In assessing the need for a valuation allowance in the second quarter of 2018, the Company considered all available objective and verifiable evidence, both positive and negative, including historical levels of pre-tax income (loss) both on a consolidated basis and tax reporting entity basis, legislative developments, and expectations and risks associated with estimates of future pre-tax income. As a result of this analysis, the Company determined that it is more likely than not that it will not realize the benefits of certain deferred tax assets and, therefore, recorded a valuation allowance against the carrying value of net deferred tax assets, except for deferred tax liabilities related to non-amortizable intangible assets and certain state jurisdictions. As all available evidence should be taken into consideration when assessing the need for a valuation allowance, the subsequent events that occurred in the first quarter of 2019 (Note 21) provided a source of income to support the release of \$11.5 million of the valuation

allowance. As such, the Company reversed this portion of the valuation allowance during the fourth quarter of 2018. The Company periodically identifies and evaluates uncertain tax positions. This process considers the amounts and probability of various outcomes that could be realized upon final settlement. Liabilities for uncertain tax positions are based on a two-step process. The actual benefits ultimately realized may differ from the Company's estimates. Changes in facts, circumstances, and new information may require a change in recognition and measurement estimates for certain individual tax positions. Any changes in estimates are recorded in results of operations in the period in which the change occurs. At December 31, 2018, the Company performed an evaluation of its various tax positions and concluded that it did not have significant uncertain tax positions requiring disclosure. The Company's policy is to record interest and penalties related to income tax matters as income tax expense.

## **Share-Based Compensation**

The Company has stock-based incentive plans which are authorized to issue stock options, restricted stock, and other incentive awards. Stock-based compensation expense for stock options and restricted stock is determined based upon estimated grant-date fair value. This fair value for the stock options is calculated using the Black-Scholes option-pricing model and is recognized as expense over the requisite service period. The option-pricing model requires the input of highly subjective assumptions, including expected stock price

volatility and expected option life. For all stock-based incentive plans, the Company estimates an expected forfeiture rate and recognizes expense only for those shares expected to vest. The estimated forfeiture rate is based on historical experience. To the extent actual forfeiture rates differ from the estimate, stock-based compensation expense is adjusted accordingly.

## Loss Contingencies

The Company is subject to a variety of loss contingencies that could arise during the Company's conduct of business. Management considers the likelihood of a loss or impairment of an asset or the incurrence of a liability, as well as the Company's ability to reasonably estimate the amount of loss, in determining potential loss contingencies. An estimated loss contingency is accrued when it is probable that a liability has been incurred or an asset has been impaired and the amount of loss can be reasonably estimated. Accruals for loss contingencies have not been recorded during the past three years. The Company regularly evaluates current information available to determine whether such accruals should be made or adjusted.

#### **Recent Accounting Pronouncements**

Recent accounting pronouncements which may impact the Company are described in Note 2 – "Summary of Significant Accounting Policies" in Part II, Item 8 – "Financial Statements and Supplementary Data" of this Annual Report.

## Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

The Company is exposed to market risk from changes in interest rates, foreign currency exchange rates, and commodity prices. Market risk is measured as the potential negative impact on earnings, cash flows, or fair values resulting from a hypothetical change in interest rates, commodity prices, or foreign currency exchange rates over the next year. The Company manages exposure to market risks at the corporate level. The portfolio of interest-sensitive assets and liabilities is monitored and adjusted to provide liquidity necessary to satisfy anticipated short-term needs. The Company's risk management policies allow the use of specified financial instruments for hedging purposes only. Speculation on interest rates or foreign currency rates is not permitted. The Company does not consider any of these risk management activities to be material.

#### **Interest Rate Risk**

The Company is exposed to the impact of interest rate changes on any outstanding indebtedness under the revolving credit facility agreement and the term loan agreement both of which have a variable interest rate. The interest rate on advances under the revolving credit facility varies based on the level of borrowing under the revolving credit facility. Rates range (a)

between PNC Bank's base lending rate plus 1.5% to 2.0% or (b) between the London Interbank Offered Rate (LIBOR) plus 2.5% to 3.0%. PNC Bank's base lending rate was 5.50% at December 31, 2018, and would have permitted

borrowing at rates ranging between 7.00% and 7.50%. The Company is required to pay a monthly facility fee of 0.25% on any unused amount under the commitment based on daily averages. At December 31, 2018, \$49.7 million was outstanding under the revolving credit facility, with \$(0.3) million borrowed as base rate loans at an interest rate of 7.50% and \$50.0 million borrowed as LIBOR loans at an interest rate of 5.51%.

The amount borrowed under the term loan was reset to \$10.0 million as of September 30, 2016. Monthly principal payments of \$0.2 million were required. On May 22, 2017, the Company repaid the outstanding balance of the term loan. No additional amount may be re-borrowed under the term loan.

## Foreign Currency Exchange Risk

The Company presently has limited exposure to foreign currency risk. As a global company, Flotek operates in over 20 domestic and international markets. Flotek's functional

currency is primarily the U.S. dollar. During 2018, approximately 3.0% of revenue was demarcated in non-U.S. dollar currencies and virtually all assets and liabilities of the Company are denominated in U.S. dollars. However, as the Company expands its international operations, non-U.S. denominated activity is likely to increase. The Company has historically performed no swaps and no foreign currency hedges. The Company may utilize swaps or foreign currency hedges in the future.

#### **Commodity Risk**

The Company purchases raw materials derived from citrus oils and, therefore, has a commodity risk inherent in orange harvests. In recent years, citrus greening has disrupted citrus

fruit production in Florida and Brazil which caused raw material feedstock cost to increase. Tropical storms and hurricanes, as experienced during 2017, can also impact the future citrus crop yields in growing regions. The Company believes that adequate global supply is available to meet the Company's needs. The Company primarily relies upon long-term strategic supply relationships to meet its raw material needs which are expected to remain in place for the foreseeable future. Price increases have been passed along to the Company's customers, where applicable. The Company presently does not have any commodity futures contracts but may consider utilizing forms of hedging from time to time in the future.

## Item 8. Financial Statements and Supplementary Data.

#### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of Flotek Industries, Inc.

## Opinion on Internal Control over Financial Reporting

We have audited Flotek Industries, Inc. and subsidiaries' (the "Company") internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework 2013* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). In our opinion, the Company maintained, in all material respects, effective control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework 2013* issued by COSO.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated balance sheets of Flotek Industries, Inc. and subsidiaries as of December 31, 2018 and 2017, the related consolidated statements of operations, comprehensive income (loss), equity and cash flows for the years then ended, and the related notes (collectively referred to as the "consolidated financial statements") and our report dated March 8, 2019 expressed an unqualified opinion on those consolidated financial statements.

## **Basis for Opinion**

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB. We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

## Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ MOSS ADAMS LLP

Houston, Texas

#### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of Flotek Industries, Inc.

## Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Flotek Industries, Inc. and subsidiaries (the "Company") as of December 31, 2018 and 2017, the related consolidated statements of operations, comprehensive income (loss), equity and cash flows for the years then ended, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Company as of December 31, 2018 and 2017, and the consolidated results of their operations and their cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework 2013* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 8, 2019 expressed an unqualified opinion on the Company's internal control over financial reporting.

## Change in Accounting Principle

As discussed in Note 7 to the consolidated financial statements, the Company changed its method of accounting for recognizing revenue due to the adoption of Accounting Standards Codification Topic No. 606.

## Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures to respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

## /s/ MOSS ADAMS LLP

Houston, Texas March 8, 2019

We have served as the Company's independent registered public accounting firm since 2017.

#### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders

Flotek Industries, Inc.

We have audited the accompanying consolidated statements of operations, comprehensive income (loss), equity and cash flows of Flotek Industries, Inc. and subsidiaries for the period ended December 31, 2016. These financial statements are the responsibility of the company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the results of operations and cash flows of Flotek Industries, Inc. and subsidiaries for the year ended December 31, 2016, in conformity with U.S. generally accepted accounting principles.

/s/ HEIN & ASSOCIATES LLP

Houston, Texas February 8, 2017

# FLOTEK INDUSTRIES, INC. CONSOLIDATED BALANCE SHEETS

(in thousands, except share data)

(in thousands, except share data)		
	December 2018	31, 2017
ASSETS		
Current assets:		
Cash and cash equivalents	\$3,044	\$4,584
Accounts receivable, net of allowance for doubtful accounts of \$1,190 and \$673 at December 31, 2018 and 2017, respectively	37,047	34,897
Inventories, net	27,289	32,460
Income taxes receivable	3,161	2,826
Assets held for sale	118,470	54,508
Other current assets	5,771	8,649
Total current assets	194,782	137,924
Property and equipment, net	45,485	52,786
Goodwill		37,180
Deferred tax assets, net	18,663	12,713
Other intangible assets, net	26,827	22,048
Other long-term assets	126	527
Assets held for sale		66,710
TOTAL ASSETS	\$285,883	\$329,888
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable	\$15,011	\$10,394
Accrued liabilities	10,335	13,793
Interest payable	8	43
Liabilities held for sale	9,174	12,450
Long-term debt, classified as current	49,731	27,950
Total current liabilities and total liabilities	84,259	64,630
Commitments and contingencies		
Equity:		
Preferred stock, \$0.0001 par value, 100,000 shares authorized; no shares issued and outstanding	_	_
Common stock, \$0.0001 par value, 80,000,000 shares authorized; 62,162,875		
shares issued and 57,342,279 shares outstanding at December 31, 2018;	6	6
60,622,986 shares issued and 56,755,293 shares outstanding at	O	U
December 31, 2017		
Additional paid-in capital	343,536	336,067
Accumulated other comprehensive income (loss)		(884)
Retained earnings (accumulated deficit)	(107,565)	(37,225)
Treasury stock, at cost; 3,770,224 and 3,621,435 shares at December 31, 2018 and 2017, respectively	(33,237)	(33,064)
Flotek Industries, Inc. stockholders' equity	201,624	264,900
Noncontrolling interests	_	358
Total equity	201,624	265,258
TOTAL LIABILITIES AND EQUITY	\$285,883	\$329,888
See accompanying Notes to Consolidated Financial Statements.		

## FLOTEK INDUSTRIES, INC. CONSOLIDATED STATEMENTS OF OPERATIONS (in thousands, except per share data)

(in thousands, except per snare data)					
	Year ended December 31, 2018 2017 2016				
	2018	2017	2016		
Revenue	\$177,773	\$243,106	\$188,233	3	
Costs and expenses:					
Operating expenses (excluding depreciation and amortization)	159,808	188,744	143,983		
Corporate general and administrative	31,467	41,492	43,745		
Depreciation and amortization	9,216	9,768	8,172		
Research and development	10,356	13,130	9,319		
(Gain) loss on disposal of long-lived assets	(443	292	(18	)	
Impairment of goodwill	37,180				
Total costs and expenses	247,584	253,426	205,201		
Loss from operations		•	(16,968	)	
Other (expense) income:	(0),011	(10,520	(10,700	,	
Interest expense	(2,866	(2,168	(1,979	)	
Loss on sale of business	(360	(2,100 ) ) —	(1,)//	,	
	` ′				
Loss on write-down of assets held for sale	(2,580	_	10.720		
Gain on legal settlement	<u> </u>		12,730	,	
Other (expense) income, net		1,096	(434	)	
Total other (expense) income	(10,846)		10,317		
Loss before income taxes	(80,657)		(6,651	)	
Income tax benefit (expense)	7,216		2,204		
Loss from continuing operations	(73,441)	(17,504)	(4,447	)	
Income (loss) from discontinued operations, net of tax	2,743	(9,891	(44,683	)	
Net loss	(70,698)	(27,395)	(49,130	)	
Net loss attributable to noncontrolling interests	358	<u> </u>	_		
Net loss attributable to Flotek Industries, Inc. (Flotek)		\$(27,395)	\$(49.130	) )	
,,	, ( )-	, , , , , , , ,	, , , , , , ,		
Amounts attributable to Flotek shareholders:					
Loss from continuing operations	\$(73.083)	\$(17,504)	\$(4.447	)	
Income (loss) from discontinued operations, net of tax	2,743	(9,891	-	-	
Net loss attributable to Flotek	*	\$(27,395)		-	
Net loss attitutable to Piotek	\$(70,540)	ι Φ(21,393)	φ(49,130	, ,	
Pagia sarmings (loss) non samman shares					
Basic earnings (loss) per common share:	¢(1.26	¢(0.20	¢ (0, 00	`	
Continuing operations		\$(0.30			
Discontinued operations, net of tax	0.05		(0.80	)	
Basic earnings (loss) per common share	\$(1.21)	\$(0.47)	\$(0.88	)	
Diluted earnings (loss) per common share:					
Continuing operations	\$(1.26)	\$(0.30	\$(0.08	)	
Discontinued operations, net of tax	0.05	(0.17)	(0.80)	)	
Diluted earnings (loss) per common share	\$(1.21)	\$(0.47)	\$(0.88	)	
	,	, and the second			
Weighted average common shares:					
Weighted average common shares used in computing basic earnings (loss) per			<b>.</b>		
common share	57,995	57,580	56,087		
Weighted average common shares used in computing diluted earnings (loss) per					
common share	57,995	57,580	56,087		
Common snare					

See accompanying Notes to Consolidated Financial Statements.

## FLOTEK INDUSTRIES, INC. CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (in thousands)

	Year ended December 31,						
	2018	2017	2016				
Loss from continuing operations	\$(73,441)	\$(17,504)	\$(4,447	)			
Income (loss) from discontinued operations, net of tax	2,743	(9,891)	(44,683	)			
Net loss	(70,698)	(27,395)	(49,130	)			
Other comprehensive income (loss):							
Foreign currency translation adjustment	(232)	72	281				
Comprehensive loss	(70,930)	(27,323)	(48,849	)			
Net loss attributable to noncontrolling interests	358	_	_				
Comprehensive loss attributable to Flotek	\$(70,572)	\$(27,323)	\$(48,849	)			
See accompanying Notes to Consolidated Financial Statements.							

## FLOTEK INDUSTRIES, INC. CONSOLIDATED STATEMENTS OF EQUITY (in thousands)

(III tilousalius)											
	Comm Stock Shares	Par	Shares Cost		Additional Paid-in Capital	Comprehensive		Non-controllin Interests	ngTotal Equity		
Balance, December 31, 2015	<b>Issued</b> 56,220		1.785	\$(17,869)	-	<b>Income (Loss)</b> \$ (1,237 )	<b>Deficit</b> ) \$ 39,300	\$ 358	\$294,009		
Net loss	_	_	_	_	_	_	(49,130)	_	(49,130 )		
Foreign currency translation adjustment		_	_	_	_	281		_	281		
Sale of common stock, net of issuance cost	2,450	_	_	_	30,090	_	_	_	30,090		
Stock issued under employee stock purchase plan	_	_	(93)	_	833	_	_	_	833		
Stock options exercised	114	_	_	_	184	_	_	_	184		
Restricted stock granted	653	_	_	_	_	_	_	_	_		
Restricted stock forfeited	_	_	96	_	_	_	_	_	_		
Treasury stock purchased	_	_	238	(2,350)	_	_	_	_	(2,350)		
Stock surrendered for exercise of stock options	_	_	3	(50)	_	_	_	_	(50)		
Excess tax benefit related to share-based awards	_	_	_	_	(2,510)	_	_	_	(2,510)		
Stock compensation expense	_	_	_	_	13,076	_	_	_	13,076		
Stock issued in IAL acquisition	248	_	_	_	3,268	_	_	_	3,268		
Balance, December 31, 2016	59,685	\$ 6	2,029	\$(20,269)	\$318,392	\$ (956 )	\$ (9,830 )	\$ 358	\$287,701		
Net loss	_	_	_	_	_	_	(27,395)	_	(27,395)		
Foreign currency translation adjustment		_	_	_	_	72	_	_	72		
Stock issued under employee stock purchase plan	_	_	(113)	_	654	_	_	_	654		
Common stock issued in payment of accrued liability	_	_	_	_	188	_	_	_	188		
Stock options exercised	663	_	_	_	5,884	_	_	_	5,884		
Restricted stock granted	275	_	_	_	_	_	_	_	_		
Restricted stock forfeited	_	_	122	_	_	_	_	_	_		
Treasury stock purchased	_	_	200	(1,729 )	_	_	_	_	(1,729 )		
Stock surrendered for exercise of stock options	_	_	478	(5,863)	_	_	_	_	(5,863)		
Stock compensation expense	_	_	_	_	10,949	_	_	_	10,949		
Stock issued in IPI acquisition	_	_	_	_	_	_	_	_	_		
Repurchase of common stock		_	905	(5,203)	_	_	_	_	(5,203)		
Balance, December 31, 2017	60,623	\$ 6	3,621	\$(33,064)	\$336,067	\$ (884 )	\$ (37,225 )	\$ 358	\$265,258		
Net loss	_	_	_	_	_	_	(70,340 )	(358 )	(70,698)		
Foreign currency translation adjustment		_	_	_	_	(232 )	_	_	(232 )		
Stock issued under employee stock purchase plan	_	_	(111)	_	341	_	_	_	341		
Restricted stock granted	1,540	_	_	_	_	_	_	_	_		
Restricted stock forfeited	_	_	158	_	_	_	_	_	_		
Treasury stock purchased	_	_	102	(173)	_	_	_	_	(173)		
Stock compensation expense	_	_	_	_	7,128	_	_	_	7,128		
Balance, December 31, 2018	62,163	\$ 6	3,770	\$(33,237)	\$343,536	\$ (1,116 )	\$ (107,565 )	\$ —	\$201,624		
See accompanying Notes to Consolid	dated l	Financ	rial St	atements							

See accompanying Notes to Consolidated Financial Statements.

## FLOTEK INDUSTRIES, INC. CONSOLIDATED STATEMENTS OF CASH FLOWS (in thousands)

	(in thousands)		_				
			l Decemb	er			
	Cash flavor from approxima activities	2018		2017		2016	
	Cash flows from operating activities:  Net loss attributable to Flotek Industries, Inc. (Flotek)	\$ (70.340		\$ (27.305	`	\$(49,130	١,
	Income (loss) from discontinued operations, net of tax	2,743				(44,683	
	Loss from continuing operations	(73,083		, ,	_	(4,447	)
	Adjustments to reconcile loss from continuing operations to net cash (used in) provided by operating activities:	(73,063	,	(17,504	,	(4,447	,
	Depreciation and amortization	9,216		9,768		8,172	
	Amortization of deferred financing costs	400		472		424	
	Provision for doubtful accounts	839		157		482	
	Provision for excess and obsolete inventory			388		402	
	Loss on sale of business	2,418 360		300		_	
				_		_	
	Loss on write-down of assets held for sale	2,580	`	202		(10	`
	(Gain) loss on sale of assets	(443	)	292		(18	)
	Impairment of goodwill	37,180		10.642		11 446	
	Stock compensation expense	7,050		10,643		11,446	`
	Deferred income tax (benefit) provision	(5,950	)	181		(19,681	)
	Reduction in tax benefit related to share-based awards	709		1,989		2,510	
	Changes in current assets and liabilities:	(2.606	,	1.076		(10.005	`
	Accounts receivable, net	(2,606	_	4,076	,	(10,905	
	Inventories	2,597			)		)
	Income taxes receivable		_	8,008			)
	Other current assets	3,177		12,001		(14,296	)
	Accounts payable	4,631				6,365	
	Accrued liabilities	(8,740	)	(6,175	)	32,769	
	Income taxes payable			_			)
	Interest payable	(35	_	19		`	)
	Net cash (used in) provided by operating activities	(20,816	)	12,345		1,192	
	Cash flows from investing activities:						
	Capital expenditures	(3,559	_	(4,197	)	(13,072	)
	Proceeds from sale of businesses	1,665		18,490		_	
	Proceeds from sale of assets	1,387		689		115	
	Payments for acquisitions, net of cash acquired	_		_			)
	Purchase of patents and other intangible assets	(1,602		`	)	(599	)
	Net cash (used in) provided by investing activities	(2,109	)	14,526		(21,419	)
	Cash flows from financing activities:						
	Repayments of indebtedness	_			)	(15,564	)
	Borrowings on revolving credit facility	277,599		383,160		338,460	
	Repayments on revolving credit facility	(255,818			)	(325,043	)
	Debt issuance costs	(111	)	(579	)		)
	Reduction in tax benefit related to share-based awards	_		_		(2,510	)
	Purchase of treasury stock	(173	)	(1,729	)	(2,350	)
	Proceeds from sale of common stock	341		654		30,923	
	Repurchase of common stock	_		(5,203	)	_	
	Proceeds from exercise of stock options	_		21		134	
	Loss from noncontrolling interest	(358	)	_		_	
	Net cash provided by (used in) financing activities	21,480		(27,285	)	22,851	

## Discontinued operations:

Net cash provided by operating activities	1,296	4,102	874	
Net cash used in investing activities	(1,303	) (4,078	) (880	)
Net cash flows (used in) provided by discontinued operations	(7	) 24	(6	)
Effect of changes in exchange rates on cash and cash equivalents	(88)	) 151	(	