PANTERRA ENERGY SURFACE CASING CEMENT REPORT

| Panterra Energy, LLC | T | · | | | | | | |
|-----------------------------------|---|-------|---------------|-------------|-----------|------------|-------------|-----------------|
| 6900 Highway 86 | PanTerra energy | | | | | | | |
| Kiowa CO 80117 | | nono | T.7 | | | | | |
| | | nerg | y — | | | | | |
| | | | | | | | | |
| PROJECT NUMBER | pcs17-4-cp | | PROJECT LE | AD DRILLER | RIG # | HOLE # | BIT TYPE(S) | START DATE |
| PROJECT LOCATION | COFFEYVILLE, KS | | SKYLER WILSON | | PE: 1002 | COF_AC 1 | HAMMER | 5/16/2017 |
| GENERAL CONTRACTOR | PIPELINE CONTROLS AND SERVICES | | | | | | | COMPLETION DATE |
| | | | | | | | | 6/1/2017 |
| GEOLOGIC LOG | DEPTH | TYPE | GRAIN SIZE | COLOR | WATER Y/N | ADDITIVES | PH | MUD WT |
| clay | 0-40 | CLAY | solid | tan | | NONE | N/A | N/A |
| limestone | 40-400 | FLINT | solid | grey/ black | у | | | |
| | | | | | | | | |
| | | | | | | | | |
| GPS COORDINATES (UTM) | | | N: | 37.050866 | E: | -95.613033 | | |
| | | | | | | | | |
| HOLE DIAMETER (IN) | 9 7/8" NOTES: | | | | | | | |
| TOTAL HOLE DEPTH | 400' CASING COMPLETED AND FILLED WITH 108 BAGS OF CEMENT | | | | | | | |
| CASING SIZE | 10.75" | | | | | | | |
| CASING HOLE DIAMETER | 16" | | | | | | | |
| CASING HOLE DEPTH | 150 | | | | | | | |
| CEMENT CIRCULATED TO SURFACE | YES | | | | | | | |
| GROUT MATERIAL | PORTLAND CEMENT | | | | | | | |
| ANODE SIZE | 2" x 25 | | | | | | | |
| BOTTOM ANODE DEPTH | 400' | | | | | | | |
| TOP ANODE DEPTH | 150' | | | | | | | |
| # OF BAGS OF COKE BREEZE | 200 tagged 2@ 142' | | | | | | | |
| #OF BAGS OF CEMENT | 92 bags of Portland Cement | | | | | | | |
| WAS VAC TRUCK USED | YES | | | | | | | |
| EQUIPMENT USED ON SITE | DRILL MAX | | | | | | | |
| | MUD PUPPY | | | | | | | |
| | SUPPORT VEHICLES | | | | | | | |
| | GROUTING RIG | | | | | | | |
| | PICK UP | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
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| DRILLER'S SIGNATURE VERIFYING THE | DRILLER'S SIGNATURE VERIFYING THE ACCURACY OF THIS INFORMATION: Skyler Wilson | | | | | | | |
| | | | | | | | | |