



OCD – HOBBS
07/29/2019
RECEIVED

Concho Resources, Inc.

Lea County, NM (NAD 27 NME)
(Goose State) Sec-32_T-20-S_R-34-E
Goose State Com #601H

OWB

Plan: Plan #1

Standard Survey Report

24 July, 2019



Company:	Concho Resources, Inc.	Local Co-ordinate Reference:	Well Goose State Com #601H
Project:	Lea County, NM (NAD 27 NME)	TVD Reference:	KB @ 3814.7usft (Latshaw 44)
Site:	(Goose State) Sec-32_T-20-S_R-34-E	MD Reference:	KB @ 3814.7usft (Latshaw 44)
Well:	Goose State Com #601H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	EDM 5000.15 Single User Db

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	(Goose State) Sec-32_T-20-S_R-34-E		
Site Position:		Northing:	554,892.30 usft
From:	Map	Easting:	731,784.10 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 31' 23.737 N
		Longitude:	103° 34' 52.814 W
		Grid Convergence:	0.40 °

Well	Goose State Com #601H		
Well Position	+N/-S	0.0 usft	Northing: 554,892.30 usft
	+E/-W	0.0 usft	Easting: 731,784.10 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 31' 23.737 N
		Longitude:	103° 34' 52.814 W
		Ground Level:	3,789.7 usft

Wellbore	OWB		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2015	07/24/19	6.75
			Dip Angle (°) 60.31
			Field Strength (nT) 47,894.98471844

Design	Plan #1		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.0	0.0	0.0
			Direction (°) 1.42

Survey Tool Program	Date	07/24/19		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	6,831.1	Plan #1 (OWB)	MWD	OWSG MWD - Standard
6,831.1	16,242.8	Plan #1 (OWB)	MWD+IFR1+MS	MWD + IFR1 + Multi-Station Correction

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

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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)
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
1,748.0	0.00	0.00	1,748.0	0.0	0.0	0.0	0.00	0.00	0.00
Rustler									
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
NUDGE - Build 2.00									
2,100.0	2.00	151.52	2,100.0	-1.5	0.8	-1.5	2.00	2.00	0.00
2,162.1	3.24	151.52	2,162.0	-4.0	2.2	-4.0	2.00	2.00	0.00
TOS									
2,200.1	4.00	151.52	2,199.9	-6.1	3.3	-6.1	2.00	2.00	0.00
HOLD - 4431.0 at 2200.1 MD									
2,300.0	4.00	151.52	2,299.6	-12.3	6.7	-12.1	0.00	0.00	0.00
2,400.0	4.00	151.52	2,399.4	-18.4	10.0	-18.1	0.00	0.00	0.00
2,500.0	4.00	151.52	2,499.1	-24.5	13.3	-24.2	0.00	0.00	0.00
2,600.0	4.00	151.52	2,598.9	-30.7	16.6	-30.2	0.00	0.00	0.00
2,700.0	4.00	151.52	2,698.6	-36.8	20.0	-36.3	0.00	0.00	0.00
2,800.0	4.00	151.52	2,798.4	-42.9	23.3	-42.3	0.00	0.00	0.00
2,900.0	4.00	151.52	2,898.1	-49.1	26.6	-48.4	0.00	0.00	0.00
3,000.0	4.00	151.52	2,997.9	-55.2	30.0	-54.4	0.00	0.00	0.00
3,100.0	4.00	151.52	3,097.6	-61.3	33.3	-60.5	0.00	0.00	0.00
3,200.0	4.00	151.52	3,197.4	-67.5	36.6	-66.5	0.00	0.00	0.00
3,300.0	4.00	151.52	3,297.2	-73.6	39.9	-72.6	0.00	0.00	0.00
3,400.0	4.00	151.52	3,396.9	-79.7	43.3	-78.6	0.00	0.00	0.00
3,486.3	4.00	151.52	3,483.0	-85.0	46.1	-83.9	0.00	0.00	0.00
BOS / Tansill									
3,500.0	4.00	151.52	3,496.7	-85.9	46.6	-84.7	0.00	0.00	0.00
3,598.6	4.00	151.52	3,595.0	-91.9	49.9	-90.6	0.00	0.00	0.00
Yates									
3,600.0	4.00	151.52	3,596.4	-92.0	49.9	-90.7	0.00	0.00	0.00
3,700.0	4.00	151.52	3,696.2	-98.1	53.2	-96.8	0.00	0.00	0.00
3,759.0	4.00	151.52	3,755.0	-101.7	55.2	-100.3	0.00	0.00	0.00
Seven Rivers									
3,800.0	4.00	151.52	3,795.9	-104.3	56.6	-102.8	0.00	0.00	0.00
3,900.0	4.00	151.52	3,895.7	-110.4	59.9	-108.9	0.00	0.00	0.00
4,000.0	4.00	151.52	3,995.4	-116.5	63.2	-114.9	0.00	0.00	0.00
4,051.7	4.00	151.52	4,047.0	-119.7	65.0	-118.1	0.00	0.00	0.00

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Capitan Reef									
4,100.0	4.00	151.52	4,095.2	-122.7	66.6	-121.0	0.00	0.00	0.00
4,200.0	4.00	151.52	4,195.0	-128.8	69.9	-127.0	0.00	0.00	0.00
4,300.0	4.00	151.52	4,294.7	-134.9	73.2	-133.1	0.00	0.00	0.00
4,400.0	4.00	151.52	4,394.5	-141.1	76.5	-139.1	0.00	0.00	0.00
4,500.0	4.00	151.52	4,494.2	-147.2	79.9	-145.2	0.00	0.00	0.00
4,600.0	4.00	151.52	4,594.0	-153.3	83.2	-151.2	0.00	0.00	0.00
4,700.0	4.00	151.52	4,693.7	-159.5	86.5	-157.3	0.00	0.00	0.00
4,800.0	4.00	151.52	4,793.5	-165.6	89.9	-163.3	0.00	0.00	0.00
4,900.0	4.00	151.52	4,893.3	-171.7	93.2	-169.4	0.00	0.00	0.00
5,000.0	4.00	151.52	4,993.0	-177.9	96.5	-175.4	0.00	0.00	0.00
5,100.0	4.00	151.52	5,092.8	-184.0	99.8	-181.5	0.00	0.00	0.00
5,200.0	4.00	151.52	5,192.5	-190.1	103.2	-187.5	0.00	0.00	0.00
5,300.0	4.00	151.52	5,292.3	-196.3	106.5	-193.6	0.00	0.00	0.00
5,400.0	4.00	151.52	5,392.0	-202.4	109.8	-199.6	0.00	0.00	0.00
5,500.0	4.00	151.52	5,491.8	-208.5	113.1	-205.7	0.00	0.00	0.00
5,600.0	4.00	151.52	5,591.5	-214.7	116.5	-211.7	0.00	0.00	0.00
5,601.5	4.00	151.52	5,593.0	-214.8	116.5	-211.8	0.00	0.00	0.00
Base of Reef (BLCN)									
5,700.0	4.00	151.52	5,691.3	-220.8	119.8	-217.8	0.00	0.00	0.00
5,800.0	4.00	151.52	5,791.1	-226.9	123.1	-223.8	0.00	0.00	0.00
5,900.0	4.00	151.52	5,890.8	-233.1	126.5	-229.9	0.00	0.00	0.00
6,000.0	4.00	151.52	5,990.6	-239.2	129.8	-235.9	0.00	0.00	0.00
6,019.5	4.00	151.52	6,010.0	-240.4	130.4	-237.1	0.00	0.00	0.00
CYCN									
6,100.0	4.00	151.52	6,090.3	-245.3	133.1	-242.0	0.00	0.00	0.00
6,200.0	4.00	151.52	6,190.1	-251.5	136.4	-248.0	0.00	0.00	0.00
6,300.0	4.00	151.52	6,289.8	-257.6	139.8	-254.1	0.00	0.00	0.00
6,400.0	4.00	151.52	6,389.6	-263.7	143.1	-260.1	0.00	0.00	0.00
6,500.0	4.00	151.52	6,489.4	-269.9	146.4	-266.2	0.00	0.00	0.00
6,600.0	4.00	151.52	6,589.1	-276.0	149.8	-272.2	0.00	0.00	0.00
6,631.1	4.00	151.52	6,620.1	-277.9	150.8	-274.1	0.00	0.00	0.00
DROP - -2.00									
6,700.0	2.62	151.52	6,688.9	-281.4	152.7	-277.5	2.00	-2.00	0.00
6,800.0	0.62	151.52	6,788.9	-283.9	154.0	-280.0	2.00	-2.00	0.00
6,831.1	0.00	0.00	6,820.0	-284.0	154.1	-280.1	2.00	-2.00	0.00
HOLD - 4142.8 at 6831.1 MD									
6,900.0	0.00	0.00	6,888.9	-284.0	154.1	-280.1	0.00	0.00	0.00
6,904.1	0.00	0.00	6,893.0	-284.0	154.1	-280.1	0.00	0.00	0.00
BYCN									
7,000.0	0.00	0.00	6,988.9	-284.0	154.1	-280.1	0.00	0.00	0.00
7,100.0	0.00	0.00	7,088.9	-284.0	154.1	-280.1	0.00	0.00	0.00
7,200.0	0.00	0.00	7,188.9	-284.0	154.1	-280.1	0.00	0.00	0.00
7,300.0	0.00	0.00	7,288.9	-284.0	154.1	-280.1	0.00	0.00	0.00

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7,400.0	0.00	0.00	7,388.9	-284.0	154.1	-280.1	0.00	0.00	0.00
7,500.0	0.00	0.00	7,488.9	-284.0	154.1	-280.1	0.00	0.00	0.00
7,600.0	0.00	0.00	7,588.9	-284.0	154.1	-280.1	0.00	0.00	0.00
7,700.0	0.00	0.00	7,688.9	-284.0	154.1	-280.1	0.00	0.00	0.00
7,800.0	0.00	0.00	7,788.9	-284.0	154.1	-280.1	0.00	0.00	0.00
7,900.0	0.00	0.00	7,888.9	-284.0	154.1	-280.1	0.00	0.00	0.00
8,000.0	0.00	0.00	7,988.9	-284.0	154.1	-280.1	0.00	0.00	0.00
8,100.0	0.00	0.00	8,088.9	-284.0	154.1	-280.1	0.00	0.00	0.00
8,200.0	0.00	0.00	8,188.9	-284.0	154.1	-280.1	0.00	0.00	0.00
8,300.0	0.00	0.00	8,288.9	-284.0	154.1	-280.1	0.00	0.00	0.00
8,400.0	0.00	0.00	8,388.9	-284.0	154.1	-280.1	0.00	0.00	0.00
8,500.0	0.00	0.00	8,488.9	-284.0	154.1	-280.1	0.00	0.00	0.00
8,600.0	0.00	0.00	8,588.9	-284.0	154.1	-280.1	0.00	0.00	0.00
8,700.0	0.00	0.00	8,688.9	-284.0	154.1	-280.1	0.00	0.00	0.00
8,800.0	0.00	0.00	8,788.9	-284.0	154.1	-280.1	0.00	0.00	0.00
8,821.1	0.00	0.00	8,810.0	-284.0	154.1	-280.1	0.00	0.00	0.00
Bone Spring (BSGL)									
8,900.0	0.00	0.00	8,888.9	-284.0	154.1	-280.1	0.00	0.00	0.00
9,000.0	0.00	0.00	8,988.9	-284.0	154.1	-280.1	0.00	0.00	0.00
9,041.1	0.00	0.00	9,030.0	-284.0	154.1	-280.1	0.00	0.00	0.00
U Avalon Sh									
9,100.0	0.00	0.00	9,088.9	-284.0	154.1	-280.1	0.00	0.00	0.00
9,179.1	0.00	0.00	9,168.0	-284.0	154.1	-280.1	0.00	0.00	0.00
L Avalon Sh									
9,200.0	0.00	0.00	9,188.9	-284.0	154.1	-280.1	0.00	0.00	0.00
9,300.0	0.00	0.00	9,288.9	-284.0	154.1	-280.1	0.00	0.00	0.00
9,400.0	0.00	0.00	9,388.9	-284.0	154.1	-280.1	0.00	0.00	0.00
9,500.0	0.00	0.00	9,488.9	-284.0	154.1	-280.1	0.00	0.00	0.00
9,594.1	0.00	0.00	9,583.0	-284.0	154.1	-280.1	0.00	0.00	0.00
B Avalon Sh									
9,600.0	0.00	0.00	9,588.9	-284.0	154.1	-280.1	0.00	0.00	0.00
9,700.0	0.00	0.00	9,688.9	-284.0	154.1	-280.1	0.00	0.00	0.00
9,800.0	0.00	0.00	9,788.9	-284.0	154.1	-280.1	0.00	0.00	0.00
9,829.1	0.00	0.00	9,818.0	-284.0	154.1	-280.1	0.00	0.00	0.00
FBSG_sand									
9,900.0	0.00	0.00	9,888.9	-284.0	154.1	-280.1	0.00	0.00	0.00
10,000.0	0.00	0.00	9,988.9	-284.0	154.1	-280.1	0.00	0.00	0.00
10,100.0	0.00	0.00	10,088.9	-284.0	154.1	-280.1	0.00	0.00	0.00
10,200.0	0.00	0.00	10,188.9	-284.0	154.1	-280.1	0.00	0.00	0.00
10,300.0	0.00	0.00	10,288.9	-284.0	154.1	-280.1	0.00	0.00	0.00
10,388.1	0.00	0.00	10,377.0	-284.0	154.1	-280.1	0.00	0.00	0.00
SBSG_sand									
10,400.0	0.00	0.00	10,388.9	-284.0	154.1	-280.1	0.00	0.00	0.00
10,500.0	0.00	0.00	10,488.9	-284.0	154.1	-280.1	0.00	0.00	0.00
10,600.0	0.00	0.00	10,588.9	-284.0	154.1	-280.1	0.00	0.00	0.00

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10,700.0	0.00	0.00	10,688.9	-284.0	154.1	-280.1	0.00	0.00	0.00
10,800.0	0.00	0.00	10,788.9	-284.0	154.1	-280.1	0.00	0.00	0.00
10,858.1	0.00	0.00	10,847.0	-284.0	154.1	-280.1	0.00	0.00	0.00
SBSG_sand_Base									
10,900.0	0.00	0.00	10,888.9	-284.0	154.1	-280.1	0.00	0.00	0.00
10,973.9	0.00	0.00	10,962.8	-284.0	154.1	-280.1	0.00	0.00	0.00
KOP - DLS 12.00 TFO 359.57									
10,975.0	0.13	359.57	10,963.9	-284.0	154.1	-280.1	12.00	12.00	0.00
11,000.0	3.13	359.57	10,988.9	-283.3	154.1	-279.4	12.00	12.00	0.00
11,025.0	6.13	359.57	11,013.8	-281.3	154.1	-277.4	12.00	12.00	0.00
11,050.0	9.13	359.57	11,038.6	-278.0	154.1	-274.1	12.00	12.00	0.00
11,075.0	12.13	359.57	11,063.1	-273.4	154.0	-269.5	12.00	12.00	0.00
11,100.0	15.13	359.57	11,087.4	-267.5	154.0	-263.6	12.00	12.00	0.00
11,125.0	18.13	359.57	11,111.4	-260.3	153.9	-256.4	12.00	12.00	0.00
11,150.0	21.13	359.57	11,134.9	-251.9	153.9	-248.0	12.00	12.00	0.00
11,175.0	24.13	359.57	11,158.0	-242.3	153.8	-238.4	12.00	12.00	0.00
11,200.0	27.13	359.57	11,180.5	-231.5	153.7	-227.6	12.00	12.00	0.00
11,225.0	30.13	359.57	11,202.5	-219.5	153.6	-215.7	12.00	12.00	0.00
11,250.0	33.13	359.57	11,223.7	-206.4	153.5	-202.6	12.00	12.00	0.00
11,268.5	35.34	359.57	11,239.0	-196.0	153.5	-192.2	12.00	12.00	0.00
TBSG_sand									
11,275.0	36.13	359.57	11,244.3	-192.2	153.4	-188.4	12.00	12.00	0.00
11,300.0	39.13	359.57	11,264.1	-177.0	153.3	-173.1	12.00	12.00	0.00
11,325.0	42.13	359.57	11,283.1	-160.7	153.2	-156.8	12.00	12.00	0.00
11,350.0	45.13	359.57	11,301.2	-143.4	153.1	-139.6	12.00	12.00	0.00
11,375.0	48.13	359.57	11,318.3	-125.3	152.9	-121.4	12.00	12.00	0.00
11,400.0	51.13	359.57	11,334.5	-106.2	152.8	-102.4	12.00	12.00	0.00
11,425.0	54.13	359.57	11,349.7	-86.4	152.6	-82.5	12.00	12.00	0.00
11,450.0	57.13	359.57	11,363.8	-65.7	152.5	-61.9	12.00	12.00	0.00
11,475.0	60.13	359.57	11,376.8	-44.4	152.3	-40.6	12.00	12.00	0.00
11,500.0	63.13	359.57	11,388.7	-22.4	152.2	-18.6	12.00	12.00	0.00
11,525.0	66.13	359.57	11,399.4	0.2	152.0	4.0	12.00	12.00	0.00
11,550.0	69.13	359.57	11,408.9	23.3	151.8	27.1	12.00	12.00	0.00
11,575.0	72.13	359.57	11,417.2	46.9	151.6	50.6	12.00	12.00	0.00
11,600.0	75.13	359.57	11,424.3	70.9	151.5	74.6	12.00	12.00	0.00
11,625.0	78.13	359.57	11,430.1	95.2	151.3	98.9	12.00	12.00	0.00
11,650.0	81.13	359.57	11,434.6	119.8	151.1	123.5	12.00	12.00	0.00
11,675.0	84.13	359.57	11,437.8	144.6	150.9	148.3	12.00	12.00	0.00
11,700.0	87.13	359.57	11,439.7	169.5	150.7	173.2	12.00	12.00	0.00
11,725.0	90.13	359.57	11,440.3	194.5	150.5	198.2	12.00	12.00	0.00
11,740.4	91.97	359.57	11,440.0	209.8	150.4	213.5	12.00	12.00	0.00
EOC - 4502.4 hold at 11740.4 MD									
11,800.0	91.97	359.57	11,437.9	269.4	150.0	273.1	0.00	0.00	0.00
11,900.0	91.97	359.57	11,434.5	369.4	149.2	373.0	0.00	0.00	0.00

Company:	Concho Resources, Inc.	Local Co-ordinate Reference:	Well Goose State Com #601H
Project:	Lea County, NM (NAD 27 NME)	TVD Reference:	KB @ 3814.7usft (Latshaw 44)
Site:	(Goose State) Sec-32_T-20-S_R-34-E	MD Reference:	KB @ 3814.7usft (Latshaw 44)
Well:	Goose State Com #601H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	EDM 5000.15 Single User Db

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)
12,000.0	91.97	359.57	11,431.0	469.3	148.5	472.9	0.00	0.00	0.00
12,100.0	91.97	359.57	11,427.6	569.3	147.7	572.7	0.00	0.00	0.00
12,200.0	91.97	359.57	11,424.2	669.2	147.0	672.6	0.00	0.00	0.00
12,300.0	91.97	359.57	11,420.7	769.1	146.2	772.5	0.00	0.00	0.00
12,400.0	91.97	359.57	11,417.3	869.1	145.5	872.4	0.00	0.00	0.00
12,500.0	91.97	359.57	11,413.8	969.0	144.8	972.3	0.00	0.00	0.00
12,600.0	91.97	359.57	11,410.4	1,068.9	144.0	1,072.2	0.00	0.00	0.00
12,700.0	91.97	359.57	11,406.9	1,168.9	143.3	1,172.1	0.00	0.00	0.00
12,800.0	91.97	359.57	11,403.5	1,268.8	142.5	1,272.0	0.00	0.00	0.00
12,900.0	91.97	359.57	11,400.1	1,368.8	141.8	1,371.9	0.00	0.00	0.00
13,000.0	91.97	359.57	11,396.6	1,468.7	141.0	1,471.7	0.00	0.00	0.00
13,100.0	91.97	359.57	11,393.2	1,568.6	140.3	1,571.6	0.00	0.00	0.00
13,200.0	91.97	359.57	11,389.7	1,668.6	139.5	1,671.5	0.00	0.00	0.00
13,300.0	91.97	359.57	11,386.3	1,768.5	138.8	1,771.4	0.00	0.00	0.00
13,400.0	91.97	359.57	11,382.9	1,868.5	138.0	1,871.3	0.00	0.00	0.00
13,500.0	91.97	359.57	11,379.4	1,968.4	137.3	1,971.2	0.00	0.00	0.00
13,600.0	91.97	359.57	11,376.0	2,068.3	136.5	2,071.1	0.00	0.00	0.00
13,700.0	91.97	359.57	11,372.5	2,168.3	135.8	2,171.0	0.00	0.00	0.00
13,800.0	91.97	359.57	11,369.1	2,268.2	135.0	2,270.9	0.00	0.00	0.00
13,900.0	91.97	359.57	11,365.6	2,368.1	134.3	2,370.7	0.00	0.00	0.00
14,000.0	91.97	359.57	11,362.2	2,468.1	133.6	2,470.6	0.00	0.00	0.00
14,100.0	91.97	359.57	11,358.8	2,568.0	132.8	2,570.5	0.00	0.00	0.00
14,200.0	91.97	359.57	11,355.3	2,668.0	132.1	2,670.4	0.00	0.00	0.00
14,300.0	91.97	359.57	11,351.9	2,767.9	131.3	2,770.3	0.00	0.00	0.00
14,400.0	91.97	359.57	11,348.4	2,867.8	130.6	2,870.2	0.00	0.00	0.00
14,500.0	91.97	359.57	11,345.0	2,967.8	129.8	2,970.1	0.00	0.00	0.00
14,600.0	91.97	359.57	11,341.5	3,067.7	129.1	3,070.0	0.00	0.00	0.00
14,700.0	91.97	359.57	11,338.1	3,167.6	128.3	3,169.9	0.00	0.00	0.00
14,800.0	91.97	359.57	11,334.7	3,267.6	127.6	3,269.7	0.00	0.00	0.00
14,900.0	91.97	359.57	11,331.2	3,367.5	126.8	3,369.6	0.00	0.00	0.00
15,000.0	91.97	359.57	11,327.8	3,467.5	126.1	3,469.5	0.00	0.00	0.00
15,100.0	91.97	359.57	11,324.3	3,567.4	125.3	3,569.4	0.00	0.00	0.00
15,200.0	91.97	359.57	11,320.9	3,667.3	124.6	3,669.3	0.00	0.00	0.00
15,300.0	91.97	359.57	11,317.5	3,767.3	123.8	3,769.2	0.00	0.00	0.00
15,400.0	91.97	359.57	11,314.0	3,867.2	123.1	3,869.1	0.00	0.00	0.00
15,500.0	91.97	359.57	11,310.6	3,967.1	122.3	3,969.0	0.00	0.00	0.00
15,600.0	91.97	359.57	11,307.1	4,067.1	121.6	4,068.9	0.00	0.00	0.00
15,700.0	91.97	359.57	11,303.7	4,167.0	120.9	4,168.7	0.00	0.00	0.00
15,800.0	91.97	359.57	11,300.2	4,267.0	120.1	4,268.6	0.00	0.00	0.00
15,900.0	91.97	359.57	11,296.8	4,366.9	119.4	4,368.5	0.00	0.00	0.00
16,000.0	91.97	359.57	11,293.4	4,466.8	118.6	4,468.4	0.00	0.00	0.00
16,100.0	91.97	359.57	11,289.9	4,566.8	117.9	4,568.3	0.00	0.00	0.00
16,200.0	91.97	359.57	11,286.5	4,666.7	117.1	4,668.2	0.00	0.00	0.00

Company:	Concho Resources, Inc.	Local Co-ordinate Reference:	Well Goose State Com #601H
Project:	Lea County, NM (NAD 27 NME)	TVD Reference:	KB @ 3814.7usft (Latshaw 44)
Site:	(Goose State) Sec-32_T-20-S_R-34-E	MD Reference:	KB @ 3814.7usft (Latshaw 44)
Well:	Goose State Com #601H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	EDM 5000.15 Single User Db

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)
16,242.8	91.97	359.57	11,285.0	4,709.5	116.8	4,710.9	0.00	0.00	0.00
TD at 16242.8									

Design Targets
Target Name

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
LTP (Goose State Coi - plan misses target center by 4.5usft at 16112.8usft MD (11289.5 TVD, 4579.6 N, 117.8 E) - Point	0.00	0.00	11,285.0	4,579.4	117.8	559,471.73	731,901.92	32° 32' 9.042 N	103° 34' 51.060 W
PBHL (Goose State C - plan hits target center - Rectangle (sides W60.0 H4,764.0 D30.0)	-1.97	359.57	11,285.0	4,709.5	116.8	559,601.80	731,900.90	32° 32' 10.329 N	103° 34' 51.061 W
FTP (Goose State Co - plan misses target center by 60.0usft at 11496.6usft MD (11387.2 TVD, -25.4 N, 152.2 E) - Point	0.00	0.01	11,440.0	-53.9	152.4	554,838.38	731,936.50	32° 31' 23.192 N	103° 34' 51.038 W

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,748.0	1,748.0	Rustler			
2,162.1	2,162.0	TOS			
3,486.3	3,483.0	BOS / Tansill			
3,598.6	3,595.0	Yates			
3,759.0	3,755.0	Seven Rivers			
4,051.7	4,047.0	Capitan Reef			
5,601.5	5,593.0	Base of Reef (BLCN)			
6,019.5	6,010.0	CYCN			
6,904.1	6,893.0	BYCN			
8,821.1	8,810.0	Bone Spring (BSGL)			
9,041.1	9,030.0	U Avalon Sh			
9,179.1	9,168.0	L Avalon Sh			
9,594.1	9,583.0	B Avalon Sh			
9,829.1	9,818.0	FBSG_sand			
10,388.1	10,377.0	SBSG_sand			
10,858.1	10,847.0	SBSG_sand_Base			
11,268.5	11,239.0	TBSG_sand			

Company:	Concho Resources, Inc.	Local Co-ordinate Reference:	Well Goose State Com #601H
Project:	Lea County, NM (NAD 27 NME)	TVD Reference:	KB @ 3814.7usft (Latshaw 44)
Site:	(Goose State) Sec-32_T-20-S_R-34-E	MD Reference:	KB @ 3814.7usft (Latshaw 44)
Well:	Goose State Com #601H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	EDM 5000.15 Single User Db

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2000	2000	0	0	NUDGE - Build 2.00
2200	2200	-6	3	HOLD - 4431.0 at 2200.1 MD
6631	6620	-278	151	DROP - -2.00
6831	6820	-284	154	HOLD - 4142.8 at 6831.1 MD
10,974	10,963	-284	154	KOP - DLS 12.00 TFO 359.57
11,740	11,440	210	150	EOC - 4502.4 hold at 11740.4 MD
16,243	11,285	4710	117	TD at 16242.8

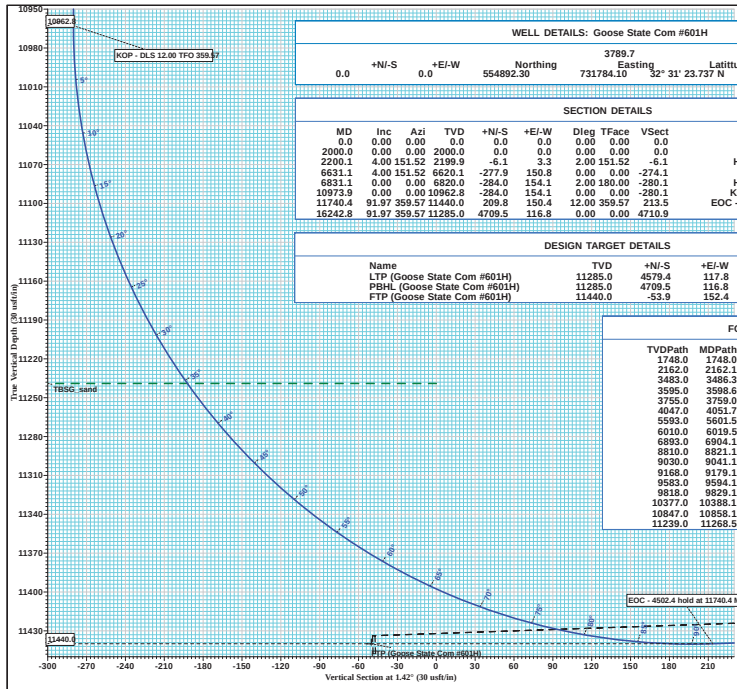
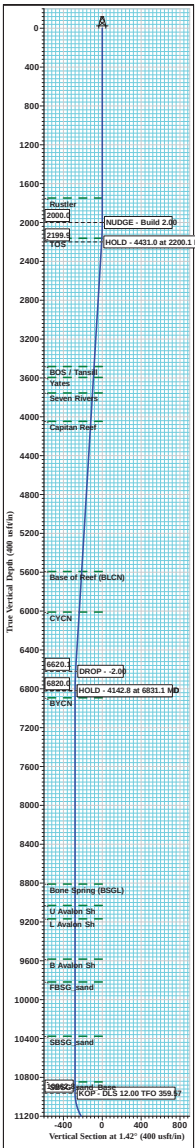
Checked By: _____	Approved By: _____	Date: _____
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Azimuths to Grid North
True North: -0.40°
Magnetic North: 6.35°
Magnetic Field
Strength: 47895.0nT
Dip Angle: 60.31°
Date: 07/24/2019
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.35°

Concho Resources, Inc.
Project: Lea County, NM (NAD 27 NME)
Site: (Goose State) Sec-32 T-20 S R-34-E
Well: Goose State Com #601H
Wellbore: OWB
Design: Plan #1
Lat: 32° 31' 23.737 N
Long: 103° 34' 52.814 W
Pad GL: 3789.7
KB: KB @ 3814.7usft (Latshaw 44)



WELL DETAILS: Goose State Com #601H									
		3789.7		Easting		Latitude		Longitude	
0.0	+N/-S	0.0	+E/-W	Northing	731784.10	32° 31' 23.737 N	103° 34' 52.814 W		
SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2000.0	0.00	0.00	2000.0	0.0	0.0	0.00	0.00	0.0	NUJGE - Build 2.00
2200.1	4.00	151.52	2199.9	-6.1	3.3	2.00	151.52	-6.1	HOLD - 4431.0 at 2200.1 MD
6831.1	4.00	151.52	6820.1	-277.9	150.8	0.00	0.00	-274.1	DROP - 2.00
6831.1	0.00	0.00	6820.0	-284.0	154.1	2.00	180.00	-280.1	HOLD - 4142.8 at 6831.1 MD
10973.9	0.00	0.00	10962.8	-284.0	154.1	0.00	0.00	-280.1	KOP - DLS 12.00 TFO 359.57
11740.4	91.97	359.57	11440.0	209.8	150.4	12.00	359.57	213.5	EOC - 4502.4 hold at 11740.4 MD
16242.8	91.97	359.57	11285.0	4709.5	116.8	0.00	0.00	4710.9	TD at 16242.8
DESIGN TARGET DETAILS									
Name	TVD	+N/-S	+E/-W	Northing	Easting				
LTP (Goose State Com #601H)	11285.0	4579.4	117.8	558471.73	731901.93				
PBHL (Goose State Com #601H)	11285.0	4709.5	116.8	558601.30	731900.90				
FTP (Goose State Com #601H)	11440.0	-53.9	152.4	554838.38	731936.50				

