

3001538613

## ALDABRA 25 FEDERAL 2H

WEST UNRESTRICTED

devon

## Directional Survey

|                                          |                       |                                  |                                     |                               |
|------------------------------------------|-----------------------|----------------------------------|-------------------------------------|-------------------------------|
| District<br>DELAWARE BASIN               | County<br>EDDY        | Field Name<br>INGLE WELLS        | Project Group<br>DELAWARE BASIN REG | State/Province<br>NM          |
| Surface Legal Location<br>SEC25 T2S R31E | API/UWI<br>3001538613 | Latitude (°)<br>32° 16' 7.914" N | Longitude (°)<br>103° 44' 16.294" W | Ground Elev...<br>3,484.70    |
|                                          |                       |                                  | KB - GL (ft)<br>28.00               | Orig KB Elev (ft)<br>3,512.70 |
|                                          |                       |                                  |                                     | Tubing Head Elevation (ft)    |

|                                                   |                       |                       |                                |
|---------------------------------------------------|-----------------------|-----------------------|--------------------------------|
| Wellbore Name<br>OH                               | Parent Wellbore<br>OH | Kick Off Depth (ftKB) | Vertical Section Direction (°) |
| Actual Deviation Survey<br>GYRO/MWD, Proposed? No | Definitive?<br>Yes    | Proposed?<br>No       | Proposed Deviation Survey      |

| Deviation Survey |                   |                         |                    |               |                |
|------------------|-------------------|-------------------------|--------------------|---------------|----------------|
| Date<br>6/8/2014 |                   | Description<br>GYRO/MWD |                    |               |                |
| MD Tie In (ftKB) | TVD Tie In (ftKB) | Inclination Tie In (°)  | Azimuth Tie In (°) | NSTie In (ft) | EW Tie In (ft) |

| Date     | MD (ftKB) | Incl (°) | Azm (°) | TVD (ftKB) | VS (ft) | N/S (ft) | EW (ft) | DLS (°/100ft) | Survey Tool | Survey Company          |
|----------|-----------|----------|---------|------------|---------|----------|---------|---------------|-------------|-------------------------|
| 6/8/2014 | 0.00      | 0.00     | 0.00    | 0.00       | 0.00    | 0.00     | 0.00    | 0.00          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 100.00    | 0.40     | 131.29  | 100.00     | -0.22   | -0.23    | 0.26    | 0.40          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 200.00    | 0.66     | 138.73  | 199.99     | -0.85   | -0.89    | 0.90    | 0.27          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 300.00    | 0.75     | 143.73  | 299.99     | -1.78   | -1.85    | 1.67    | 0.11          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 400.00    | 1.27     | 142.49  | 399.97     | -3.14   | -3.26    | 2.73    | 0.52          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 500.00    | 1.35     | 142.17  | 499.95     | -4.89   | -5.07    | 4.13    | 0.08          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 600.00    | 1.21     | 163.23  | 599.92     | -6.78   | -7.01    | 5.16    | 0.49          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 700.00    | 0.48     | 181.66  | 699.91     | -8.20   | -8.44    | 5.45    | 0.77          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 800.00    | 0.56     | 229.26  | 799.91     | -8.95   | -9.18    | 5.07    | 0.43          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 900.00    | 1.09     | 253.33  | 899.90     | -9.60   | -9.77    | 3.79    | 0.62          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 1,000.00  | 1.46     | 273.02  | 999.87     | -9.90   | -9.98    | 1.60    | 0.57          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 1,100.00  | 1.54     | 281.93  | 1,099.84   | -9.67   | -9.63    | -0.98   | 0.25          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 1,200.00  | 1.44     | 285.70  | 1,199.80   | -9.16   | -9.01    | -3.51   | 0.14          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 1,300.00  | 1.21     | 295.35  | 1,299.78   | -8.46   | -8.22    | -5.67   | 0.32          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 1,400.00  | 1.04     | 283.36  | 1,399.76   | -7.88   | -7.56    | -7.51   | 0.29          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 1,500.00  | 0.79     | 302.18  | 1,499.74   | -7.37   | -6.98    | -8.98   | 0.39          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 1,600.00  | 0.94     | 311.41  | 1,599.73   | -6.51   | -6.07    | -10.17  | 0.20          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 1,700.00  | 0.77     | 298.69  | 1,699.72   | -5.70   | -5.21    | -11.38  | 0.25          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 1,800.00  | 0.73     | 290.44  | 1,799.71   | -5.20   | -4.66    | -12.57  | 0.12          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 1,900.00  | 0.59     | 296.40  | 1,899.71   | -4.80   | -4.21    | -13.62  | 0.16          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 2,000.00  | 0.63     | 336.99  | 1,999.70   | -4.09   | -3.48    | -14.30  | 0.42          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 2,100.00  | 0.65     | 1.31    | 2,099.70   | -3.03   | -2.40    | -14.50  | 0.27          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 2,200.00  | 0.71     | 17.27   | 2,199.69   | -1.87   | -1.25    | -14.30  | 0.20          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 2,300.00  | 0.95     | 20.93   | 2,299.68   | -0.48   | 0.12     | -13.82  | 0.25          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 2,400.00  | 0.99     | 16.52   | 2,399.66   | 1.14    | 1.72     | -13.28  | 0.08          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 2,500.00  | 1.06     | 15.86   | 2,499.65   | 2.88    | 3.44     | -12.78  | 0.07          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 2,600.00  | 0.98     | 24.52   | 2,599.63   | 4.58    | 5.11     | -12.18  | 0.17          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 2,700.00  | 1.10     | 19.05   | 2,699.62   | 6.29    | 6.79     | -11.51  | 0.16          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 2,800.00  | 1.11     | 10.93   | 2,799.60   | 8.17    | 8.65     | -11.01  | 0.16          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 2,900.00  | 1.24     | 12.47   | 2,899.58   | 10.19   | 10.66    | -10.59  | 0.13          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 3,000.00  | 1.29     | 13.57   | 2,999.55   | 12.36   | 12.81    | -10.10  | 0.06          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 3,100.00  | 1.44     | 16.81   | 3,099.52   | 14.68   | 15.11    | -9.47   | 0.17          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 3,200.00  | 1.62     | 18.12   | 3,199.49   | 17.26   | 17.65    | -8.67   | 0.18          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 3,300.00  | 1.06     | 15.07   | 3,299.46   | 19.53   | 19.89    | -7.99   | 0.56          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 3,400.00  | 0.64     | 12.78   | 3,399.45   | 20.98   | 21.33    | -7.62   | 0.42          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 3,500.00  | 0.61     | 10.16   | 3,499.44   | 22.05   | 22.40    | -7.40   | 0.04          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 3,600.00  | 0.60     | 15.49   | 3,599.44   | 23.09   | 23.43    | -7.17   | 0.06          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 3,700.00  | 0.46     | 35.51   | 3,699.43   | 23.94   | 24.26    | -6.80   | 0.23          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 3,800.00  | 0.96     | 77.15   | 3,799.43   | 24.50   | 24.77    | -5.75   | 0.69          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 3,900.00  | 1.11     | 123.19  | 3,899.41   | 24.22   | 24.43    | -4.12   | 0.82          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 4,000.00  | 1.00     | 125.92  | 3,999.39   | 23.25   | 23.38    | -2.60   | 0.12          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 4,100.00  | 1.86     | 123.68  | 4,099.36   | 21.93   | 21.97    | -0.55   | 0.86          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 4,200.00  | 2.52     | 127.80  | 4,199.29   | 19.82   | 19.72    | 2.54    | 0.68          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 4,300.00  | 2.53     | 125.54  | 4,299.19   | 17.34   | 17.09    | 6.08    | 0.10          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 4,400.00  | 2.37     | 129.88  | 4,399.10   | 14.88   | 14.49    | 9.46    | 0.24          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 4,500.00  | 1.67     | 136.26  | 4,499.04   | 12.62   | 12.11    | 12.05   | 0.73          | GYRO        | VAUHG N ENERGY SERVICES |
| 6/8/2014 | 4,600.00  | 1.18     | 138.70  | 4,599.01   | 10.87   | 10.28    | 13.74   | 0.49          | GYRO        | VAUHG N ENERGY SERVICES |

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## ALDABRA 25 FEDERAL 2H

WEST UNRESTRICTED

## Directional Survey

|                        |            |                  |                    |                            |
|------------------------|------------|------------------|--------------------|----------------------------|
| District               | County     | Field Name       | Project Group      | State/Province             |
| DELAWARE BASIN         | EDDY       | INGLE WELLS      | DELAWARE BASIN REG | NM                         |
| Surface Legal Location | API/UWI    | Latitude (°)     | Longitude (°)      | Ground Elev...             |
| SEC25 T23S R31E        | 3001538613 | 32° 16' 7.914" N | 103° 44' 16.294" W | 3,484.70                   |
|                        |            |                  |                    | KB - GL (ft)               |
|                        |            |                  |                    | 28.00                      |
|                        |            |                  |                    | Orig KB Elev (ft)          |
|                        |            |                  |                    | 3,512.70                   |
|                        |            |                  |                    | Tubing Head Elevation (ft) |

## Survey Data

| Date     | MD (ft/KB) | Incl (°) | Azm (°) | TVD (ft/KB) | VS (ft) | N/S (ft) | E/W (ft) | DLS (°/100ft) | Survey Tool | Survey Company           |
|----------|------------|----------|---------|-------------|---------|----------|----------|---------------|-------------|--------------------------|
| 6/8/2014 | 4,700.00   | 1.16     | 137.31  | 4,698.98    | 9.41    | 8.76     | 15.10    | 0.03          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 4,800.00   | 1.26     | 134.55  | 4,798.96    | 7.96    | 7.25     | 16.57    | 0.12          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 4,900.00   | 1.15     | 141.21  | 4,898.94    | 6.47    | 5.69     | 17.99    | 0.18          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 5,000.00   | 0.90     | 146.32  | 4,998.92    | 5.08    | 4.26     | 19.05    | 0.27          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 5,100.00   | 0.95     | 151.59  | 5,098.91    | 3.74    | 2.88     | 19.88    | 0.10          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 5,200.00   | 0.72     | 157.08  | 5,198.90    | 2.46    | 1.57     | 20.52    | 0.24          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 5,300.00   | 0.59     | 168.34  | 5,298.89    | 1.39    | 0.49     | 20.87    | 0.18          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 5,400.00   | 0.69     | 178.15  | 5,398.89    | 0.29    | -0.62    | 20.99    | 0.15          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 5,500.00   | 0.61     | 178.39  | 5,498.88    | -0.84   | -1.75    | 21.03    | 0.08          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 5,600.00   | 0.47     | 182.31  | 5,598.88    | -1.78   | -2.70    | 21.03    | 0.14          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 5,700.00   | 0.59     | 189.74  | 5,698.87    | -2.70   | -3.61    | 20.92    | 0.14          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 5,800.00   | 0.56     | 186.96  | 5,798.87    | -3.70   | -4.61    | 20.78    | 0.04          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 5,900.00   | 0.20     | 190.93  | 5,898.87    | -4.36   | -5.26    | 20.68    | 0.36          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 6,000.00   | 0.34     | 197.16  | 5,998.86    | -4.82   | -5.72    | 20.56    | 0.14          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 6,100.00   | 0.43     | 181.86  | 6,098.86    | -5.48   | -6.38    | 20.46    | 0.14          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 6,200.00   | 0.45     | 184.50  | 6,198.86    | -6.25   | -7.14    | 20.42    | 0.03          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 6,300.00   | 0.73     | 190.24  | 6,298.85    | -7.27   | -8.16    | 20.28    | 0.29          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 6,400.00   | 0.58     | 188.74  | 6,398.85    | -8.41   | -9.29    | 20.09    | 0.15          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 6,500.00   | 0.42     | 196.26  | 6,498.84    | -9.27   | -10.14   | 19.91    | 0.17          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 6,600.00   | 0.24     | 191.47  | 6,598.84    | -9.83   | -10.70   | 19.76    | 0.18          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 6,700.00   | 0.39     | 174.47  | 6,698.84    | -10.37  | -11.24   | 19.75    | 0.18          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 6,800.00   | 0.54     | 173.76  | 6,798.84    | -11.18  | -12.05   | 19.84    | 0.15          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 6,900.00   | 0.60     | 179.54  | 6,898.83    | -12.16  | -13.04   | 19.89    | 0.08          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 7,000.00   | 0.72     | 165.18  | 6,998.83    | -13.29  | -14.17   | 20.06    | 0.20          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 7,100.00   | 0.53     | 162.45  | 7,098.82    | -14.32  | -15.22   | 20.36    | 0.19          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 7,200.00   | 0.44     | 165.26  | 7,198.82    | -15.12  | -16.03   | 20.59    | 0.09          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 7,300.00   | 0.46     | 157.16  | 7,298.81    | -15.85  | -16.77   | 20.85    | 0.07          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 7,400.00   | 0.25     | 150.13  | 7,398.81    | -16.40  | -17.33   | 21.11    | 0.21          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 7,500.00   | 0.45     | 151.28  | 7,498.81    | -16.92  | -17.87   | 21.41    | 0.20          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 7,600.00   | 0.83     | 137.94  | 7,598.80    | -17.77  | -18.75   | 22.08    | 0.41          | GYRO        | VAUGHN ENERGY SERVICE... |
| 6/8/2014 | 7,700.00   | 0.76     | 146.14  | 7,698.79    | -18.82  | -19.84   | 22.94    | 0.13          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 7,800.00   | 0.85     | 160.38  | 7,798.78    | -20.04  | -21.09   | 23.56    | 0.22          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 7,900.00   | 0.82     | 164.31  | 7,898.77    | -21.41  | -22.47   | 24.00    | 0.06          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 8,000.00   | 0.93     | 155.55  | 7,998.76    | -22.81  | -23.90   | 24.53    | 0.17          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 8,100.00   | 1.08     | 159.74  | 8,098.75    | -24.41  | -25.52   | 25.19    | 0.17          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 8,200.00   | 1.02     | 167.44  | 8,198.73    | -26.13  | -27.28   | 25.71    | 0.15          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 8,300.00   | 0.90     | 179.19  | 8,298.71    | -27.78  | -28.93   | 25.92    | 0.23          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 8,400.00   | 1.20     | 173.94  | 8,398.70    | -29.60  | -30.76   | 26.04    | 0.31          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 8,500.00   | 1.93     | 180.13  | 8,498.66    | -32.32  | -33.48   | 26.14    | 0.75          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 8,600.00   | 3.10     | 185.68  | 8,598.56    | -36.70  | -37.86   | 25.87    | 1.19          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 8,700.00   | 3.48     | 193.38  | 8,698.40    | -42.38  | -43.50   | 24.90    | 0.58          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 8,800.00   | 2.83     | 198.54  | 8,798.25    | -47.73  | -48.79   | 23.42    | 0.71          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 8,900.00   | 1.98     | 209.49  | 8,898.16    | -51.64  | -52.64   | 21.78    | 0.96          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 9,000.00   | 2.23     | 235.67  | 8,998.09    | -54.35  | -55.24   | 19.32    | 0.98          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 9,100.00   | 2.37     | 257.02  | 9,098.01    | -56.07  | -56.80   | 15.70    | 0.86          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 9,200.00   | 2.25     | 270.28  | 9,197.93    | -56.69  | -57.26   | 11.72    | 0.55          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 9,300.00   | 2.19     | 278.73  | 9,297.86    | -56.56  | -56.96   | 7.87     | 0.33          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 9,400.00   | 2.06     | 278.93  | 9,397.79    | -56.15  | -56.39   | 4.21     | 0.13          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 9,500.00   | 1.63     | 273.02  | 9,497.74    | -55.94  | -56.03   | 1.01     | 0.47          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 9,600.00   | 1.45     | 286.01  | 9,597.70    | -55.63  | -55.61   | -1.62    | 0.39          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 9,700.00   | 1.23     | 304.90  | 9,697.67    | -54.76  | -54.65   | -3.72    | 0.49          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/8/2014 | 9,809.00   | 0.89     | 335.66  | 9,806.66    | -53.37  | -53.21   | -5.03    | 0.60          | GYRO        | VAUGHN ENERGY SERVICE    |
| 6/9/2014 | 9,945.00   | 0.70     | 24.40   | 9,942.64    | -51.66  | -51.49   | -5.12    | 0.50          | MWD         | LEAM DRILLING SYSTEMS    |
| 6/9/2014 | 9,977.00   | 1.90     | 14.90   | 9,974.64    | -50.96  | -50.80   | -4.90    | 3.80          | MWD         | LEAM DRILLING SYSTEMS    |
| 6/9/2014 | 10,009.00  | 5.00     | 4.70    | 10,006.57   | -49.05  | -48.89   | -4.65    | 9.84          | MWD         | LEAM DRILLING SYSTEMS    |



## ALDABRA 25 FEDERAL 2H

WEST UNRESTRICTED

## Directional Survey

|                                           |                       |                                  |                                     |                               |
|-------------------------------------------|-----------------------|----------------------------------|-------------------------------------|-------------------------------|
| District<br>DELAWARE BASIN                | County<br>EDDY        | Field Name<br>INGLE WELLS        | Project Group<br>DELAWARE BASIN REG | State/Province<br>NM          |
| Surface Legal Location<br>SEC25 T23S R31E | API/UWI<br>3001538613 | Latitude (°)<br>32° 16' 7.914" N | Longitude (°)<br>103° 44' 16.294" W | Ground Elev...<br>3,484.70    |
|                                           |                       |                                  | KB - GL (ft)<br>28.00               | Orig KB Elev (ft)<br>3,512.70 |
|                                           |                       |                                  |                                     | Tubing Head Elevation (ft)    |

## Survey Data

| Date      | MD (ftKB) | Incl (°) | Azm (°) | TVD (ftKB) | VS (ft)  | N/S (ft) | E/W (ft) | DLS<br>(°/100ft) | Survey<br>Tool | Survey Company        |
|-----------|-----------|----------|---------|------------|----------|----------|----------|------------------|----------------|-----------------------|
| 6/9/2014  | 10,040.00 | 8.90     | 2.70    | 10,037.34  | -45.30   | -45.15   | -4.43    | 12.60            | MWD            | LEAM DRILLING SYSTEMS |
| 6/9/2014  | 10,072.00 | 12.80    | 3.30    | 10,068.76  | -39.28   | -39.14   | -4.11    | 12.19            | MWD            | LEAM DRILLING SYSTEMS |
| 6/9/2014  | 10,104.00 | 17.00    | 5.20    | 10,099.68  | -31.06   | -30.94   | -3.48    | 13.21            | MWD            | LEAM DRILLING SYSTEMS |
| 6/9/2014  | 10,135.00 | 21.00    | 6.40    | 10,128.98  | -20.98   | -20.90   | -2.45    | 12.96            | MWD            | LEAM DRILLING SYSTEMS |
| 6/9/2014  | 10,167.00 | 25.30    | 5.00    | 10,158.40  | -8.43    | -8.38    | -1.21    | 13.55            | MWD            | LEAM DRILLING SYSTEMS |
| 6/9/2014  | 10,199.00 | 29.40    | 2.70    | 10,186.82  | 6.27     | 6.28     | -0.25    | 13.23            | MWD            | LEAM DRILLING SYSTEMS |
| 6/9/2014  | 10,230.00 | 33.00    | 0.30    | 10,213.33  | 22.32    | 22.33    | 0.15     | 12.28            | MWD            | LEAM DRILLING SYSTEMS |
| 6/9/2014  | 10,262.00 | 37.50    | 0.30    | 10,239.46  | 40.77    | 40.79    | 0.25     | 14.06            | MWD            | LEAM DRILLING SYSTEMS |
| 6/9/2014  | 10,293.00 | 42.00    | 0.60    | 10,263.29  | 60.57    | 60.61    | 0.41     | 14.53            | MWD            | LEAM DRILLING SYSTEMS |
| 6/9/2014  | 10,325.00 | 45.10    | 0.50    | 10,286.48  | 82.60    | 82.65    | 0.62     | 9.69             | MWD            | LEAM DRILLING SYSTEMS |
| 6/9/2014  | 10,357.00 | 48.30    | 359.70  | 10,308.42  | 105.87   | 105.94   | 0.66     | 10.16            | MWD            | LEAM DRILLING SYSTEMS |
| 6/9/2014  | 10,388.00 | 51.40    | 359.20  | 10,328.41  | 129.53   | 129.63   | 0.43     | 10.08            | MWD            | LEAM DRILLING SYSTEMS |
| 6/9/2014  | 10,420.00 | 53.10    | 359.70  | 10,348.00  | 154.79   | 154.93   | 0.19     | 5.45             | MWD            | LEAM DRILLING SYSTEMS |
| 6/9/2014  | 10,451.00 | 54.60    | 359.20  | 10,366.28  | 179.79   | 179.96   | -0.06    | 5.01             | MWD            | LEAM DRILLING SYSTEMS |
| 6/9/2014  | 10,483.00 | 58.20    | 359.20  | 10,383.99  | 206.39   | 206.61   | -0.43    | 11.25            | MWD            | LEAM DRILLING SYSTEMS |
| 6/10/2014 | 10,515.00 | 61.30    | 358.50  | 10,400.11  | 233.98   | 234.24   | -0.99    | 9.87             | MWD            | LEAM DRILLING SYSTEMS |
| 6/10/2014 | 10,546.00 | 64.50    | 357.10  | 10,414.23  | 261.48   | 261.81   | -2.05    | 11.08            | MWD            | LEAM DRILLING SYSTEMS |
| 6/10/2014 | 10,577.00 | 68.40    | 356.10  | 10,426.61  | 289.74   | 290.17   | -3.74    | 12.92            | MWD            | LEAM DRILLING SYSTEMS |
| 6/10/2014 | 10,609.00 | 72.10    | 357.10  | 10,437.42  | 319.69   | 320.23   | -5.52    | 11.93            | MWD            | LEAM DRILLING SYSTEMS |
| 6/10/2014 | 10,640.00 | 76.30    | 358.30  | 10,445.86  | 349.41   | 350.03   | -6.71    | 14.05            | MWD            | LEAM DRILLING SYSTEMS |
| 6/10/2014 | 10,672.00 | 81.10    | 359.90  | 10,452.13  | 380.72   | 381.40   | -7.20    | 15.78            | MWD            | LEAM DRILLING SYSTEMS |
| 6/10/2014 | 10,703.00 | 84.80    | 0.50    | 10,455.94  | 411.46   | 412.16   | -7.10    | 12.09            | MWD            | LEAM DRILLING SYSTEMS |
| 6/10/2014 | 10,735.00 | 87.50    | 1.70    | 10,458.08  | 443.37   | 444.07   | -6.48    | 9.23             | MWD            | LEAM DRILLING SYSTEMS |
| 6/11/2014 | 10,893.00 | 94.80    | 6.30    | 10,454.91  | 601.14   | 601.51   | 4.52     | 5.46             | MWD            | LEAM DRILLING SYSTEMS |
| 6/11/2014 | 10,988.00 | 92.20    | 6.30    | 10,449.11  | 695.74   | 695.75   | 14.92    | 2.74             | MWD            | LEAM DRILLING SYSTEMS |
| 6/11/2014 | 11,083.00 | 91.20    | 5.20    | 10,446.30  | 790.55   | 790.23   | 24.44    | 1.56             | MWD            | LEAM DRILLING SYSTEMS |
| 6/11/2014 | 11,178.00 | 89.50    | 3.10    | 10,445.72  | 885.49   | 884.97   | 31.31    | 2.84             | MWD            | LEAM DRILLING SYSTEMS |
| 6/11/2014 | 11,273.00 | 89.90    | 3.30    | 10,446.21  | 980.49   | 979.82   | 36.61    | 0.47             | MWD            | LEAM DRILLING SYSTEMS |
| 6/11/2014 | 11,368.00 | 88.70    | 2.90    | 10,447.37  | 1,075.47 | 1,074.67 | 41.75    | 1.33             | MWD            | LEAM DRILLING SYSTEMS |
| 6/11/2014 | 11,462.00 | 89.00    | 3.40    | 10,449.26  | 1,169.45 | 1,168.51 | 46.91    | 0.62             | MWD            | LEAM DRILLING SYSTEMS |
| 6/11/2014 | 11,557.00 | 89.80    | 3.60    | 10,450.25  | 1,264.42 | 1,263.33 | 52.71    | 0.87             | MWD            | LEAM DRILLING SYSTEMS |
| 6/11/2014 | 11,651.00 | 88.40    | 3.80    | 10,451.73  | 1,358.39 | 1,357.12 | 58.78    | 1.50             | MWD            | LEAM DRILLING SYSTEMS |
| 6/11/2014 | 11,746.00 | 88.60    | 3.60    | 10,454.22  | 1,453.34 | 1,451.89 | 64.91    | 0.30             | MWD            | LEAM DRILLING SYSTEMS |
| 6/11/2014 | 11,841.00 | 89.30    | 4.10    | 10,455.96  | 1,548.29 | 1,546.66 | 71.29    | 0.91             | MWD            | LEAM DRILLING SYSTEMS |
| 6/11/2014 | 11,936.00 | 89.90    | 5.40    | 10,456.62  | 1,643.21 | 1,641.32 | 79.15    | 1.51             | MWD            | LEAM DRILLING SYSTEMS |
| 6/11/2014 | 12,030.00 | 88.40    | 3.10    | 10,458.02  | 1,737.15 | 1,735.05 | 86.12    | 2.92             | MWD            | LEAM DRILLING SYSTEMS |
| 6/12/2014 | 12,125.00 | 88.60    | 3.40    | 10,460.50  | 1,832.11 | 1,829.86 | 91.50    | 0.38             | MWD            | LEAM DRILLING SYSTEMS |
| 6/12/2014 | 12,220.00 | 88.90    | 3.10    | 10,462.58  | 1,927.08 | 1,924.69 | 96.89    | 0.45             | MWD            | LEAM DRILLING SYSTEMS |
| 6/12/2014 | 12,315.00 | 89.50    | 1.50    | 10,463.90  | 2,022.06 | 2,019.60 | 100.70   | 1.80             | MWD            | LEAM DRILLING SYSTEMS |
| 6/12/2014 | 12,410.00 | 90.60    | 2.20    | 10,463.82  | 2,117.06 | 2,114.55 | 103.76   | 1.37             | MWD            | LEAM DRILLING SYSTEMS |
| 6/12/2014 | 12,505.00 | 90.00    | 2.00    | 10,463.32  | 2,212.05 | 2,209.48 | 107.24   | 0.67             | MWD            | LEAM DRILLING SYSTEMS |
| 6/12/2014 | 12,600.00 | 91.50    | 2.20    | 10,462.08  | 2,307.04 | 2,304.40 | 110.73   | 1.59             | MWD            | LEAM DRILLING SYSTEMS |
| 6/13/2014 | 12,720.00 | 92.80    | 3.30    | 10,457.58  | 2,426.95 | 2,424.18 | 116.48   | 1.42             | MWD            | LEAM DRILLING SYSTEMS |
| 6/13/2014 | 12,814.00 | 92.30    | 2.40    | 10,453.39  | 2,520.85 | 2,517.97 | 121.15   | 1.09             | MWD            | LEAM DRILLING SYSTEMS |
| 6/13/2014 | 12,909.00 | 92.00    | 2.00    | 10,449.83  | 2,615.78 | 2,612.83 | 124.79   | 0.53             | MWD            | LEAM DRILLING SYSTEMS |
| 6/13/2014 | 13,004.00 | 91.50    | 1.30    | 10,446.93  | 2,710.73 | 2,707.75 | 127.53   | 0.91             | MWD            | LEAM DRILLING SYSTEMS |
| 6/13/2014 | 13,098.00 | 90.70    | 1.30    | 10,445.12  | 2,804.69 | 2,801.70 | 129.66   | 0.85             | MWD            | LEAM DRILLING SYSTEMS |
| 6/14/2014 | 13,193.00 | 89.80    | 1.30    | 10,444.71  | 2,899.67 | 2,896.68 | 131.81   | 0.95             | MWD            | LEAM DRILLING SYSTEMS |
| 6/14/2014 | 13,288.00 | 91.90    | 1.20    | 10,443.30  | 2,994.63 | 2,991.64 | 133.89   | 2.21             | MWD            | LEAM DRILLING SYSTEMS |
| 6/14/2014 | 13,382.00 | 90.20    | 0.80    | 10,441.58  | 3,088.58 | 3,085.60 | 135.53   | 1.86             | MWD            | LEAM DRILLING SYSTEMS |
| 6/14/2014 | 13,477.00 | 90.10    | 0.50    | 10,441.33  | 3,183.53 | 3,180.60 | 136.60   | 0.33             | MWD            | LEAM DRILLING SYSTEMS |
| 6/14/2014 | 13,572.00 | 90.70    | 0.80    | 10,440.67  | 3,278.48 | 3,275.59 | 137.68   | 0.71             | MWD            | LEAM DRILLING SYSTEMS |
| 6/14/2014 | 13,667.00 | 90.00    | 1.70    | 10,440.09  | 3,373.45 | 3,370.56 | 139.75   | 1.20             | MWD            | LEAM DRILLING SYSTEMS |
| 6/14/2014 | 13,762.00 | 90.20    | 2.20    | 10,439.92  | 3,468.45 | 3,465.51 | 142.99   | 0.57             | MWD            | LEAM DRILLING SYSTEMS |
| 6/14/2014 | 13,856.00 | 88.00    | 3.10    | 10,441.40  | 3,562.43 | 3,559.39 | 147.33   | 2.53             | MWD            | LEAM DRILLING SYSTEMS |



## ALDABRA 25 FEDERAL 2H

WEST UNRESTRICTED

## Directional Survey

|                                           |                       |                                  |                                     |                               |
|-------------------------------------------|-----------------------|----------------------------------|-------------------------------------|-------------------------------|
| District<br>DELAWARE BASIN                | County<br>EDDY        | Field Name<br>INGLE WELLS        | Project Group<br>DELAWARE BASIN REG | State/Province<br>NM          |
| Surface Legal Location<br>SEC25 T23S R31E | API/UWI<br>3001538613 | Latitude (°)<br>32° 16' 7.914" N | Longitude (°)<br>103° 44' 16.294" W | Ground Elev...<br>3,484.70    |
|                                           |                       |                                  |                                     | KB - GL (ft)<br>28.00         |
|                                           |                       |                                  |                                     | Orig KB Elev (ft)<br>3,512.70 |
|                                           |                       |                                  |                                     | Tubing Head Elevation (ft)    |

## Survey Data

| Date      | MD (ftKB) | Incl (°) | Azm (°) | TVD (ftKB) | VS (ft)  | N/S (ft) | EW (ft) | DLS<br>(%/100ft) | Survey<br>Tool | Survey Company        |
|-----------|-----------|----------|---------|------------|----------|----------|---------|------------------|----------------|-----------------------|
| 6/14/2014 | 13,951.00 | 89.90    | 3.10    | 10,443.14  | 3,657.40 | 3,654.23 | 152.47  | 2.00             | MWD            | LEAM DRILLING SYSTEMS |
| 6/14/2014 | 14,046.00 | 89.80    | 3.30    | 10,443.39  | 3,752.40 | 3,749.08 | 157.77  | 0.24             | MWD            | LEAM DRILLING SYSTEMS |
| 6/14/2014 | 14,140.00 | 90.00    | 2.70    | 10,443.55  | 3,846.39 | 3,842.95 | 162.69  | 0.67             | MWD            | LEAM DRILLING SYSTEMS |
| 6/14/2014 | 14,235.00 | 89.20    | 2.40    | 10,444.21  | 3,941.39 | 3,937.85 | 166.92  | 0.90             | MWD            | LEAM DRILLING SYSTEMS |
| 6/15/2014 | 14,330.00 | 90.00    | 2.00    | 10,444.88  | 4,036.38 | 4,032.78 | 170.56  | 0.94             | MWD            | LEAM DRILLING SYSTEMS |
| 6/15/2014 | 14,424.00 | 91.30    | 2.40    | 10,443.81  | 4,130.37 | 4,126.70 | 174.17  | 1.45             | MWD            | LEAM DRILLING SYSTEMS |
| 6/15/2014 | 14,519.00 | 90.10    | 2.60    | 10,442.65  | 4,225.37 | 4,221.60 | 178.31  | 1.28             | MWD            | LEAM DRILLING SYSTEMS |
| 6/15/2014 | 14,614.00 | 89.70    | 3.10    | 10,442.82  | 4,320.36 | 4,316.49 | 183.04  | 0.67             | MWD            | LEAM DRILLING SYSTEMS |
| 6/15/2014 | 14,709.00 | 89.10    | 2.90    | 10,443.81  | 4,415.35 | 4,411.35 | 188.01  | 0.67             | MWD            | LEAM DRILLING SYSTEMS |
| 6/15/2014 | 14,804.00 | 89.90    | 2.90    | 10,444.64  | 4,510.35 | 4,506.22 | 192.82  | 0.84             | MWD            | LEAM DRILLING SYSTEMS |
| 6/15/2014 | 14,898.00 | 91.40    | 3.30    | 10,443.57  | 4,604.33 | 4,600.08 | 197.90  | 1.65             | MWD            | LEAM DRILLING SYSTEMS |
| 6/15/2014 | 15,047.00 | 91.40    | 3.30    | 10,439.93  | 4,753.27 | 4,748.79 | 206.47  | 0.00             | BIT            | LEAM DRILLING SYSTEMS |