



11 Lewis Drive

Paola, KS 66071

**Oil & Gas Well Drilling
Water Wells
Geo-Loop Installation**

Phone: 913-557-9083

Fax: 913-557-9084

WELL LOG

Midstates Energy Operating, LLC

Mark Leach #I-2

API#15-059-27,158

November 9 - November 10, 2017

| <u>Thickness of Strata</u> | <u>Formation</u> | <u>Total</u> |
|----------------------------|------------------|-----------------------------|
| 3 | soil | 3 |
| 18 | clay | 21 |
| 84 | shale | 105 |
| 5 | lime | 110 |
| 7 | shale | 117 |
| 16 | lime | 133 |
| 8 | shale | 141 |
| 9 | lime | 150 |
| 3 | shale | 153 |
| 18 | lime | 171 |
| 25 | shale | 196 |
| 24 | lime | 220 |
| 77 | shale | 297 |
| 22 | lime | 319 |
| 15 | shale | 334 |
| 9 | lime | 343 |
| 34 | shale | 377 |
| 14 | lime | 391 |
| 14 | shale | 405 |
| 25 | lime | 430 slight oil show at 423' |
| 6 | shale | 436 |
| 24 | lime | 460 makes salt water |
| 4 | shale | 464 |
| 13 | lime | 477 base of the Kansas City |
| 167 | shale | 644 |
| 10 | lime | 654 |
| 20 | shale | 674 |
| 6 | lime | 680 |
| 15 | shale | 695 |
| 3 | lime | 698 |
| 1 | shale | 699 |
| 9 | lime & shale | 708 |
| 4 | shale | 712 |
| 3 | lime | 715 |
| 14 | shale | 729 |
| 4 | lime | 732 |
| 4 | shale | 737 green |
| 1 | oil sand | 738 good bleeding |
| 2 | sandy silt | 740 few thin bleeding seams |

| | | |
|----|------------|-------------|
| 1 | limey sand | 741 no show |
| 1 | oil sand | 742 |
| 38 | shale | 780 TD |

)
Drilled a 9 7/8" hole to 22.5'
Drilled a 5 5/8" hole to 780'

)
Set 22.5' of new 7" threaded and coupled surface casing cemented with 5 sacks of cement
Set 770' of new 2 7/8" 8 round upset tubing including 3 centralizers, 1 float shoe, 1 clamp



PRESSURE PUMPING LLC
 PO Box 884, Chanute, KS 66720
 820-431-9210 or 800-487-8678

9444
 9350

TICKET NUMBER 53898

LOCATION Ottawa, KS

FOREMAN Casey Kennedy

FIELD TICKET & TREATMENT REPORT
 CEMENT

| DATE | CUSTOMER # | WELL NAME & NUMBER | SECTION | TOWNSHIP | RANGE | COUNTY |
|--|-------------|--------------------|---------|---------------|------------------|--------|
| 11/10/17 | 5647 | Mack Leach #I-2 | SE 20 | 15 | 20 | FR |
| CUSTOMER Midstates Energy Investments | | | TRUCK # | DRIVER | TRUCK # | DRIVER |
| MAILING ADDRESS 5571 Halifax Avenue | | | 729 | Casey Kennedy | ✓ Safety Meeting | |
| CITY Fort Meyers | STATE FL | ZIP CODE 33912 | 467 | KeiCar | ✓ | |
| | | | 503 | Al Mad | ✓ | |
| | | | 675 | KeiDet | ✓ | |

JOB TYPE logstring HOLE SIZE 5 3/8" HOLE DEPTH 780' CASING SIZE & WEIGHT 2 7/8" EUE
 CASING DEPTH 770' DRILL PIPE _____ TUBING _____ OTHER _____
 SLURRY WEIGHT _____ SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING _____
 DISPLACEMENT 4.46 bbls DISPLACEMENT PSI _____ MIX PSI _____ RATE 4 bpm

REMARKS: held solid, meeting, established circulation, mixed & pumped 100 #
Gel followed by 5 bbls fresh water, mixed & pumped 93 sks Thixoblend
I cement w/ 1/2 # Phenoseal per sk, cement to surface, flushed pump
clean, pumped 2 1/2" rubber plug to casing TD w/ 4.46 bbls fresh water,
pressured to 800 PSI, well held pressure for 30 min MIT, released
pressure, shut in casing.

PK

| ACCOUNT CODE | QUANTITY or UNITS | DESCRIPTION of SERVICES or PRODUCT | UNIT PRICE | TOTAL |
|------------------|-------------------|------------------------------------|------------|---------|
| CE0450 | 1 | PUMP CHARGE | 1500.00 | |
| CE0002 | 15 mi | MILEAGE | 107.25 | |
| CE0711 | min | you mileage | 660.00 | |
| WE0853 | 2 hrs | 80 fare | 200.00 | |
| | | trucks | 2467.25 | |
| | | -55% | 1356.99 | |
| | | subtotal | | 1110.26 |
| <i>MU</i> CC5860 | 93 sks | Thixoblend I cement | 2325.00 | |
| CC5965 | 100 # | Gel | 30.00 | |
| CC6079 | 47 # | Phenoseal | 63.45 | |
| CP8176 | 1 | 2 1/2" rubber plug | 45.00 | |
| | | materials | 2463.45 | |
| | | -55% | 1354.90 | |
| | | subtotal | | 1108.55 |
| | | 8 1/2% | | |
| | | SALES TAX | | 88.68 |
| | | ESTIMATED TOTAL | | 2307.49 |

Form 3737

AUTHORIZATION No Co Rep on location TITLE _____ DATE 5127.78

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form

TERMS AND CONDITIONS

ATTENTION: THESE TERMS AND CONDITIONS CONTAIN INDEMNITY PROVISIONS FOR DAMAGE TO PERSONS AND PROPERTY.

All Services or Products provided by QES Pressure Pumping LLC (the Consolidated Oil Well Services LLC) are subject to these Terms and Conditions unless superseded by a Master Service Agreement signed by the parties. In the event Customer does not accept these Terms and Conditions as written, Customer must request a Master Service Agreement from QES' Contract Administration Department at mas@qesinc.com.

The operations, services, supplies, materials, personnel or goods to be provided ("Services" or "Products" as applicable) by QES Pressure Pumping LLC ("QES") will be provided to you, as customer ("Customer") in accordance with the following terms and conditions ("Agreement"). QES and Customer may be referred to as "Party" or "Parties".

1. **Price and Taxes.** Customer will pay QES for the Services or Products in accordance with QES' quoted price which includes applicable taxes or process charges fees. Customer shall pay all applicable taxes and process charges fees related to the Services and/or Products. QES' prices are subject to change without notice.

2. **Terms of Payment.** Customer will pay QES cash in advance for Services and Products unless QES has approved credit prior to the performance of the Services and/or delivery of the Products. Credit terms for approved accounts are net 30 days from the date of invoice. All invoices not paid within 30 days will be charged an interest rate of 1% per month or the maximum rate allowed under applicable state law, whichever is higher. Customer will be responsible for any fees incurred by QES in the collection of any amounts owed to QES including but not limited to agency fees and/or collection fees costs.

3. **Evidence of Services or Delivery of Products.** QES will furnish verification of proof of Services performed and Product delivered to Customer's representative at the time of performance of the Services or Product delivery. Customer agrees to sign and return such verification indicating Customer's acceptance of the Services or Products.

4. **Delivery or Transition.** At delivery and responsibility of QES ends when (1) Products are delivered to the Customer by QES and no longer in the care, custody and control of QES or (2) when the carrier receives the Products under shipment. QES will not be responsible for loss or damage to Products in transit or for delays of delivery of goods. In case of shortage, non-conformance, or apparent damage, it is the Customer's responsibility to secure written acknowledgment from the carrier before Customer accepts delivery. Additionally, QES will not be liable for any damage by delay in delivery or completion due to a Force Majeure (as defined below), strike or non-strike of the Customer, third party industrial or manufacturing delays, impossibility or impracticability of performance or any other cause of force beyond the control of QES, in the event of a delay caused by the aforesaid, the delivery or completion date will be extended for a period equal to any such delay, and the purchase price shall not be held or variable as a result thereof.

5. **Warranty Services and Conditions.** Customer, having custody and control of the well and service site, are having superior knowledge of the same and the conditions surrounding them, warrant that the well is ready to receive the Services and/or Products. Upon QES' request, Customer will provide documentation to verify that the well or service site is adequate to support the Services and the delivery of Products. Customer also warrants that QES' personnel and equipment will be able to safely access the well and service site and that any special equipment or special improvements required for such access will be the responsibility of Customer, unless otherwise agreed to by the parties.

6. **QES' Right to Remove or Abandon Materials.** Customer agrees that for any well created as part of the Services, Customer will be considered the generator for purposes of any applicable laws or regulations pertaining to the transportation, storage and handling of chemicals and hazardous materials.

7. **Data Data Transmission and Storage.** QES does not warrant or guarantee the accuracy of any information analyzed, stored or other data generated for the Customer. QES is not responsible for any accidental or intentional interruption of such data by the parties and it is the responsibility of the Customer to safeguard such data against loss including any need to create digital or paper copies for storage.

8. **WARRANTIES - LIMITATION OF LIABILITY.**

a) QES warrants that the Services and Products will (i) be free from defects in materials and workmanship; (ii) be performed in a good and workmanlike manner, in accordance with good oilfield working practices; and (iii) conform to the plans, specifications and technical information provided in writing by Customer until the Services or Products are accepted by Customer. QES' contractual obligations are met. In the event that Customer discovers a defect in the Services or Products within the warranty period specified above, Customer will notify QES of such defect. In the event that QES confirms that the Services or Products are defective, QES' liability and Customer's exclusion remedy for any cause of action (whether in tort, contract, breach of warranty or otherwise) arising out of the use or use of any Services or Products is expressly limited to, at QES' option, the (i) replacement of such Services or Products upon the return to QES of the goods to Customer for the full three year period for the collective term of the Services or Products upon the return to QES of the goods to Customer or (ii) the cost of products or parts not in the custody of QES' manufacturer. QES' liability will be limited to the extent of its recovery from the manufacturer of such products or parts under its liability to QES. QES will not be liable for any consequential damages, losses or interests of Customer resulting from such defects or for damages resulting from delay in loss of use, or other expenses, including incidental, punitive or consequential damages of any kind. QES will not be responsible for: (i) failures of Services that have been in any way tampered with or altered by a third party other than an authorized representative of QES; (ii) failures due to lack of compliance with relevant codes or standards or applicable laws; and (iii) accidents involving equipment use in normal well and test.

b) EXCEPT FOR THE WARRANTIES EXPRESSLY STATED ABOVE, THERE ARE NO OTHER WARRANTIES. THE PARTIES EXPRESSLY EXCLUDE AND CUSTOMER WAIVES ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

c) IN NO EVENT WILL QES' ENTIRE LIABILITY (IN TORT, CONTRACT, WARRANTY, INFRINGEMENT OR OTHERWISE) TO CUSTOMER EXCEED THE PURCHASE PRICE ACTUALLY PAID BY CUSTOMER FOR THE SERVICES OR PRODUCTS THAT GIVE RISE TO A DISPUTE. THIS PROVISION WILL SURVIVE ANY TERMINATION OF THIS AGREEMENT.

9. **INDEMNIFICATION AND WAIVER OF CONSEQUENTIAL DAMAGES.**

9.1 For purposes of this Section 9, the following definitions will apply: "QES Group" means QES Pressure Pumping LLC, its parent company, and affiliated companies and its and their direct or indirect employees, contractors, subcontractors and invitees. "Customer Group" means Customer as parent of any subsidiary and affiliated companies, its officers, co-venturers, partners and any party with whom Customer has an economic interest with respect to the Services, including Customers' joint interest owners and partners and its and their officers, directors, employees, members and invitees (including QES), subcontractors and invitees.

9.2 **QES INDEMNITY.** QES AGREES TO PROTECT, DEFEND, INDEMNIFY AND HOLD HARMLESS CUSTOMER GROUP FROM AND AGAINST ALL CLAIMS, DEMANDS, AND CAUSES OF ACTION OF EVERY KIND AND CHARACTER, ARISING IN CONNECTION WITH THE SERVICES, ON ACCOUNT OF BODILY INJURY, ILLNESS, OR DEATH OF ANY MEMBER OF QES GROUP OR DAMAGE TO OR LOSS OF PROPERTY OF ANY MEMBER OF QES GROUP.

9.3 **CUSTOMER INDEMNITY.** CUSTOMER AGREES TO PROTECT, DEFEND, INDEMNIFY AND HOLD HARMLESS QES GROUP FROM AND AGAINST ALL CLAIMS, DEMANDS, AND CAUSES OF ACTION OF EVERY KIND AND CHARACTER, ARISING IN CONNECTION WITH THE SERVICES, ON ACCOUNT OF BODILY INJURY, ILLNESS, OR DEATH OF ANY MEMBER OF CUSTOMER GROUP OR DAMAGE TO OR LOSS OF PROPERTY OF ANY MEMBER OF CUSTOMER GROUP.

9.4 **WELL.** CUSTOMER WILL RELEASE, PROTECT, DEFEND, AND INDEMNIFY QES GROUP FROM AND AGAINST ALL CLAIMS, DEMANDS AND CAUSES OF ACTION OF EVERY KIND AND CHARACTER IN THE EVENTS OF: (i) LOSS OR DAMAGE TO ANY GEOLOGICAL FORMATION, STRATA OR OIL OR GAS RESERVOIR OR MINERAL OR WATER RESOURCE BENEATH THE SURFACE OF THE LAND OR WATER, (ii) LOSS OR DAMAGE TO THE HOLE OR WELL, (iii)

IMPAIRMENT OF PROPERTY RIGHTS OR OTHER INTERESTS IN OR TO OIL, GAS, MINERAL OR WATER RESOURCES, AND (iv) REGAINING CONTROL OF ANY WILD WELL OR OUT OF CONTROL WELL, UNDERGROUND OR ABOVE THE SURFACE, INCLUDING REMOVAL OF WRECK, DEBRIS, EQUIPMENT, AND HAZARDOUS MATERIALS AND REMEDIATING ENVIRONMENTAL DAMAGE.

9.5 **POLLUTION RESPONSIBILITY.** Subject to paragraphs 9.2 and 9.3, it is understood and agreed between Customer and QES that the responsibility for pollution shall be as follows: (a) QES WILL ASSUME RESPONSIBILITY FOR CONTROL AND REMOVAL OF AND WILL PROTECT, DEFEND AND INDEMNIFY CUSTOMER GROUP FROM AND AGAINST ALL CLAIMS, DEMANDS AND CAUSES OF ACTION OF EVERY KIND OF CHARACTER ARISING FROM POLLUTION OR CONTAMINATION WHICH ORIGINATES ABOVE THE SURFACE OF THE LAND OR WATER FROM THE EQUIPMENT OF ANY MEMBER OF QES GROUP MAINTAINED IN QES GROUP'S CARE, CUSTODY AND CONTROL, AND ARISING FROM THE PERFORMANCE OF THE SERVICES. (b) CUSTOMER WILL ASSUME RESPONSIBILITY FOR CONTROL AND REMOVAL OF AND WILL PROTECT, DEFEND AND INDEMNIFY QES GROUP FROM AND AGAINST ALL CLAIMS, DEMANDS AND CAUSES OF ACTION OF EVERY KIND AND CHARACTER ARISING FROM POLLUTION OR OTHER THAN THAT DESCRIBED IN SECTION 9.5(A) ABOVE, WHICH MAY OCCUR DURING THE CONDUCT OF OPERATIONS HEREUNDER, INCLUDING, BUT NOT LIMITED TO, POLLUTION RESULTING FROM FIRE, BLOWOUT, CRATERING, SEEPAGE OR OTHER UNCONTROLLED FLOW OF OIL, GAS OR OTHER SUBSTANCE.

9.6 **WAIVER OF CONSEQUENTIAL DAMAGES.** NOTWITHSTANDING ANY PROVISION TO THE CONTRARY, CUSTOMER AND QES FURTHER AGREE THAT NEITHER PARTY WILL BE LIABLE TO THE OTHER OR EACH OTHERS RESPECTIVE GROUP FOR ANY CONSEQUENTIAL, INCIDENTAL OR INDIRECT DAMAGES INCLUDING BUT NOT LIMITED TO, LOSS OF PROFIT, LOSS OF PRODUCTION, REVENUE, OR ANTICIPATED BUSINESS ("LOSSES"). CUSTOMER AGREES TO INDEMNIFY AND HOLD QES GROUP HARMLESS FROM AND AGAINST ANY AND ALL CLAIMS FOR SUCH LOSSES ASSERTED BY MEMBERS OF CUSTOMER GROUP. QES AGREES TO INDEMNIFY AND HOLD CUSTOMER GROUP HARMLESS FROM AND AGAINST ANY AND ALL CLAIMS FOR SUCH LOSSES ASSERTED BY MEMBERS OF QES GROUP.

9.7 EXCEPT AS OTHERWISE EXPRESSLY LIMITED BY THIS AGREEMENT OR BY LAW, ALL RELEASES, INDEMNITY OBLIGATIONS AND OTHER LIABILITIES ASSUMED UNDER THIS AGREEMENT WILL BE WITHOUT LIMIT AND WITHOUT REGARD TO THE CAUSE OR CAUSES, INCLUDING, WITHOUT LIMITATION, PREEXISTING CONDITIONS, UNSEAWORTHINESS, STRICT LIABILITY, WILLFUL MISCONDUCT, AND THE SOLE, JOINT, GROSS, OR CONCURRENT NEGLIGENCE OF ANY PARTY.

9.8 Each Party herunder agreed to support its indemnity obligations with liability insurance coverage with limits of liability not less than ten million dollars (\$10,000,000). It is the express intention of the Parties that the indemnities contained herein apply to the fullest extent permitted by applicable law, and in no event will a Party's indemnity obligation be limited to the amount of insurance carried by such Party.

10. **THIS SECTION 9 WILL SURVIVE THE TERMINATION OR EXPIRATION OF THIS AGREEMENT.**

10.1 **Integration.** All matters outside of other Party, in any way related to the Services whether or not required by this Agreement, shall be the subject of the files and folders assumed by each party. It is the intent of the parties that this agreement shall be the entire agreement between the parties and that the parties are not contributing to any insurance of the other party group.

11. **Force Majeure.** Except the obligation to make payments under this agreement, QES nor Customer will be liable for delayed or non-performance under this agreement if such delay or non-performance is caused by an event beyond the control of either party, including but not limited to: war, terrorism, acts of God, civil or military authority, natural changes of law, any governmental action, acts of public enemy war, accidents, fires, epidemics, earthquakes, floods, failure of transportation, rebellion, insurrection or unusual labor conditions or equipment shortages or any similar or dissimilar cause beyond the reasonable control of either Party. The Party so affected will as soon as practicable notify the other party in writing concerning the cause and the date and effect and later reasonable mitigation with proper dispatch in writing, the condition. In the event Customer decides to terminate, occurrence QES will be compensated at the standing daily rate for the materials and personnel that are standing site as a consequence of the termination as determined with Customer by the work order or work estimates.

12. **Governing Law.** This Agreement shall be governed by the laws of the State of Texas, without regard to its conflicts of law provisions. The Parties agree to submit to the exclusive jurisdiction of the courts located in Houston, Harris County, Texas to the extent of any dispute or claim that arises out of or in connection with this Agreement. This Section 12 will survive the termination or expiration of this Agreement.

13. **Independent Contractor.** QES will be an independent contractor with respect to the Services performed and QES nor anyone employed by QES will be deemed for any purpose to be the employee, agent, partner, authorized agent or representative of Customer.

14. **Severability.** In the event any provision of this Agreement is inconsistent with or contrary to any applicable law, it is hereby agreed that the provision will be deemed modified to the extent required to comply with the remaining terms of this Agreement which are in full force and effect.

15. **Waiver.** A waiver on the part of either Party of any breach of any term, provision or condition of this Agreement will not constitute a precedent and shall not bind either Party hereto to a waiver of any subsequent or other breach of this Agreement in any other future breach of condition of this Agreement.

16. **Entire Agreement.** This Agreement constitutes the entire agreement of the Parties with respect to the subject matter hereof and supersedes all prior oral and written agreements, contracts, representations or warranties between the Parties relating to the subject matter hereof. No amendment or modification of this Agreement will be effective unless it is in writing and signed by the authorized representatives of each Party. If the Parties enter into a Master Service Agreement, then any term in a written hereto which conflicts with the provisions of such Master Service Agreement shall be deemed waived.