



OCD – HOBBS
07/31/2019
RECEIVED

Concho Resources, Inc.

Lea County, NM (NAD 27 NME)
(Pork Pie) Sec-15_T24-S_R-35-E
Pork Pie State Com #704H

ST01

Plan: Plan #1

Standard Planning Report

23 July, 2019



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Pork Pie State Com #704H
Company:	Concho Resources, Inc.	TVD Reference:	KB @ 3362.0usft (Latshaw 44)
Project:	Lea County, NM (NAD 27 NME)	MD Reference:	KB @ 3362.0usft (Latshaw 44)
Site:	(Pork Pie) Sec-15_T24-S_R-35-E	North Reference:	Grid
Well:	Pork Pie State Com #704H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ST01		
Design:	Plan #1		

Project	Lea County, NM (NAD 27 NME)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	(Pork Pie) Sec-15_T24-S_R-35-E		
Site Position:		Northing:	442,049.80 usft
From:	Map	Easting:	803,079.50 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 12' 41.450 N
		Longitude:	103° 21' 12.259 W
		Grid Convergence:	0.52 °

Well	Pork Pie State Com #704H		
Well Position	+N/-S	0.0 usft	Northing: 442,049.80 usft
	+E/-W	0.0 usft	Easting: 803,079.50 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	Latitude: 32° 12' 41.450 N
			Longitude: 103° 21' 12.259 W
			Ground Level: 3,337.0 usft

Wellbore	ST01				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	07/23/19	6.62	60.06	47,738.04368051

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	11,602.4
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	358.76

Plan Survey Tool Program	Date	07/23/19		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	11,602.4	22,343.0	Plan #1 (ST01)	MWD
				OWSG MWD - Standard

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
11,602.4	0.00	0.00	11,584.1	-401.0	-126.5	0.00	0.00	0.00	0.00	
12,515.2	91.28	359.51	12,157.0	184.8	-131.6	10.00	10.00	-0.05	359.51	
22,343.0	91.28	359.51	11,937.0	10,009.7	-216.3	0.00	0.00	0.00	0.00	PBHL (Pork Pie Sta

Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Pork Pie State Com #704H
Company:	Concho Resources, Inc.	TVD Reference:	KB @ 3362.0usft (Latshaw 44)
Project:	Lea County, NM (NAD 27 NME)	MD Reference:	KB @ 3362.0usft (Latshaw 44)
Site:	(Pork Pie) Sec-15_T24-S_R-35-E	North Reference:	Grid
Well:	Pork Pie State Com #704H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ST01		
Design:	Plan #1		

Planned 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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	2.00	197.51	2,100.0	-1.7	-0.5	-1.7	2.00	2.00	0.00
2,200.0	4.00	197.51	2,199.8	-6.7	-2.1	-6.6	2.00	2.00	0.00
2,253.1	5.06	197.51	2,252.8	-10.7	-3.4	-10.6	2.00	2.00	0.00
2,300.0	5.06	197.51	2,299.5	-14.6	-4.6	-14.5	0.00	0.00	0.00
2,400.0	5.06	197.51	2,399.1	-23.0	-7.3	-22.9	0.00	0.00	0.00
2,500.0	5.06	197.51	2,498.7	-31.4	-9.9	-31.2	0.00	0.00	0.00
2,600.0	5.06	197.51	2,598.3	-39.8	-12.6	-39.6	0.00	0.00	0.00
2,700.0	5.06	197.51	2,697.9	-48.3	-15.2	-47.9	0.00	0.00	0.00
2,800.0	5.06	197.51	2,797.5	-56.7	-17.9	-56.3	0.00	0.00	0.00
2,900.0	5.06	197.51	2,897.1	-65.1	-20.5	-64.6	0.00	0.00	0.00
3,000.0	5.06	197.51	2,996.8	-73.5	-23.2	-73.0	0.00	0.00	0.00
3,100.0	5.06	197.51	3,096.4	-81.9	-25.8	-81.3	0.00	0.00	0.00
3,200.0	5.06	197.51	3,196.0	-90.3	-28.5	-89.7	0.00	0.00	0.00
3,300.0	5.06	197.51	3,295.6	-98.8	-31.2	-98.1	0.00	0.00	0.00
3,400.0	5.06	197.51	3,395.2	-107.2	-33.8	-106.4	0.00	0.00	0.00
3,500.0	5.06	197.51	3,494.8	-115.6	-36.5	-114.8	0.00	0.00	0.00
3,600.0	5.06	197.51	3,594.4	-124.0	-39.1	-123.1	0.00	0.00	0.00
3,700.0	5.06	197.51	3,694.0	-132.4	-41.8	-131.5	0.00	0.00	0.00
3,800.0	5.06	197.51	3,793.6	-140.8	-44.4	-139.8	0.00	0.00	0.00
3,900.0	5.06	197.51	3,893.2	-149.2	-47.1	-148.2	0.00	0.00	0.00
4,000.0	5.06	197.51	3,992.9	-157.7	-49.7	-156.5	0.00	0.00	0.00
4,100.0	5.06	197.51	4,092.5	-166.1	-52.4	-164.9	0.00	0.00	0.00
4,200.0	5.06	197.51	4,192.1	-174.5	-55.0	-173.3	0.00	0.00	0.00
4,300.0	5.06	197.51	4,291.7	-182.9	-57.7	-181.6	0.00	0.00	0.00
4,400.0	5.06	197.51	4,391.3	-191.3	-60.4	-190.0	0.00	0.00	0.00
4,500.0	5.06	197.51	4,490.9	-199.7	-63.0	-198.3	0.00	0.00	0.00
4,600.0	5.06	197.51	4,590.5	-208.1	-65.7	-206.7	0.00	0.00	0.00
4,700.0	5.06	197.51	4,690.1	-216.6	-68.3	-215.0	0.00	0.00	0.00
4,800.0	5.06	197.51	4,789.7	-225.0	-71.0	-223.4	0.00	0.00	0.00
4,900.0	5.06	197.51	4,889.3	-233.4	-73.6	-231.7	0.00	0.00	0.00
5,000.0	5.06	197.51	4,989.0	-241.8	-76.3	-240.1	0.00	0.00	0.00
5,100.0	5.06	197.51	5,088.6	-250.2	-78.9	-248.5	0.00	0.00	0.00
5,200.0	5.06	197.51	5,188.2	-258.6	-81.6	-256.8	0.00	0.00	0.00

Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Pork Pie State Com #704H
Company:	Concho Resources, Inc.	TVD Reference:	KB @ 3362.0usft (Latshaw 44)
Project:	Lea County, NM (NAD 27 NME)	MD Reference:	KB @ 3362.0usft (Latshaw 44)
Site:	(Pork Pie) Sec-15_T24-S_R-35-E	North Reference:	Grid
Well:	Pork Pie State Com #704H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ST01		
Design:	Plan #1		

Planned 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)
5,300.0	5.06	197.51	5,287.8	-267.1	-84.2	-265.2	0.00	0.00	0.00
5,400.0	5.06	197.51	5,387.4	-275.5	-86.9	-273.5	0.00	0.00	0.00
5,500.0	5.06	197.51	5,487.0	-283.9	-89.6	-281.9	0.00	0.00	0.00
5,600.0	5.06	197.51	5,586.6	-292.3	-92.2	-290.2	0.00	0.00	0.00
5,700.0	5.06	197.51	5,686.2	-300.7	-94.9	-298.6	0.00	0.00	0.00
5,800.0	5.06	197.51	5,785.8	-309.1	-97.5	-306.9	0.00	0.00	0.00
5,900.0	5.06	197.51	5,885.4	-317.5	-100.2	-315.3	0.00	0.00	0.00
6,000.0	5.06	197.51	5,985.1	-326.0	-102.8	-323.7	0.00	0.00	0.00
6,100.0	5.06	197.51	6,084.7	-334.4	-105.5	-332.0	0.00	0.00	0.00
6,200.0	5.06	197.51	6,184.3	-342.8	-108.1	-340.4	0.00	0.00	0.00
6,300.0	5.06	197.51	6,283.9	-351.2	-110.8	-348.7	0.00	0.00	0.00
6,400.0	5.06	197.51	6,383.5	-359.6	-113.4	-357.1	0.00	0.00	0.00
6,500.0	5.06	197.51	6,483.1	-368.0	-116.1	-365.4	0.00	0.00	0.00
6,600.0	5.06	197.51	6,582.7	-376.4	-118.8	-373.8	0.00	0.00	0.00
6,700.0	5.06	197.51	6,682.3	-384.9	-121.4	-382.1	0.00	0.00	0.00
6,765.1	5.06	197.51	6,747.2	-390.3	-123.1	-387.6	0.00	0.00	0.00
6,800.0	4.37	197.51	6,782.0	-393.1	-124.0	-390.3	2.00	-2.00	0.00
6,900.0	2.37	197.51	6,881.8	-398.7	-125.8	-395.9	2.00	-2.00	0.00
7,000.0	0.37	197.51	6,981.7	-400.9	-126.5	-398.1	2.00	-2.00	0.00
7,018.3	0.00	0.00	7,000.0	-401.0	-126.5	-398.2	2.00	-2.00	0.00
7,100.0	0.00	0.00	7,081.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
7,200.0	0.00	0.00	7,181.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
7,300.0	0.00	0.00	7,281.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
7,400.0	0.00	0.00	7,381.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
7,500.0	0.00	0.00	7,481.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
7,600.0	0.00	0.00	7,581.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
7,700.0	0.00	0.00	7,681.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
7,800.0	0.00	0.00	7,781.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
7,900.0	0.00	0.00	7,881.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
8,000.0	0.00	0.00	7,981.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
8,100.0	0.00	0.00	8,081.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
8,200.0	0.00	0.00	8,181.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
8,300.0	0.00	0.00	8,281.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
8,400.0	0.00	0.00	8,381.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
8,500.0	0.00	0.00	8,481.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
8,600.0	0.00	0.00	8,581.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
8,700.0	0.00	0.00	8,681.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
8,800.0	0.00	0.00	8,781.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
8,900.0	0.00	0.00	8,881.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
9,000.0	0.00	0.00	8,981.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
9,100.0	0.00	0.00	9,081.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
9,200.0	0.00	0.00	9,181.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
9,300.0	0.00	0.00	9,281.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
9,400.0	0.00	0.00	9,381.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
9,500.0	0.00	0.00	9,481.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
9,600.0	0.00	0.00	9,581.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
9,700.0	0.00	0.00	9,681.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
9,800.0	0.00	0.00	9,781.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
9,900.0	0.00	0.00	9,881.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
10,000.0	0.00	0.00	9,981.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
10,100.0	0.00	0.00	10,081.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
10,200.0	0.00	0.00	10,181.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
10,300.0	0.00	0.00	10,281.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
10,400.0	0.00	0.00	10,381.7	-401.0	-126.5	-398.2	0.00	0.00	0.00

Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Pork Pie State Com #704H
Company:	Concho Resources, Inc.	TVD Reference:	KB @ 3362.0usft (Latshaw 44)
Project:	Lea County, NM (NAD 27 NME)	MD Reference:	KB @ 3362.0usft (Latshaw 44)
Site:	(Pork Pie) Sec-15_T24-S_R-35-E	North Reference:	Grid
Well:	Pork Pie State Com #704H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ST01		
Design:	Plan #1		

Planned 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)
10,500.0	0.00	0.00	10,481.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
10,600.0	0.00	0.00	10,581.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
10,700.0	0.00	0.00	10,681.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
10,800.0	0.00	0.00	10,781.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
10,900.0	0.00	0.00	10,881.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
11,000.0	0.00	0.00	10,981.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
11,100.0	0.00	0.00	11,081.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
11,200.0	0.00	0.00	11,181.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
11,300.0	0.00	0.00	11,281.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
11,400.0	0.00	0.00	11,381.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
11,500.0	0.00	0.00	11,481.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
11,600.0	0.00	0.00	11,581.7	-401.0	-126.5	-398.2	0.00	0.00	0.00
11,602.4	0.00	0.00	11,584.1	-401.0	-126.5	-398.2	0.00	0.00	0.00
KOP - DLS 10.00 TFO 359.51									
11,650.0	4.76	359.51	11,631.7	-399.0	-126.5	-396.2	10.00	10.00	0.00
11,700.0	9.76	359.51	11,681.3	-392.7	-126.6	-389.9	10.00	10.00	0.00
11,750.0	14.76	359.51	11,730.1	-382.1	-126.7	-379.3	10.00	10.00	0.00
11,769.6	16.72	359.51	11,749.0	-376.8	-126.7	-373.9	10.00	10.00	0.00
TBSG_sand									
11,800.0	19.76	359.51	11,777.8	-367.3	-126.8	-364.4	10.00	10.00	0.00
11,850.0	24.76	359.51	11,824.1	-348.3	-127.0	-345.5	10.00	10.00	0.00
11,900.0	29.76	359.51	11,868.5	-325.4	-127.2	-322.6	10.00	10.00	0.00
11,950.0	34.76	359.51	11,910.8	-298.8	-127.4	-295.9	10.00	10.00	0.00
12,000.0	39.76	359.51	11,950.6	-268.5	-127.6	-265.7	10.00	10.00	0.00
12,050.0	44.76	359.51	11,987.6	-234.9	-127.9	-232.1	10.00	10.00	0.00
12,100.0	49.76	359.51	12,021.5	-198.2	-128.2	-195.4	10.00	10.00	0.00
12,150.0	54.76	359.51	12,052.1	-158.6	-128.6	-155.8	10.00	10.00	0.00
12,200.0	59.76	359.51	12,079.1	-116.6	-129.0	-113.8	10.00	10.00	0.00
12,239.9	63.75	359.51	12,098.0	-81.5	-129.3	-78.7	10.00	10.00	0.00
WFMP									
12,250.0	64.76	359.51	12,102.4	-72.4	-129.3	-69.6	10.00	10.00	0.00
12,300.0	69.76	359.51	12,121.7	-26.3	-129.7	-23.5	10.00	10.00	0.00
12,306.7	70.43	359.51	12,124.0	-20.0	-129.8	-17.2	10.00	10.00	0.00
WFMP Lith									
12,350.0	74.76	359.51	12,137.0	21.3	-130.1	24.1	10.00	10.00	0.00
12,400.0	79.76	359.51	12,148.0	70.1	-130.6	72.9	10.00	10.00	0.00
12,450.0	84.76	359.51	12,154.7	119.6	-131.0	122.4	10.00	10.00	0.00
12,500.0	89.76	359.51	12,157.1	169.5	-131.4	172.3	10.00	10.00	0.00
12,515.2	91.28	359.51	12,157.0	184.8	-131.6	187.6	10.00	10.00	0.00
EOC - 9827.8 hold at 12515.2 MD									
12,600.0	91.28	359.51	12,155.1	269.5	-132.3	272.3	0.00	0.00	0.00
12,700.0	91.28	359.51	12,152.8	369.5	-133.1	372.3	0.00	0.00	0.00
12,800.0	91.28	359.51	12,150.6	469.5	-134.0	472.2	0.00	0.00	0.00
12,900.0	91.28	359.51	12,148.3	569.4	-134.9	572.2	0.00	0.00	0.00
13,000.0	91.28	359.51	12,146.1	669.4	-135.7	672.2	0.00	0.00	0.00
13,100.0	91.28	359.51	12,143.9	769.4	-136.6	772.1	0.00	0.00	0.00
13,200.0	91.28	359.51	12,141.6	869.3	-137.5	872.1	0.00	0.00	0.00
13,300.0	91.28	359.51	12,139.4	969.3	-138.3	972.1	0.00	0.00	0.00
13,400.0	91.28	359.51	12,137.2	1,069.3	-139.2	1,072.0	0.00	0.00	0.00
13,500.0	91.28	359.51	12,134.9	1,169.3	-140.0	1,172.0	0.00	0.00	0.00
13,600.0	91.28	359.51	12,132.7	1,269.2	-140.9	1,272.0	0.00	0.00	0.00
13,700.0	91.28	359.51	12,130.4	1,369.2	-141.8	1,371.9	0.00	0.00	0.00
13,800.0	91.28	359.51	12,128.2	1,469.2	-142.6	1,471.9	0.00	0.00	0.00

Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Pork Pie State Com #704H
Company:	Concho Resources, Inc.	TVD Reference:	KB @ 3362.0usft (Latshaw 44)
Project:	Lea County, NM (NAD 27 NME)	MD Reference:	KB @ 3362.0usft (Latshaw 44)
Site:	(Pork Pie) Sec-15_T24-S_R-35-E	North Reference:	Grid
Well:	Pork Pie State Com #704H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ST01		
Design:	Plan #1		

Planned 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)
13,900.0	91.28	359.51	12,126.0	1,569.1	-143.5	1,571.9	0.00	0.00	0.00
14,000.0	91.28	359.51	12,123.7	1,669.1	-144.4	1,671.8	0.00	0.00	0.00
14,100.0	91.28	359.51	12,121.5	1,769.1	-145.2	1,771.8	0.00	0.00	0.00
14,200.0	91.28	359.51	12,119.2	1,869.1	-146.1	1,871.8	0.00	0.00	0.00
14,300.0	91.28	359.51	12,117.0	1,969.0	-146.9	1,971.7	0.00	0.00	0.00
14,400.0	91.28	359.51	12,114.8	2,069.0	-147.8	2,071.7	0.00	0.00	0.00
14,500.0	91.28	359.51	12,112.5	2,169.0	-148.7	2,171.7	0.00	0.00	0.00
14,600.0	91.28	359.51	12,110.3	2,268.9	-149.5	2,271.6	0.00	0.00	0.00
14,700.0	91.28	359.51	12,108.1	2,368.9	-150.4	2,371.6	0.00	0.00	0.00
14,800.0	91.28	359.51	12,105.8	2,468.9	-151.3	2,471.6	0.00	0.00	0.00
14,900.0	91.28	359.51	12,103.6	2,568.8	-152.1	2,571.5	0.00	0.00	0.00
15,000.0	91.28	359.51	12,101.3	2,668.8	-153.0	2,671.5	0.00	0.00	0.00
15,100.0	91.28	359.51	12,099.1	2,768.8	-153.8	2,771.5	0.00	0.00	0.00
15,200.0	91.28	359.51	12,096.9	2,868.8	-154.7	2,871.4	0.00	0.00	0.00
15,300.0	91.28	359.51	12,094.6	2,968.7	-155.6	2,971.4	0.00	0.00	0.00
15,400.0	91.28	359.51	12,092.4	3,068.7	-156.4	3,071.4	0.00	0.00	0.00
15,500.0	91.28	359.51	12,090.2	3,168.7	-157.3	3,171.3	0.00	0.00	0.00
15,600.0	91.28	359.51	12,087.9	3,268.6	-158.2	3,271.3	0.00	0.00	0.00
15,700.0	91.28	359.51	12,085.7	3,368.6	-159.0	3,371.3	0.00	0.00	0.00
15,800.0	91.28	359.51	12,083.4	3,468.6	-159.9	3,471.2	0.00	0.00	0.00
15,900.0	91.28	359.51	12,081.2	3,568.6	-160.7	3,571.2	0.00	0.00	0.00
16,000.0	91.28	359.51	12,079.0	3,668.5	-161.6	3,671.2	0.00	0.00	0.00
16,100.0	91.28	359.51	12,076.7	3,768.5	-162.5	3,771.1	0.00	0.00	0.00
16,200.0	91.28	359.51	12,074.5	3,868.5	-163.3	3,871.1	0.00	0.00	0.00
16,300.0	91.28	359.51	12,072.2	3,968.4	-164.2	3,971.1	0.00	0.00	0.00
16,400.0	91.28	359.51	12,070.0	4,068.4	-165.1	4,071.0	0.00	0.00	0.00
16,500.0	91.28	359.51	12,067.8	4,168.4	-165.9	4,171.0	0.00	0.00	0.00
16,600.0	91.28	359.51	12,065.5	4,268.4	-166.8	4,271.0	0.00	0.00	0.00
16,700.0	91.28	359.51	12,063.3	4,368.3	-167.6	4,370.9	0.00	0.00	0.00
16,800.0	91.28	359.51	12,061.1	4,468.3	-168.5	4,470.9	0.00	0.00	0.00
16,900.0	91.28	359.51	12,058.8	4,568.3	-169.4	4,570.9	0.00	0.00	0.00
17,000.0	91.28	359.51	12,056.6	4,668.2	-170.2	4,670.8	0.00	0.00	0.00
17,100.0	91.28	359.51	12,054.3	4,768.2	-171.1	4,770.8	0.00	0.00	0.00
17,200.0	91.28	359.51	12,052.1	4,868.2	-172.0	4,870.8	0.00	0.00	0.00
17,300.0	91.28	359.51	12,049.9	4,968.2	-172.8	4,970.7	0.00	0.00	0.00
17,400.0	91.28	359.51	12,047.6	5,068.1	-173.7	5,070.7	0.00	0.00	0.00
17,500.0	91.28	359.51	12,045.4	5,168.1	-174.5	5,170.7	0.00	0.00	0.00
17,600.0	91.28	359.51	12,043.2	5,268.1	-175.4	5,270.6	0.00	0.00	0.00
17,700.0	91.28	359.51	12,040.9	5,368.0	-176.3	5,370.6	0.00	0.00	0.00
17,800.0	91.28	359.51	12,038.7	5,468.0	-177.1	5,470.6	0.00	0.00	0.00
17,900.0	91.28	359.51	12,036.4	5,568.0	-178.0	5,570.5	0.00	0.00	0.00
18,000.0	91.28	359.51	12,034.2	5,668.0	-178.8	5,670.5	0.00	0.00	0.00
18,100.0	91.28	359.51	12,032.0	5,767.9	-179.7	5,770.5	0.00	0.00	0.00
18,200.0	91.28	359.51	12,029.7	5,867.9	-180.6	5,870.4	0.00	0.00	0.00
18,300.0	91.28	359.51	12,027.5	5,967.9	-181.4	5,970.4	0.00	0.00	0.00
18,400.0	91.28	359.51	12,025.2	6,067.8	-182.3	6,070.4	0.00	0.00	0.00
18,500.0	91.28	359.51	12,023.0	6,167.8	-183.2	6,170.3	0.00	0.00	0.00
18,600.0	91.28	359.51	12,020.8	6,267.8	-184.0	6,270.3	0.00	0.00	0.00
18,700.0	91.28	359.51	12,018.5	6,367.8	-184.9	6,370.3	0.00	0.00	0.00
18,800.0	91.28	359.51	12,016.3	6,467.7	-185.7	6,470.2	0.00	0.00	0.00
18,900.0	91.28	359.51	12,014.1	6,567.7	-186.6	6,570.2	0.00	0.00	0.00
19,000.0	91.28	359.51	12,011.8	6,667.7	-187.5	6,670.2	0.00	0.00	0.00
19,100.0	91.28	359.51	12,009.6	6,767.6	-188.3	6,770.1	0.00	0.00	0.00
19,200.0	91.28	359.51	12,007.3	6,867.6	-189.2	6,870.1	0.00	0.00	0.00

Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Pork Pie State Com #704H
Company:	Concho Resources, Inc.	TVD Reference:	KB @ 3362.0usft (Latshaw 44)
Project:	Lea County, NM (NAD 27 NME)	MD Reference:	KB @ 3362.0usft (Latshaw 44)
Site:	(Pork Pie) Sec-15_T24-S_R-35-E	North Reference:	Grid
Well:	Pork Pie State Com #704H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ST01		
Design:	Plan #1		

Planned 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)	
19,300.0	91.28	359.51	12,005.1	6,967.6	-190.1	6,970.1	0.00	0.00	0.00	
19,400.0	91.28	359.51	12,002.9	7,067.6	-190.9	7,070.0	0.00	0.00	0.00	
19,500.0	91.28	359.51	12,000.6	7,167.5	-191.8	7,170.0	0.00	0.00	0.00	
19,600.0	91.28	359.51	11,998.4	7,267.5	-192.6	7,270.0	0.00	0.00	0.00	
19,700.0	91.28	359.51	11,996.2	7,367.5	-193.5	7,369.9	0.00	0.00	0.00	
19,800.0	91.28	359.51	11,993.9	7,467.4	-194.4	7,469.9	0.00	0.00	0.00	
19,900.0	91.28	359.51	11,991.7	7,567.4	-195.2	7,569.9	0.00	0.00	0.00	
20,000.0	91.28	359.51	11,989.4	7,667.4	-196.1	7,669.8	0.00	0.00	0.00	
20,100.0	91.28	359.51	11,987.2	7,767.4	-197.0	7,769.8	0.00	0.00	0.00	
20,200.0	91.28	359.51	11,985.0	7,867.3	-197.8	7,869.8	0.00	0.00	0.00	
20,300.0	91.28	359.51	11,982.7	7,967.3	-198.7	7,969.7	0.00	0.00	0.00	
20,400.0	91.28	359.51	11,980.5	8,067.3	-199.5	8,069.7	0.00	0.00	0.00	
20,500.0	91.28	359.51	11,978.2	8,167.2	-200.4	8,169.7	0.00	0.00	0.00	
20,600.0	91.28	359.51	11,976.0	8,267.2	-201.3	8,269.6	0.00	0.00	0.00	
20,700.0	91.28	359.51	11,973.8	8,367.2	-202.1	8,369.6	0.00	0.00	0.00	
20,800.0	91.28	359.51	11,971.5	8,467.2	-203.0	8,469.6	0.00	0.00	0.00	
20,900.0	91.28	359.51	11,969.3	8,567.1	-203.9	8,569.5	0.00	0.00	0.00	
21,000.0	91.28	359.51	11,967.1	8,667.1	-204.7	8,669.5	0.00	0.00	0.00	
21,100.0	91.28	359.51	11,964.8	8,767.1	-205.6	8,769.5	0.00	0.00	0.00	
21,200.0	91.28	359.51	11,962.6	8,867.0	-206.4	8,869.4	0.00	0.00	0.00	
21,300.0	91.28	359.51	11,960.3	8,967.0	-207.3	8,969.4	0.00	0.00	0.00	
21,400.0	91.28	359.51	11,958.1	9,067.0	-208.2	9,069.4	0.00	0.00	0.00	
21,500.0	91.28	359.51	11,955.9	9,167.0	-209.0	9,169.3	0.00	0.00	0.00	
21,600.0	91.28	359.51	11,953.6	9,266.9	-209.9	9,269.3	0.00	0.00	0.00	
21,700.0	91.28	359.51	11,951.4	9,366.9	-210.8	9,369.3	0.00	0.00	0.00	
21,800.0	91.28	359.51	11,949.2	9,466.9	-211.6	9,469.2	0.00	0.00	0.00	
21,900.0	91.28	359.51	11,946.9	9,566.8	-212.5	9,569.2	0.00	0.00	0.00	
22,000.0	91.28	359.51	11,944.7	9,666.8	-213.3	9,669.2	0.00	0.00	0.00	
22,100.0	91.28	359.51	11,942.4	9,766.8	-214.2	9,769.1	0.00	0.00	0.00	
22,200.0	91.28	359.51	11,940.2	9,866.7	-215.1	9,869.1	0.00	0.00	0.00	
22,300.0	91.28	359.51	11,938.0	9,966.7	-215.9	9,969.1	0.00	0.00	0.00	
22,343.0	91.28	359.51	11,937.0	10,009.7	-216.3	10,012.0	0.00	0.00	0.00	
TD at 22343.0										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude		Longitude
PBHL (Pork Pie State - hit/miss target - Shape - Rectangle (sides W60.0 H10,412.0 D30.0)	-1.28	359.51	11,937.0	10,009.7	-216.3	452,059.50	802,863.20	32° 14' 20.515 N		103° 21' 13.715 W
LTP (Pork Pie State C - plan misses target center by 1.1usft at 22293.0usft MD (11938.1 TVD, 9959.7 N, -215.9 E) - Point	0.00	0.00	11,937.0	9,959.7	-215.9	452,009.50	802,863.60	32° 14' 20.020 N		103° 21' 13.715 W
FTP (Pork Pie State C - plan misses target center by 237.3usft at 12050.0usft MD (11987.6 TVD, -234.9 N, -127.9 E) - Point	0.00	0.00	12,157.0	-401.0	-126.5	441,648.80	802,953.00	32° 12' 37.494 N		103° 21' 13.774 W

Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Pork Pie State Com #704H
Company:	Concho Resources, Inc.	TVD Reference:	KB @ 3362.0usft (Latshaw 44)
Project:	Lea County, NM (NAD 27 NME)	MD Reference:	KB @ 3362.0usft (Latshaw 44)
Site:	(Pork Pie) Sec-15_T24-S_R-35-E	North Reference:	Grid
Well:	Pork Pie State Com #704H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ST01		
Design:	Plan #1		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
951.0	951.0	Rustler			
1,276.0	1,276.0	TOS			
4,954.9	4,944.0	BOS (Fletcher)			
5,264.1	5,252.0	LMAR (Top Delaware)			
5,329.3	5,317.0	BLCN			
6,263.0	6,247.0	CYCN			
7,631.3	7,613.0	BYCN			
8,895.3	8,877.0	Bone Sprg (BSGL)			
9,160.3	9,142.0	U Avalon Sh			
9,396.3	9,378.0	L Avalon Sh			
10,030.3	10,012.0	FBSG_sand			
10,670.3	10,652.0	SBSG_sand			
11,249.3	11,231.0	SBSG_sand base			
11,769.6	11,749.0	TBSG_sand			
12,239.9	12,098.0	WFMP			
12,306.7	12,124.0	WFMP Lith			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
11,602.4	11,584.1	-401.0	-126.5	KOP - DLS 10.00 TFO 359.51
12,515.2	12,157.0	184.8	-131.6	EOC - 9827.8 hold at 12515.2 MD
22,343.0	11,937.0	10,009.7	-216.3	TD at 22343.0

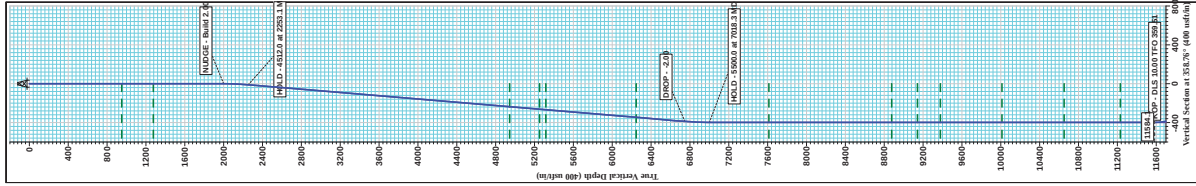


Azimuths to Grid North:
True North: 0.52°
Magnetic North: 6.10°
Magnetic Field
Strength: 47738.0nT
Dip Angle: 60.06°
Date: 07/23/2019
Model: IGR2015

Concho Resources, Inc.
Project: Lea County, NM (NAD 27 NME)
Site: Pork Pie State Com #704H
Well: PORK PIE STATE COM #704H
Design: Plan #1
Lat: 32° 12' 41.450 N
Long: 103° 21' 22.559 W
KB: KB @ 3382.0ustf (Lathaw 44)



To convert a Magnetic Direction to a Grid Direction, Add 6.10°



WELL DETAILS: Pork Pie State Com #704H									
MD	11602.4	TD	11700.0	True Vertical Depth (ft)	11602.4	True Vertical Depth (ft)	11700.0	True Vertical Depth (ft)	11700.0
DC	0.00	0.00	0.00	DC	0.00	0.00	0.00	DC	0.00
MD	11602.4	TD	11700.0	MD	11602.4	TD	11700.0	MD	11602.4
DC	0.00	0.00	0.00	DC	0.00	0.00	0.00	DC	0.00
MD	11602.4	TD	11700.0	MD	11602.4	TD	11700.0	MD	11602.4
DC	0.00	0.00	0.00	DC	0.00	0.00	0.00	DC	0.00
MD	11602.4	TD	11700.0	MD	11602.4	TD	11700.0	MD	11602.4
DC	0.00	0.00	0.00	DC	0.00	0.00	0.00	DC	0.00
MD	11602.4	TD	11700.0	MD	11602.4	TD	11700.0	MD	11602.4
DC	0.00	0.00	0.00	DC	0.00	0.00	0.00	DC	0.00

FORMATIONS	
Formation	MDPath
RUSSIAN	951.0
BOS (Flecher)	4944.0
LMAR (Top Belcher)	5379.0
CVN	6247.0
Bone Sprng (BSCL)	8877.0
U Avalon Sh	9342.0
FESE sand	10012.0
FESE sand	10620.0
FESE sand	11748.0
FESE sand	12080.0
FESE sand	12289.0
FESE sand	12500.0
FESE sand	12500.0

DESIGN TARGET DETAILS	
Name	TVD
PORK PIE STATE COM #704H	11602.4
PORK PIE STATE COM #704H	11700.0
PORK PIE STATE COM #704H	12500.0

