

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

OCD Received  
Date: 3/31/2020

Form C-104  
Revised August 1, 2011

Submit one copy to appropriate District Office

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

|                                                                                                                          |                                                  |                                                           |                                  |
|--------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|-----------------------------------------------------------|----------------------------------|
| <sup>1</sup> Operator name and Address<br>TAP ROCK OPERATING, LLC<br>602 PARK POINT DRIVE, SUITE 200<br>GOLDEN, CO 80401 |                                                  | <sup>2</sup> OGRID Number<br>372043                       |                                  |
|                                                                                                                          |                                                  | <sup>3</sup> Reason for Filing Code/ Effective Date<br>RT |                                  |
| <sup>4</sup> API Number<br>30 - 0 15-46121                                                                               | <sup>5</sup> Pool Name<br>PURPLE SAGE, WOLFCAMP  |                                                           | <sup>6</sup> Pool Code<br>98220  |
| <sup>7</sup> Property Code<br>319943                                                                                     | <sup>8</sup> Property Name<br>CYPRESS 34 FEDERAL |                                                           | <sup>9</sup> Well Number<br>246H |

II. <sup>10</sup> Surface Location

| Ul or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South Line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| A             | 3       | 24S      | 29E   | 1       | 241           | NORTH            | 1147          | EAST           | EDDY   |

<sup>11</sup> Bottom Hole Location

| UL or lot no.               | Section                                     | Township | Range                                | Lot Idn | Feet from the                     | North/South line | Feet from the                      | East/West line | County                              |
|-----------------------------|---------------------------------------------|----------|--------------------------------------|---------|-----------------------------------|------------------|------------------------------------|----------------|-------------------------------------|
| B                           | 34                                          | 23S      | 29E                                  |         | 86                                | NORTH            | 2439                               | EAST           | EDDY                                |
| <sup>12</sup> Lse Code<br>F | <sup>13</sup> Producing Method<br>Code<br>F |          | <sup>14</sup> Gas Connection<br>Date |         | <sup>15</sup> C-129 Permit Number |                  | <sup>16</sup> C-129 Effective Date |                | <sup>17</sup> C-129 Expiration Date |

III. Oil and Gas Transporters

| <sup>18</sup> Transporter<br>OGRID | <sup>19</sup> Transporter Name<br>and Address                                   | <sup>20</sup> O/G/W |
|------------------------------------|---------------------------------------------------------------------------------|---------------------|
| 373554                             | SALT CREEK MIDSTREAM, LLC<br>20329 STATE HIGHWAY 249<br>HOUSTON, TX U.S.A 77070 | O                   |
| 373554                             | SALT CREEK MIDSTREAM, LLC<br>20329 STATE HIGHWAY 249<br>HOUSTON, TX U.S.A 77070 | G                   |
|                                    |                                                                                 |                     |
|                                    |                                                                                 |                     |
|                                    |                                                                                 |                     |

IV. Well Completion Data

|                                   |                                       |                                    |                              |                                             |                            |
|-----------------------------------|---------------------------------------|------------------------------------|------------------------------|---------------------------------------------|----------------------------|
| <sup>21</sup> Spud Date<br>8/3/19 | <sup>22</sup> Ready Date<br>11/9/2019 | <sup>23</sup> TD<br>15875'         | <sup>24</sup> PBTD<br>15798' | <sup>25</sup> Perforations<br>10666'-15683' | <sup>26</sup> DHC, MC      |
| <sup>27</sup> Hole Size           |                                       | <sup>28</sup> Casing & Tubing Size | <sup>29</sup> Depth Set      |                                             | <sup>30</sup> Sacks Cement |
| 17 1/2"                           |                                       | 13 3/8"                            | 422'                         |                                             | 560                        |
| 12 1/4"                           |                                       | 9 5/8"                             | 3155'                        |                                             | 1069                       |
| 8 3/4"                            |                                       | 7 5/8"                             | 9889'                        |                                             | 450                        |
| 6 3/4                             |                                       | 5 1/2", 5"                         | 9225', 15847'                |                                             | 721                        |

V. Well Test Data

|                            |                                 |                         |                           |                             |                             |
|----------------------------|---------------------------------|-------------------------|---------------------------|-----------------------------|-----------------------------|
| <sup>31</sup> Date New Oil | <sup>32</sup> Gas Delivery Date | <sup>33</sup> Test Date | <sup>34</sup> Test Length | <sup>35</sup> Tbg. Pressure | <sup>36</sup> Csg. Pressure |
| <sup>37</sup> Choke Size   | <sup>38</sup> Oil               | <sup>39</sup> Water     | <sup>40</sup> Gas         |                             | <sup>41</sup> Test Method   |

|                                                                                                                                                                                                                                                                                                            |                       |                                                          |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|----------------------------------------------------------|--|
| <sup>42</sup> I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.<br>Signature:  |                       | OIL CONSERVATION DIVISION                                |  |
| Printed name:<br>Bill Ramsey                                                                                                                                                                                                                                                                               |                       | Approved by:<br><b>DENIED</b>                            |  |
| Title:<br>Regulatory Analyst                                                                                                                                                                                                                                                                               |                       | Title:                                                   |  |
| E-mail Address:<br>bramsey@taprk.com                                                                                                                                                                                                                                                                       |                       | Approval Date:                                           |  |
| Date:<br>3/18/2020                                                                                                                                                                                                                                                                                         | Phone:<br>72-360-4028 | RT EXPIRED: 2/9/2020<br>Received: 3/31/20. NW C-104 LATE |  |

District I  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720  
District II  
811 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico  
Energy, Minerals & Natural Resources  
Department  
OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

FORM C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

☐ AMENDED REPORT  
AS-DRILLED

WELL LOCATION AND ACREAGE DEDICATION PLAT

|                                         |  |                                                        |  |                                                       |                                  |
|-----------------------------------------|--|--------------------------------------------------------|--|-------------------------------------------------------|----------------------------------|
| <sup>1</sup> API Number<br>30-015-46121 |  | <sup>2</sup> Pool Code<br>98220                        |  | <sup>3</sup> Pool Name<br>PURPLE SAGE, WOLFCAMP (GAS) |                                  |
| <sup>4</sup> Property Code<br>319943    |  | <sup>5</sup> Property Name<br>CYPRESS 34               |  |                                                       | <sup>6</sup> Well Number<br>246H |
| <sup>7</sup> OGRID No.<br>372043        |  | <sup>8</sup> Operator Name<br>TAP ROCK OPERATING, LLC. |  |                                                       | <sup>9</sup> Elevation<br>3093'  |

<sup>10</sup>Surface Location

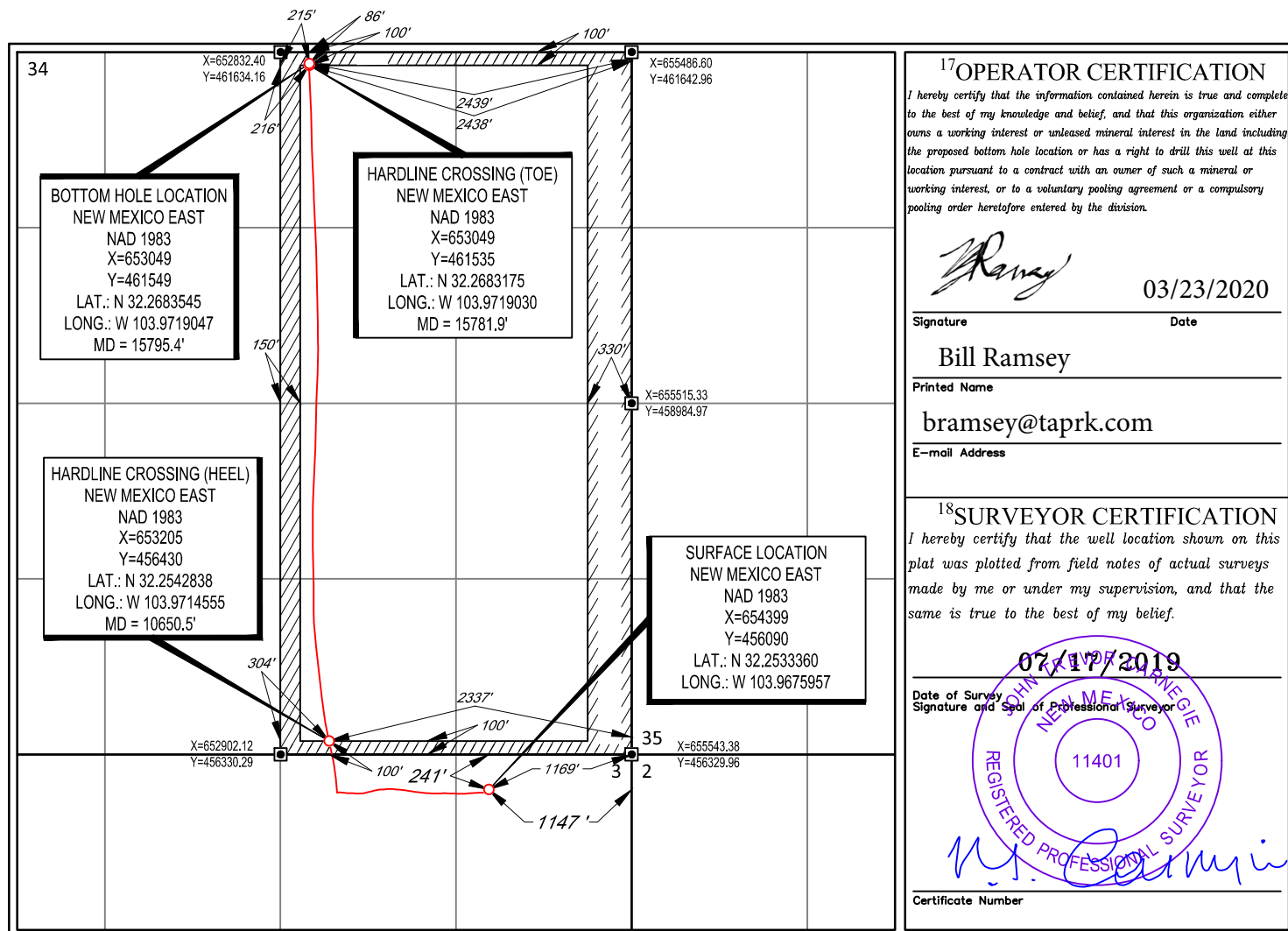
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| A             | 3       | 24-S     | 29-E  | -       | 241'          | NORTH            | 1147'         | EAST           | EDDY   |

<sup>11</sup>Bottom Hole Location If Different From Surface

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| B             | 34      | 23-S     | 29-E  | -       | 86'           | NORTH            | 2439'         | EAST           | EDDY   |

|                               |                               |                                  |                         |
|-------------------------------|-------------------------------|----------------------------------|-------------------------|
| <sup>12</sup> Dedicated Acres | <sup>13</sup> Joint or Infill | <sup>14</sup> Consolidation Code | <sup>15</sup> Order No. |
|                               |                               |                                  |                         |

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.







# **Tap Rock Resources, LLC**

**Eddy County, NM (NAD 83 NME)  
(Cypress) Sec-3\_T-24-S\_R-29-E  
Cypress 34 Federal #246H**

**OWB**

**Design: AWB**

## **Standard Survey Report**

**15 October, 2019**





Operator: Taprock Resources LLC  
Well Name: Cypress 34 Federal #246H  
County: Eddy  
State: New Mexico  
Rig Name: H&P 388  
API Number: 30-015-46121

Intrepid Directional Drilling Specialists certifies that the surveys performed on the above referenced well are true and correct MWD surveys, data provided as follows:

Surveyor: Intrepid Directional Drilling Specialists  
Survey Depths: 120' MD – 15796' MD  
Projection to Bit: 15875' MD  
Dates Performed: 08/31/2019 – 09/08/2019 & 10/06/2019 – 10/13/2019  
Type of Survey: MWD

Sincerely,

A handwritten signature in blue ink, appearing to read "James Burleson".

James Burleson  
Vice President of MWD Operations  
Intrepid Directional Drilling Specialists



|                  |                               |                                     |                               |
|------------------|-------------------------------|-------------------------------------|-------------------------------|
| <b>Company:</b>  | Tap Rock Resources, LLC       | <b>Local Co-ordinate Reference:</b> | Well Cypress 34 Federal #246H |
| <b>Project:</b>  | Eddy County, NM (NAD 83 NME)  | <b>TVD Reference:</b>               | KB @ 3119.0usft (H&P 245)     |
| <b>Site:</b>     | (Cypress) Sec-3_T-24-S_R-29-E | <b>MD Reference:</b>                | KB @ 3119.0usft (H&P 245)     |
| <b>Well:</b>     | Cypress 34 Federal #246H      | <b>North Reference:</b>             | Grid                          |
| <b>Wellbore:</b> | OWB                           | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Design:</b>   | AWB                           | <b>Database:</b>                    | EDM 5000.15 Single User Db    |

|                    |                              |                      |                |
|--------------------|------------------------------|----------------------|----------------|
| <b>Project</b>     | Eddy County, NM (NAD 83 NME) |                      |                |
| <b>Map System:</b> | US State Plane 1983          | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b>  | North American Datum 1983    |                      |                |
| <b>Map Zone:</b>   | New Mexico Eastern Zone      |                      |                |

|                              |                               |                          |                  |
|------------------------------|-------------------------------|--------------------------|------------------|
| <b>Site</b>                  | (Cypress) Sec-3_T-24-S_R-29-E |                          |                  |
| <b>Site Position:</b>        |                               | <b>Northing:</b>         | 456,089.00 usft  |
| <b>From:</b>                 | Map                           | <b>Easting:</b>          | 654,400.00 usft  |
| <b>Position Uncertainty:</b> | 0.0 usft                      | <b>Slot Radius:</b>      | 13-3/16 "        |
|                              |                               | <b>Latitude:</b>         | 32° 15' 12.005 N |
|                              |                               | <b>Longitude:</b>        | 103° 58' 3.336 W |
|                              |                               | <b>Grid Convergence:</b> | 0.20 °           |

|                             |                          |                            |                                  |
|-----------------------------|--------------------------|----------------------------|----------------------------------|
| <b>Well</b>                 | Cypress 34 Federal #246H |                            |                                  |
| <b>Well Position</b>        | <b>+N/-S</b>             | 0.0 usft                   | <b>Northing:</b> 456,089.00 usft |
|                             | <b>+E/-W</b>             | 0.0 usft                   | <b>Easting:</b> 654,400.00 usft  |
| <b>Position Uncertainty</b> | 0.0 usft                 | <b>Wellhead Elevation:</b> | usft                             |
|                             |                          | <b>Latitude:</b>           | 32° 15' 12.005 N                 |
|                             |                          | <b>Longitude:</b>          | 103° 58' 3.336 W                 |
|                             |                          | <b>Ground Level:</b>       | 3,093.0 usft                     |

|                  |                   |                    |                                            |
|------------------|-------------------|--------------------|--------------------------------------------|
| <b>Wellbore</b>  | OWB               |                    |                                            |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b>                     |
|                  | IGRF2015          | 08/25/19           | 6.90                                       |
|                  |                   |                    | <b>Dip Angle (°)</b> 60.00                 |
|                  |                   |                    | <b>Field Strength (nT)</b> 47,691.17792194 |

|                          |                                |                      |                             |
|--------------------------|--------------------------------|----------------------|-----------------------------|
| <b>Design</b>            | AWB                            |                      |                             |
| <b>Audit Notes:</b>      |                                |                      |                             |
| <b>Version:</b>          | 1.0                            | <b>Phase:</b>        | ACTUAL                      |
|                          |                                | <b>Tie On Depth:</b> | 0.0                         |
| <b>Vertical Section:</b> | <b>Depth From (TVD) (usft)</b> | <b>+N/-S (usft)</b>  | <b>+E/-W (usft)</b>         |
|                          | 0.0                            | 0.0                  | 0.0                         |
|                          |                                |                      | <b>Direction (°)</b> 359.39 |

|                       |                  |                          |                  |                     |
|-----------------------|------------------|--------------------------|------------------|---------------------|
| <b>Survey Program</b> | <b>Date</b>      | 10/15/19                 |                  |                     |
| <b>From (usft)</b>    | <b>To (usft)</b> | <b>Survey (Wellbore)</b> | <b>Tool Name</b> | <b>Description</b>  |
| 120.0                 | 15,875.0         | Intrepid MWD (OWB)       | MWD              | OWSG MWD - Standard |

|                              |                        |                    |                              |                     |                     |                                |                                |                               |                              |
|------------------------------|------------------------|--------------------|------------------------------|---------------------|---------------------|--------------------------------|--------------------------------|-------------------------------|------------------------------|
| <b>Survey</b>                |                        |                    |                              |                     |                     |                                |                                |                               |                              |
| <b>Measured Depth (usft)</b> | <b>Inclination (°)</b> | <b>Azimuth (°)</b> | <b>Vertical Depth (usft)</b> | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b> | <b>Vertical Section (usft)</b> | <b>Dogleg Rate (°/100usft)</b> | <b>Build Rate (°/100usft)</b> | <b>Turn Rate (°/100usft)</b> |
| 0.0                          | 0.00                   | 0.00               | 0.0                          | 0.0                 | 0.0                 | 0.0                            | 0.00                           | 0.00                          | 0.00                         |
| 120.0                        | 0.50                   | 218.00             | 120.0                        | -0.4                | -0.3                | -0.4                           | 0.42                           | 0.42                          | 0.00                         |
| 206.0                        | 0.60                   | 309.00             | 206.0                        | -0.4                | -0.9                | -0.4                           | 0.92                           | 0.12                          | 105.81                       |
| 296.0                        | 0.50                   | 205.00             | 296.0                        | -0.5                | -1.4                | -0.5                           | 0.97                           | -0.11                         | -115.56                      |
| 390.0                        | 0.80                   | 198.00             | 390.0                        | -1.5                | -1.8                | -1.5                           | 0.33                           | 0.32                          | -7.45                        |
| 434.0                        | 0.70                   | 179.00             | 434.0                        | -2.0                | -1.9                | -2.0                           | 0.61                           | -0.23                         | -43.18                       |
| 596.0                        | 0.97                   | 185.13             | 596.0                        | -4.4                | -2.0                | -4.4                           | 0.18                           | 0.17                          | 3.78                         |
| 670.0                        | 1.21                   | 176.22             | 670.0                        | -5.8                | -2.0                | -5.8                           | 0.39                           | 0.32                          | -12.03                       |
| <b>Rustler Anhydrite</b>     |                        |                    |                              |                     |                     |                                |                                |                               |                              |
| 688.0                        | 1.27                   | 174.58             | 687.9                        | -6.2                | -2.0                | -6.2                           | 0.39                           | 0.34                          | -9.15                        |
| 781.0                        | 1.49                   | 183.37             | 780.9                        | -8.4                | -2.0                | -8.4                           | 0.33                           | 0.24                          | 9.45                         |

|                  |                               |                                     |                               |
|------------------|-------------------------------|-------------------------------------|-------------------------------|
| <b>Company:</b>  | Tap Rock Resources, LLC       | <b>Local Co-ordinate Reference:</b> | Well Cypress 34 Federal #246H |
| <b>Project:</b>  | Eddy County, NM (NAD 83 NME)  | <b>TVD Reference:</b>               | KB @ 3119.0usft (H&P 245)     |
| <b>Site:</b>     | (Cypress) Sec-3_T-24-S_R-29-E | <b>MD Reference:</b>                | KB @ 3119.0usft (H&P 245)     |
| <b>Well:</b>     | Cypress 34 Federal #246H      | <b>North Reference:</b>             | Grid                          |
| <b>Wellbore:</b> | OWB                           | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Design:</b>   | AWB                           | <b>Database:</b>                    | EDM 5000.15 Single User Db    |

**Survey**

| Measured Depth (usft)               | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|-------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 904.0                               | 0.57            | 57.60       | 903.9                 | -9.7         | -1.5         | -9.7                    | 1.53                    | -0.75                  | -102.25               |
| 967.0                               | 0.70            | 46.44       | 966.9                 | -9.3         | -1.0         | -9.2                    | 0.28                    | 0.21                   | -17.71                |
| 1,061.0                             | 0.26            | 94.42       | 1,060.9               | -8.9         | -0.4         | -8.9                    | 0.60                    | -0.47                  | 51.04                 |
| 1,155.0                             | 0.22            | 185.30      | 1,154.9               | -9.1         | -0.2         | -9.1                    | 0.37                    | -0.04                  | 96.68                 |
| 1,248.0                             | 0.44            | 144.43      | 1,247.9               | -9.5         | 0.0          | -9.5                    | 0.33                    | 0.24                   | -43.95                |
| 1,342.0                             | 0.44            | 152.17      | 1,341.9               | -10.2        | 0.4          | -10.2                   | 0.06                    | 0.00                   | 8.23                  |
| 1,435.0                             | 0.44            | 94.07       | 1,434.9               | -10.5        | 0.9          | -10.5                   | 0.46                    | 0.00                   | -62.47                |
| 1,529.0                             | 0.48            | 91.17       | 1,528.9               | -10.5        | 1.7          | -10.5                   | 0.05                    | 0.04                   | -3.09                 |
| 1,620.1                             | 0.35            | 78.44       | 1,620.0               | -10.5        | 2.3          | -10.5                   | 0.17                    | -0.14                  | -13.97                |
| <b>Top Salt</b>                     |                 |             |                       |              |              |                         |                         |                        |                       |
| 1,622.0                             | 0.35            | 78.08       | 1,621.9               | -10.5        | 2.4          | -10.5                   | 0.17                    | -0.13                  | -19.00                |
| 1,716.0                             | 0.44            | 64.72       | 1,715.9               | -10.3        | 3.0          | -10.3                   | 0.14                    | 0.10                   | -14.21                |
| 1,810.0                             | 0.44            | 75.97       | 1,809.9               | -10.0        | 3.6          | -10.1                   | 0.09                    | 0.00                   | 11.97                 |
| 1,903.0                             | 0.53            | 66.92       | 1,902.9               | -9.8         | 4.4          | -9.8                    | 0.13                    | 0.10                   | -9.73                 |
| 1,996.0                             | 0.40            | 78.78       | 1,995.9               | -9.5         | 5.1          | -9.6                    | 0.17                    | -0.14                  | 12.75                 |
| 2,090.0                             | 0.62            | 81.86       | 2,089.9               | -9.4         | 5.9          | -9.5                    | 0.24                    | 0.23                   | 3.28                  |
| 2,183.0                             | 0.79            | 87.39       | 2,182.9               | -9.3         | 7.1          | -9.4                    | 0.20                    | 0.18                   | 5.95                  |
| 2,277.0                             | 0.84            | 106.38      | 2,276.9               | -9.5         | 8.4          | -9.6                    | 0.29                    | 0.05                   | 20.20                 |
| 2,370.0                             | 0.84            | 123.34      | 2,369.8               | -10.0        | 9.6          | -10.1                   | 0.27                    | 0.00                   | 18.24                 |
| 2,463.0                             | 1.27            | 120.09      | 2,462.8               | -10.9        | 11.0         | -11.0                   | 0.47                    | 0.46                   | -3.49                 |
| 2,555.0                             | 2.29            | 117.98      | 2,554.8               | -12.3        | 13.6         | -12.4                   | 1.11                    | 1.11                   | -2.29                 |
| 2,649.0                             | 1.76            | 133.89      | 2,648.7               | -14.2        | 16.3         | -14.3                   | 0.82                    | -0.56                  | 16.93                 |
| 2,742.0                             | 1.71            | 151.11      | 2,741.7               | -16.4        | 18.0         | -16.6                   | 0.56                    | -0.05                  | 18.52                 |
| 2,836.0                             | 1.36            | 170.10      | 2,835.7               | -18.7        | 18.8         | -18.9                   | 0.65                    | -0.37                  | 20.20                 |
| 2,929.0                             | 1.49            | 206.13      | 2,928.6               | -20.9        | 18.5         | -21.1                   | 0.96                    | 0.14                   | 38.74                 |
| 2,954.4                             | 1.29            | 215.94      | 2,954.0               | -21.4        | 18.2         | -21.6                   | 1.23                    | -0.80                  | 38.65                 |
| <b>Base Salt</b>                    |                 |             |                       |              |              |                         |                         |                        |                       |
| 3,023.0                             | 1.05            | 256.76      | 3,022.6               | -22.2        | 17.1         | -22.4                   | 1.23                    | -0.34                  | 59.49                 |
| 3,099.0                             | 1.45            | 280.58      | 3,098.6               | -22.2        | 15.5         | -22.3                   | 0.85                    | 0.53                   | 31.34                 |
| 3,174.4                             | 1.64            | 266.52      | 3,174.0               | -22.0        | 13.5         | -22.2                   | 0.56                    | 0.25                   | -18.64                |
| <b>Delaware Mountain Gp - Lamar</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 3,199.5                             | 1.72            | 262.62      | 3,199.0               | -22.1        | 12.7         | -22.3                   | 0.56                    | 0.32                   | -15.60                |
| <b>Bell Canyon</b>                  |                 |             |                       |              |              |                         |                         |                        |                       |
| 3,212.0                             | 1.76            | 260.80      | 3,211.5               | -22.2        | 12.4         | -22.3                   | 0.56                    | 0.34                   | -14.49                |
| 3,234.5                             | 2.11            | 263.05      | 3,234.0               | -22.3        | 11.6         | -22.4                   | 1.60                    | 1.56                   | 10.01                 |
| <b>Ramsey Sand</b>                  |                 |             |                       |              |              |                         |                         |                        |                       |
| 3,304.0                             | 3.21            | 266.87      | 3,303.5               | -22.5        | 8.4          | -22.6                   | 1.60                    | 1.58                   | 5.49                  |
| 3,397.0                             | 4.79            | 267.66      | 3,396.2               | -22.8        | 1.9          | -22.9                   | 1.70                    | 1.70                   | 0.85                  |
| 3,491.0                             | 6.51            | 267.92      | 3,489.8               | -23.2        | -7.3         | -23.1                   | 1.83                    | 1.83                   | 0.28                  |
| 3,584.0                             | 8.31            | 271.44      | 3,582.0               | -23.2        | -19.3        | -23.0                   | 2.00                    | 1.94                   | 3.78                  |
| 3,677.0                             | 10.07           | 272.75      | 3,673.8               | -22.7        | -34.2        | -22.3                   | 1.91                    | 1.89                   | 1.41                  |
| 3,771.0                             | 11.47           | 269.24      | 3,766.1               | -22.4        | -51.7        | -21.8                   | 1.64                    | 1.49                   | -3.73                 |
| 3,864.0                             | 11.74           | 267.75      | 3,857.2               | -22.9        | -70.4        | -22.1                   | 0.43                    | 0.29                   | -1.60                 |
| 3,957.0                             | 11.78           | 267.13      | 3,948.3               | -23.7        | -89.4        | -22.8                   | 0.14                    | 0.04                   | -0.67                 |

|                  |                               |                                     |                               |
|------------------|-------------------------------|-------------------------------------|-------------------------------|
| <b>Company:</b>  | Tap Rock Resources, LLC       | <b>Local Co-ordinate Reference:</b> | Well Cypress 34 Federal #246H |
| <b>Project:</b>  | Eddy County, NM (NAD 83 NME)  | <b>TVD Reference:</b>               | KB @ 3119.0usft (H&P 245)     |
| <b>Site:</b>     | (Cypress) Sec-3_T-24-S_R-29-E | <b>MD Reference:</b>                | KB @ 3119.0usft (H&P 245)     |
| <b>Well:</b>     | Cypress 34 Federal #246H      | <b>North Reference:</b>             | Grid                          |
| <b>Wellbore:</b> | OWB                           | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Design:</b>   | AWB                           | <b>Database:</b>                    | EDM 5000.15 Single User Db    |

**Survey**

| Measured Depth (usft)   | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|-------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 4,050.0                 | 10.99           | 266.69      | 4,039.4               | -24.7        | -107.7       | -23.6                   | 0.85                    | -0.85                  | -0.47                 |
| 4,096.4                 | 10.73           | 266.43      | 4,085.0               | -25.2        | -116.4       | -24.0                   | 0.58                    | -0.57                  | -0.56                 |
| <b>Cherry Canyon</b>    |                 |             |                       |              |              |                         |                         |                        |                       |
| 4,143.0                 | 10.46           | 266.16      | 4,130.8               | -25.8        | -125.0       | -24.5                   | 0.58                    | -0.57                  | -0.58                 |
| 4,234.0                 | 10.59           | 264.84      | 4,220.3               | -27.1        | -141.5       | -25.6                   | 0.30                    | 0.14                   | -1.45                 |
| 4,325.0                 | 10.68           | 264.14      | 4,309.7               | -28.7        | -158.2       | -27.0                   | 0.17                    | 0.10                   | -0.77                 |
| 4,416.0                 | 10.68           | 268.80      | 4,399.2               | -29.7        | -175.1       | -27.9                   | 0.95                    | 0.00                   | 5.12                  |
| 4,507.0                 | 10.64           | 267.92      | 4,488.6               | -30.2        | -191.9       | -28.2                   | 0.18                    | -0.04                  | -0.97                 |
| 4,599.0                 | 10.33           | 266.43      | 4,579.0               | -31.1        | -208.6       | -28.8                   | 0.45                    | -0.34                  | -1.62                 |
| 4,690.0                 | 9.49            | 274.34      | 4,668.7               | -31.0        | -224.2       | -28.6                   | 1.76                    | -0.92                  | 8.69                  |
| 4,783.0                 | 9.27            | 273.02      | 4,760.4               | -30.0        | -239.4       | -27.5                   | 0.33                    | -0.24                  | -1.42                 |
| 4,876.0                 | 9.10            | 271.52      | 4,852.3               | -29.4        | -254.2       | -26.7                   | 0.32                    | -0.18                  | -1.61                 |
| 4,969.0                 | 9.49            | 269.77      | 4,944.0               | -29.3        | -269.2       | -26.4                   | 0.52                    | 0.42                   | -1.88                 |
| 5,062.0                 | 11.21           | 274.25      | 5,035.5               | -28.6        | -285.9       | -25.6                   | 2.04                    | 1.85                   | 4.82                  |
| 5,155.0                 | 11.69           | 272.93      | 5,126.7               | -27.5        | -304.3       | -24.2                   | 0.59                    | 0.52                   | -1.42                 |
| 5,248.0                 | 11.82           | 270.91      | 5,217.7               | -26.8        | -323.3       | -23.4                   | 0.46                    | 0.14                   | -2.17                 |
| 5,341.0                 | 11.43           | 269.33      | 5,308.8               | -26.8        | -342.0       | -23.2                   | 0.54                    | -0.42                  | -1.70                 |
| 5,342.2                 | 11.43           | 269.29      | 5,310.0               | -26.8        | -342.2       | -23.2                   | 0.73                    | 0.32                   | -3.30                 |
| <b>Brushy Canyon</b>    |                 |             |                       |              |              |                         |                         |                        |                       |
| 5,434.0                 | 11.74           | 266.34      | 5,399.9               | -27.5        | -360.6       | -23.7                   | 0.73                    | 0.33                   | -3.21                 |
| 5,527.0                 | 11.25           | 270.21      | 5,491.1               | -28.1        | -379.2       | -24.0                   | 0.98                    | -0.53                  | 4.16                  |
| 5,618.0                 | 10.90           | 270.29      | 5,580.4               | -28.0        | -396.6       | -23.8                   | 0.38                    | -0.38                  | 0.09                  |
| 5,712.0                 | 9.80            | 268.54      | 5,672.8               | -28.2        | -413.5       | -23.8                   | 1.22                    | -1.17                  | -1.86                 |
| 5,805.0                 | 10.59           | 272.75      | 5,764.4               | -28.0        | -430.0       | -23.4                   | 1.17                    | 0.85                   | 4.53                  |
| 5,898.0                 | 11.60           | 274.51      | 5,855.6               | -26.8        | -447.8       | -22.0                   | 1.15                    | 1.09                   | 1.89                  |
| 5,991.0                 | 10.77           | 272.67      | 5,946.9               | -25.7        | -465.8       | -20.7                   | 0.97                    | -0.89                  | -1.98                 |
| 6,085.0                 | 10.73           | 273.90      | 6,039.2               | -24.7        | -483.3       | -19.5                   | 0.25                    | -0.04                  | 1.31                  |
| 6,178.0                 | 11.30           | 276.80      | 6,130.5               | -23.0        | -501.0       | -17.7                   | 0.85                    | 0.61                   | 3.12                  |
| 6,272.0                 | 12.35           | 278.47      | 6,222.5               | -20.4        | -520.1       | -14.9                   | 1.17                    | 1.12                   | 1.78                  |
| 6,365.0                 | 11.91           | 277.41      | 6,313.4               | -17.7        | -539.5       | -12.0                   | 0.53                    | -0.47                  | -1.14                 |
| 6,459.0                 | 12.62           | 278.91      | 6,405.3               | -14.9        | -559.2       | -8.9                    | 0.83                    | 0.76                   | 1.60                  |
| 6,553.0                 | 13.23           | 278.29      | 6,496.9               | -11.7        | -580.0       | -5.6                    | 0.67                    | 0.65                   | -0.66                 |
| 6,646.0                 | 12.66           | 277.41      | 6,587.5               | -8.9         | -600.7       | -2.5                    | 0.65                    | -0.61                  | -0.95                 |
| 6,739.0                 | 12.18           | 277.50      | 6,678.4               | -6.3         | -620.5       | 0.3                     | 0.52                    | -0.52                  | 0.10                  |
| 6,833.0                 | 11.74           | 277.33      | 6,770.3               | -3.8         | -639.8       | 3.0                     | 0.47                    | -0.47                  | -0.18                 |
| 6,926.0                 | 11.16           | 276.27      | 6,861.5               | -1.6         | -658.1       | 5.4                     | 0.66                    | -0.62                  | -1.14                 |
| 7,011.0                 | 10.41           | 276.27      | 6,945.0               | 0.1          | -674.0       | 7.3                     | 0.88                    | -0.88                  | 0.00                  |
| <b>Bone Spring Lime</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 7,020.0                 | 10.33           | 276.27      | 6,953.8               | 0.3          | -675.6       | 7.5                     | 0.88                    | -0.88                  | 0.00                  |
| 7,066.9                 | 9.89            | 275.10      | 7,000.0               | 1.1          | -683.7       | 8.4                     | 1.04                    | -0.94                  | -2.50                 |
| <b>Upper Avalon</b>     |                 |             |                       |              |              |                         |                         |                        |                       |
| 7,114.0                 | 9.45            | 273.81      | 7,046.4               | 1.8          | -691.6       | 9.1                     | 1.04                    | -0.93                  | -2.73                 |
| 7,207.0                 | 9.45            | 276.01      | 7,138.2               | 3.1          | -706.8       | 10.6                    | 0.39                    | 0.00                   | 2.37                  |
| 7,300.0                 | 9.63            | 278.03      | 7,229.9               | 4.9          | -722.1       | 12.6                    | 0.41                    | 0.19                   | 2.17                  |

|                  |                               |                                     |                               |
|------------------|-------------------------------|-------------------------------------|-------------------------------|
| <b>Company:</b>  | Tap Rock Resources, LLC       | <b>Local Co-ordinate Reference:</b> | Well Cypress 34 Federal #246H |
| <b>Project:</b>  | Eddy County, NM (NAD 83 NME)  | <b>TVD Reference:</b>               | KB @ 3119.0usft (H&P 245)     |
| <b>Site:</b>     | (Cypress) Sec-3_T-24-S_R-29-E | <b>MD Reference:</b>                | KB @ 3119.0usft (H&P 245)     |
| <b>Well:</b>     | Cypress 34 Federal #246H      | <b>North Reference:</b>             | Grid                          |
| <b>Wellbore:</b> | OWB                           | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Design:</b>   | AWB                           | <b>Database:</b>                    | EDM 5000.15 Single User Db    |

**Survey**

| Measured Depth (usft)       | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|-----------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 7,393.0                     | 9.80            | 268.01      | 7,321.5               | 5.8          | -737.7       | 13.6                    | 1.82                    | 0.18                   | -10.77                |
| 7,432.1                     | 10.29           | 266.41      | 7,360.0               | 5.4          | -744.6       | 13.4                    | 1.44                    | 1.25                   | -4.09                 |
| <b>Middle Avalon</b>        |                 |             |                       |              |              |                         |                         |                        |                       |
| 7,487.0                     | 10.99           | 264.41      | 7,414.0               | 4.6          | -754.7       | 12.6                    | 1.44                    | 1.27                   | -3.65                 |
| 7,579.0                     | 14.29           | 267.83      | 7,503.8               | 3.3          | -774.7       | 11.6                    | 3.68                    | 3.59                   | 3.72                  |
| 7,673.0                     | 14.51           | 265.46      | 7,594.8               | 2.0          | -798.1       | 10.4                    | 0.67                    | 0.23                   | -2.52                 |
| 7,767.0                     | 12.92           | 264.14      | 7,686.1               | -0.1         | -820.3       | 8.7                     | 1.72                    | -1.69                  | -1.40                 |
| 7,861.0                     | 9.63            | 257.64      | 7,778.3               | -2.8         | -838.4       | 6.1                     | 3.75                    | -3.50                  | -6.91                 |
| 7,893.2                     | 9.49            | 256.99      | 7,810.0               | -4.0         | -843.6       | 5.0                     | 0.54                    | -0.43                  | -2.01                 |
| <b>Lower Avalon</b>         |                 |             |                       |              |              |                         |                         |                        |                       |
| 7,955.0                     | 9.23            | 255.70      | 7,871.0               | -6.4         | -853.4       | 2.7                     | 0.54                    | -0.42                  | -2.09                 |
| 7,984.4                     | 9.55            | 256.12      | 7,900.0               | -7.5         | -858.0       | 1.6                     | 1.11                    | 1.08                   | 1.42                  |
| <b>1st Bone Spring Sand</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 8,048.0                     | 10.24           | 256.93      | 7,962.7               | -10.1        | -868.7       | -0.8                    | 1.11                    | 1.09                   | 1.28                  |
| 8,142.0                     | 11.87           | 258.34      | 8,054.9               | -13.9        | -886.3       | -4.5                    | 1.76                    | 1.73                   | 1.50                  |
| 8,235.0                     | 10.68           | 256.50      | 8,146.1               | -17.9        | -904.0       | -8.2                    | 1.34                    | -1.28                  | -1.98                 |
| 8,284.7                     | 10.45           | 255.90      | 8,195.0               | -20.0        | -912.9       | -10.3                   | 0.52                    | -0.47                  | -1.20                 |
| <b>2nd Bone Spring Carb</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 8,329.0                     | 10.24           | 255.35      | 8,238.6               | -22.0        | -920.6       | -12.2                   | 0.52                    | -0.47                  | -1.25                 |
| 8,424.0                     | 10.42           | 256.93      | 8,332.0               | -26.1        | -937.1       | -16.1                   | 0.35                    | 0.19                   | 1.66                  |
| 8,517.0                     | 11.38           | 264.93      | 8,423.4               | -28.8        | -954.5       | -18.6                   | 1.92                    | 1.03                   | 8.60                  |
| 8,610.0                     | 10.24           | 273.11      | 8,514.7               | -29.2        | -971.8       | -18.8                   | 2.05                    | -1.23                  | 8.80                  |
| 8,704.0                     | 8.70            | 274.16      | 8,607.4               | -28.2        | -987.3       | -17.7                   | 1.65                    | -1.64                  | 1.12                  |
| 8,787.6                     | 9.05            | 270.94      | 8,690.0               | -27.6        | -1,000.2     | -17.0                   | 0.73                    | 0.42                   | -3.85                 |
| <b>2nd Bone Spring Sand</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 8,798.0                     | 9.10            | 270.56      | 8,700.3               | -27.6        | -1,001.8     | -16.9                   | 0.73                    | 0.44                   | -3.68                 |
| 8,892.0                     | 10.42           | 273.72      | 8,792.9               | -27.0        | -1,017.7     | -16.1                   | 1.51                    | 1.40                   | 3.36                  |
| 8,986.0                     | 10.07           | 271.35      | 8,885.4               | -26.2        | -1,034.4     | -15.2                   | 0.58                    | -0.37                  | -2.52                 |
| 9,080.0                     | 9.01            | 267.83      | 8,978.1               | -26.3        | -1,050.0     | -15.1                   | 1.29                    | -1.13                  | -3.74                 |
| 9,132.5                     | 8.71            | 270.31      | 9,030.0               | -26.4        | -1,058.1     | -15.2                   | 0.93                    | -0.58                  | 4.73                  |
| <b>3rd Bone Spring Carb</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,174.0                     | 8.48            | 272.40      | 9,071.1               | -26.3        | -1,064.3     | -15.0                   | 0.93                    | -0.55                  | 5.03                  |
| 9,267.0                     | 7.56            | 279.52      | 9,163.1               | -25.0        | -1,077.2     | -13.5                   | 1.45                    | -0.99                  | 7.66                  |
| 9,361.0                     | 8.48            | 278.82      | 9,256.2               | -22.9        | -1,090.1     | -11.3                   | 0.98                    | 0.98                   | -0.74                 |
| 9,455.0                     | 8.48            | 274.16      | 9,349.2               | -21.4        | -1,103.9     | -9.6                    | 0.73                    | 0.00                   | -4.96                 |
| 9,548.0                     | 5.49            | 270.65      | 9,441.5               | -20.8        | -1,115.2     | -8.9                    | 3.25                    | -3.22                  | -3.77                 |
| 9,642.0                     | 4.31            | 272.58      | 9,535.2               | -20.6        | -1,123.2     | -8.6                    | 1.27                    | -1.26                  | 2.05                  |
| 9,736.0                     | 2.64            | 261.94      | 9,629.0               | -20.7        | -1,128.9     | -8.7                    | 1.90                    | -1.78                  | -11.32                |
| 9,855.0                     | 2.11            | 248.94      | 9,747.9               | -21.9        | -1,133.6     | -9.8                    | 0.63                    | -0.45                  | -10.92                |
| 9,927.2                     | 1.75            | 243.83      | 9,820.0               | -22.9        | -1,135.8     | -10.8                   | 0.55                    | -0.50                  | -7.09                 |
| <b>3rd Bone Spring Sand</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,952.0                     | 1.63            | 241.55      | 9,844.8               | -23.2        | -1,136.5     | -11.1                   | 0.55                    | -0.48                  | -9.16                 |
| 9,994.0                     | 1.58            | 232.68      | 9,886.8               | -23.8        | -1,137.5     | -11.7                   | 0.60                    | -0.12                  | -21.12                |
| 10,041.0                    | 4.88            | 344.74      | 9,933.7               | -22.3        | -1,138.5     | -10.2                   | 12.05                   | 7.02                   | 238.43                |

|                  |                               |                                     |                               |
|------------------|-------------------------------|-------------------------------------|-------------------------------|
| <b>Company:</b>  | Tap Rock Resources, LLC       | <b>Local Co-ordinate Reference:</b> | Well Cypress 34 Federal #246H |
| <b>Project:</b>  | Eddy County, NM (NAD 83 NME)  | <b>TVD Reference:</b>               | KB @ 3119.0usft (H&P 245)     |
| <b>Site:</b>     | (Cypress) Sec-3_T-24-S_R-29-E | <b>MD Reference:</b>                | KB @ 3119.0usft (H&P 245)     |
| <b>Well:</b>     | Cypress 34 Federal #246H      | <b>North Reference:</b>             | Grid                          |
| <b>Wellbore:</b> | OWB                           | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Design:</b>   | AWB                           | <b>Database:</b>                    | EDM 5000.15 Single User Db    |

**Survey**

| Measured Depth (usft)                            | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|--------------------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 10,088.0                                         | 13.49           | 355.02      | 9,980.1               | -14.9        | -1,139.5     | -2.8                    | 18.58                   | 18.32                  | 21.87                 |
| 10,135.0                                         | 21.45           | 356.78      | 10,024.9              | -0.8         | -1,140.5     | 11.3                    | 16.97                   | 16.94                  | 3.74                  |
| 10,182.0                                         | 26.24           | 354.84      | 10,067.9              | 18.1         | -1,141.9     | 30.3                    | 10.33                   | 10.19                  | -4.13                 |
| 10,212.6                                         | 28.70           | 355.14      | 10,095.0              | 32.1         | -1,143.1     | 44.3                    | 8.05                    | 8.04                   | 0.98                  |
| <b>3rd BS W Sand</b>                             |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,229.0                                         | 30.02           | 355.28      | 10,109.3              | 40.2         | -1,143.8     | 52.3                    | 8.05                    | 8.04                   | 0.86                  |
| 10,270.6                                         | 32.01           | 355.21      | 10,145.0              | 61.6         | -1,145.6     | 73.7                    | 4.78                    | 4.78                   | -0.17                 |
| <b>Wolfcamp A X Sand</b>                         |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,275.0                                         | 32.22           | 355.20      | 10,148.7              | 63.9         | -1,145.8     | 76.1                    | 4.78                    | 4.78                   | -0.16                 |
| 10,322.0                                         | 36.44           | 351.42      | 10,187.5              | 90.2         | -1,148.9     | 102.4                   | 10.06                   | 8.98                   | -8.04                 |
| 10,369.0                                         | 39.03           | 351.33      | 10,224.7              | 118.6        | -1,153.2     | 130.9                   | 5.51                    | 5.51                   | -0.19                 |
| 10,408.9                                         | 42.13           | 351.79      | 10,255.0              | 144.3        | -1,157.0     | 156.6                   | 7.80                    | 7.77                   | 1.14                  |
| <b>Wolfcamp A Y Sand</b>                         |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,416.0                                         | 42.68           | 351.86      | 10,260.2              | 149.0        | -1,157.7     | 161.3                   | 7.80                    | 7.77                   | 1.06                  |
| 10,462.0                                         | 49.54           | 351.50      | 10,292.1              | 181.8        | -1,162.5     | 194.2                   | 14.92                   | 14.91                  | -0.78                 |
| 10,509.0                                         | 57.10           | 349.40      | 10,320.1              | 218.9        | -1,168.8     | 231.4                   | 16.48                   | 16.09                  | -4.47                 |
| 10,556.0                                         | 59.82           | 348.78      | 10,344.7              | 258.3        | -1,176.4     | 270.8                   | 5.90                    | 5.79                   | -1.32                 |
| 10,556.5                                         | 59.86           | 348.77      | 10,345.0              | 258.7        | -1,176.5     | 271.2                   | 7.47                    | 7.09                   | -2.70                 |
| <b>Wolfcamp A Lower</b>                          |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,603.0                                         | 63.16           | 347.55      | 10,367.2              | 298.7        | -1,184.9     | 311.3                   | 7.47                    | 7.11                   | -2.62                 |
| 10,651.0                                         | 65.49           | 347.02      | 10,388.0              | 340.9        | -1,194.4     | 353.6                   | 4.96                    | 4.85                   | -1.10                 |
| 10,651.5                                         | 65.52           | 347.02      | 10,388.2              | 341.3        | -1,194.5     | 354.0                   | 6.09                    | 6.09                   | 0.20                  |
| <b>FTP @ 10651.5'MD, 100'FSL &amp; 304.7'FWL</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,698.0                                         | 68.35           | 347.11      | 10,406.4              | 383.0        | -1,204.1     | 395.8                   | 6.09                    | 6.09                   | 0.19                  |
| 10,744.0                                         | 70.68           | 348.87      | 10,422.5              | 425.2        | -1,213.0     | 438.0                   | 6.20                    | 5.07                   | 3.83                  |
| 10,790.0                                         | 71.08           | 348.69      | 10,437.5              | 467.8        | -1,221.5     | 480.8                   | 0.94                    | 0.87                   | -0.39                 |
| 10,837.0                                         | 73.45           | 350.71      | 10,451.9              | 511.8        | -1,229.5     | 524.9                   | 6.49                    | 5.04                   | 4.30                  |
| 10,884.0                                         | 76.00           | 352.03      | 10,464.2              | 556.6        | -1,236.3     | 569.8                   | 6.06                    | 5.43                   | 2.81                  |
| 10,931.0                                         | 82.15           | 353.44      | 10,473.1              | 602.4        | -1,242.1     | 615.6                   | 13.41                   | 13.09                  | 3.00                  |
| 10,978.0                                         | 86.81           | 352.82      | 10,477.7              | 648.8        | -1,247.7     | 662.1                   | 10.00                   | 9.91                   | -1.32                 |
| 11,025.0                                         | 87.87           | 352.65      | 10,479.8              | 695.4        | -1,253.6     | 708.7                   | 2.28                    | 2.26                   | -0.36                 |
| 11,119.0                                         | 90.59           | 353.17      | 10,481.1              | 788.7        | -1,265.2     | 802.1                   | 2.95                    | 2.89                   | 0.55                  |
| 11,213.0                                         | 90.51           | 353.44      | 10,480.2              | 882.0        | -1,276.2     | 895.6                   | 0.30                    | -0.09                  | 0.29                  |
| 11,307.0                                         | 91.12           | 354.32      | 10,478.9              | 975.5        | -1,286.2     | 989.1                   | 1.14                    | 0.65                   | 0.94                  |
| 11,401.0                                         | 89.89           | 353.97      | 10,478.0              | 1,069.0      | -1,295.8     | 1,082.7                 | 1.36                    | -1.31                  | -0.37                 |
| 11,495.0                                         | 89.63           | 354.32      | 10,478.4              | 1,162.5      | -1,305.4     | 1,176.3                 | 0.46                    | -0.28                  | 0.37                  |
| 11,588.0                                         | 91.03           | 357.13      | 10,477.9              | 1,255.2      | -1,312.3     | 1,269.1                 | 3.38                    | 1.51                   | 3.02                  |
| 11,682.0                                         | 90.15           | 359.68      | 10,476.9              | 1,349.2      | -1,314.9     | 1,363.1                 | 2.87                    | -0.94                  | 2.71                  |
| 11,775.0                                         | 89.58           | 359.68      | 10,477.2              | 1,442.2      | -1,315.5     | 1,456.1                 | 0.61                    | -0.61                  | 0.00                  |
| 11,869.0                                         | 88.22           | 359.33      | 10,479.0              | 1,536.1      | -1,316.3     | 1,550.1                 | 1.49                    | -1.45                  | -0.37                 |
| 11,963.0                                         | 88.53           | 358.71      | 10,481.6              | 1,630.1      | -1,317.9     | 1,644.0                 | 0.74                    | 0.33                   | -0.66                 |
| 12,057.0                                         | 89.05           | 358.80      | 10,483.6              | 1,724.0      | -1,319.9     | 1,738.0                 | 0.56                    | 0.55                   | 0.10                  |
| 12,150.0                                         | 89.19           | 359.42      | 10,485.0              | 1,817.0      | -1,321.4     | 1,831.0                 | 0.68                    | 0.15                   | 0.67                  |
| 12,243.0                                         | 93.14           | 0.03        | 10,483.1              | 1,910.0      | -1,321.8     | 1,923.9                 | 4.30                    | 4.25                   | 0.66                  |

|                  |                               |                                     |                               |
|------------------|-------------------------------|-------------------------------------|-------------------------------|
| <b>Company:</b>  | Tap Rock Resources, LLC       | <b>Local Co-ordinate Reference:</b> | Well Cypress 34 Federal #246H |
| <b>Project:</b>  | Eddy County, NM (NAD 83 NME)  | <b>TVD Reference:</b>               | KB @ 3119.0usft (H&P 245)     |
| <b>Site:</b>     | (Cypress) Sec-3_T-24-S_R-29-E | <b>MD Reference:</b>                | KB @ 3119.0usft (H&P 245)     |
| <b>Well:</b>     | Cypress 34 Federal #246H      | <b>North Reference:</b>             | Grid                          |
| <b>Wellbore:</b> | OWB                           | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Design:</b>   | AWB                           | <b>Database:</b>                    | EDM 5000.15 Single User Db    |

**Survey**

| Measured Depth (usft)                                     | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|-----------------------------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 12,337.0                                                  | 94.46           | 359.77      | 10,476.9              | 2,003.8      | -1,322.0     | 2,017.7                 | 1.43                    | 1.40                   | -0.28                 |
| 12,431.0                                                  | 92.88           | 0.65        | 10,470.9              | 2,097.6      | -1,321.6     | 2,111.5                 | 1.92                    | -1.68                  | 0.94                  |
| 12,524.0                                                  | 91.56           | 1.79        | 10,467.3              | 2,190.5      | -1,319.6     | 2,204.4                 | 1.87                    | -1.42                  | 1.23                  |
| 12,617.0                                                  | 89.85           | 2.40        | 10,466.2              | 2,283.4      | -1,316.2     | 2,297.3                 | 1.95                    | -1.84                  | 0.66                  |
| 12,711.0                                                  | 89.36           | 3.63        | 10,466.8              | 2,377.3      | -1,311.3     | 2,391.1                 | 1.41                    | -0.52                  | 1.31                  |
| 12,803.0                                                  | 88.53           | 2.58        | 10,468.5              | 2,469.1      | -1,306.3     | 2,482.9                 | 1.45                    | -0.90                  | -1.14                 |
| 12,897.0                                                  | 87.12           | 0.73        | 10,472.1              | 2,563.0      | -1,303.6     | 2,576.7                 | 2.47                    | -1.50                  | -1.97                 |
| 12,990.0                                                  | 88.31           | 1.96        | 10,475.8              | 2,655.9      | -1,301.4     | 2,669.6                 | 1.84                    | 1.28                   | 1.32                  |
| 13,084.0                                                  | 88.84           | 1.17        | 10,478.1              | 2,749.8      | -1,298.9     | 2,763.5                 | 1.01                    | 0.56                   | -0.84                 |
| 13,177.0                                                  | 89.19           | 1.35        | 10,479.7              | 2,842.8      | -1,296.8     | 2,856.4                 | 0.42                    | 0.38                   | 0.19                  |
| 13,271.0                                                  | 89.27           | 1.96        | 10,481.0              | 2,936.8      | -1,294.1     | 2,950.4                 | 0.65                    | 0.09                   | 0.65                  |
| 13,364.0                                                  | 93.10           | 2.84        | 10,479.0              | 3,029.6      | -1,290.2     | 3,043.2                 | 4.23                    | 4.12                   | 0.95                  |
| 13,458.0                                                  | 93.98           | 2.23        | 10,473.2              | 3,123.4      | -1,286.1     | 3,136.9                 | 1.14                    | 0.94                   | -0.65                 |
| 13,551.0                                                  | 93.01           | 1.08        | 10,467.6              | 3,216.1      | -1,283.4     | 3,229.6                 | 1.62                    | -1.04                  | -1.24                 |
| 13,645.0                                                  | 91.96           | 0.21        | 10,463.5              | 3,310.1      | -1,282.3     | 3,323.5                 | 1.45                    | -1.12                  | -0.93                 |
| 13,739.0                                                  | 89.41           | 359.06      | 10,462.4              | 3,404.0      | -1,282.9     | 3,417.5                 | 2.98                    | -2.71                  | -1.22                 |
| 13,832.0                                                  | 88.44           | 358.80      | 10,464.1              | 3,497.0      | -1,284.7     | 3,510.5                 | 1.08                    | -1.04                  | -0.28                 |
| 13,926.0                                                  | 88.31           | 358.62      | 10,466.8              | 3,590.9      | -1,286.8     | 3,604.4                 | 0.24                    | -0.14                  | -0.19                 |
| 14,020.0                                                  | 88.09           | 358.89      | 10,469.7              | 3,684.9      | -1,288.8     | 3,698.4                 | 0.37                    | -0.23                  | 0.29                  |
| 14,114.0                                                  | 87.78           | 358.80      | 10,473.1              | 3,778.8      | -1,290.7     | 3,792.3                 | 0.34                    | -0.33                  | -0.10                 |
| 14,207.0                                                  | 87.65           | 359.15      | 10,476.8              | 3,871.7      | -1,292.4     | 3,885.2                 | 0.40                    | -0.14                  | 0.38                  |
| 14,301.0                                                  | 86.46           | 358.45      | 10,481.7              | 3,965.6      | -1,294.3     | 3,979.1                 | 1.47                    | -1.27                  | -0.74                 |
| 14,395.0                                                  | 87.43           | 357.92      | 10,486.7              | 4,059.4      | -1,297.3     | 4,073.0                 | 1.18                    | 1.03                   | -0.56                 |
| 14,488.0                                                  | 88.53           | 357.31      | 10,489.9              | 4,152.2      | -1,301.2     | 4,165.9                 | 1.35                    | 1.18                   | -0.66                 |
| 14,581.0                                                  | 89.85           | 357.48      | 10,491.3              | 4,245.1      | -1,305.4     | 4,258.8                 | 1.43                    | 1.42                   | 0.18                  |
| 14,674.0                                                  | 91.25           | 358.01      | 10,490.4              | 4,338.0      | -1,309.1     | 4,351.7                 | 1.61                    | 1.51                   | 0.57                  |
| 14,768.0                                                  | 91.30           | 358.10      | 10,488.3              | 4,432.0      | -1,312.2     | 4,445.7                 | 0.11                    | 0.05                   | 0.10                  |
| 14,861.0                                                  | 90.33           | 357.13      | 10,487.0              | 4,524.9      | -1,316.1     | 4,538.6                 | 1.47                    | -1.04                  | -1.04                 |
| 14,954.0                                                  | 90.90           | 357.66      | 10,486.0              | 4,617.8      | -1,320.3     | 4,631.6                 | 0.84                    | 0.61                   | 0.57                  |
| 15,048.0                                                  | 89.85           | 357.48      | 10,485.3              | 4,711.7      | -1,324.3     | 4,725.5                 | 1.13                    | -1.12                  | -0.19                 |
| 15,141.0                                                  | 90.37           | 358.36      | 10,485.2              | 4,804.6      | -1,327.7     | 4,818.5                 | 1.10                    | 0.56                   | 0.95                  |
| 15,235.0                                                  | 90.64           | 358.71      | 10,484.3              | 4,898.6      | -1,330.1     | 4,912.5                 | 0.47                    | 0.29                   | 0.37                  |
| 15,328.0                                                  | 90.20           | 358.80      | 10,483.7              | 4,991.6      | -1,332.1     | 5,005.5                 | 0.48                    | -0.47                  | 0.10                  |
| 15,422.0                                                  | 90.11           | 358.10      | 10,483.4              | 5,085.5      | -1,334.7     | 5,099.5                 | 0.75                    | -0.10                  | -0.74                 |
| 15,515.0                                                  | 90.90           | 357.31      | 10,482.6              | 5,178.4      | -1,338.4     | 5,192.4                 | 1.20                    | 0.85                   | -0.85                 |
| 15,609.0                                                  | 91.34           | 357.48      | 10,480.7              | 5,272.3      | -1,342.7     | 5,286.3                 | 0.50                    | 0.47                   | 0.18                  |
| 15,703.0                                                  | 92.62           | 357.83      | 10,477.5              | 5,366.2      | -1,346.5     | 5,380.2                 | 1.41                    | 1.36                   | 0.37                  |
| 15,782.9                                                  | 92.81           | 357.38      | 10,473.7              | 5,445.9      | -1,349.8     | 5,460.0                 | 0.61                    | 0.24                   | -0.56                 |
| <b>LTP @ 15782.9'MD, 100'FNL &amp; 216.4'FWL</b>          |                 |             |                       |              |              |                         |                         |                        |                       |
| 15,796.0                                                  | 92.84           | 357.31      | 10,473.1              | 5,459.0      | -1,350.4     | 5,473.1                 | 0.61                    | 0.24                   | -0.56                 |
| <b>LAST SVY</b>                                           |                 |             |                       |              |              |                         |                         |                        |                       |
| 15,875.0                                                  | 92.84           | 357.31      | 10,469.1              | 5,537.8      | -1,354.2     | 5,551.9                 | 0.00                    | 0.00                   | 0.00                  |
| <b>Projection to TD @ 15875'MD, 8'FNL &amp; 213.3'FWL</b> |                 |             |                       |              |              |                         |                         |                        |                       |

|                  |                               |                                     |                               |
|------------------|-------------------------------|-------------------------------------|-------------------------------|
| <b>Company:</b>  | Tap Rock Resources, LLC       | <b>Local Co-ordinate Reference:</b> | Well Cypress 34 Federal #246H |
| <b>Project:</b>  | Eddy County, NM (NAD 83 NME)  | <b>TVD Reference:</b>               | KB @ 3119.0usft (H&P 245)     |
| <b>Site:</b>     | (Cypress) Sec-3_T-24-S_R-29-E | <b>MD Reference:</b>                | KB @ 3119.0usft (H&P 245)     |
| <b>Well:</b>     | Cypress 34 Federal #246H      | <b>North Reference:</b>             | Grid                          |
| <b>Wellbore:</b> | OWB                           | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Design:</b>   | AWB                           | <b>Database:</b>                    | EDM 5000.15 Single User Db    |

#### Design Targets

| Target Name<br>- hit/miss target<br>- Shape                                                                                                                                 | Dip Angle<br>(°) | Dip Dir.<br>(°) | TVD<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Northing<br>(usft) | Easting<br>(usft) | Latitude         | Longitude         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-----------------|---------------|-----------------|-----------------|--------------------|-------------------|------------------|-------------------|
| FTP (Cypress 34 Fed<br>- actual wellpath misses target center by 118.6usft at 10701.3usft MD (10407.6 TVD, 386.0 N, -1204.7 E)<br>- Point                                   | 0.00             | 0.00            | 10,479.0      | 341.0           | -1,288.0        | 456,430.00         | 653,112.00        | 32° 15' 15.422 N | 103° 58' 18.322 W |
| LTP (Cypress 34 Fed<br>- actual wellpath misses target center by 9.4usft at 15782.4usft MD (10473.7 TVD, 5445.4 N, -1349.8 E)<br>- Point                                    | 0.00             | 0.00            | 10,479.0      | 5,446.0         | -1,342.0        | 461,535.00         | 653,058.00        | 32° 16' 5.942 N  | 103° 58' 18.751 W |
| PBHL (Cypress 34 Fe<br>- actual wellpath misses target center by 15.2usft at 15875.0usft MD (10469.1 TVD, 5537.8 N, -1354.2 E)<br>- Rectangle (sides W100.0 H5,200.0 D20.0) | 0.00             | 359.39          | 10,479.0      | 5,541.0         | -1,343.0        | 461,630.00         | 653,057.00        | 32° 16' 6.882 N  | 103° 58' 18.759 W |

#### Formations

| Measured Depth<br>(usft) | Vertical Depth<br>(usft) | Name                 | Lithology | Dip<br>(°) | Dip Direction<br>(°) |
|--------------------------|--------------------------|----------------------|-----------|------------|----------------------|
| 670.0                    | 670.0                    | Rustler Anhydrite    |           |            |                      |
| 1,620.1                  | 1,620.0                  | Top Salt             |           |            |                      |
| 2,954.4                  | 2,954.0                  | Base Salt            |           |            |                      |
| 3,174.4                  | 3,174.0                  | Delaware Mountain Gp |           |            |                      |
| 3,174.4                  | 3,174.0                  | Lamar                |           |            |                      |
| 3,199.5                  | 3,199.0                  | Bell Canyon          |           |            |                      |
| 3,234.5                  | 3,234.0                  | Ramsey Sand          |           |            |                      |
| 4,096.4                  | 4,085.0                  | Cherry Canyon        |           |            |                      |
| 5,342.2                  | 5,310.0                  | Brushy Canyon        |           |            |                      |
| 7,011.0                  | 6,945.0                  | Bone Spring Lime     |           |            |                      |
| 7,066.9                  | 7,000.0                  | Upper Avalon         |           |            |                      |
| 7,432.1                  | 7,360.0                  | Middle Avalon        |           |            |                      |
| 7,893.2                  | 7,810.0                  | Lower Avalon         |           |            |                      |
| 7,984.4                  | 7,900.0                  | 1st Bone Spring Sand |           |            |                      |
| 8,284.7                  | 8,195.0                  | 2nd Bone Spring Carb |           |            |                      |
| 8,787.6                  | 8,690.0                  | 2nd Bone Spring Sand |           |            |                      |
| 9,132.5                  | 9,030.0                  | 3rd Bone Spring Carb |           |            |                      |
| 9,927.2                  | 9,820.0                  | 3rd Bone Spring Sand |           |            |                      |
| 10,212.6                 | 10,095.0                 | 3rd BS W Sand        |           |            |                      |
| 10,270.6                 | 10,145.0                 | Wolfcamp A X Sand    |           |            |                      |
| 10,408.9                 | 10,255.0                 | Wolfcamp A Y Sand    |           |            |                      |
| 10,556.5                 | 10,345.0                 | Wolfcamp A Lower     |           |            |                      |

#### Design Annotations

| Measured Depth<br>(usft) | Vertical Depth<br>(usft) | Local Coordinates |                 | Comment                                        |
|--------------------------|--------------------------|-------------------|-----------------|------------------------------------------------|
|                          |                          | +N/-S<br>(usft)   | +E/-W<br>(usft) |                                                |
| 10,651.5                 | 10,388.2                 | 341.3             | -1,194.5        | FTP @ 10651.5'MD, 100'FSL & 304.7'FWL          |
| 15,782.9                 | 10,473.7                 | 5,445.9           | -1,349.8        | LTP @ 15782.9'MD, 100'FNL & 216.4'FWL          |
| 15,796.0                 | 10,473.1                 | 5,459.0           | -1,350.4        | LAST SVY                                       |
| 15,875.0                 | 10,469.1                 | 5,537.8           | -1,354.2        | Projection to TD @ 15875'MD, 8'FNL & 213.3'FWL |



**Intrepid**  
Survey Report



|                  |                               |                                     |                               |
|------------------|-------------------------------|-------------------------------------|-------------------------------|
| <b>Company:</b>  | Tap Rock Resources, LLC       | <b>Local Co-ordinate Reference:</b> | Well Cypress 34 Federal #246H |
| <b>Project:</b>  | Eddy County, NM (NAD 83 NME)  | <b>TVD Reference:</b>               | KB @ 3119.0usft (H&P 245)     |
| <b>Site:</b>     | (Cypress) Sec-3_T-24-S_R-29-E | <b>MD Reference:</b>                | KB @ 3119.0usft (H&P 245)     |
| <b>Well:</b>     | Cypress 34 Federal #246H      | <b>North Reference:</b>             | Grid                          |
| <b>Wellbore:</b> | OWB                           | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Design:</b>   | AWB                           | <b>Database:</b>                    | EDM 5000.15 Single User Db    |

|                   |                    |             |
|-------------------|--------------------|-------------|
| Checked By: _____ | Approved By: _____ | Date: _____ |
|-------------------|--------------------|-------------|