Spud Date: June 17, 2018
Drilling Finished Date: July 07, 2018
1st Prod Date: August 20, 2018
Completion Date: August 13, 2018

Drill Type: HORIZONTAL HOLE

Well Name: EMMERICH 2-6H
Location: LOGAN 6 17N 4W
200 FSL 950 FEL of $1 / 4$ SEC
Derrick Elevation: 1184 Ground Elevation: 1161
Operator: STEPHENS PRODUCTION CO 23030
PO BOX 2407
623 GARRISON AVE
FORT SMITH, AR 72902-2407

Min Gas Allowable: Yes
Purchaser/Measurer: SUPERIOR PIPELINE CO, LLC
First Sales Date: 08/20/2018

| Completion Type |  |
| :--- | :--- |
| $X$ | Single Zone |
|  | Multiple Zone |
|  | Commingled |


| Location Exception |
| :---: |
| Order No |
| 664325 |


| Increased Density |
| :--- |
| Order No |
| There are no Increased Density records to display. |


| Casing and Cement |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type | Size | Weight | Grade | Feet | PSI | SAX | Top of CMT |
| CONDUCTOR | 20 |  |  | 80 |  | 8 | SURFACE |
| SURFACE | 9.625 | 36 | J-55 | 540 |  | 185 | SURFACE |
| PRODUCTION | 7 | 29 | P-110 | 6812 |  | 245 | 4229 |


| Liner |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type | Size | Weight | Grade | Length | PSI | SAX | Top Depth | Bottom Depth |  |
| LINER | 4.5 | 13.5 | P-110 | 4926 | 0 | 0 | 6562 | 11488 |  |

Total Depth: 11488

| Packer |  |
| :---: | :---: |
| Depth | Brand \& Type |
| 6523 | AS III |

## Initial Test Data

| Test Date | Formation | $\begin{gathered} \hline \text { Oil } \\ \text { BBL/Day } \end{gathered}$ | Oil-Gravity (API) | $\begin{gathered} \text { Gas } \\ \text { MCF/Day } \end{gathered}$ | Gas-Oil Ratio Cu FT/BBL | Water BBL/Day | Pumpin or Flowing | Initial ShutIn Pressure | Choke Size | Flow Tubing Pressure |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aug 21, 2018 | MISSISSIPPIAN | 97 | 38.5 | 1 | 10 | 1245 | FLOWING |  | NO | 129 |

Completion and Test Data by Producing Formation

| Formation Name: MISSISSIPPIAN |  |
| :---: | :---: |
| Spacing Orders |  |
| Order No | Unit Size |
| 632408 | 640 |

Code: 359MSSP Class: OIL


| Acid Volumes |
| :---: |
| 1,320 BARRELS 15\% HCL |


| Fracture Treatments |
| :---: |
| $6,959,740$ POUNDS SAND, 273,357 BARRELS FLUID |


| Formation | Top |
| :--- | :--- |
| BIG LIME | 5949 |
| SKINNER | 6169 |
| MISSISSIPPIAN | 6388 |

Were open hole logs run? No
Date last log run:

Were unusual drilling circumstances encountered? No Explanation:

## Other Remarks

SWELLABLE PACKERS USED ON 4.5" LINER. OCC - THIS WELL IS AN OPEN HOLE COMPLETION FROM BOTTOM OF THE 7" CASING AT 6,812' TO TERMINUS AT 11,488'. THE $41 / 2^{\prime \prime}$ LINER IS NOT CEMENTED. OCC - THIS DOCUMENT IS ACCEPTED BASED ON THE DATA SUBMITTED THE FINAL LOCATION EXCEPTION HAS NOT BEEN ISSUED.

## Lateral Holes

Sec: 6 TWP: 17N RGE: 4W County: LOGAN
NE NE NW NE
155 FNL 1490 FEL of $1 / 4$ SEC
Depth of Deviation: 6061 Radius of Turn: 757 Direction: 353 Total Length: 3256
Measured Total Depth: 11488 True Vertical Depth: 6718 End Pt. Location From Release, Unit or Property Line: 155

## FOR COMMISSION USE ONLY

Status: Accepted


SEP 042018 Oklahoma Corporation

| X | SINGLE ZONE |  |
| :---: | :---: | :---: |
|  | MULTIPLE ZONE Application Date |  |
| COMMNTGEO |  |  |
| LOCATON 664325 |  |  |
| EXCEPTION ORDEF 6843 |  |  |
| INCREASEU OENSITY |  |  |
| ORD | ER NO. |  |

PACKER 6523' BRAND \& TVPE AS III
PACKER A $\quad$ GRAND \& TVPE




PLEASE TYPE OR USE BLACK INK ONLY
Give formation names and tops, if available, or descriptions and thickness of formations drilled through. Show intervals cored or diflistem tested.

| NAMES OF FORMATIONS | TOP |
| :--- | :---: |
| Big Lime | 5,949 |
| Skinner | 6,169 |
| Mississippian | 6,388 |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |


[oneremantes: swellable packers used on $4.5^{\circ}$ liner. OCC This well is an open hole complehaps from bottom of the $7^{\prime c}$ casing at 6812" to terminus at 11,488 . The $41 / 2^{\prime \prime}$ liner is not cemented.



N more than those crainholes ane proposed, attach a -

Direction must be stated in degree azimuth. Plows note, the horizontal drainhole and its end point must be located within the boundaries of the on or spacing unto.

Directional surveys are required for all drainholea and directional wells.


BOTTOM HOLE LOCATION FOR DIRECTIONAL HOLE


BOTTOM HOLE LOCATION FOR HORIZONTAL HOLE: (LATERALS)





