

HOBBS OCD

OCT 01 2015

RECEIVED



50-025-42527

August 12, 2015

Concho Resources, Inc.  
One Concho Center  
600 W. Illinois Avenue  
Midland, Texas 79701

Attn: Kanicia Castillo

RE: **Corazon 4 State SWD No 002**

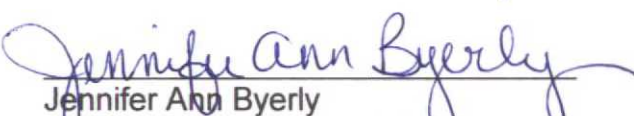
Please find enclosed a copy of the survey from 0' to 15,714' ran on the above referenced well.

Sincerely,

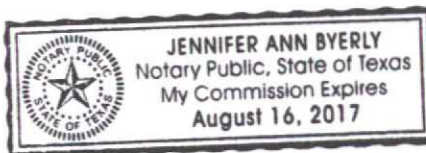
  
Keith Havelka  
Operations

STATE OF TEXAS     §  
                                  §  
COUNTY OF NUECES §

This instrument was acknowledged before me on the 12 day of August, A.D., 2015, by Keith Havelka.

  
Jennifer Ann Byerly  
Notary Public, State of Texas

VES Survey International  
P.O. Box 261021 Corpus Christi, TX 78426  
T (361) 767-0602 F (361) 767-0612  
[www.vessurvey.com](http://www.vessurvey.com)



OCT 02 2015





Company: Concho Oil & Gas  
Well: Corazon 4 State SWD No 002

Rig Name: Precision 590  
State/County: New Mexico/Lea  
VS-Azi: 14.30 Degrees

Latitude: 32.51258, Longitude: -103.57662  
Grid North = True North -0.41 degs (NAD 27)  
Grid Correction Applied = -0.41 degs



Depth Reference : RKB=25 Feet

#### DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: gyro-de\_01.ut

Minimum Curvature Method

Report Date/Time: 8/12/2015 / 14:12

VES Survey International  
Midland, Texas  
432-563-5444

Surveyor: Geof Davis

Corazon 4 State SWD No 002 / API 30-025-42527

| Measured<br>Depth<br>FT | Incl<br>Angle<br>Deg | Drift<br>Direction<br>Deg | TVD<br>FT | +N/-S<br>FT | +E/-W<br>FT | Vertical<br>Section<br>FT | Closure<br>Distance<br>FT | Closure<br>Direction<br>Deg | Dogleg<br>Severity<br>Deg/100 |
|-------------------------|----------------------|---------------------------|-----------|-------------|-------------|---------------------------|---------------------------|-----------------------------|-------------------------------|
| 0.00                    | 0.00                 | 0.00                      | 0.00      | 0.00        | 0.00        | 0.00                      | 0.00                      | 0.00                        | ****                          |
| 100.00                  | 0.18                 | 147.00                    | 100.00    | -0.13       | 0.09        | -0.11                     | 0.16                      | 147.00                      | 0.18                          |
| 200.00                  | 0.18                 | 272.09                    | 200.00    | -0.26       | 0.01        | -0.25                     | 0.26                      | 177.44                      | 0.32                          |
| 300.00                  | 0.11                 | 334.82                    | 300.00    | -0.16       | -0.19       | -0.21                     | 0.25                      | 229.47                      | 0.17                          |
| 400.00                  | 0.21                 | 258.60                    | 400.00    | -0.11       | -0.42       | -0.21                     | 0.43                      | 255.13                      | 0.22                          |
| 500.00                  | 0.31                 | 214.10                    | 500.00    | -0.37       | -0.75       | -0.55                     | 0.84                      | 243.63                      | 0.22                          |
| 600.00                  | 0.17                 | 314.57                    | 600.00    | -0.49       | -1.01       | -0.73                     | 1.12                      | 243.93                      | 0.38                          |
| 700.00                  | 0.27                 | 204.31                    | 700.00    | -0.60       | -1.21       | -0.88                     | 1.35                      | 243.54                      | 0.36                          |
| 800.00                  | 0.11                 | 272.75                    | 800.00    | -0.81       | -1.40       | -1.13                     | 1.62                      | 239.93                      | 0.25                          |
| 900.00                  | 0.29                 | 209.43                    | 900.00    | -1.03       | -1.62       | -1.39                     | 1.91                      | 237.59                      | 0.26                          |
| 1000.00                 | 0.11                 | 5.67                      | 1000.00   | -1.16       | -1.73       | -1.55                     | 2.08                      | 236.30                      | 0.39                          |
| 1100.00                 | 0.35                 | 265.27                    | 1099.99   | -1.09       | -2.03       | -1.56                     | 2.30                      | 241.80                      | 0.39                          |
| 1200.00                 | 0.58                 | 304.71                    | 1199.99   | -0.83       | -2.75       | -1.48                     | 2.87                      | 253.27                      | 0.38                          |
| 1300.00                 | 0.57                 | 283.62                    | 1299.99   | -0.42       | -3.65       | -1.31                     | 3.67                      | 263.39                      | 0.21                          |
| 1400.00                 | 0.60                 | 287.65                    | 1399.98   | -0.15       | -4.63       | -1.29                     | 4.63                      | 268.19                      | 0.05                          |
| 1500.00                 | 0.41                 | 292.97                    | 1499.98   | 0.15        | -5.46       | -1.20                     | 5.46                      | 271.58                      | 0.20                          |
| 1600.00                 | 0.74                 | 289.39                    | 1599.97   | 0.50        | -6.39       | -1.09                     | 6.41                      | 274.51                      | 0.34                          |

| Measured<br>Depth<br>FT | Incl<br>Angle<br>Deg | Drift<br>Direction<br>Deg | TVD<br>FT | +N/-S<br>FT | +E/-W<br>FT | Vertical<br>Section<br>FT | Closure<br>Distance<br>FT | Closure<br>Direction<br>Deg | Dogleg<br>Severity<br>Deg/100 |
|-------------------------|----------------------|---------------------------|-----------|-------------|-------------|---------------------------|---------------------------|-----------------------------|-------------------------------|
| 1700.00                 | 0.43                 | 297.84                    | 1699.97   | 0.89        | -7.33       | -0.95                     | 7.39                      | 276.94                      | 0.33                          |
| 1800.00                 | 0.60                 | 281.79                    | 1799.96   | 1.17        | -8.17       | -0.88                     | 8.26                      | 278.17                      | 0.22                          |
| 1900.00                 | 0.48                 | 305.52                    | 1899.96   | 1.52        | -9.03       | -0.75                     | 9.15                      | 279.58                      | 0.25                          |
| 2000.00                 | 0.36                 | 294.95                    | 1999.96   | 1.90        | -9.65       | -0.54                     | 9.84                      | 281.13                      | 0.15                          |
| 2100.00                 | 0.27                 | 279.12                    | 2099.95   | 2.07        | -10.17      | -0.51                     | 10.37                     | 281.50                      | 0.12                          |
| 2200.00                 | 0.15                 | 264.01                    | 2199.95   | 2.09        | -10.53      | -0.57                     | 10.74                     | 281.23                      | 0.13                          |
| 2300.00                 | 0.20                 | 108.69                    | 2299.95   | 2.02        | -10.49      | -0.63                     | 10.69                     | 280.90                      | 0.34                          |
| 2400.00                 | 0.26                 | 61.30                     | 2399.95   | 2.07        | -10.13      | -0.49                     | 10.34                     | 281.57                      | 0.19                          |
| 2500.00                 | 0.41                 | 97.83                     | 2499.95   | 2.13        | -9.57       | -0.30                     | 9.81                      | 282.56                      | 0.26                          |
| 2600.00                 | 0.22                 | 171.96                    | 2599.95   | 1.89        | -9.18       | -0.44                     | 9.38                      | 281.62                      | 0.41                          |
| 2700.00                 | 0.41                 | 94.07                     | 2699.95   | 1.67        | -8.80       | -0.56                     | 8.96                      | 280.74                      | 0.42                          |
| 2800.00                 | 0.40                 | 67.50                     | 2799.95   | 1.78        | -8.13       | -0.29                     | 8.32                      | 282.33                      | 0.18                          |
| 2900.00                 | 0.25                 | 349.29                    | 2899.95   | 2.13        | -7.85       | 0.12                      | 8.13                      | 285.16                      | 0.43                          |
| 3000.00                 | 0.29                 | 115.70                    | 2999.95   | 2.24        | -7.67       | 0.27                      | 7.99                      | 286.26                      | 0.48                          |
| 3100.00                 | 0.20                 | 75.48                     | 3099.94   | 2.17        | -7.27       | 0.31                      | 7.59                      | 286.62                      | 0.19                          |
| 3200.00                 | 0.03                 | 70.23                     | 3199.94   | 2.22        | -7.08       | 0.40                      | 7.42                      | 287.42                      | 0.17                          |
| 3300.00                 | 0.34                 | 140.95                    | 3299.94   | 2.00        | -6.87       | 0.24                      | 7.15                      | 286.22                      | 0.33                          |
| 3400.00                 | 0.30                 | 141.57                    | 3399.94   | 1.56        | -6.52       | -0.10                     | 6.70                      | 283.45                      | 0.04                          |
| 3500.00                 | 0.32                 | 172.32                    | 3499.94   | 1.07        | -6.31       | -0.52                     | 6.40                      | 279.62                      | 0.17                          |
| 3600.00                 | 0.43                 | 99.28                     | 3599.94   | 0.73        | -5.90       | -0.75                     | 5.95                      | 277.05                      | 0.46                          |
| 3700.00                 | 0.67                 | 120.53                    | 3699.93   | 0.37        | -5.03       | -0.88                     | 5.04                      | 274.24                      | 0.31                          |
| 3800.00                 | 0.44                 | 152.20                    | 3799.93   | -0.26       | -4.35       | -1.33                     | 4.35                      | 266.57                      | 0.37                          |
| 3900.00                 | 0.25                 | 190.00                    | 3899.93   | -0.81       | -4.21       | -1.82                     | 4.28                      | 259.09                      | 0.29                          |
| 4000.00                 | 0.24                 | 153.32                    | 3999.93   | -1.21       | -4.15       | -2.19                     | 4.32                      | 253.79                      | 0.15                          |
| 4100.00                 | 0.16                 | 35.21                     | 4099.93   | -1.28       | -3.98       | -2.22                     | 4.18                      | 252.19                      | 0.34                          |
| 4200.00                 | 0.05                 | 24.34                     | 4199.93   | -1.13       | -3.88       | -2.05                     | 4.04                      | 253.84                      | 0.10                          |
| 4300.00                 | 0.09                 | 38.87                     | 4299.93   | -1.02       | -3.82       | -1.93                     | 3.95                      | 254.98                      | 0.04                          |
| 4400.00                 | 0.97                 | 344.08                    | 4399.92   | -0.15       | -4.00       | -1.13                     | 4.00                      | 267.86                      | 0.92                          |
| 4500.00                 | 1.71                 | 339.67                    | 4499.89   | 2.07        | -4.75       | 0.83                      | 5.18                      | 293.50                      | 0.75                          |
| 4600.00                 | 2.29                 | 358.23                    | 4599.83   | 5.46        | -5.33       | 3.98                      | 7.63                      | 315.69                      | 0.86                          |
| 4700.00                 | 2.42                 | 4.61                      | 4699.75   | 9.56        | -5.22       | 7.97                      | 10.90                     | 331.35                      | 0.29                          |
| 4800.00                 | 1.80                 | 11.27                     | 4799.68   | 13.20       | -4.75       | 11.62                     | 14.03                     | 340.22                      | 0.66                          |
| 4900.00                 | 1.41                 | 22.77                     | 4899.64   | 15.88       | -3.97       | 14.41                     | 16.36                     | 345.98                      | 0.51                          |
| 5000.00                 | 0.71                 | 40.62                     | 4999.62   | 17.48       | -3.09       | 16.18                     | 17.75                     | 349.98                      | 0.76                          |
| 5100.00                 | 0.30                 | 14.17                     | 5099.62   | 18.20       | -2.62       | 16.99                     | 18.39                     | 351.81                      | 0.46                          |
| 5200.00                 | 0.24                 | 1.11                      | 5199.62   | 18.67       | -2.55       | 17.46                     | 18.84                     | 352.22                      | 0.09                          |
| 5300.00                 | 0.07                 | 220.16                    | 5299.62   | 18.83       | -2.59       | 17.61                     | 19.01                     | 352.18                      | 0.30                          |
| 5400.00                 | 0.08                 | 189.97                    | 5399.62   | 18.72       | -2.64       | 17.49                     | 18.90                     | 351.98                      | 0.04                          |
| 5500.00                 | 0.24                 | 134.12                    | 5499.62   | 18.51       | -2.50       | 17.31                     | 18.67                     | 352.29                      | 0.20                          |

| Measured<br>Depth<br>FT | Incl<br>Angle<br>Deg | Drift<br>Direction<br>Deg | TVD<br>FT | +N/S<br>FT | +E/W<br>FT | Vertical<br>Section<br>FT | Closure<br>Distance<br>FT | Closure<br>Direction<br>Deg | Dogleg<br>Severity<br>Deg/100 |
|-------------------------|----------------------|---------------------------|-----------|------------|------------|---------------------------|---------------------------|-----------------------------|-------------------------------|
| 5600.00                 | 0.11                 | 105.61                    | 5599.62   | 18.34      | -2.26      | 17.21                     | 18.48                     | 352.96                      | 0.15                          |
| 5700.00                 | 0.42                 | 118.31                    | 5699.62   | 18.14      | -1.85      | 17.12                     | 18.23                     | 354.19                      | 0.31                          |
| 5800.00                 | 0.04                 | 134.53                    | 5799.62   | 17.94      | -1.50      | 17.01                     | 18.00                     | 355.23                      | 0.38                          |
| 5900.00                 | 0.18                 | 131.02                    | 5899.62   | 17.81      | -1.36      | 16.92                     | 17.86                     | 355.65                      | 0.14                          |
| 6000.00                 | 0.09                 | 323.83                    | 5999.62   | 17.77      | -1.29      | 16.91                     | 17.82                     | 355.86                      | 0.27                          |
| 6100.00                 | 0.05                 | 160.09                    | 6099.62   | 17.80      | -1.32      | 16.92                     | 17.85                     | 355.76                      | 0.14                          |
| 6200.00                 | 0.15                 | 100.43                    | 6199.62   | 17.73      | -1.17      | 16.89                     | 17.77                     | 356.21                      | 0.13                          |
| 6300.00                 | 0.14                 | 73.44                     | 6299.61   | 17.74      | -0.93      | 16.96                     | 17.77                     | 356.99                      | 0.07                          |
| 6400.00                 | 0.16                 | 279.60                    | 6399.61   | 17.80      | -0.96      | 17.01                     | 17.82                     | 356.92                      | 0.29                          |
| 6500.00                 | 0.16                 | 81.01                     | 6499.61   | 17.84      | -0.96      | 17.05                     | 17.87                     | 356.92                      | 0.31                          |
| 6600.00                 | 0.18                 | 23.77                     | 6599.61   | 18.00      | -0.77      | 17.26                     | 18.02                     | 357.57                      | 0.16                          |
| 6700.00                 | 0.05                 | 182.16                    | 6699.61   | 18.10      | -0.71      | 17.36                     | 18.11                     | 357.77                      | 0.23                          |
| 6800.00                 | 0.05                 | 66.09                     | 6799.61   | 18.07      | -0.67      | 17.35                     | 18.08                     | 357.89                      | 0.09                          |
| 6900.00                 | 0.22                 | 316.19                    | 6899.61   | 18.23      | -0.76      | 17.48                     | 18.24                     | 357.61                      | 0.24                          |
| 7000.00                 | 0.05                 | 123.25                    | 6999.61   | 18.34      | -0.86      | 17.56                     | 18.36                     | 357.32                      | 0.27                          |
| 7100.00                 | 0.11                 | 46.17                     | 7099.61   | 18.39      | -0.75      | 17.64                     | 18.41                     | 357.65                      | 0.11                          |
| 7200.00                 | 0.28                 | 318.63                    | 7199.61   | 18.65      | -0.85      | 17.86                     | 18.67                     | 357.40                      | 0.30                          |
| 7300.00                 | 0.05                 | 86.72                     | 7299.61   | 18.84      | -0.97      | 18.01                     | 18.86                     | 357.06                      | 0.32                          |
| 7400.00                 | 0.19                 | 223.02                    | 7399.61   | 18.72      | -1.04      | 17.88                     | 18.74                     | 356.83                      | 0.23                          |
| 7500.00                 | 0.20                 | 279.66                    | 7499.61   | 18.62      | -1.32      | 17.72                     | 18.67                     | 355.93                      | 0.19                          |
| 7600.00                 | 0.15                 | 208.36                    | 7599.61   | 18.54      | -1.56      | 17.58                     | 18.60                     | 355.20                      | 0.21                          |
| 7700.00                 | 0.10                 | 187.17                    | 7699.61   | 18.34      | -1.63      | 17.37                     | 18.41                     | 354.92                      | 0.06                          |
| 7800.00                 | 0.20                 | 237.10                    | 7799.61   | 18.16      | -1.79      | 17.16                     | 18.25                     | 354.38                      | 0.15                          |
| 7900.00                 | 0.18                 | 238.30                    | 7899.61   | 17.99      | -2.06      | 16.92                     | 18.10                     | 353.46                      | 0.02                          |
| 8000.00                 | 0.10                 | 79.09                     | 7999.61   | 17.92      | -2.11      | 16.85                     | 18.05                     | 353.29                      | 0.27                          |
| 8100.00                 | 0.16                 | 145.59                    | 8099.61   | 17.82      | -1.94      | 16.79                     | 17.93                     | 353.77                      | 0.15                          |
| 8200.00                 | 0.21                 | 247.18                    | 8199.61   | 17.63      | -2.03      | 16.58                     | 17.75                     | 353.42                      | 0.29                          |
| 8300.00                 | 0.16                 | 2.71                      | 8299.61   | 17.70      | -2.19      | 16.61                     | 17.84                     | 352.93                      | 0.32                          |
| 8400.00                 | 0.21                 | 244.10                    | 8399.61   | 17.76      | -2.36      | 16.63                     | 17.92                     | 352.44                      | 0.33                          |
| 8500.00                 | 0.18                 | 236.98                    | 8499.61   | 17.59      | -2.66      | 16.39                     | 17.79                     | 351.40                      | 0.04                          |
| 8600.00                 | 0.27                 | 267.72                    | 8599.61   | 17.50      | -3.03      | 16.21                     | 17.76                     | 350.17                      | 0.15                          |
| 8700.00                 | 0.16                 | 229.74                    | 8699.61   | 17.40      | -3.37      | 16.03                     | 17.72                     | 349.04                      | 0.18                          |
| 8800.00                 | 0.04                 | 295.77                    | 8799.61   | 17.33      | -3.51      | 15.92                     | 17.68                     | 348.56                      | 0.14                          |
| 8900.00                 | 0.37                 | 62.71                     | 8899.61   | 17.49      | -3.25      | 16.15                     | 17.79                     | 349.47                      | 0.39                          |
| 9000.00                 | 0.39                 | 109.41                    | 8999.60   | 17.53      | -2.65      | 16.33                     | 17.72                     | 351.42                      | 0.30                          |
| 9100.00                 | 0.66                 | 100.18                    | 9099.60   | 17.31      | -1.76      | 16.34                     | 17.40                     | 354.20                      | 0.29                          |
| 9200.00                 | 0.41                 | 120.40                    | 9199.60   | 17.03      | -0.88      | 16.28                     | 17.05                     | 357.04                      | 0.31                          |
| 9300.00                 | 0.20                 | 358.49                    | 9299.60   | 17.02      | -0.58      | 16.35                     | 17.03                     | 358.06                      | 0.54                          |
| 9400.00                 | 0.68                 | 323.42                    | 9399.59   | 17.67      | -0.94      | 16.89                     | 17.69                     | 356.96                      | 0.54                          |

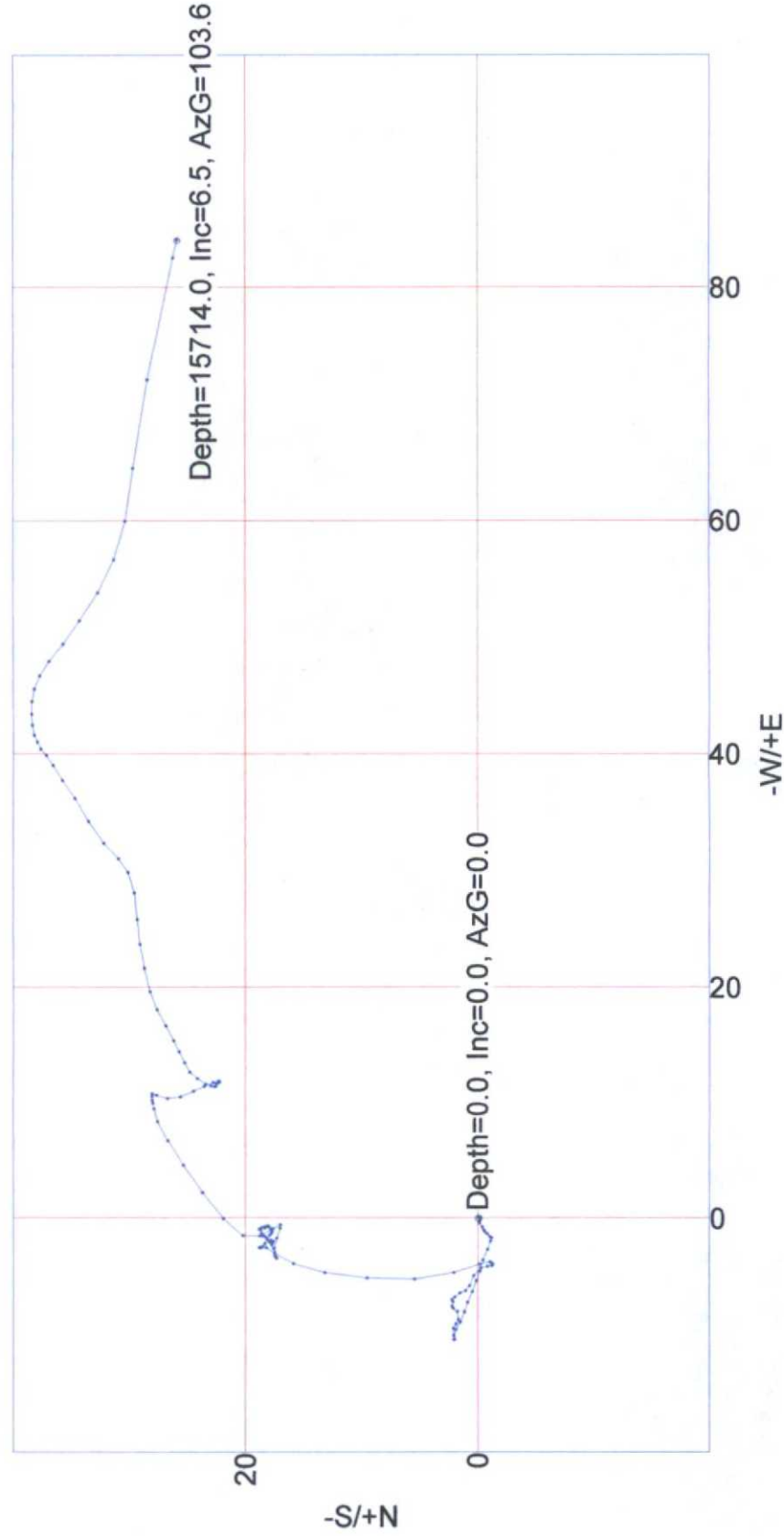
| Measured<br>Depth<br>FT | Incl<br>Angle<br>Deg | Drift<br>Direction<br>Deg | TVD<br>FT | +N-S<br>FT | +E-W<br>FT | Vertical<br>Section<br>FT | Closure<br>Distance<br>FT | Closure<br>Direction<br>Deg | Dogleg<br>Severity<br>Deg/100 |
|-------------------------|----------------------|---------------------------|-----------|------------|------------|---------------------------|---------------------------|-----------------------------|-------------------------------|
| 9500.00                 | 0.80                 | 336.95                    | 9499.58   | 18.79      | -1.57      | 17.82                     | 18.86                     | 355.23                      | 0.21                          |
| 9600.00                 | 1.00                 | 21.63                     | 9599.57   | 20.25      | -1.52      | 19.24                     | 20.30                     | 355.70                      | 0.71                          |
| 9700.00                 | 1.62                 | 53.35                     | 9699.55   | 21.90      | -0.07      | 21.20                     | 21.90                     | 359.82                      | 0.93                          |
| 9800.00                 | 1.72                 | 50.07                     | 9799.50   | 23.70      | 2.21       | 23.51                     | 23.80                     | 5.33                        | 0.14                          |
| 9900.00                 | 1.62                 | 60.33                     | 9899.46   | 25.36      | 4.59       | 25.71                     | 25.78                     | 10.26                       | 0.32                          |
| 10000.00                | 1.24                 | 54.57                     | 9999.43   | 26.69      | 6.70       | 27.52                     | 27.52                     | 14.09                       | 0.40                          |
| 10100.00                | 0.91                 | 71.30                     | 10099.41  | 27.57      | 8.33       | 28.78                     | 28.80                     | 16.81                       | 0.45                          |
| 10200.00                | 0.48                 | 81.25                     | 10199.41  | 27.89      | 9.49       | 29.37                     | 29.46                     | 18.79                       | 0.45                          |
| 10300.00                | 0.15                 | 73.82                     | 10299.40  | 27.99      | 10.02      | 29.60                     | 29.73                     | 19.71                       | 0.33                          |
| 10400.00                | 0.16                 | 83.36                     | 10399.40  | 28.04      | 10.28      | 29.71                     | 29.87                     | 20.14                       | 0.03                          |
| 10500.00                | 0.21                 | 96.63                     | 10499.40  | 28.03      | 10.60      | 29.78                     | 29.97                     | 20.72                       | 0.07                          |
| 10600.00                | 0.06                 | 55.87                     | 10599.40  | 28.04      | 10.83      | 29.85                     | 30.06                     | 21.11                       | 0.17                          |
| 10700.00                | 0.49                 | 201.67                    | 10699.40  | 27.67      | 10.71      | 29.46                     | 29.67                     | 21.16                       | 0.54                          |
| 10800.00                | 0.64                 | 190.82                    | 10799.40  | 26.73      | 10.45      | 28.48                     | 28.70                     | 21.35                       | 0.18                          |
| 10900.00                | 0.72                 | 158.17                    | 10899.39  | 25.60      | 10.58      | 27.42                     | 27.70                     | 22.45                       | 0.39                          |
| 11000.00                | 0.68                 | 156.03                    | 10999.38  | 24.48      | 11.05      | 26.45                     | 26.86                     | 24.30                       | 0.05                          |
| 11100.00                | 0.48                 | 154.46                    | 11099.38  | 23.55      | 11.48      | 25.66                     | 26.20                     | 25.98                       | 0.20                          |
| 11200.00                | 0.48                 | 161.00                    | 11199.37  | 22.78      | 11.79      | 24.99                     | 25.65                     | 27.37                       | 0.05                          |
| 11300.00                | 0.05                 | 191.06                    | 11299.37  | 22.34      | 11.92      | 24.59                     | 25.32                     | 28.09                       | 0.43                          |
| 11400.00                | 0.06                 | 197.29                    | 11399.37  | 22.24      | 11.89      | 24.49                     | 25.22                     | 28.14                       | 0.01                          |
| 11500.00                | 0.13                 | 322.92                    | 11499.37  | 22.28      | 11.81      | 24.50                     | 25.21                     | 27.93                       | 0.17                          |
| 11600.00                | 0.15                 | 338.15                    | 11599.37  | 22.49      | 11.69      | 24.68                     | 25.35                     | 27.47                       | 0.04                          |
| 11700.00                | 0.18                 | 258.71                    | 11699.37  | 22.68      | 11.49      | 24.72                     | 25.33                     | 26.98                       | 0.21                          |
| 11800.00                | 0.19                 | 40.73                     | 11799.37  | 22.67      | 11.45      | 24.79                     | 25.40                     | 26.79                       | 0.34                          |
| 11900.00                | 0.21                 | 343.65                    | 11899.37  | 22.96      | 11.50      | 25.09                     | 25.68                     | 26.61                       | 0.19                          |
| 12000.00                | 0.39                 | 37.87                     | 11999.37  | 23.40      | 11.66      | 25.56                     | 26.15                     | 26.49                       | 0.32                          |
| 12100.00                | 0.61                 | 30.68                     | 12099.37  | 24.13      | 12.14      | 26.39                     | 27.02                     | 26.71                       | 0.23                          |
| 12200.00                | 0.38                 | 52.76                     | 12199.36  | 24.79      | 12.68      | 27.16                     | 27.85                     | 27.09                       | 0.30                          |
| 12300.00                | 0.69                 | 64.64                     | 12299.36  | 25.25      | 13.49      | 27.80                     | 28.63                     | 28.11                       | 0.33                          |
| 12400.00                | 0.55                 | 63.94                     | 12399.35  | 25.72      | 14.46      | 28.49                     | 29.50                     | 29.34                       | 0.14                          |
| 12500.00                | 0.67                 | 64.09                     | 12499.35  | 26.18      | 15.41      | 29.18                     | 30.38                     | 30.48                       | 0.13                          |
| 12600.00                | 0.97                 | 59.75                     | 12599.34  | 26.87      | 16.67      | 30.15                     | 31.62                     | 31.82                       | 0.30                          |
| 12700.00                | 0.84                 | 63.43                     | 12699.32  | 27.62      | 18.06      | 31.22                     | 33.00                     | 33.17                       | 0.15                          |
| 12800.00                | 1.07                 | 72.44                     | 12799.31  | 28.23      | 19.60      | 32.20                     | 34.37                     | 34.77                       | 0.28                          |
| 12900.00                | 1.30                 | 79.61                     | 12899.29  | 28.71      | 21.60      | 33.16                     | 35.93                     | 36.96                       | 0.27                          |
| 13000.00                | 1.10                 | 80.49                     | 12999.27  | 29.08      | 23.66      | 34.02                     | 37.49                     | 39.14                       | 0.19                          |
| 13100.00                | 1.35                 | 86.16                     | 13099.24  | 29.32      | 25.79      | 34.78                     | 39.04                     | 41.34                       | 0.28                          |
| 13200.00                | 1.28                 | 80.21                     | 13199.22  | 29.58      | 28.06      | 35.60                     | 40.78                     | 43.49                       | 0.16                          |
| 13300.00                | 0.84                 | 62.48                     | 13299.20  | 30.11      | 29.81      | 36.54                     | 42.37                     | 44.71                       | 0.54                          |
| 13400.00                | 0.84                 | 47.42                     | 13399.19  | 30.95      | 31.00      | 37.64                     | 43.80                     | 45.05                       | 0.22                          |

| Measured<br>Depth<br>FT | Incl<br>Angle<br>Deg | Drift<br>Direction<br>Deg | TVD<br>FT | +N/-S<br>FT | +E/-W<br>FT | Vertical<br>Section<br>FT | Closure<br>Distance<br>FT | Closure<br>Direction<br>Deg | Dogleg<br>Severity<br>Deg/100 |
|-------------------------|----------------------|---------------------------|-----------|-------------|-------------|---------------------------|---------------------------|-----------------------------|-------------------------------|
| 13500.00                | 1.23                 | 46.05                     | 13499.17  | 32.19       | 32.31       | 39.17                     | 45.61                     | 45.11                       | 0.39                          |
| 13600.00                | 1.42                 | 63.40                     | 13599.15  | 33.49       | 34.19       | 40.89                     | 47.86                     | 45.60                       | 0.44                          |
| 13700.00                | 1.20                 | 54.22                     | 13699.12  | 34.65       | 36.15       | 42.51                     | 50.08                     | 46.21                       | 0.30                          |
| 13800.00                | 0.98                 | 55.94                     | 13799.10  | 35.74       | 37.71       | 43.95                     | 51.96                     | 46.53                       | 0.22                          |
| 13900.00                | 0.77                 | 61.78                     | 13899.09  | 36.54       | 39.01       | 45.04                     | 53.45                     | 46.87                       | 0.22                          |
| 14000.00                | 0.43                 | 43.07                     | 13999.09  | 37.14       | 39.86       | 45.83                     | 54.48                     | 47.03                       | 0.39                          |
| 14100.00                | 0.40                 | 54.45                     | 14099.08  | 37.62       | 40.40       | 46.43                     | 55.20                     | 47.05                       | 0.09                          |
| 14200.00                | 0.38                 | 74.09                     | 14199.08  | 37.91       | 41.01       | 46.87                     | 55.85                     | 47.25                       | 0.13                          |
| 14300.00                | 0.36                 | 60.49                     | 14299.08  | 38.16       | 41.61       | 47.25                     | 56.46                     | 47.48                       | 0.09                          |
| 14400.00                | 0.66                 | 87.50                     | 14399.08  | 38.34       | 42.46       | 47.64                     | 57.21                     | 47.92                       | 0.37                          |
| 14500.00                | 0.45                 | 87.56                     | 14499.07  | 38.38       | 43.42       | 47.92                     | 57.95                     | 48.53                       | 0.21                          |
| 14600.00                | 0.77                 | 92.86                     | 14599.06  | 38.37       | 44.48       | 48.16                     | 58.74                     | 49.22                       | 0.33                          |
| 14700.00                | 0.53                 | 114.21                    | 14699.06  | 38.14       | 45.58       | 48.22                     | 59.43                     | 50.08                       | 0.34                          |
| 14800.00                | 0.85                 | 111.23                    | 14799.05  | 37.69       | 46.69       | 48.05                     | 60.00                     | 51.09                       | 0.32                          |
| 14900.00                | 0.88                 | 134.34                    | 14899.04  | 36.88       | 47.92       | 47.58                     | 60.47                     | 52.42                       | 0.35                          |
| 15000.00                | 1.32                 | 126.16                    | 14999.02  | 35.66       | 49.41       | 46.76                     | 60.93                     | 54.18                       | 0.47                          |
| 15100.00                | 1.46                 | 124.09                    | 15098.99  | 34.27       | 51.39       | 45.90                     | 61.77                     | 56.31                       | 0.15                          |
| 15200.00                | 1.81                 | 122.69                    | 15198.95  | 32.70       | 53.78       | 44.97                     | 62.94                     | 58.70                       | 0.35                          |
| 15300.00                | 1.82                 | 109.56                    | 15298.90  | 31.31       | 56.61       | 44.32                     | 64.69                     | 61.05                       | 0.41                          |
| 15400.00                | 2.15                 | 103.30                    | 15398.84  | 30.35       | 59.93       | 44.21                     | 67.18                     | 63.14                       | 0.40                          |
| 15500.00                | 3.14                 | 94.88                     | 15498.73  | 29.68       | 64.49       | 44.69                     | 71.00                     | 65.29                       | 1.06                          |
| 15600.00                | 5.71                 | 101.77                    | 15598.43  | 28.43       | 72.10       | 45.36                     | 77.50                     | 68.48                       | 2.62                          |
| 15700.00                | 6.49                 | 102.11                    | 15697.86  | 26.23       | 82.50       | 45.80                     | 86.57                     | 72.36                       | 0.78                          |
| 15714.00                | 6.54                 | 103.57                    | 15711.77  | 25.88       | 84.05       | 45.84                     | 87.94                     | 72.89                       | 1.24                          |



VES Survey International  
Midland, Texas  
432-563-5444

Surveyor: Geof Davis  
Corazon 4 State SWD No 002 / API 30-025-42527





I Geof Davis certify that I am employed by Vaughn Energy Services. That I did on the day(s) of 08/08/15 through 08/08/15 conduct or supervise the taking of a HA Gyro survey from a depth of 0 feet to a depth of 15714 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Vaughn Energy Services, that I am authorized and qualified to make this report; that this survey was conducted at the request of Concho Oil & Gas for the Corazon 4 State SWD Well # No 002 API # 30-025-42527 in Lea County / Parish New Mexico; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Vaughn Energy Services

A handwritten signature in blue ink, appearing to read "Geof Davis", is written over a horizontal line.

Geof Davis  
Service Technician  
Vaughn Energy Services



I Geof Davis certify that I am employed by Vaughn Energy Services. That I did on the day(s) of 08/08/15 through 08/08/15 conduct or supervise the taking of a HA Gyro survey from a depth of 0 feet to a depth of 15714 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Vaughn Energy Services, that I am authorized and qualified to make this report; that this survey was conducted at the request of Concho Oil & Gas for the Corazon 4 State SVD Well # No 002 API # 30-025-42527 in Lea County / Parish New Mexico; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Vaughn Energy Services

A handwritten signature in blue ink, appearing to read "Geof Davis", written over a horizontal line.

Geof Davis  
Service Technician  
Vaughn Energy Services