

Confidentiality Requested:

Yes  No

**KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION**

Form ACO-1

January 2018

**Form must be Typed**

**Form must be Signed**

**All blanks must be Filled**

**WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE**

OPERATOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Wellsite Geologist: \_\_\_\_\_

Purchaser: \_\_\_\_\_

Designate Type of Completion:

New Well  Re-Entry  Workover

Oil  WSW  SWD

Gas  DH  EOR

OG  GSW

CM (Coal Bed Methane)

Cathodic  Other (Core, Expl., etc.): \_\_\_\_\_

If Workover/Re-entry: Old Well Info as follows:

Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_

Deepening  Re-perf.  Conv. to EOR  Conv. to SWD

Plug Back  Liner  Conv. to GSW  Conv. to Producer

Commingled Permit #: \_\_\_\_\_

Dual Completion Permit #: \_\_\_\_\_

SWD Permit #: \_\_\_\_\_

EOR Permit #: \_\_\_\_\_

GSW Permit #: \_\_\_\_\_

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

NE  NW  SE  SW

GPS Location: Lat: \_\_\_\_\_, Long: \_\_\_\_\_  
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum:  NAD27  NAD83  WGS84

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Vertical Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

**Drilling Fluid Management Plan**

*(Data must be collected from the Reserve Pit)*

Chloride content: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

Location of fluid disposal if hauled offsite:

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Permit #: \_\_\_\_\_

**AFFIDAVIT**

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

**KCC Office Use ONLY**

Confidentiality Requested

Date: \_\_\_\_\_

Confidential Release Date: \_\_\_\_\_

Wireline Log Received  Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

**INSTRUCTIONS:** Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to [kcc-well-logs@kcc.ks.gov](mailto:kcc-well-logs@kcc.ks.gov). Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

|  |   |
|--|---|
| Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No<br><i>(Attach Additional Sheets)</i><br><br>Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No<br><br>Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No<br>Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No<br>Geologist Report / Mud Logs <input type="checkbox"/> Yes <input type="checkbox"/> No<br><br>List All E. Logs Run: _____ | <input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample<br><br>Name Top Datum |
|--|---|

| CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used  |                   |                           |                   |               |                |              |                            |
|---|-------------------|---------------------------|-------------------|---------------|----------------|--------------|----------------------------|
| Report all strings set-conductor, surface, intermediate, production, etc. |                   |                           |                   |               |                |              |                            |
| Purpose of String   | Size Hole Drilled | Size Casing Set (In O.D.) | Weight Lbs. / Ft. | Setting Depth | Type of Cement | # Sacks Used | Type and Percent Additives |
|   |                   |                           |                   |               |                |              |                            |
|   |                   |                           |                   |               |                |              |                            |
|   |                   |                           |                   |               |                |              |                            |

| ADDITIONAL CEMENTING / SQUEEZE RECORD  |                  |                |              |                            |
|--|------------------|----------------|--------------|----------------------------|
| Purpose:   | Depth Top Bottom | Type of Cement | # Sacks Used | Type and Percent Additives |
| <input type="checkbox"/> Perforate<br><input type="checkbox"/> Protect Casing<br><input type="checkbox"/> Plug Back TD<br><input type="checkbox"/> Plug Off Zone |                  |                |              |                            |
|  |                  |                |              |                            |

1. Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*
3. Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?  Yes  No *(If No, fill out Page Three of the ACO-1)*

|   |  |         |             |               |         |
|---|--|---------|-------------|---------------|---------|
| Date of first Production/Injection or Resumed Production/Injection: | Producing Method:<br><input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____ |         |             |               |         |
| Estimated Production Per 24 Hours                                   | Oil Bbls.  | Gas Mcf | Water Bbls. | Gas-Oil Ratio | Gravity |

|   |   |                                    |
|---|---|------------------------------------|
| DISPOSITION OF GAS:<br><input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease<br><i>(If vented, Submit ACO-18.)</i> | METHOD OF COMPLETION:<br><input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled<br><i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> | PRODUCTION INTERVAL:<br>Top Bottom |
|---|---|------------------------------------|

| Shots Per Foot | Perforation Top | Perforation Bottom | Bridge Plug Type | Bridge Plug Set At | Acid, Fracture, Shot, Cementing Squeeze Record<br><i>(Amount and Kind of Material Used)</i> |
|----------------|-----------------|--------------------|------------------|--------------------|---|
|                |                 |                    |                  |                    |   |
|                |                 |                    |                  |                    |   |
|                |                 |                    |                  |                    |   |
|                |                 |                    |                  |                    |   |

|                |       |         |            |  |
|----------------|-------|---------|------------|--|
| TUBING RECORD: | Size: | Set At: | Packer At: |  |
|----------------|-------|---------|------------|--|

|           |                           |
|-----------|---------------------------|
| Form      | ACO1 - Well Completion    |
| Operator  | Merit Energy Company, LLC |
| Well Name | CROSSBOW 1-11             |
| Doc ID    | 1325008                   |

All Electric Logs Run

|  |
|--|
|  |
| ANNULAR HOLE VOLUME LOG 5 CASING   |
| ARRAY COMPENSATED TRUE RESISTIVITY LOG 1 LOG   |
| ARRAY COMPENSATED TRUE RESISTIVITY LOG 2 LOG   |
| ARRAY COMPENSATED TRUE RESISTIVITY LOG 5 LOG   |
| ARRAY TRUE RESISTIVITY SPECTRAL DENSITY DUAL SPACED NEUTRON<br>BOREHOLE SONIC QUAD COMBO LOG |
| BOREHOLE COMPENSATED SONIC LOG   |
| MICROLOG   |

|           |                           |
|-----------|---------------------------|
| Form      | ACO1 - Well Completion    |
| Operator  | Merit Energy Company, LLC |
| Well Name | CROSSBOW 1-11             |
| Doc ID    | 1325008                   |

Tops

| Name         | Top  | Datum |
|--------------|------|-------|
| HEEBNER      | 3839 |       |
| TORONTO      | 3863 |       |
| LANSING      | 3927 |       |
| MARMATON     | 4468 |       |
| PAWNEE       | 4628 |       |
| CHEROKEE     | 4696 |       |
| ATOKA        | 4921 |       |
| MORROW       | 5215 |       |
| CHESTER      | 5577 |       |
| ST GENEVIEVE | 5614 |       |
| ST LOUIS     | 5658 |       |

|           |                           |
|-----------|---------------------------|
| Form      | ACO1 - Well Completion    |
| Operator  | Merit Energy Company, LLC |
| Well Name | CROSSBOW 1-11             |
| Doc ID    | 1325008                   |

Perforations

| Shots Per Foot | Perforation Record | Material Record                                      | Depth     |
|----------------|--------------------|--|-----------|
| 4              | 5699-5725 ST LOUIS | ACID-36 BBLs OF<br>15% HCL, FLUSH W/<br>38BBLs 2%KCL | 5699-5725 |





*Depend on US*

# Post Job Report

## **Merit Energy**

Crossbow 1-11

8/19/2016

8.625" Surface Casing

Grant County, KS





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### 1.0 Executive Summary

Allied Oil & Gas Services would like to thank you for the award of the provision of cementing products and services on the well Crossbow 1-11.

A pre-job meeting was held to discuss job details, review the safety hazards, potential environmental impact and established emergency procedures.

Allied started the job testing lines to 2000 psi. After a successful test we began the job by pumping 10 bbls of Fresh Water spacer. We then mixed and pumped the following cements:

|                  |                       |
|------------------|-----------------------|
| 168.04 bbl       | 370 Sacks of 12.1 ppg |
| Class A Slurry - | 2.55 Yield            |

- 2.0% Sodium Metasilicate
- 2.0% Gypsum
- 4.0% Gel
- 2.0% Sodium Chloride
- 3.0 % Calcium Chloride
- 0.25 lb Cellophane Flake

- 39.58 bbl
- 175 Sacks of 15.2 ppg
- Class A Slurry -
- 1.27 Yield
- 2.0 % Calcium Chloride
- 0.25 lb Cellophane Flake

The top plug was then released and displaced with 91.5 Bbls of Fresh Water. The plug bumped and was pressured to 1200 psi. Upon release the floats held. 60 bbl cement returned to the pit.

All real time data can be view in the Job Summary section.

Allied Oil & Gas Services remains committed to provide operational excellence and superior product performance. All comments and suggestions are greatly appreciated and help us to continue to provide this level of service.

Again we want to thank you for the opportunity to perform these and your future cementing & acidizing service needs.

|                                |                    |                         |
|--------------------------------|--------------------|-------------------------|
| Job Number: Lib1608191145      | Job Purpose        | 01 Surface              |
| Customer: MERIT ENERGY COMPANY | Date:              | 8/19/2016               |
| Well Name: Crossbow            | Number: 1-11       | API/UWI: 46652          |
| County: Grant                  | City:              | State: KS               |
| Cust. Rep:                     | Phone:             | Rig Phone:              |
| Distance                       | 50 miles (one way) | Supervisor: Lenny Baeza |

| Employees: | Emp. ID: | Employees:  | Emp. ID: |
|------------|----------|-------------|----------|
| Lenny B.   |          | Jose C.     |          |
| Ramon E.   |          | Cristian C. |          |

| Equipment: |          |
|------------|----------|
| 994-550    | 1080-842 |
| 870-744    |          |

### Materials - Pumping Schedule

#### STAGE #1

| Fluid Name | Description                           | Rqstd Qty   | Density | Yield | Water (gal/sk) |
|------------|---------------------------------------|-------------|---------|-------|----------------|
| Spacer 1   | FRESH WATER                           | 10          | 8.33    | n/a   | n/a            |
| Fluid Name | Description                           | Rqstd Qty   | Density | Yield | Water (gal/sk) |
| Lead 1     | ALLIED MULTI-DENSITY CEMENT - CLASS A | 370         | 12.10   | 2.55  | 14.86          |
| Fluid Name | Description                           | Rqstd Qty   | Density | Yield | Water (gal/sk) |
| Tail 1     | CLASS A COMMON                        | 175         | 15.19   | 1.27  | 5.75           |
| Fluid Name | Description                           | Rqstd Qty   | Density | Yield | Water (gal/sk) |
| Disp. 1    | Displacement                          | 91.57695897 | 8.33    | n/a   | n/a            |

| Slurry: Lead 1 |                                    | Slurry Name: ALLIED MULTI-DENSITY CEMENT - CLASS A Light |                |               |                 |  |
|----------------|------------------------------------|--|----------------|---------------|-----------------|--|
| Quantity:      | 370 sacks                          | Blend Vol:   | 466.41 cu.ft.  | Blend Weight: | 39706.80012 lbs |  |
| Material       | Description                        | Conc. (lb/sk)  | Determined by  | Load Volume   | UOM             |  |
| CCAC           | CLASS A COMMON                     | 94   | % Base Materia | 34780.0       | lbm             |  |
| CA-500         | GYPSUM                             | 1.88   | % BWOC         | 695.6         | lbm             |  |
| CA-400         | SODIUM METASILICATE                | 1.88   | % BWOC         | 695.6         | lbm             |  |
| Cgel           | GEL - BENTONITE                    | 3.76   | % BWOC         | 1391.2        | lbm             |  |
| CA-200         | SODIUM CHLORIDE                    | 2.475676   | % BWOW         | 916.0         | lbm             |  |
| CA-100         | CALCIUM CHLORIDE, PELLETS OR FLAKE | 2.82   | % BWOC         | 1043.4        | lbm             |  |
| CLC-CPF        | CELLOPHANE FLAKES                  | 0.5  | lb/sk          | 185.0         | lbm             |  |
| Water          | Mixing Water                       | 14.86  | gal/sk         | 5498.2        | gal             |  |

| Slurry: Tail 1 |                                    | Slurry Name: CLASS A COMMON |                |               |             |  |
|----------------|------------------------------------|-----------------------------|----------------|---------------|-------------|--|
| Quantity:      | 175 sacks                          | Blend Vol:                  | 187.35 cu.ft.  | Blend Weight: | 16866.5 lbs |  |
| Material       | Description                        | Conc. (lb/sk)               | Determined by  | Load Volume   | UOM         |  |
| CCAC           | CLASS A COMMON                     | 94                          | % Base Materia | 16450.0       | lbm         |  |
| CA-100         | CALCIUM CHLORIDE, PELLETS OR FLAKE | 1.88                        | % BWOC         | 329.0         | lbm         |  |
| CLC-CPF        | CELLOPHANE FLAKES                  | 0.5                         | lb/sk          | 87.5          | lbm         |  |
| Water          | Mixing Water                       | 5.75                        | gal/sk         | 1006.3        | gal         |  |

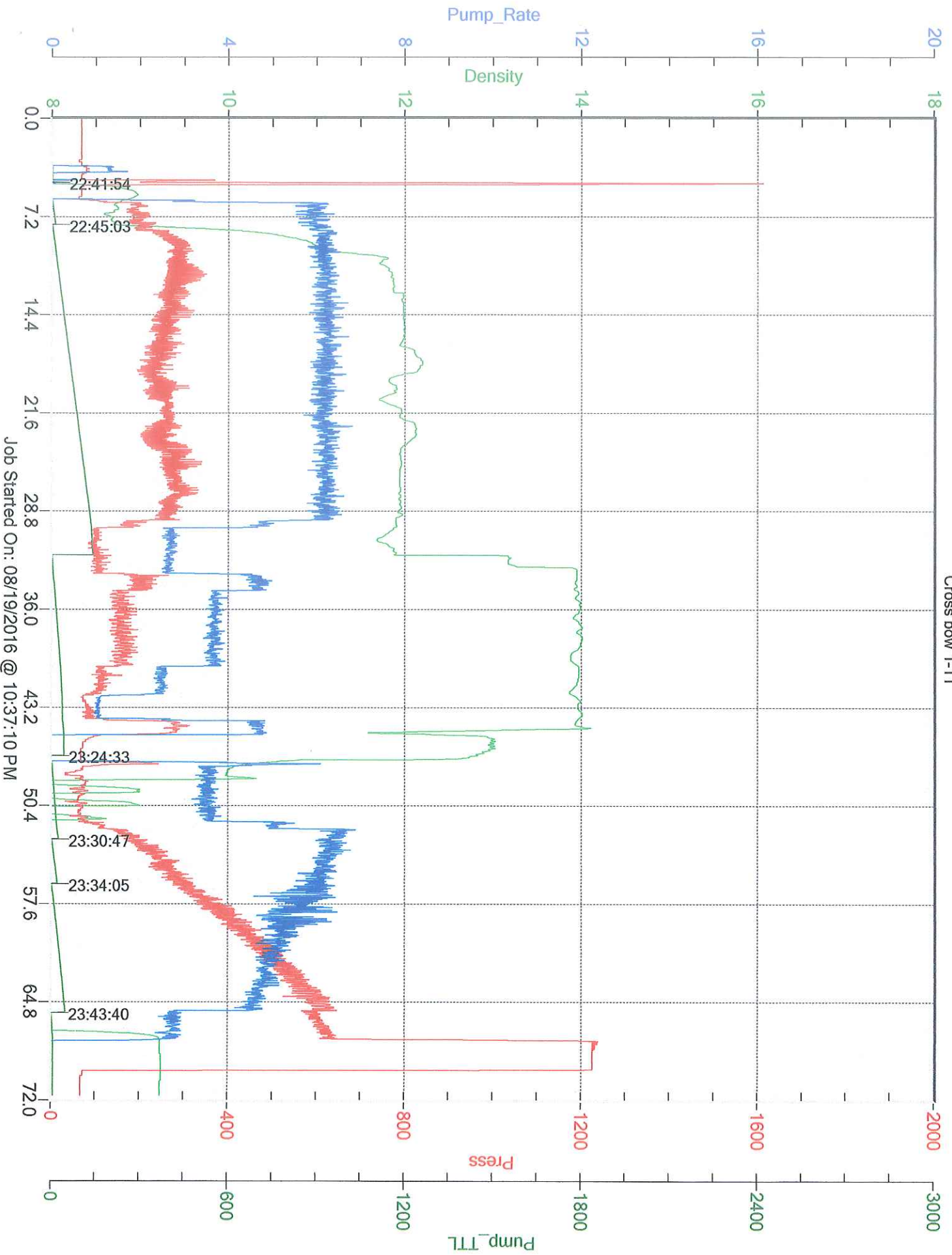
|                                |                    |                         |
|--------------------------------|--------------------|-------------------------|
| Job Number: Lib1608191145      | Job Purpose        | 01 Surface              |
| Customer: MERIT ENERGY COMPANY | Date:              | 8/19/2016               |
| Well Name: Crossbow            | Number: 1-11       | API/UWI:                |
| County: Grant                  | City:              | State: KS               |
| Cust. Rep:                     | Phone:             | Rig Phone: 0            |
| Distance                       | 50 miles (one way) | Supervisor: Lenny Baeza |

### Cement Job Summary

| DATE      | TIME    | PRESSURE - (PSI) |         | FLUID PUMPED DATA |            | COMMENTS                                       |
|-----------|---------|------------------|---------|-------------------|------------|--|
|           |         | CASING           | ANNULUS | VOLUME            | RATE (BPM) |  |
| 8/19/2016 | 8:30pm  |                  |         |                   |            | ARRIVE ON LOCATION                             |
|           | 9:30pm  |                  |         |                   |            | Rigging up and well head                       |
|           | 10:20pm |                  |         |                   |            | Safeting meeting with<br>companyman / rig crew |
|           | 10:42pm |                  |         |                   |            | Pressure test lines                            |
|           |         |                  |         | 10                | 5          | 10 bbls of water ahead                         |
|           | 10:45pm |                  |         | 178               | 6          | Mixing Lead Cement                             |
|           | 11:08pm |                  |         | 217               | 4          | Mixing Tail Cement                             |
|           | 11:20pm |                  |         | 217               | 0          | Shut dow no release plug                       |
|           | 11:24pm |                  |         |                   |            | Plug Released and starting<br>displacement     |
|           |         |                  |         |                   |            |  |
|           | 11:30pm | 160              |         | 237               | 5          | 20 bbls  |
|           | 11:34pm | 280              |         | 257               | 5          | 40 bbls  |
|           | 11:39pm | 430              |         | 277               | 5          | 60 bbls  |
|           | 11:42pm | 570              |         | 297               | 5          | 80 bbls  |
|           | 11:45pm | 590              |         | 302               | 3          | 85bbls gone slowing down                       |
|           | 11:45pm | 620-1200         |         | 308               | 3          | 91.5 bbls gone landed plug                     |
|           |         |                  |         |                   |            | Holding psi for little                         |
|           |         |                  |         |                   |            | Released psi and floats                        |
|           |         |                  |         |                   |            | Holding  |
|           |         |                  |         |                   |            |  |
|           | 1:00am  |                  |         |                   |            | Leaving location                               |
|           |         |                  |         |                   |            | 40bbl of Cement to Surface                     |



# Merit Energy Cross bow 1-11





CEMENT MIXING WATER GUIDELINES

Company Name:

MERIT ENERGY COMPANY

Lease Name:

Crossbow # 1-11

County

State

Grant

KS

Water Source:

TANK

Submitted By:

Date:

Lenny Baeza

8/19/2016

pH Level

Good

Must be less than 8.5

Sulfates

Good

Must be less than 1,000 PPM

Chlorides

Good

Must be less than 3,000 PPM

Temperature

68

Must be less than 100 deg F

COMMENTS

[Empty box for comments]

Thank You

Customer Signature

*[Handwritten Signature]*



Customer: MERIT ENERGY COMPANY  
Date: Friday, August 19, 2016  
Well Name: Crossbow # 1-11  
Well Location:  
Supervisor: Lenny Baeza

Equipment Operators: Lenny B. - Jose C. - Ramon E. - Cristian C.

| Performance   | Customer                             |                          |
|---|--------------------------------------|--------------------------|
| Was the appearance of the personnel and equipment satisfactory? | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Was the job performed in a professional manner?                 | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Were the calculations prepared and explained properly?          | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Were the correct services dispatched to the job site?           | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Were the services performed as requested?                       | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Did the job site environment remain unchanged?                  | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Did the equipment perform in the manner expected?               | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Did the materials meet your expectations?                       | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Was the crew prepared for the job?                              | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Was the crew prompt in the rig-up and actual job?               | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Were reasonable recommendations given, as requested?            | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Did the crew perform safely?                                    | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Was the job performed to your satisfaction?                     | <input checked="" type="radio"/> Yes | <input type="radio"/> No |

Customer Signature:

*Rody Alvarez*

Date: 8-19-16

Additional Comments:

*Bad job!*



*Depend on US*

# Post Job Report

## **Merit Energy**

Crossbow 1-11

8/23/2016

5.5" Production Casing

Grant County, KS





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Merit Energy  
Crossbow 1-11  
Grant County, KS

## 1.0 Executive Summary

Allied Oil & Gas Services would like to thank you for the award of the provision of cementing products and services on the well Crossbow 1-11.

A pre-job meeting was held to discuss job details, review the safety hazards, potential environmental impact and established emergency procedures.

Allied started the job testing lines to 2500 psi. After a successful test we began the job by plugging the rat hole and mouse hole with 50 sacks of ASC and then began pumping 12 bbls of HiVis Sweep spacer. We then mixed and pumped the following cements:

|                          |                       |
|--------------------------|-----------------------|
| 104.30 bbl               | 305 Sacks of 13.6 ppg |
| Class A Slurry -         | 1.92 Yield            |
| 10.0% Salt               |                       |
| 6.0% Gypsum              |                       |
| 2.0% Gel                 |                       |
| 0.5% CFL-210             |                       |
| 5.0 lb Kol-Seal          |                       |
| 0.25 lb Cellophane Flake |                       |

The top plug was then released and displaced with 137 Bbls of Fresh Water. The plug bumped and was pressured to 2500 psi. Upon release the floats held.

All real time data can be view in the Job Summary section.

Allied Oil & Gas Services remains committed to provide operational excellence and superior product performance. All comments and suggestions are greatly appreciated and help us to continue to provide this level of service.

Again we want to thank you for the opportunity to perform these and your future cementing & acidizing service needs.

|                                |                         |                           |  |
|--------------------------------|-------------------------|---------------------------|--|
| Job Number: LIK1623081300      | Job Purpose             | 02 Production/Long String |  |
| Customer: MERIT ENERGY COMPANY | Date: 8-23-2016         |                           |  |
| Well Name: Crosbow             | Number: 1-11            | API/UWI: 46652            |  |
| County: Grant                  | City:                   | State: KS                 |  |
| Cust. Rep: RODNY               | Phone:                  | Rig Phone:                |  |
| Distance: 50 miles (one way)   | Supervisor: Kenny Baeza |                           |  |

| Employees:       | Emp. ID: | Employees: | Emp. ID: |
|------------------|----------|------------|----------|
| Ayala, Alejandro | 0        |            |          |
| Gerardo B        | #N/A     |            |          |

| Equipment: |
|------------|
| 903-541    |
| 870-744    |

#### Materials - Pumping Schedule

##### STAGE #1

| Fluid Name | Description                           | Rqstd Qty   | Density | Yield | Water (gal/sk) |
|------------|---------------------------------------|-------------|---------|-------|----------------|
| Spacer 1   | HIVIS SWEEP                           | 12          | 8.40    | n/a   | n/a            |
| Fluid Name | Description                           | Rqstd Qty   | Density | Yield | Water (gal/sk) |
| Tail 1     | ALLIED SPECIAL BLEND CEMENT - CLASS A | 355         | 13.60   | 1.92  | 9.56           |
| Fluid Name | Description                           | Rqstd Qty   | Density | Yield | Water (gal/sk) |
| Disp. 1    | Displacement                          | 137.3385432 | 8.33    | n/a   | n/a            |

| Slurry: Tail 1 |                                | Slurry Name: ALLIED SPECIAL BLEND CEMENT - CLASS A |                |             |               |                |  |
|----------------|--------------------------------|--|----------------|-------------|---------------|----------------|--|
| Quantity:      | 355 sacks                      | Blend Vol:   | 488.28 cu.ft.  | cu.ft.      | Blend Weight: | 40897.2354 lbs |  |
| Material       | Description                    | Conc. (lb/sk)                                      | Determined by  | Load Volume | UOM           |                |  |
| CCAC           | CLASS A COMMON                 | 94   | % Base Materia | 33370.0     | lbm           |                |  |
| CA-200         | SODIUM CHLORIDE                | 7.96348  | % BWOW         | 2827.0      | lbm           |                |  |
| CA-500         | GYP SUM                        | 5.64   | % BWOC         | 2002.2      | lbm           |                |  |
| CGEL           | GEL - BENTONITE                | 1.88   | % BWOC         | 667.4       | lbm           |                |  |
| CFL-210        | FLUID LOSS ADDITIVE - LOW TEMP | 0.47   | % BWOC         | 166.9       | lbm           |                |  |
| CLC-KOL        | KOL-SEAL                       | 5  | lb/sk          | 1775.0      | lbm           |                |  |
| CLC-CPF        | CELLOPHANE FLAKES              | 0.25   | lb/sk          | 88.8        | lbm           |                |  |
| Water          | Mixing Water                   | 9.56   | gal/sk         | 3393.8      | gal           |                |  |

|                                |                         |                           |                      |
|--------------------------------|-------------------------|---------------------------|----------------------|
| Job Number: LIK1623081300      | Job Purpose             | 02 Production/Long String |                      |
| Customer: MERIT ENERGY COMPANY | Date: 8-23-2016         |                           | <del>1/26/2015</del> |
| Well Name: Crosbow             | Number: 1-11            | API/UWI:                  |                      |
| County: Grant                  | City:                   | State: KS                 |                      |
| Cust. Rep: RODNY               | Phone:                  | Rig Phone: 0              |                      |
| Distance: 50 miles (one way)   | Supervisor: Kenny Baeza |                           |                      |

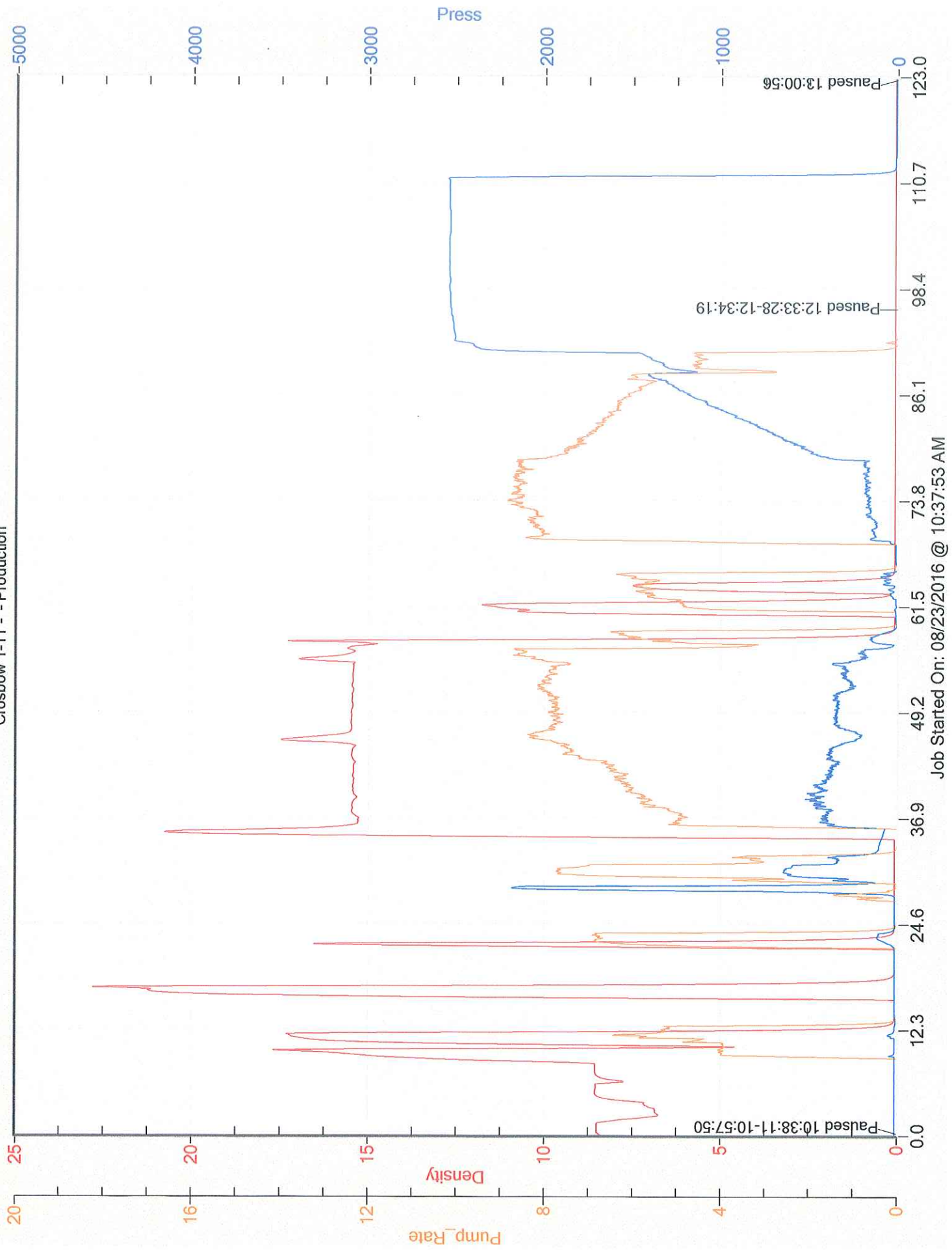
| DATE      | TIME        | PRESSURE - (PSI) |         | FLUID PUMPED DATA |            | COMMENTS                |
|-----------|-------------|------------------|---------|-------------------|------------|-------------------------|
|           |             | CASING           | ANNULUS | VOLUME            | RATE (BPM) |                         |
| 8/23/2016 | 8:30:00 AM  |                  |         |                   |            | ARRIVE ON LOCATION      |
| 8/23/16   | 10:20:00 AM |                  |         |                   |            | SAFETY MEETING          |
| 8/23/16   | 11:05:00 AM | 0                |         | 17.1              | 4          | PLUG RAT AND MOUSE 50SK |
| 8/23/16   | 11:18:00 AM | 2500             |         | .5                | .5         | PRESSURE TEST LINES     |
| 8/23/16   | 11:20:00 AM | 100              |         | 12                | 6          | PUMP MUD FLUSH          |
| 8/23/16   | 11:25:00 AM | 200              |         | 104.3             | 7          | MIX 305 SACKS OF ASC    |
| 8/23/16   | 12:00:00 PM | 0                |         |                   |            | SHUT DOWN               |
| 8/23/16   | 12:02:00 PM | 0                |         | 10                | 4          | WASH PUMPING LINES      |

*Cement Job Summary*

|         |             |      |  |     |   |                             |
|---------|-------------|------|--|-----|---|-----------------------------|
| 8/23/16 | 12:10:00 PM | 150  |  | 0   | 8 | DROP PLUG START DISP KCL    |
| 8/23/16 | 12:15:00 PM | 500  |  | 70  | 8 | COUGHT CEMENT AT            |
| 8/23/16 | 12:27:00 PM | 800  |  | 127 | 5 | SLOWED RATE DOWN            |
| 8/23/16 | 12:30:00 PM | 2500 |  | 137 |   | LAND PLUG                   |
| 8/23/16 | 12:31:00 PM | 2500 |  |     |   | PRESSURE TEST CASING 15 MIN |
| 8/23/16 | 12:49:00 PM | 0    |  |     |   | RELEASED PRESS 1 BBL BACK   |
| 8/23/16 | 12:50:00 PM | 0    |  |     |   | FLOATS HOLDING              |
| 8/23/16 | 12:51:00 PM |      |  |     |   | RIG DOWN                    |

# Merit Energy

Crosbow 1-11 - - Production







CEMENT MIXING WATER GUIDELINES

Company Name:

MERIT ENERGY COMPANY

Lease Name:

Crosbow # 1-11

County

Grant

State

KS

Water Source:

TANK

Submitted By:

Kenny Baeza

Date:

8/23/2016

pH Level

Good

Must be less than 8.5

Sulfates

Good

Must be less than 1,000 PPM

Chlorides

Good

Must be less than 3,000 PPM

Temperature

75 deg

Must be less than 100 deg F

COMMENTS

Thank You

Customer Signature



Customer: MERIT ENERGY COMPANY  
 Date: Tuesday, August 23, 2016  
 Well Name: Crosbow # 1-11  
 Well Location: \_\_\_\_\_  
 Supervisor: Kenny Baeza

Equipment Operators: Ayala, Alejandro - Gerardo B

| Performance   | Customer                             |                          |
|---|--------------------------------------|--------------------------|
| Was the appearance of the personnel and equipment satisfactory? | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Was the job performed in a professional manner?                 | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Were the calculations prepared and explained properly?          | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Were the correct services dispatched to the job site?           | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Were the services performed as requested?                       | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Did the job site environment remain unchanged?                  | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Did the equipment perform in the manner expected?               | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Did the materials meet your expectations?                       | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Was the crew prepared for the job?                              | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Was the crew prompt in the rig-up and actual job?               | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Were reasonable recommendations given, as requested?            | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Did the crew perform safely?                                    | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Was the job performed to your satisfaction?                     | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Customer Signature:   | Date: <u>8-23-16</u>                 |                          |
| Additional Comments:  |                                      |                          |
|   |                                      |                          |
|   |                                      |                          |
|   |                                      |                          |
|   |                                      |                          |
|   |                                      |                          |
|   |                                      |                          |

*Kenny Baeza*