



NM OIL CONSERVATION
ARTESIA DISTRICT

DEC 12 2018

RECEIVED

Concho Resources, Inc.

Eddy County (NAD27 NME)
(SRO 4 State Com) Sec-4_T-26-S_R-28-E
SRO 4 State Com #503H

OWB

30-015-45549

Plan: Plan #1

Standard Planning Report

11 December, 2018



Database: EDM 5000.15 Single User Db
Company: Concho Resources, Inc.
Project: Eddy County (NAD27 NME)
Site: (SRO 4 State Com) Sec-4_T-26-S_R-28-E
Well: SRO 4 State Com #503H
Wellbore: OWB
Design: Plan #1

Local Co-ordinate Reference: Well SRO 4 State Com #503H
TVD Reference: KB @ 3021.2usft (Precision 106)
MD Reference: KB @ 3021.2usft (Precision 106)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Project	Eddy County (NAD27 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	(SRO 4 State Com) Sec-4_T-26-S_R-28-E				
Site Position:		Northing:	392,249.80 usft	Latitude:	32° 4' 41.481 N
From:	Map	Easting:	573,329.70 usft	Longitude:	104° 5' 47.692 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.13 °

Well	SRO 4 State Com #503H					
Well Position	+N/-S	0.0 usft	Northing:	392,249.80 usft	Latitude:	32° 4' 41.481 N
	+E/-W	0.0 usft	Easting:	573,329.70 usft	Longitude:	104° 5' 47.692 W
Position Uncertainty	0.0 usft		Wellhead Elevation:		Ground Level:	2,990.2 usft

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	12/10/18	7.03	59.83	47,646.75623263

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)	Direction (°)	
	0.0	0.0	0.0	184.92	

Plan Survey Tool Program		Date 12/11/18			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	7,484.0 Plan #1 (OWB)	MWD		
			OWSG MWD - Standard		
2	7,484.0	18,252.3 Plan #1 (OWB)	MWD+IFR1+MS		
			MWD + IFR1 + Multi-Station		



Intrepid
Planning Report



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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
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,754.2	5.08	279.89	2,753.9	1.9	-11.1	2.00	2.00	-31.52	279.89	
7,484.0	5.08	279.89	7,465.1	73.9	-424.0	0.00	0.00	0.00	0.00	
8,375.7	90.06	200.00	8,027.0	-448.2	-666.4	10.00	9.53	-8.96	-79.92	
9,360.2	90.06	180.31	8,026.0	-1,412.4	-839.2	2.00	0.00	-2.00	-90.00	
18,252.3	90.06	180.31	8,017.0	-10,304.4	-887.4	0.00	0.00	0.00	0.00	PBHL (SRO 4 State

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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)	Bulld 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	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
NUDGE - DLS 2.00 TFO 279.89									
2,600.0	2.00	279.89	2,600.0	0.3	-1.7	-0.2	2.00	2.00	0.00
2,700.0	4.00	279.89	2,699.8	1.2	-6.9	-0.6	2.00	2.00	0.00
2,754.2	5.08	279.89	2,753.9	1.9	-11.1	-1.0	2.00	2.00	0.00
HOLD - 4729.9 at 2754.2 MD									
2,800.0	5.08	279.89	2,799.5	2.6	-15.1	-1.3	0.00	0.00	0.00
2,900.0	5.08	279.89	2,899.1	4.2	-23.8	-2.1	0.00	0.00	0.00
3,000.0	5.08	279.89	2,998.7	5.7	-32.6	-2.9	0.00	0.00	0.00
3,100.0	5.08	279.89	3,098.3	7.2	-41.3	-3.6	0.00	0.00	0.00
3,200.0	5.08	279.89	3,197.9	8.7	-50.0	-4.4	0.00	0.00	0.00
3,300.0	5.08	279.89	3,297.5	10.2	-58.7	-5.2	0.00	0.00	0.00
3,400.0	5.08	279.89	3,397.1	11.8	-67.5	-5.9	0.00	0.00	0.00
3,500.0	5.08	279.89	3,496.7	13.3	-76.2	-6.7	0.00	0.00	0.00
3,600.0	5.08	279.89	3,596.3	14.8	-84.9	-7.5	0.00	0.00	0.00
3,700.0	5.08	279.89	3,695.9	16.3	-93.7	-8.2	0.00	0.00	0.00
3,800.0	5.08	279.89	3,795.6	17.8	-102.4	-9.0	0.00	0.00	0.00
3,900.0	5.08	279.89	3,895.2	19.4	-111.1	-9.8	0.00	0.00	0.00
4,000.0	5.08	279.89	3,994.8	20.9	-119.9	-10.5	0.00	0.00	0.00
4,100.0	5.08	279.89	4,094.4	22.4	-128.6	-11.3	0.00	0.00	0.00
4,200.0	5.08	279.89	4,194.0	23.9	-137.3	-12.1	0.00	0.00	0.00
4,300.0	5.08	279.89	4,293.6	25.5	-146.0	-12.8	0.00	0.00	0.00
4,400.0	5.08	279.89	4,393.2	27.0	-154.8	-13.6	0.00	0.00	0.00
4,500.0	5.08	279.89	4,492.8	28.5	-163.5	-14.4	0.00	0.00	0.00
4,600.0	5.08	279.89	4,592.4	30.0	-172.2	-15.1	0.00	0.00	0.00
4,700.0	5.08	279.89	4,692.0	31.5	-181.0	-15.9	0.00	0.00	0.00
4,800.0	5.08	279.89	4,791.6	33.1	-189.7	-16.7	0.00	0.00	0.00
4,900.0	5.08	279.89	4,891.2	34.6	-198.4	-17.4	0.00	0.00	0.00
5,000.0	5.08	279.89	4,990.8	36.1	-207.2	-18.2	0.00	0.00	0.00

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5,100.0	5.08	279.89	5,090.4	37.6	-215.9	-19.0	0.00	0.00	0.00
5,200.0	5.08	279.89	5,190.0	39.1	-224.6	-19.7	0.00	0.00	0.00
5,300.0	5.08	279.89	5,289.7	40.7	-233.3	-20.5	0.00	0.00	0.00
5,400.0	5.08	279.89	5,389.3	42.2	-242.1	-21.3	0.00	0.00	0.00
5,500.0	5.08	279.89	5,488.9	43.7	-250.8	-22.0	0.00	0.00	0.00
5,600.0	5.08	279.89	5,588.5	45.2	-259.5	-22.8	0.00	0.00	0.00
5,700.0	5.08	279.89	5,688.1	46.8	-268.3	-23.6	0.00	0.00	0.00
5,800.0	5.08	279.89	5,787.7	48.3	-277.0	-24.3	0.00	0.00	0.00
5,900.0	5.08	279.89	5,887.3	49.8	-285.7	-25.1	0.00	0.00	0.00
6,000.0	5.08	279.89	5,986.9	51.3	-294.4	-25.9	0.00	0.00	0.00
6,100.0	5.08	279.89	6,086.5	52.8	-303.2	-26.6	0.00	0.00	0.00
6,200.0	5.08	279.89	6,186.1	54.4	-311.9	-27.4	0.00	0.00	0.00
6,300.0	5.08	279.89	6,285.7	55.9	-320.6	-28.2	0.00	0.00	0.00
6,400.0	5.08	279.89	6,385.3	57.4	-329.4	-28.9	0.00	0.00	0.00
6,500.0	5.08	279.89	6,484.9	58.9	-338.1	-29.7	0.00	0.00	0.00
6,600.0	5.08	279.89	6,584.5	60.4	-346.8	-30.5	0.00	0.00	0.00
6,700.0	5.08	279.89	6,684.1	62.0	-355.6	-31.2	0.00	0.00	0.00
6,800.0	5.08	279.89	6,783.8	63.5	-364.3	-32.0	0.00	0.00	0.00
6,900.0	5.08	279.89	6,883.4	65.0	-373.0	-32.8	0.00	0.00	0.00
7,000.0	5.08	279.89	6,983.0	66.5	-381.7	-33.5	0.00	0.00	0.00
7,100.0	5.08	279.89	7,082.6	68.1	-390.5	-34.3	0.00	0.00	0.00
7,200.0	5.08	279.89	7,182.2	69.6	-399.2	-35.1	0.00	0.00	0.00
7,300.0	5.08	279.89	7,281.8	71.1	-407.9	-35.8	0.00	0.00	0.00
7,400.0	5.08	279.89	7,381.4	72.6	-416.7	-36.6	0.00	0.00	0.00
7,484.0	5.08	279.89	7,465.1	73.9	-424.0	-37.2	0.00	0.00	0.00
KOP - DLS 10.00 TFO -79.92									
7,500.0	5.59	263.53	7,481.0	73.9	-425.5	-37.2	10.00	3.16	-102.48
7,550.0	9.00	233.58	7,530.6	71.3	-431.0	-34.1	10.00	6.82	-59.90
7,600.0	13.44	221.51	7,579.6	64.7	-438.0	-26.8	10.00	8.88	-24.15
7,650.0	18.17	215.48	7,627.7	54.0	-446.4	-15.5	10.00	9.46	-12.05
7,700.0	23.01	211.91	7,674.5	39.3	-456.1	0.0	10.00	9.68	-7.15
7,750.0	27.91	209.52	7,719.7	20.8	-467.1	19.3	10.00	9.79	-4.76
7,800.0	32.83	207.81	7,762.8	-1.4	-479.1	42.5	10.00	9.85	-3.43
7,850.0	37.77	206.49	7,803.6	-27.1	-492.3	69.2	10.00	9.88	-2.62
7,900.0	42.73	205.45	7,841.7	-56.1	-506.4	99.4	10.00	9.91	-2.10
7,950.0	47.69	204.58	7,877.0	-88.3	-521.4	132.7	10.00	9.92	-1.74
8,000.0	52.66	203.84	7,909.0	-123.3	-537.2	168.9	10.00	9.94	-1.48
8,050.0	57.63	203.19	7,937.5	-160.9	-553.5	207.8	10.00	9.94	-1.30
8,100.0	62.60	202.61	7,962.4	-200.8	-570.4	249.0	10.00	9.95	-1.16
8,150.0	67.58	202.08	7,983.5	-242.8	-587.6	292.3	10.00	9.95	-1.06
8,200.0	72.56	201.58	8,000.5	-286.4	-605.1	337.2	10.00	9.96	-0.99
8,250.0	77.54	201.11	8,013.4	-331.4	-622.6	383.6	10.00	9.96	-0.94
8,300.0	82.52	200.66	8,022.1	-377.3	-640.2	430.9	10.00	9.96	-0.90
8,350.0	87.50	200.22	8,026.4	-424.0	-657.6	478.9	10.00	9.96	-0.88
8,375.7	90.06	200.00	8,027.0	-448.2	-666.4	503.7	10.00	9.96	-0.87
EOC/TRN - DLS 2.00 TFO -90.00									
8,400.0	90.06	199.51	8,027.0	-471.0	-674.6	527.1	2.00	0.00	-2.00
8,500.0	90.06	197.51	8,026.9	-565.8	-706.4	624.3	2.00	0.00	-2.00
8,600.0	90.06	195.51	8,026.8	-661.7	-734.8	722.3	2.00	0.00	-2.00
8,700.0	90.06	193.51	8,026.6	-758.5	-759.9	820.9	2.00	0.00	-2.00
8,800.0	90.06	191.51	8,026.5	-856.1	-781.5	920.0	2.00	0.00	-2.00
8,900.0	90.06	189.51	8,026.4	-954.4	-799.8	1,019.5	2.00	0.00	-2.00
9,000.0	90.06	187.51	8,026.3	-1,053.3	-814.6	1,119.3	2.00	0.00	-2.00
9,100.0	90.06	185.51	8,026.2	-1,152.7	-825.9	1,219.3	2.00	0.00	-2.00

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9,200.0	90.06	183.51	8,026.1	-1,252.4	-833.8	1,319.3	2.00	0.00	-2.00
9,300.0	90.06	181.51	8,026.0	-1,352.3	-838.2	1,419.2	2.00	0.00	-2.00
9,360.2	90.06	180.31	8,026.0	-1,412.4	-839.2	1,479.2	2.00	0.00	-2.00
Start 8892.1 hold at 9360.2 MD									
9,400.0	90.06	180.31	8,025.9	-1,452.2	-839.4	1,518.9	0.00	0.00	0.00
9,500.0	90.06	180.31	8,025.8	-1,552.2	-839.9	1,618.6	0.00	0.00	0.00
9,600.0	90.06	180.31	8,025.7	-1,652.2	-840.5	1,718.3	0.00	0.00	0.00
9,700.0	90.06	180.31	8,025.6	-1,752.2	-841.0	1,817.9	0.00	0.00	0.00
9,800.0	90.06	180.31	8,025.5	-1,852.2	-841.5	1,917.6	0.00	0.00	0.00
9,900.0	90.06	180.31	8,025.4	-1,952.2	-842.1	2,017.3	0.00	0.00	0.00
10,000.0	90.06	180.31	8,025.3	-2,052.2	-842.6	2,117.0	0.00	0.00	0.00
10,100.0	90.06	180.31	8,025.2	-2,152.2	-843.2	2,216.6	0.00	0.00	0.00
10,200.0	90.06	180.31	8,025.1	-2,252.2	-843.7	2,316.3	0.00	0.00	0.00
10,300.0	90.06	180.31	8,025.0	-2,352.2	-844.3	2,416.0	0.00	0.00	0.00
10,400.0	90.06	180.31	8,024.9	-2,452.2	-844.8	2,515.7	0.00	0.00	0.00
10,500.0	90.06	180.31	8,024.8	-2,552.2	-845.3	2,615.3	0.00	0.00	0.00
10,600.0	90.06	180.31	8,024.7	-2,652.2	-845.9	2,715.0	0.00	0.00	0.00
10,700.0	90.06	180.31	8,024.6	-2,752.2	-846.4	2,814.7	0.00	0.00	0.00
10,800.0	90.06	180.31	8,024.5	-2,852.2	-847.0	2,914.4	0.00	0.00	0.00
10,900.0	90.06	180.31	8,024.4	-2,952.2	-847.5	3,014.1	0.00	0.00	0.00
11,000.0	90.06	180.31	8,024.3	-3,052.2	-848.1	3,113.7	0.00	0.00	0.00
11,100.0	90.06	180.31	8,024.2	-3,152.2	-848.6	3,213.4	0.00	0.00	0.00
11,200.0	90.06	180.31	8,024.1	-3,252.2	-849.1	3,313.1	0.00	0.00	0.00
11,300.0	90.06	180.31	8,024.0	-3,352.2	-849.7	3,412.8	0.00	0.00	0.00
11,400.0	90.06	180.31	8,023.9	-3,452.2	-850.2	3,512.4	0.00	0.00	0.00
11,500.0	90.06	180.31	8,023.8	-3,552.2	-850.8	3,612.1	0.00	0.00	0.00
11,600.0	90.06	180.31	8,023.7	-3,652.2	-851.3	3,711.8	0.00	0.00	0.00
11,700.0	90.06	180.31	8,023.6	-3,752.2	-851.9	3,811.5	0.00	0.00	0.00
11,800.0	90.06	180.31	8,023.5	-3,852.2	-852.4	3,911.1	0.00	0.00	0.00
11,900.0	90.06	180.31	8,023.4	-3,952.2	-852.9	4,010.8	0.00	0.00	0.00
12,000.0	90.06	180.31	8,023.3	-4,052.2	-853.5	4,110.5	0.00	0.00	0.00
12,100.0	90.06	180.31	8,023.2	-4,152.2	-854.0	4,210.2	0.00	0.00	0.00
12,200.0	90.06	180.31	8,023.1	-4,252.2	-854.6	4,309.8	0.00	0.00	0.00
12,300.0	90.06	180.31	8,023.0	-4,352.2	-855.1	4,409.5	0.00	0.00	0.00
12,400.0	90.06	180.31	8,022.9	-4,452.2	-855.7	4,509.2	0.00	0.00	0.00
12,500.0	90.06	180.31	8,022.8	-4,552.2	-856.2	4,608.9	0.00	0.00	0.00
12,600.0	90.06	180.31	8,022.7	-4,652.2	-856.7	4,708.5	0.00	0.00	0.00
12,700.0	90.06	180.31	8,022.6	-4,752.2	-857.3	4,808.2	0.00	0.00	0.00
12,800.0	90.06	180.31	8,022.5	-4,852.2	-857.8	4,907.9	0.00	0.00	0.00
12,900.0	90.06	180.31	8,022.4	-4,952.2	-858.4	5,007.6	0.00	0.00	0.00
13,000.0	90.06	180.31	8,022.3	-5,052.2	-858.9	5,107.3	0.00	0.00	0.00
13,100.0	90.06	180.31	8,022.2	-5,152.2	-859.4	5,206.9	0.00	0.00	0.00
13,200.0	90.06	180.31	8,022.1	-5,252.2	-860.0	5,306.6	0.00	0.00	0.00
13,300.0	90.06	180.31	8,022.0	-5,352.2	-860.5	5,406.3	0.00	0.00	0.00
13,400.0	90.06	180.31	8,021.9	-5,452.2	-861.1	5,506.0	0.00	0.00	0.00
13,500.0	90.06	180.31	8,021.8	-5,552.2	-861.6	5,605.6	0.00	0.00	0.00
13,600.0	90.06	180.31	8,021.7	-5,652.2	-862.2	5,705.3	0.00	0.00	0.00
13,700.0	90.06	180.31	8,021.6	-5,752.2	-862.7	5,805.0	0.00	0.00	0.00
13,800.0	90.06	180.31	8,021.5	-5,852.2	-863.2	5,904.7	0.00	0.00	0.00
13,900.0	90.06	180.31	8,021.4	-5,952.2	-863.8	6,004.3	0.00	0.00	0.00
14,000.0	90.06	180.31	8,021.3	-6,052.2	-864.3	6,104.0	0.00	0.00	0.00
14,100.0	90.06	180.31	8,021.2	-6,152.2	-864.9	6,203.7	0.00	0.00	0.00
14,200.0	90.06	180.31	8,021.1	-6,252.2	-865.4	6,303.4	0.00	0.00	0.00



Intrepid
Planning Report



Database: EDM 5000.15 Single User Db
Company: Concho Resources, Inc.
Project: Eddy County (NAD27 NME)
Site: (SRO 4 State Com) Sec-4_T-26-S_R-28-E
Well: SRO 4 State Com #503H
Wellbore: OWB
Design: Plan #1

Local Co-ordinate Reference: Well SRO 4 State Com #503H
TVD Reference: KB @ 3021.2usft (Precision 106)
MD Reference: KB @ 3021.2usft (Precision 106)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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)
14,300.0	90.06	180.31	8,021.0	-6,352.2	-866.0	6,403.0	0.00	0.00	0.00
14,400.0	90.06	180.31	8,020.9	-6,452.2	-866.5	6,502.7	0.00	0.00	0.00
14,500.0	90.06	180.31	8,020.8	-6,552.2	-867.0	6,602.4	0.00	0.00	0.00
14,600.0	90.06	180.31	8,020.7	-6,652.2	-867.6	6,702.1	0.00	0.00	0.00
14,700.0	90.06	180.31	8,020.6	-6,752.2	-868.1	6,801.8	0.00	0.00	0.00
14,800.0	90.06	180.31	8,020.5	-6,852.2	-868.7	6,901.4	0.00	0.00	0.00
14,900.0	90.06	180.31	8,020.4	-6,952.2	-869.2	7,001.1	0.00	0.00	0.00
15,000.0	90.06	180.31	8,020.3	-7,052.2	-869.8	7,100.8	0.00	0.00	0.00
15,100.0	90.06	180.31	8,020.2	-7,152.2	-870.3	7,200.5	0.00	0.00	0.00
15,200.0	90.06	180.31	8,020.1	-7,252.2	-870.8	7,300.1	0.00	0.00	0.00
15,300.0	90.06	180.31	8,020.0	-7,352.2	-871.4	7,399.8	0.00	0.00	0.00
15,400.0	90.06	180.31	8,019.9	-7,452.2	-871.9	7,499.5	0.00	0.00	0.00
15,500.0	90.06	180.31	8,019.8	-7,552.2	-872.5	7,599.2	0.00	0.00	0.00
15,600.0	90.06	180.31	8,019.7	-7,652.2	-873.0	7,698.8	0.00	0.00	0.00
15,700.0	90.06	180.31	8,019.6	-7,752.1	-873.6	7,798.5	0.00	0.00	0.00
15,800.0	90.06	180.31	8,019.5	-7,852.1	-874.1	7,898.2	0.00	0.00	0.00
15,900.0	90.06	180.31	8,019.4	-7,952.1	-874.6	7,997.9	0.00	0.00	0.00
16,000.0	90.06	180.31	8,019.3	-8,052.1	-875.2	8,097.5	0.00	0.00	0.00
16,100.0	90.06	180.31	8,019.2	-8,152.1	-875.7	8,197.2	0.00	0.00	0.00
16,200.0	90.06	180.31	8,019.1	-8,252.1	-876.3	8,296.9	0.00	0.00	0.00
16,300.0	90.06	180.31	8,019.0	-8,352.1	-876.8	8,396.6	0.00	0.00	0.00
16,400.0	90.06	180.31	8,018.9	-8,452.1	-877.4	8,496.2	0.00	0.00	0.00
16,500.0	90.06	180.31	8,018.8	-8,552.1	-877.9	8,595.9	0.00	0.00	0.00
16,600.0	90.06	180.31	8,018.7	-8,652.1	-878.4	8,695.6	0.00	0.00	0.00
16,700.0	90.06	180.31	8,018.6	-8,752.1	-879.0	8,795.3	0.00	0.00	0.00
16,800.0	90.06	180.31	8,018.5	-8,852.1	-879.5	8,895.0	0.00	0.00	0.00
16,900.0	90.06	180.31	8,018.4	-8,952.1	-880.1	8,994.6	0.00	0.00	0.00
17,000.0	90.06	180.31	8,018.3	-9,052.1	-880.6	9,094.3	0.00	0.00	0.00
17,100.0	90.06	180.31	8,018.2	-9,152.1	-881.1	9,194.0	0.00	0.00	0.00
17,200.0	90.06	180.31	8,018.1	-9,252.1	-881.7	9,293.7	0.00	0.00	0.00
17,300.0	90.06	180.31	8,018.0	-9,352.1	-882.2	9,393.3	0.00	0.00	0.00
17,400.0	90.06	180.31	8,017.9	-9,452.1	-882.8	9,493.0	0.00	0.00	0.00
17,500.0	90.06	180.31	8,017.8	-9,552.1	-883.3	9,592.7	0.00	0.00	0.00
17,600.0	90.06	180.31	8,017.7	-9,652.1	-883.9	9,692.4	0.00	0.00	0.00
17,700.0	90.06	180.31	8,017.6	-9,752.1	-884.4	9,792.0	0.00	0.00	0.00
17,800.0	90.06	180.31	8,017.5	-9,852.1	-884.9	9,891.7	0.00	0.00	0.00
17,900.0	90.06	180.31	8,017.4	-9,952.1	-885.5	9,991.4	0.00	0.00	0.00
18,000.0	90.06	180.31	8,017.3	-10,052.1	-886.0	10,091.1	0.00	0.00	0.00
18,100.0	90.06	180.31	8,017.2	-10,152.1	-886.6	10,190.7	0.00	0.00	0.00
18,200.0	90.06	180.31	8,017.1	-10,252.1	-887.1	10,290.4	0.00	0.00	0.00
18,252.3	90.06	180.31	8,017.0	-10,304.4	-887.4	10,342.5	0.00	0.00	0.00

TD at 18252.3

Database: EDM 5000.15 Single User Db
Company: Concho Resources, Inc.
Project: Eddy County (NAD27 NME)
Site: (SRO 4 State Com) Sec-4_T-26-S_R-28-E
Well: SRO 4 State Com #503H
Wellbore: OWB
Design: Plan #1

Local Co-ordinate Reference: Well SRO 4 State Com #503H
TVD Reference: KB @ 3021.2usft (Precision 106)
MD Reference: KB @ 3021.2usft (Precision 106)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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 (SRO 4 State Co - plan misses target center by 2.3usft at 18200.0usft MD (8017.1 TVD, -10252.1 N, -887.1 E) - Point	0.00	0.00	8,017.0	-10,254.4	-887.1	381,995.40	572,442.60	32° 3' 0.017 N	104° 5' 58.261 W
PBHL (SRO 4 State C - plan hits target center - Rectangle (sides W60.0 H10,427.0 D20.0)	-0.06	180.31	8,017.0	-10,304.4	-887.4	381,945.40	572,442.30	32° 2' 59.522 N	104° 5' 58.265 W
FTP (SRO 4 State Co - plan misses target center by 400.9usft at 7996.3usft MD (7906.7 TVD, -120.6 N, -536.0 E) - Point	0.00	0.00	8,027.0	122.2	-831.5	392,372.00	572,498.20	32° 4' 42.708 N	104° 5' 57.353 W

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
644.0	644.0	Rustler			
815.0	815.0	TOS			
2,222.0	2,222.0	BOS (Fletcher)			
2,414.0	2,414.0	LMAR (Top Delaware)			
2,453.0	2,453.0	BLCN			
3,327.6	3,325.0	CYCN			
4,536.3	4,529.0	BYCN			
6,106.5	6,093.0	Bone Sprg (BSGL)			
6,439.8	6,425.0	U Avalon Sh			
6,655.7	6,640.0	L Avalon Sh			
6,836.4	6,820.0	B Avalon Sh			
7,041.2	7,024.0	FBSG_sand			
7,724.6	7,697.0	SBSG_sand			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2,500.0	2,500.0	0.0	0.0	NUDGE - DLS 2.00 TFO 279.89
2,754.2	2,753.9	1.9	-11.1	HOLD - 4729.9 at 2754.2 MD
7,484.0	7,465.1	73.9	-424.0	KOP - DLS 10.00 TFO -79.92
8,375.7	8,027.0	-448.2	-666.4	EOC/TRN - DLS 2.00 TFO -90.00
9,360.2	8,026.0	-1,412.4	-839.2	Start 8892.1 hold at 9360.2 MD
18,252.3	8,017.0	-10,304.4	-887.4	TD at 18252.3



Concho Resources, Inc.
Project: Eddy County (NAD27 NME)
Site: (SRO 4 State Com) Sec-4, T-28-S, R-28-E
Well: SRO 4 State Com #503H
Wellbore: OWB
Design: Plan #1
Lat: 32° 4' 41.481 N
Long: 104° 5' 47.682 W
Pad CL: 2090.2
KB: KB @ 3021.2ust (Precision 106)



WELL DETAILS: SRO 4 State Com #503H									
		2990.2		Easting		Latitude		Longitude	
0.0	+N-S	0.0	+E-W	382249.80	873329.70	32° 4' 41.481 N	104° 5' 47.682 W		
SECTION DETAILS									
MD	Inc	Azi	TVD	+N-S	+E-W	Diag T/Face	Vsect	Annotation	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.0		
2500.0	0.00	0.00	2500.0	0.0	0.0	0.00	0.0	HUDGE - DLS 2.00 TPO 279.88	
2794.2	8.08	279.89	2793.9	1.9	-11.1	2.00	279.89	HOLD - 4729.9 at 2794.2 MD	
7484.0	0.08	279.89	7488.1	73.9	-224.0	0.00	0.00	KOP - DLS 10.00 TPO -79.82	
8378.7	90.08	200.00	8277.0	-448.2	-688.4	10.00	-79.82	EOCTRIN - DLS 2.00 TPO -80.00	
9360.2	90.08	190.31	8028.0	-1412.4	-839.2	2.00	-80.00	Start BE92.1 hold at 9360.2 MD	
18292.3	90.08	190.31	8017.0	-10304.4	-587.4	0.00	0.00	TD at 18292.3	
DESIGN TARGET DETAILS									
Name	TVD	+N-S	+E-W	North	East				
LTP (SRO 4 State Com #503H)	8017.0	-10284.4	-837.1	381998.40	873442.80				
PRHA (SRO 4 State Com #603H)	8017.0	-10284.4	-837.1	381948.40	873442.80				
FTP (SRO 4 State Com #603H)	8277.0	122.2	-821.8	382372.00	872488.20				

FORMATIONS

TVDPath	MDPath	Formation
844.0	844.0	Rustler
816.0	816.0	TOS
2222.0	2222.0	BOB (Fletcher)
2416.0	2416.0	LMAR (Top Detachment)
2483.0	2483.0	BLCH
3325.0	3327.8	BYCN
4829.0	4836.3	BYCN
6292.0	6108.8	Bone Sprg (BSQL)
6426.0	6439.9	U. Avonion Sh.
6840.0	6856.7	L. Avonion Sh.
6820.0	6836.9	S. Avonion Sh.
7024.0	7041.2	PBSQ_sand
7697.0	7724.8	PBSQ_sand

