

April 25, 2017

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

Attn: Kanicia Castillo

RE: **Burch Keely Unit No. 944H** - 30-015-44079

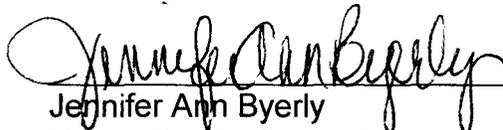
Please find enclosed a copy of the survey from 0' to 1086' ran on the above referenced well.

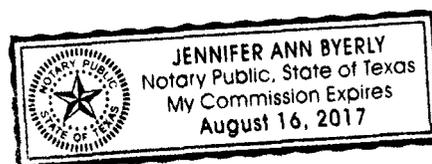
Sincerely,

Keith Havelka
Operations

STATE OF TEXAS §
 §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 25th day of April, A.D., 2017, by Keith Havelka.


Jennifer Ann Byerly
Notary Public, State of Texas





Company: COG OPERATING
 Lease/Well: BURCH KEELY UNIT No.944H
 Rig Name: SILVER OAK 3
 State/County: NEW MEXICO/EDDY
 VS-Azi: 0.00 Degrees
 Latitude: 32.83001, Longitude: -104.01964
 Grid North = True North -0.17 degs (NAD 27)
 Grid Correction Applied = -0.17 degs

Depth Reference : RKB=18 FEET

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: e-line gyro-de_01.ut
 Minimum Curvature Method
 Report Date/Time: 4/25/2017 / 08:31

VES Survey International
 Midland, Texas
 432-563-5444

Surveyor: Michael Cook

Burch Keely Unit No. 944H / API 30-015-44079

| Measured Depth FT | Incl Angle Deg | Drift Direction Deg | TVD FT | +N/-S FT | +E/-W FT | Vertical Section FT | Closure Distance FT | Closure Direction Deg | Dogleg Severity Deg/100 |
|-------------------|----------------|---------------------|--------|----------|----------|---------------------|---------------------|-----------------------|-------------------------|
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | **** |
| 25.00 | 0.17 | 61.75 | 25.00 | 0.02 | 0.03 | 0.02 | 0.04 | 61.75 | 0.69 |
| 50.00 | 0.18 | 333.60 | 50.00 | 0.07 | 0.05 | 0.07 | 0.09 | 34.27 | 0.98 |
| 75.00 | 0.16 | 326.10 | 75.00 | 0.14 | 0.01 | 0.14 | 0.14 | 4.66 | 0.12 |
| 100.00 | 0.34 | 323.53 | 100.00 | 0.23 | -0.05 | 0.23 | 0.23 | 346.70 | 0.73 |
| 125.00 | 0.46 | 314.58 | 125.00 | 0.36 | -0.17 | 0.36 | 0.39 | 334.59 | 0.51 |
| 150.00 | 0.33 | 329.16 | 150.00 | 0.49 | -0.28 | 0.49 | 0.56 | 330.40 | 0.65 |
| 175.00 | 0.27 | 337.58 | 175.00 | 0.60 | -0.34 | 0.60 | 0.69 | 330.89 | 0.28 |
| 200.00 | 0.21 | 17.36 | 200.00 | 0.70 | -0.34 | 0.70 | 0.78 | 333.84 | 0.70 |
| 225.00 | 0.22 | 20.00 | 225.00 | 0.79 | -0.31 | 0.79 | 0.85 | 338.30 | 0.05 |
| 250.00 | 0.29 | 343.03 | 250.00 | 0.90 | -0.32 | 0.90 | 0.95 | 340.53 | 0.70 |
| 275.00 | 0.38 | 314.07 | 275.00 | 1.01 | -0.39 | 1.01 | 1.09 | 338.74 | 0.75 |
| 300.00 | 0.29 | 298.15 | 300.00 | 1.10 | -0.51 | 1.10 | 1.21 | 335.15 | 0.50 |
| 325.00 | 0.29 | 280.32 | 325.00 | 1.14 | -0.63 | 1.14 | 1.31 | 331.18 | 0.36 |
| 350.00 | 0.35 | 255.61 | 350.00 | 1.14 | -0.77 | 1.14 | 1.37 | 326.02 | 0.59 |
| 375.00 | 0.46 | 227.25 | 375.00 | 1.05 | -0.91 | 1.05 | 1.39 | 318.94 | 0.91 |
| 400.00 | 0.39 | 202.00 | 399.99 | 0.90 | -1.02 | 0.90 | 1.36 | 311.48 | 0.80 |

| Measured Depth FT | Incl Angle Deg | Drift Direction Deg | TVD FT | +N/S FT | +E/W FT | Vertical Section FT | Closure Distance FT | Closure Direction Deg | Dogleg Severity Deg/100 |
|-------------------------|----------------------|---------------------------|-----------|------------|------------|---------------------------|---------------------------|-----------------------------|-------------------------------|
| | | | | | | | | | |
| 425.00 | 0.33 | 178.44 | 424.99 | 0.75 | -1.05 | 0.75 | 1.29 | 305.55 | 0.63 |
| 450.00 | 0.33 | 187.39 | 449.99 | 0.61 | -1.06 | 0.61 | 1.22 | 299.80 | 0.21 |
| 475.00 | 0.32 | 162.99 | 474.99 | 0.47 | -1.05 | 0.47 | 1.14 | 294.04 | 0.55 |
| 500.00 | 0.33 | 149.19 | 499.99 | 0.34 | -0.99 | 0.34 | 1.04 | 288.85 | 0.32 |
| 525.00 | 0.36 | 131.36 | 524.99 | 0.22 | -0.89 | 0.22 | 0.92 | 284.08 | 0.44 |
| 550.00 | 0.28 | 101.14 | 549.99 | 0.16 | -0.77 | 0.16 | 0.79 | 281.72 | 0.73 |
| 575.00 | 0.46 | 87.68 | 574.99 | 0.15 | -0.62 | 0.15 | 0.63 | 283.98 | 0.81 |
| 600.00 | 0.52 | 80.01 | 599.99 | 0.18 | -0.40 | 0.18 | 0.44 | 293.68 | 0.35 |
| 625.00 | 0.58 | 60.00 | 624.99 | 0.26 | -0.18 | 0.26 | 0.32 | 324.75 | 0.79 |
| 650.00 | 0.73 | 57.76 | 649.99 | 0.41 | 0.06 | 0.41 | 0.41 | 8.34 | 0.62 |
| 675.00 | 0.94 | 56.91 | 674.99 | 0.60 | 0.37 | 0.60 | 0.71 | 31.24 | 0.86 |
| 700.00 | 1.00 | 58.54 | 699.98 | 0.83 | 0.72 | 0.83 | 1.10 | 41.14 | 0.27 |
| 725.00 | 1.21 | 60.44 | 724.98 | 1.07 | 1.14 | 1.07 | 1.57 | 46.72 | 0.82 |
| 750.00 | 1.40 | 62.14 | 749.97 | 1.35 | 1.64 | 1.35 | 2.12 | 50.60 | 0.78 |
| 775.00 | 1.46 | 60.05 | 774.96 | 1.65 | 2.18 | 1.65 | 2.74 | 52.97 | 0.35 |
| 800.00 | 1.58 | 58.79 | 799.95 | 1.99 | 2.76 | 1.99 | 3.40 | 54.23 | 0.49 |
| 825.00 | 1.61 | 54.40 | 824.94 | 2.37 | 3.34 | 2.37 | 4.09 | 54.63 | 0.50 |
| 850.00 | 1.73 | 53.13 | 849.93 | 2.80 | 3.92 | 2.80 | 4.82 | 54.49 | 0.53 |
| 875.00 | 1.67 | 51.61 | 874.92 | 3.25 | 4.51 | 3.25 | 5.56 | 54.21 | 0.32 |
| 900.00 | 1.70 | 50.49 | 899.91 | 3.71 | 5.08 | 3.71 | 6.30 | 53.84 | 0.17 |
| 925.00 | 1.70 | 57.83 | 924.90 | 4.15 | 5.68 | 4.15 | 7.04 | 53.88 | 0.87 |
| 950.00 | 1.53 | 61.98 | 949.89 | 4.50 | 6.29 | 4.50 | 7.74 | 54.41 | 0.83 |
| 975.00 | 1.36 | 68.73 | 974.88 | 4.77 | 6.86 | 4.77 | 8.36 | 55.22 | 0.98 |
| 1000.00 | 1.32 | 79.07 | 999.88 | 4.93 | 7.42 | 4.93 | 8.91 | 56.41 | 0.98 |
| 1025.00 | 1.23 | 88.95 | 1024.87 | 4.99 | 7.97 | 4.99 | 9.40 | 57.96 | 0.95 |
| 1050.00 | 1.00 | 87.51 | 1049.87 | 5.00 | 8.46 | 5.00 | 9.83 | 59.39 | 0.93 |
| 1075.00 | 1.04 | 84.24 | 1074.86 | 5.03 | 8.90 | 5.03 | 10.23 | 60.50 | 0.29 |
| 1086.00 | 0.99 | 82.27 | 1085.86 | 5.06 | 9.09 | 5.06 | 10.41 | 60.92 | 0.55 |



VES Survey International
Midland, Texas
432-563-5444

Surveyor: Michael Cook

Burch Keely Unit No. 944H / API 30-015-44079

VES SURVEY
INTERNATIONAL

20

-S/+N

..... Depth=1086.0, Inc=1.0, AzG=82.3

0

Depth=0.0, Inc=0.0, AzG=0.0

-W/+E

20

VES SURVEY

I Michael Cook certify that I am employed by VES Survey International. That I did on the day(s) of 04/20/17 through 04/20/17 conduct or supervise the taking of a Rate Gyro survey from a depth of 0.00 feet to a depth of 1,086.00 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 COG Operating for the Burch Keely Unit Well # 944H API # 30-015-44079 in Eddy 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 VES Survey International.



Michael Cook
Service Technician
VES Survey International