



Concho Operating

Lea County, NM (Nad 27)

White Falcon 16 State

White Falcon 16 State #23H

#23H

Design: #23H

Survey Report - Geographic

09 February, 2018

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Survey Report - Geographic

Company:	Concho Operating	Local Co-ordinate Reference:	Well White Falcon 16 State #23H
Project:	Lea County, NM (Nad 27)	TVD Reference:	3257' GL - 29' RKB @ 3286.00ft (Noram #23)
Site:	White Falcon 16 State	MD Reference:	3257' GL - 29' RKB @ 3286.00ft (Noram #23)
Well:	White Falcon 16 State #23H	North Reference:	Grid
Wellbore:	#23H	Survey Calculation Method:	Minimum Curvature
Design:	#23H	Database:	EDM 5000.14 Single User Db

Project	Lea County, NM (Nad 27)		
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	White Falcon 16 State			
Site Position:		Northing:	414,833.50 usft	Latitude: 32.137°N
From: Map		Easting:	795,654.00 usft	Longitude: 103.378°W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence: 0.51 °

Well	White Falcon 16 State #23H			
Well Position	+N/-S	0.00 ft	Northing:	414,834.20 usft
	+E/-W	0.00 ft	Easting:	795,733.90 usft
Position Uncertainty	0.00 ft	Wellhead Elevation:	ft	Ground Level: 3,257.00 ft

Wellbore	#23H				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	9/15/2017	6.83	60.01	47,882.50030577

Design	#23H			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	179.48

Survey Program	Date 2/9/2018			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
100.00	11,627.00	Keeper Gyro (#23H)	Keeper	Keeper Standard Rate Gyro
11,735.00	22,410.00	DrilTech MWD - Curve & Lateral (#23H)	MWD	MWD - Standard

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	414,834.20	795,733.90	32.137°N	103.378°W
100.00	0.07	168.03	100.00	-0.06	0.01	414,834.14	795,733.91	32.137°N	103.378°W
100' MD: Begin Scientific Keeper Gyro Survey									
125.00	0.10	175.30	125.00	-0.10	0.02	414,834.10	795,733.92	32.137°N	103.378°W
150.00	0.16	128.30	150.00	-0.14	0.05	414,834.06	795,733.94	32.137°N	103.378°W
175.00	0.27	95.81	175.00	-0.17	0.13	414,834.03	795,734.03	32.137°N	103.378°W
200.00	0.38	97.50	200.00	-0.18	0.27	414,834.02	795,734.17	32.137°N	103.378°W
225.00	0.55	89.47	225.00	-0.19	0.48	414,834.01	795,734.37	32.137°N	103.378°W
250.00	0.65	89.28	250.00	-0.19	0.74	414,834.01	795,734.64	32.137°N	103.378°W
275.00	0.90	90.64	274.99	-0.19	1.08	414,834.01	795,734.97	32.137°N	103.378°W
300.00	1.16	89.76	299.99	-0.19	1.53	414,834.01	795,735.42	32.137°N	103.378°W



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Site:	White Falcon 16 State	MD Reference:	3257' GL - 29' RKB @ 3286.00ft (Noram #23)
Well:	White Falcon 16 State #23H	North Reference:	Grid
Wellbore:	#23H	Survey Calculation Method:	Minimum Curvature
Design:	#23H	Database:	EDM 5000.14 Single User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
325.00	1.31	90.94	324.98	-0.20	2.06	414,834.00	795,735.96	32.137°N	103.378°W
350.00	1.43	86.24	349.98	-0.18	2.66	414,834.02	795,736.56	32.137°N	103.378°W
375.00	1.73	84.73	374.97	-0.13	3.35	414,834.07	795,737.25	32.137°N	103.378°W
400.00	1.87	77.70	399.96	0.00	4.12	414,834.20	795,738.02	32.137°N	103.378°W
425.00	1.84	79.51	424.94	0.16	4.92	414,834.36	795,738.81	32.137°N	103.378°W
450.00	1.91	75.38	449.93	0.33	5.71	414,834.53	795,739.61	32.137°N	103.378°W
475.00	1.97	74.37	474.92	0.56	6.53	414,834.75	795,740.43	32.137°N	103.378°W
500.00	2.10	70.83	499.90	0.82	7.38	414,835.02	795,741.27	32.137°N	103.378°W
525.00	2.14	66.14	524.88	1.16	8.24	414,835.36	795,742.13	32.137°N	103.378°W
550.00	2.15	61.30	549.86	1.57	9.07	414,835.77	795,742.97	32.137°N	103.378°W
575.00	2.21	57.49	574.85	2.06	9.89	414,836.26	795,743.79	32.137°N	103.378°W
600.00	2.27	57.26	599.83	2.59	10.72	414,836.79	795,744.61	32.137°N	103.378°W
625.00	2.26	55.22	624.81	3.13	11.54	414,837.33	795,745.43	32.137°N	103.378°W
650.00	2.29	54.98	649.79	3.70	12.35	414,837.90	795,746.25	32.137°N	103.378°W
675.00	2.25	54.51	674.77	4.27	13.16	414,838.47	795,747.06	32.137°N	103.378°W
700.00	2.31	55.45	699.75	4.84	13.97	414,839.04	795,747.87	32.137°N	103.378°W
725.00	2.28	55.02	724.73	5.42	14.80	414,839.61	795,748.69	32.137°N	103.378°W
750.00	2.35	55.34	749.71	5.99	15.62	414,840.19	795,749.52	32.137°N	103.378°W
775.00	2.38	52.32	774.69	6.60	16.46	414,840.80	795,750.36	32.137°N	103.378°W
800.00	2.44	53.82	799.67	7.23	17.30	414,841.43	795,751.20	32.137°N	103.378°W
825.00	2.44	55.22	824.64	7.85	18.16	414,842.05	795,752.06	32.137°N	103.378°W
850.00	2.52	56.11	849.62	8.46	19.06	414,842.66	795,752.96	32.137°N	103.378°W
875.00	2.77	56.86	874.59	9.10	20.02	414,843.30	795,753.92	32.137°N	103.378°W
900.00	2.80	57.22	899.56	9.76	21.04	414,843.96	795,754.94	32.137°N	103.378°W
925.00	2.82	58.25	924.53	10.41	22.08	414,844.61	795,755.97	32.137°N	103.378°W
950.00	2.92	55.90	949.50	11.09	23.13	414,845.29	795,757.02	32.137°N	103.378°W
975.00	3.05	55.42	974.47	11.83	24.20	414,846.03	795,758.10	32.137°N	103.378°W
1,000.00	3.08	55.97	999.43	12.58	25.30	414,846.78	795,759.20	32.137°N	103.378°W
1,025.00	3.11	54.84	1,024.40	13.35	26.42	414,847.55	795,760.31	32.137°N	103.378°W
1,050.00	3.17	55.52	1,049.36	14.13	27.54	414,848.33	795,761.44	32.137°N	103.378°W
1,075.00	3.27	55.70	1,074.32	14.92	28.70	414,849.12	795,762.60	32.137°N	103.378°W
1,100.00	3.25	55.70	1,099.28	15.72	29.87	414,849.92	795,763.77	32.137°N	103.378°W
1,125.00	3.27	55.22	1,124.24	16.53	31.04	414,850.73	795,764.94	32.137°N	103.378°W
1,150.00	3.30	55.98	1,149.20	17.34	32.23	414,851.54	795,766.12	32.137°N	103.378°W
1,175.00	3.29	54.37	1,174.15	18.16	33.41	414,852.36	795,767.30	32.137°N	103.378°W
1,200.00	3.27	54.35	1,199.11	18.99	34.57	414,853.19	795,768.47	32.137°N	103.378°W
1,225.00	3.30	55.74	1,224.07	19.81	35.74	414,854.01	795,769.64	32.137°N	103.378°W
1,250.00	3.31	55.37	1,249.03	20.63	36.93	414,854.83	795,770.83	32.137°N	103.378°W
1,275.00	3.32	55.34	1,273.99	21.45	38.12	414,855.65	795,772.02	32.137°N	103.378°W
1,300.00	3.34	56.14	1,298.95	22.27	39.32	414,856.47	795,773.22	32.137°N	103.378°W
1,325.00	3.33	56.65	1,323.91	23.07	40.53	414,857.27	795,774.43	32.137°N	103.378°W
1,350.00	3.28	55.76	1,348.86	23.87	41.73	414,858.07	795,775.63	32.137°N	103.378°W
1,375.00	3.34	54.65	1,373.82	24.70	42.91	414,858.90	795,776.81	32.137°N	103.378°W
1,400.00	2.87	50.58	1,398.78	25.52	43.99	414,859.72	795,777.89	32.137°N	103.378°W
1,425.00	2.43	47.55	1,423.76	26.27	44.87	414,860.47	795,778.76	32.137°N	103.378°W
1,450.00	1.96	42.23	1,448.74	26.95	45.55	414,861.15	795,779.44	32.137°N	103.378°W
1,475.00	1.65	35.76	1,473.73	27.55	46.04	414,861.75	795,779.94	32.137°N	103.378°W
1,500.00	1.04	20.48	1,498.72	28.06	46.33	414,862.26	795,780.23	32.137°N	103.378°W
1,525.00	0.76	358.07	1,523.72	28.44	46.41	414,862.64	795,780.30	32.137°N	103.378°W
1,550.00	0.66	342.85	1,548.72	28.74	46.36	414,862.94	795,780.26	32.137°N	103.378°W
1,575.00	0.75	330.34	1,573.71	29.02	46.23	414,863.22	795,780.13	32.137°N	103.378°W
1,600.00	0.71	327.78	1,598.71	29.29	46.07	414,863.49	795,779.97	32.137°N	103.378°W
1,625.00	0.73	323.97	1,623.71	29.55	45.89	414,863.75	795,779.79	32.137°N	103.378°W
1,650.00	0.74	322.62	1,648.71	29.81	45.70	414,864.01	795,779.60	32.137°N	103.378°W
1,675.00	0.70	318.96	1,673.71	30.05	45.51	414,864.25	795,779.40	32.137°N	103.378°W



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Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
1,700.00	0.78	317.22	1,698.70	30.29	45.29	414,864.49	795,779.19	32.137°N	103.378°W
1,725.00	0.82	326.02	1,723.70	30.57	45.07	414,864.77	795,778.97	32.137°N	103.378°W
1,750.00	0.78	327.77	1,748.70	30.86	44.88	414,865.06	795,778.78	32.137°N	103.378°W
1,775.00	0.81	331.89	1,773.70	31.16	44.71	414,865.36	795,778.61	32.137°N	103.378°W
1,800.00	0.76	325.53	1,798.69	31.45	44.53	414,865.65	795,778.43	32.137°N	103.378°W
1,825.00	0.70	321.35	1,823.69	31.71	44.34	414,865.91	795,778.24	32.137°N	103.378°W
1,850.00	0.70	315.34	1,848.69	31.94	44.14	414,866.13	795,778.04	32.137°N	103.378°W
1,875.00	0.58	292.59	1,873.69	32.09	43.92	414,866.29	795,777.81	32.137°N	103.378°W
1,900.00	0.60	283.83	1,898.69	32.17	43.67	414,866.37	795,777.57	32.137°N	103.378°W
1,925.00	0.65	279.52	1,923.69	32.23	43.40	414,866.43	795,777.30	32.137°N	103.378°W
1,950.00	0.70	264.85	1,948.68	32.24	43.11	414,866.44	795,777.01	32.137°N	103.378°W
1,975.00	0.58	258.26	1,973.68	32.20	42.84	414,866.40	795,776.73	32.137°N	103.378°W
2,000.00	0.58	258.81	1,998.68	32.15	42.59	414,866.35	795,776.49	32.137°N	103.378°W
2,025.00	0.60	257.07	2,023.68	32.09	42.34	414,866.29	795,776.23	32.137°N	103.378°W
2,050.00	0.41	255.52	2,048.68	32.04	42.12	414,866.24	795,776.02	32.137°N	103.378°W
2,075.00	0.11	110.44	2,073.68	32.01	42.06	414,866.21	795,775.96	32.137°N	103.378°W
2,100.00	0.62	96.81	2,098.68	31.99	42.22	414,866.19	795,776.11	32.137°N	103.378°W
2,125.00	0.74	94.27	2,123.68	31.96	42.51	414,866.16	795,776.41	32.137°N	103.378°W
2,150.00	0.87	99.34	2,148.67	31.92	42.86	414,866.12	795,776.76	32.137°N	103.378°W
2,175.00	0.90	99.52	2,173.67	31.85	43.24	414,866.05	795,777.14	32.137°N	103.378°W
2,200.00	0.88	92.93	2,198.67	31.81	43.63	414,866.01	795,777.52	32.137°N	103.378°W
2,225.00	0.87	97.48	2,223.66	31.78	44.01	414,865.98	795,777.90	32.137°N	103.378°W
2,250.00	0.29	74.79	2,248.66	31.77	44.25	414,865.97	795,778.15	32.137°N	103.378°W
2,275.00	0.27	344.17	2,273.66	31.84	44.30	414,866.04	795,778.20	32.137°N	103.378°W
2,300.00	0.57	326.59	2,298.66	32.00	44.22	414,866.20	795,778.11	32.137°N	103.378°W
2,325.00	0.84	321.20	2,323.66	32.25	44.03	414,866.45	795,777.93	32.137°N	103.378°W
2,350.00	0.95	320.32	2,348.66	32.55	43.78	414,866.75	795,777.68	32.137°N	103.378°W
2,375.00	0.88	322.88	2,373.65	32.86	43.54	414,867.06	795,777.43	32.137°N	103.378°W
2,400.00	0.83	321.93	2,398.65	33.16	43.31	414,867.36	795,777.21	32.137°N	103.378°W
2,425.00	0.80	326.02	2,423.65	33.45	43.10	414,867.65	795,777.00	32.137°N	103.378°W
2,450.00	0.80	318.31	2,448.65	33.72	42.89	414,867.92	795,776.78	32.137°N	103.378°W
2,475.00	0.84	319.10	2,473.64	33.99	42.65	414,868.19	795,776.55	32.137°N	103.378°W
2,500.00	0.88	318.24	2,498.64	34.27	42.40	414,868.47	795,776.30	32.137°N	103.378°W
2,525.00	0.84	322.67	2,523.64	34.56	42.16	414,868.76	795,776.06	32.137°N	103.378°W
2,550.00	0.82	325.11	2,548.64	34.85	41.95	414,869.05	795,775.85	32.137°N	103.378°W
2,575.00	0.87	322.34	2,573.63	35.15	41.73	414,869.35	795,775.63	32.137°N	103.378°W
2,600.00	0.85	327.90	2,598.63	35.46	41.52	414,869.66	795,775.41	32.137°N	103.378°W
2,625.00	0.86	329.87	2,623.63	35.78	41.32	414,869.98	795,775.22	32.137°N	103.378°W
2,650.00	0.94	327.39	2,648.62	36.11	41.12	414,870.31	795,775.02	32.137°N	103.378°W
2,675.00	1.01	329.74	2,673.62	36.47	40.90	414,870.67	795,774.80	32.137°N	103.378°W
2,700.00	0.95	333.81	2,698.62	36.85	40.70	414,871.05	795,774.59	32.137°N	103.378°W
2,725.00	0.96	332.44	2,723.61	37.22	40.51	414,871.42	795,774.40	32.137°N	103.378°W
2,750.00	0.90	335.28	2,748.61	37.59	40.33	414,871.79	795,774.23	32.137°N	103.378°W
2,775.00	0.90	332.74	2,773.61	37.94	40.16	414,872.14	795,774.05	32.137°N	103.378°W
2,800.00	0.98	340.24	2,798.60	38.32	39.99	414,872.51	795,773.89	32.137°N	103.378°W
2,825.00	0.98	340.77	2,823.60	38.72	39.85	414,872.92	795,773.75	32.137°N	103.378°W
2,850.00	0.94	340.54	2,848.60	39.11	39.71	414,873.31	795,773.61	32.137°N	103.378°W
2,875.00	0.91	332.40	2,873.59	39.48	39.55	414,873.68	795,773.45	32.137°N	103.378°W
2,900.00	0.80	334.11	2,898.59	39.82	39.38	414,874.02	795,773.28	32.137°N	103.378°W
2,925.00	0.42	329.08	2,923.59	40.05	39.26	414,874.25	795,773.16	32.137°N	103.378°W
2,950.00	0.06	207.55	2,948.59	40.12	39.21	414,874.32	795,773.11	32.137°N	103.378°W
2,975.00	0.23	169.96	2,973.59	40.06	39.21	414,874.26	795,773.11	32.137°N	103.378°W
3,000.00	0.21	150.80	2,998.59	39.97	39.24	414,874.17	795,773.14	32.137°N	103.378°W
3,025.00	0.24	152.02	3,023.59	39.88	39.29	414,874.08	795,773.19	32.137°N	103.378°W
3,050.00	0.29	152.99	3,048.59	39.78	39.34	414,873.98	795,773.24	32.137°N	103.378°W



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Well:	White Falcon 16 State #23H	North Reference:	Grid
Wellbore:	#23H	Survey Calculation Method:	Minimum Curvature
Design:	#23H	Database:	EDM 5000.14 Single User Db.

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
3,075.00	0.18	176.22	3,073.59	39.68	39.37	414,873.88	795,773.27	32.137°N	103.378°W
3,100.00	0.19	150.36	3,098.59	39.61	39.40	414,873.81	795,773.29	32.137°N	103.378°W
3,125.00	0.31	117.63	3,123.59	39.54	39.48	414,873.74	795,773.37	32.137°N	103.378°W
3,150.00	0.40	134.51	3,148.59	39.45	39.60	414,873.65	795,773.50	32.137°N	103.378°W
3,175.00	0.28	104.39	3,173.59	39.37	39.72	414,873.57	795,773.62	32.137°N	103.378°W
3,200.00	0.30	86.92	3,198.59	39.36	39.84	414,873.56	795,773.74	32.137°N	103.378°W
3,225.00	0.43	85.04	3,223.59	39.37	40.00	414,873.57	795,773.90	32.137°N	103.378°W
3,250.00	0.38	68.06	3,248.59	39.41	40.17	414,873.61	795,774.07	32.137°N	103.378°W
3,275.00	0.41	63.42	3,273.59	39.48	40.33	414,873.68	795,774.23	32.137°N	103.378°W
3,300.00	0.47	63.84	3,298.58	39.57	40.50	414,873.77	795,774.40	32.137°N	103.378°W
3,325.00	0.43	66.92	3,323.58	39.65	40.68	414,873.85	795,774.58	32.137°N	103.378°W
3,350.00	0.53	83.15	3,348.58	39.70	40.88	414,873.90	795,774.78	32.137°N	103.378°W
3,375.00	0.47	63.11	3,373.58	39.76	41.09	414,873.96	795,774.99	32.137°N	103.378°W
3,400.00	0.55	57.51	3,398.58	39.87	41.28	414,874.07	795,775.18	32.137°N	103.378°W
3,425.00	0.64	67.55	3,423.58	39.99	41.51	414,874.19	795,775.41	32.137°N	103.378°W
3,450.00	0.65	66.54	3,448.58	40.10	41.77	414,874.30	795,775.67	32.137°N	103.378°W
3,475.00	0.69	61.09	3,473.58	40.23	42.03	414,874.43	795,775.93	32.137°N	103.378°W
3,500.00	1.00	66.22	3,498.57	40.39	42.36	414,874.59	795,776.26	32.137°N	103.378°W
3,525.00	1.09	63.60	3,523.57	40.58	42.78	414,874.78	795,776.67	32.137°N	103.378°W
3,550.00	1.14	65.32	3,548.56	40.79	43.22	414,874.99	795,777.11	32.137°N	103.378°W
3,575.00	1.14	65.48	3,573.56	41.00	43.67	414,875.20	795,777.57	32.137°N	103.378°W
3,600.00	1.08	66.19	3,598.55	41.20	44.11	414,875.40	795,778.01	32.137°N	103.378°W
3,625.00	1.14	62.07	3,623.55	41.41	44.54	414,875.61	795,778.44	32.137°N	103.378°W
3,650.00	1.12	64.97	3,648.55	41.63	44.99	414,875.83	795,778.88	32.137°N	103.378°W
3,675.00	1.12	69.52	3,673.54	41.82	45.44	414,876.02	795,779.33	32.137°N	103.378°W
3,700.00	0.91	70.28	3,698.54	41.97	45.85	414,876.17	795,779.75	32.137°N	103.378°W
3,725.00	0.70	67.76	3,723.53	42.09	46.18	414,876.29	795,780.08	32.137°N	103.378°W
3,750.00	0.39	50.63	3,748.53	42.21	46.39	414,876.41	795,780.28	32.137°N	103.378°W
3,775.00	0.23	246.58	3,773.53	42.24	46.41	414,876.44	795,780.30	32.137°N	103.378°W
3,800.00	0.66	246.95	3,798.53	42.16	46.23	414,876.36	795,780.13	32.137°N	103.378°W
3,825.00	0.96	256.78	3,823.53	42.06	45.89	414,876.26	795,779.79	32.137°N	103.378°W
3,850.00	1.02	256.81	3,848.53	41.96	45.47	414,876.16	795,779.37	32.137°N	103.378°W
3,875.00	0.98	254.37	3,873.52	41.85	45.05	414,876.05	795,778.95	32.137°N	103.378°W
3,900.00	1.07	254.23	3,898.52	41.73	44.62	414,875.93	795,778.52	32.137°N	103.378°W
3,925.00	1.00	254.68	3,923.51	41.61	44.18	414,875.81	795,778.08	32.137°N	103.378°W
3,950.00	0.97	249.03	3,948.51	41.48	43.78	414,875.68	795,777.67	32.137°N	103.378°W
3,975.00	1.02	253.26	3,973.51	41.34	43.36	414,875.54	795,777.26	32.137°N	103.378°W
4,000.00	1.08	256.57	3,998.50	41.22	42.92	414,875.42	795,776.82	32.137°N	103.378°W
4,025.00	1.01	258.89	4,023.50	41.12	42.48	414,875.32	795,776.37	32.137°N	103.378°W
4,050.00	1.00	257.39	4,048.49	41.03	42.05	414,875.23	795,775.95	32.137°N	103.378°W
4,075.00	1.04	256.49	4,073.49	40.93	41.61	414,875.13	795,775.51	32.137°N	103.378°W
4,100.00	1.03	258.88	4,098.49	40.83	41.17	414,875.03	795,775.07	32.137°N	103.378°W
4,125.00	0.98	257.02	4,123.48	40.74	40.74	414,874.94	795,774.64	32.137°N	103.378°W
4,150.00	0.22	234.72	4,148.48	40.67	40.50	414,874.87	795,774.39	32.137°N	103.378°W
4,175.00	0.29	117.05	4,173.48	40.61	40.51	414,874.81	795,774.41	32.137°N	103.378°W
4,200.00	0.72	102.08	4,198.48	40.55	40.72	414,874.75	795,774.62	32.137°N	103.378°W
4,225.00	1.26	95.65	4,223.48	40.49	41.15	414,874.69	795,775.05	32.137°N	103.378°W
4,250.00	1.45	95.67	4,248.47	40.43	41.74	414,874.63	795,775.64	32.137°N	103.378°W
4,275.00	1.60	95.09	4,273.46	40.37	42.40	414,874.57	795,776.30	32.137°N	103.378°W
4,300.00	2.08	98.02	4,298.45	40.27	43.20	414,874.47	795,777.10	32.137°N	103.378°W
4,325.00	2.16	97.10	4,323.43	40.15	44.12	414,874.35	795,778.01	32.137°N	103.378°W
4,350.00	2.34	99.08	4,348.41	40.01	45.09	414,874.21	795,778.98	32.137°N	103.378°W
4,375.00	2.36	98.12	4,373.39	39.86	46.10	414,874.06	795,780.00	32.137°N	103.378°W
4,400.00	2.31	98.39	4,398.37	39.71	47.11	414,873.91	795,781.01	32.137°N	103.378°W
4,425.00	2.32	100.33	4,423.35	39.55	48.10	414,873.75	795,782.00	32.137°N	103.378°W



Survey Report - Geographic

Company:	Concho Operating	Local Co-ordinate Reference:	Well White Falcon 16 State #23H
Project:	Lea County, NM (Nad 27)	TVD Reference:	3257' GL - 29' RKB @ 3286.00ft (Noram #23)
Site:	White Falcon 16 State	MD Reference:	3257' GL - 29' RKB @ 3286.00ft (Noram #23)
Well:	White Falcon 16 State #23H	North Reference:	Grid
Wellbore:	#23H	Survey Calculation Method:	Minimum Curvature
Design:	#23H	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
4,450.00	2.19	104.20	4,448.33	39.34	49.07	414,873.54	795,782.96	32.137°N	103.378°W	
4,475.00	1.68	110.19	4,473.31	39.10	49.87	414,873.30	795,783.77	32.137°N	103.378°W	
4,500.00	1.30	124.25	4,498.31	38.81	50.45	414,873.01	795,784.35	32.137°N	103.378°W	
4,525.00	0.96	150.44	4,523.30	38.47	50.79	414,872.67	795,784.69	32.137°N	103.378°W	
4,550.00	0.91	168.80	4,548.30	38.09	50.93	414,872.29	795,784.83	32.137°N	103.378°W	
4,575.00	0.94	170.10	4,573.30	37.70	51.00	414,871.90	795,784.90	32.137°N	103.378°W	
4,600.00	1.00	163.50	4,598.29	37.29	51.10	414,871.49	795,785.00	32.137°N	103.378°W	
4,625.00	1.00	170.02	4,623.29	36.86	51.20	414,871.06	795,785.10	32.137°N	103.378°W	
4,650.00	0.95	166.66	4,648.28	36.45	51.29	414,870.64	795,785.18	32.137°N	103.378°W	
4,675.00	1.05	142.50	4,673.28	36.06	51.47	414,870.26	795,785.37	32.137°N	103.378°W	
4,700.00	1.31	132.87	4,698.28	35.69	51.82	414,869.89	795,785.72	32.137°N	103.378°W	
4,725.00	1.53	123.90	4,723.27	35.31	52.31	414,869.50	795,786.21	32.137°N	103.378°W	
4,750.00	1.71	117.39	4,748.26	34.95	52.92	414,869.15	795,786.82	32.137°N	103.378°W	
4,775.00	1.68	118.64	4,773.25	34.60	53.57	414,868.80	795,787.47	32.137°N	103.378°W	
4,800.00	1.62	110.88	4,798.24	34.30	54.22	414,868.50	795,788.12	32.137°N	103.378°W	
4,825.00	1.34	95.22	4,823.23	34.15	54.84	414,868.35	795,788.74	32.137°N	103.378°W	
4,850.00	1.25	81.61	4,848.22	34.16	55.40	414,868.36	795,789.30	32.137°N	103.378°W	
4,875.00	1.30	79.20	4,873.22	34.25	55.95	414,868.45	795,789.85	32.137°N	103.378°W	
4,900.00	0.81	72.78	4,898.21	34.36	56.40	414,868.56	795,790.30	32.137°N	103.378°W	
4,925.00	0.44	51.77	4,923.21	34.47	56.64	414,868.67	795,790.54	32.137°N	103.378°W	
4,950.00	0.35	14.25	4,948.21	34.60	56.74	414,868.80	795,790.64	32.137°N	103.378°W	
4,975.00	0.40	358.04	4,973.21	34.76	56.75	414,868.96	795,790.65	32.137°N	103.378°W	
5,000.00	0.34	3.64	4,998.21	34.93	56.76	414,869.12	795,790.65	32.137°N	103.378°W	
5,025.00	0.31	17.02	5,023.21	35.06	56.78	414,869.26	795,790.68	32.137°N	103.378°W	
5,050.00	0.22	17.16	5,048.21	35.17	56.81	414,869.37	795,790.71	32.137°N	103.378°W	
5,075.00	0.28	23.12	5,073.21	35.28	56.85	414,869.48	795,790.75	32.137°N	103.378°W	
5,100.00	0.31	18.71	5,098.21	35.40	56.90	414,869.60	795,790.80	32.137°N	103.378°W	
5,125.00	0.27	20.96	5,123.21	35.52	56.94	414,869.72	795,790.84	32.137°N	103.378°W	
5,150.00	0.25	13.13	5,148.21	35.62	56.97	414,869.82	795,790.87	32.137°N	103.378°W	
5,175.00	0.34	5.92	5,173.21	35.75	56.99	414,869.95	795,790.89	32.137°N	103.378°W	
5,200.00	0.36	15.91	5,198.21	35.90	57.02	414,870.10	795,790.92	32.137°N	103.378°W	
5,225.00	0.33	21.74	5,223.20	36.04	57.07	414,870.24	795,790.97	32.137°N	103.378°W	
5,250.00	0.32	33.17	5,248.20	36.17	57.14	414,870.37	795,791.03	32.137°N	103.378°W	
5,275.00	0.30	31.97	5,273.20	36.28	57.21	414,870.48	795,791.11	32.137°N	103.378°W	
5,300.00	0.28	7.87	5,298.20	36.40	57.25	414,870.60	795,791.15	32.137°N	103.378°W	
5,325.00	0.28	22.87	5,323.20	36.52	57.29	414,870.71	795,791.18	32.137°N	103.378°W	
5,350.00	0.31	23.68	5,348.20	36.63	57.34	414,870.83	795,791.23	32.137°N	103.378°W	
5,375.00	0.28	27.66	5,373.20	36.75	57.39	414,870.95	795,791.29	32.137°N	103.378°W	
5,400.00	0.31	27.78	5,398.20	36.86	57.45	414,871.06	795,791.35	32.137°N	103.378°W	
5,425.00	0.36	23.07	5,423.20	37.00	57.51	414,871.19	795,791.41	32.137°N	103.378°W	
5,450.00	0.37	18.98	5,448.20	37.14	57.57	414,871.34	795,791.47	32.137°N	103.378°W	
5,475.00	0.39	29.25	5,473.20	37.29	57.64	414,871.49	795,791.54	32.137°N	103.378°W	
5,500.00	0.33	45.02	5,498.20	37.42	57.73	414,871.62	795,791.63	32.137°N	103.378°W	
5,525.00	0.35	38.44	5,523.20	37.53	57.83	414,871.73	795,791.73	32.137°N	103.378°W	
5,550.00	0.34	33.58	5,548.20	37.65	57.92	414,871.85	795,791.82	32.137°N	103.378°W	
5,575.00	0.39	32.58	5,573.20	37.79	58.00	414,871.98	795,791.90	32.137°N	103.378°W	
5,600.00	0.40	21.30	5,598.20	37.94	58.08	414,872.14	795,791.98	32.137°N	103.378°W	
5,625.00	0.53	20.84	5,623.20	38.13	58.16	414,872.33	795,792.05	32.137°N	103.378°W	
5,650.00	0.55	28.95	5,648.20	38.34	58.25	414,872.54	795,792.15	32.137°N	103.378°W	
5,675.00	0.46	27.49	5,673.20	38.53	58.36	414,872.73	795,792.26	32.137°N	103.378°W	
5,700.00	0.55	36.77	5,698.19	38.72	58.48	414,872.92	795,792.37	32.137°N	103.378°W	
5,725.00	0.48	40.88	5,723.19	38.90	58.62	414,873.09	795,792.51	32.137°N	103.378°W	
5,750.00	0.46	42.81	5,748.19	39.05	58.75	414,873.25	795,792.65	32.137°N	103.378°W	
5,775.00	0.50	33.47	5,773.19	39.21	58.88	414,873.41	795,792.78	32.137°N	103.378°W	
5,800.00	0.66	34.83	5,798.19	39.42	59.02	414,873.62	795,792.92	32.137°N	103.378°W	



Survey Report - Geographic

Company:	Concho Operating	Local Co-ordinate Reference:	Well White Falcon 16 State #23H
Project:	Lea County, NM (Nad 27)	TVD Reference:	3257' GL - 29' RKB @ 3286.00ft (Noram #23)
Site:	White Falcon 16 State	MD Reference:	3257' GL - 29' RKB @ 3286.00ft (Noram #23)
Well:	White Falcon 16 State #23H	North Reference:	Grid
Wellbore:	#23H	Survey Calculation Method:	Minimum Curvature
Design:	#23H	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
5,825.00	0.67	32.75	5,823.19	39.66	59.19	414,873.86	795,793.08	32.137°N	103.378°W	
5,850.00	0.73	37.38	5,848.19	39.91	59.36	414,874.11	795,793.26	32.137°N	103.378°W	
5,875.00	0.70	39.11	5,873.19	40.16	59.55	414,874.36	795,793.45	32.137°N	103.378°W	
5,900.00	0.71	37.27	5,898.18	40.40	59.74	414,874.60	795,793.64	32.137°N	103.378°W	
5,925.00	0.73	46.54	5,923.18	40.63	59.95	414,874.83	795,793.85	32.137°N	103.378°W	
5,950.00	0.69	42.10	5,948.18	40.85	60.17	414,875.05	795,794.07	32.137°N	103.378°W	
5,975.00	0.80	65.48	5,973.18	41.04	60.43	414,875.24	795,794.33	32.137°N	103.378°W	
6,000.00	0.68	33.59	5,998.18	41.23	60.67	414,875.43	795,794.57	32.137°N	103.378°W	
6,025.00	0.57	32.84	6,023.17	41.46	60.82	414,875.66	795,794.72	32.137°N	103.378°W	
6,050.00	0.60	29.64	6,048.17	41.68	60.95	414,875.88	795,794.85	32.137°N	103.378°W	
6,075.00	0.49	18.08	6,073.17	41.90	61.05	414,876.09	795,794.95	32.137°N	103.378°W	
6,100.00	0.64	14.47	6,098.17	42.13	61.12	414,876.33	795,795.02	32.137°N	103.378°W	
6,125.00	0.64	7.87	6,123.17	42.41	61.17	414,876.60	795,795.07	32.137°N	103.378°W	
6,150.00	0.63	3.92	6,148.17	42.68	61.20	414,876.88	795,795.10	32.137°N	103.378°W	
6,175.00	0.56	3.50	6,173.17	42.94	61.22	414,877.14	795,795.12	32.137°N	103.378°W	
6,200.00	0.50	359.41	6,198.16	43.17	61.22	414,877.37	795,795.12	32.137°N	103.378°W	
6,225.00	0.46	354.18	6,223.16	43.38	61.21	414,877.58	795,795.11	32.137°N	103.378°W	
6,250.00	0.48	349.36	6,248.16	43.58	61.18	414,877.78	795,795.08	32.137°N	103.378°W	
6,275.00	0.55	358.79	6,273.16	43.81	61.16	414,878.00	795,795.06	32.137°N	103.378°W	
6,300.00	0.55	358.85	6,298.16	44.05	61.16	414,878.24	795,795.05	32.137°N	103.378°W	
6,325.00	0.57	4.72	6,323.16	44.29	61.16	414,878.49	795,795.06	32.137°N	103.378°W	
6,350.00	0.60	4.41	6,348.16	44.54	61.19	414,878.74	795,795.08	32.137°N	103.378°W	
6,375.00	0.55	7.97	6,373.16	44.79	61.21	414,878.99	795,795.11	32.137°N	103.378°W	
6,400.00	0.57	1.07	6,398.16	45.04	61.23	414,879.24	795,795.13	32.137°N	103.378°W	
6,425.00	0.61	3.05	6,423.15	45.29	61.24	414,879.49	795,795.14	32.137°N	103.378°W	
6,450.00	0.57	6.81	6,448.15	45.55	61.26	414,879.75	795,795.16	32.137°N	103.378°W	
6,475.00	0.56	2.58	6,473.15	45.80	61.28	414,879.99	795,795.18	32.137°N	103.378°W	
6,500.00	0.60	358.45	6,498.15	46.05	61.28	414,880.25	795,795.18	32.137°N	103.378°W	
6,525.00	0.63	3.22	6,523.15	46.32	61.29	414,880.52	795,795.19	32.137°N	103.378°W	
6,550.00	0.59	6.88	6,548.15	46.58	61.31	414,880.78	795,795.21	32.137°N	103.378°W	
6,575.00	0.53	0.17	6,573.15	46.82	61.33	414,881.02	795,795.23	32.137°N	103.378°W	
6,600.00	0.49	345.15	6,598.15	47.04	61.30	414,881.24	795,795.20	32.137°N	103.378°W	
6,625.00	0.57	342.26	6,623.14	47.27	61.24	414,881.46	795,795.13	32.137°N	103.378°W	
6,650.00	0.56	345.17	6,648.14	47.50	61.17	414,881.70	795,795.06	32.137°N	103.378°W	
6,675.00	0.61	346.10	6,673.14	47.75	61.10	414,881.95	795,795.00	32.137°N	103.378°W	
6,700.00	0.60	339.86	6,698.14	48.00	61.03	414,882.20	795,794.92	32.137°N	103.378°W	
6,725.00	0.68	335.65	6,723.14	48.26	60.92	414,882.46	795,794.82	32.137°N	103.378°W	
6,750.00	0.67	336.68	6,748.14	48.53	60.80	414,882.73	795,794.70	32.137°N	103.378°W	
6,775.00	0.68	341.56	6,773.14	48.80	60.70	414,883.00	795,794.59	32.137°N	103.378°W	
6,800.00	0.65	341.58	6,798.13	49.08	60.60	414,883.28	795,794.50	32.137°N	103.378°W	
6,825.00	0.57	334.11	6,823.13	49.33	60.50	414,883.52	795,794.40	32.137°N	103.378°W	
6,850.00	0.60	338.78	6,848.13	49.56	60.40	414,883.76	795,794.30	32.137°N	103.378°W	
6,875.00	0.62	327.45	6,873.13	49.80	60.28	414,883.99	795,794.18	32.137°N	103.378°W	
6,900.00	0.65	340.15	6,898.13	50.04	60.16	414,884.24	795,794.06	32.137°N	103.378°W	
6,925.00	0.71	334.26	6,923.13	50.32	60.05	414,884.51	795,793.94	32.137°N	103.378°W	
6,950.00	0.70	332.78	6,948.12	50.59	59.91	414,884.79	795,793.81	32.137°N	103.378°W	
6,975.00	0.80	341.54	6,973.12	50.89	59.78	414,885.09	795,793.68	32.137°N	103.378°W	
7,000.00	0.71	335.43	6,998.12	51.20	59.66	414,885.40	795,793.56	32.137°N	103.378°W	
7,025.00	0.70	340.61	7,023.12	51.48	59.55	414,885.68	795,793.45	32.137°N	103.378°W	
7,050.00	0.65	342.09	7,048.12	51.76	59.46	414,885.96	795,793.35	32.137°N	103.378°W	
7,075.00	0.57	332.12	7,073.12	52.01	59.35	414,886.21	795,793.25	32.137°N	103.378°W	
7,100.00	0.58	322.24	7,098.11	52.22	59.22	414,886.42	795,793.12	32.137°N	103.378°W	
7,125.00	0.57	316.15	7,123.11	52.41	59.05	414,886.61	795,792.95	32.137°N	103.378°W	
7,150.00	0.58	324.79	7,148.11	52.60	58.90	414,886.80	795,792.79	32.137°N	103.378°W	
7,175.00	0.51	320.95	7,173.11	52.79	58.75	414,886.99	795,792.65	32.137°N	103.378°W	



Survey Report - Geographic

Company:	Concho Operating	Local Co-ordinate Reference:	Well White Falcon 16 State #23H
Project:	Lea County, NM (Nad 27)	TVD Reference:	3257' GL - 29' RKB @ 3286.00ft (Noram #23)
Site:	White Falcon 16 State	MD Reference:	3257' GL - 29' RKB @ 3286.00ft (Noram #23)
Well:	White Falcon 16 State #23H	North Reference:	Grid
Wellbore:	#23H	Survey Calculation Method:	Minimum Curvature
Design:	#23H	Database:	EDM 5000.14 Single User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
7,200.00	0.53	315.46	7,198.11	52.96	58.60	414,887.16	795,792.50	32.137°N	103.378°W
7,225.00	0.60	319.53	7,223.11	53.14	58.43	414,887.34	795,792.33	32.137°N	103.378°W
7,250.00	0.64	314.01	7,248.11	53.34	58.25	414,887.54	795,792.15	32.137°N	103.378°W
7,275.00	0.62	322.37	7,273.11	53.54	58.07	414,887.74	795,791.96	32.137°N	103.378°W
7,300.00	0.60	323.96	7,298.10	53.75	57.91	414,887.95	795,791.80	32.137°N	103.378°W
7,325.00	0.58	316.75	7,323.10	53.95	57.74	414,888.15	795,791.64	32.137°N	103.378°W
7,350.00	0.59	317.20	7,348.10	54.14	57.57	414,888.34	795,791.47	32.137°N	103.378°W
7,375.00	0.61	319.06	7,373.10	54.33	57.39	414,888.53	795,791.29	32.137°N	103.378°W
7,400.00	0.68	324.42	7,398.10	54.56	57.22	414,888.75	795,791.12	32.137°N	103.378°W
7,425.00	0.71	324.07	7,423.10	54.80	57.04	414,889.00	795,790.94	32.137°N	103.378°W
7,450.00	0.72	328.84	7,448.09	55.06	56.87	414,889.26	795,790.77	32.137°N	103.378°W
7,475.00	0.61	325.47	7,473.09	55.31	56.71	414,889.50	795,790.61	32.137°N	103.378°W
7,500.00	0.70	322.23	7,498.09	55.54	56.55	414,889.73	795,790.44	32.137°N	103.378°W
7,525.00	0.80	323.93	7,523.09	55.80	56.35	414,890.00	795,790.25	32.137°N	103.378°W
7,550.00	0.80	326.87	7,548.09	56.08	56.15	414,890.28	795,790.05	32.137°N	103.378°W
7,575.00	0.77	328.59	7,573.08	56.37	55.97	414,890.57	795,789.87	32.137°N	103.378°W
7,600.00	0.84	323.35	7,598.08	56.66	55.77	414,890.86	795,789.67	32.137°N	103.378°W
7,625.00	0.94	326.88	7,623.08	56.98	55.55	414,891.18	795,789.45	32.137°N	103.378°W
7,650.00	0.92	328.72	7,648.08	57.33	55.33	414,891.53	795,789.23	32.137°N	103.378°W
7,675.00	0.96	326.26	7,673.07	57.67	55.11	414,891.87	795,789.01	32.137°N	103.378°W
7,700.00	1.05	327.92	7,698.07	58.04	54.88	414,892.24	795,788.77	32.137°N	103.378°W
7,725.00	1.06	329.95	7,723.06	58.43	54.64	414,892.63	795,788.54	32.137°N	103.378°W
7,750.00	1.07	335.96	7,748.06	58.85	54.43	414,893.05	795,788.32	32.137°N	103.378°W
7,775.00	1.11	333.07	7,773.06	59.28	54.22	414,893.48	795,788.12	32.137°N	103.378°W
7,800.00	1.19	337.00	7,798.05	59.73	54.01	414,893.93	795,787.91	32.137°N	103.378°W
7,825.00	1.25	335.41	7,823.04	60.22	53.80	414,894.42	795,787.69	32.137°N	103.378°W
7,850.00	1.14	340.68	7,848.04	60.70	53.60	414,894.90	795,787.50	32.137°N	103.378°W
7,875.00	1.20	332.49	7,873.03	61.17	53.40	414,895.37	795,787.29	32.137°N	103.378°W
7,900.00	1.24	334.29	7,898.03	61.64	53.16	414,895.84	795,787.06	32.137°N	103.378°W
7,925.00	1.23	333.96	7,923.02	62.13	52.92	414,896.33	795,786.82	32.137°N	103.378°W
7,950.00	1.20	338.82	7,948.02	62.61	52.71	414,896.81	795,786.61	32.137°N	103.378°W
7,975.00	1.09	337.41	7,973.01	63.08	52.53	414,897.28	795,786.42	32.137°N	103.378°W
8,000.00	1.28	336.64	7,998.01	63.55	52.32	414,897.75	795,786.22	32.137°N	103.378°W
8,025.00	1.32	339.75	8,023.00	64.08	52.11	414,898.28	795,786.01	32.137°N	103.378°W
8,050.00	1.31	337.94	8,047.99	64.62	51.91	414,898.81	795,785.80	32.137°N	103.378°W
8,075.00	1.29	339.07	8,072.99	65.14	51.70	414,899.34	795,785.60	32.137°N	103.378°W
8,100.00	1.44	341.12	8,097.98	65.70	51.50	414,899.90	795,785.39	32.137°N	103.378°W
8,125.00	1.35	343.88	8,122.97	66.28	51.31	414,900.48	795,785.21	32.137°N	103.378°W
8,150.00	1.35	343.71	8,147.97	66.85	51.15	414,901.05	795,785.05	32.137°N	103.378°W
8,175.00	1.35	346.96	8,172.96	67.42	51.00	414,901.62	795,784.90	32.137°N	103.378°W
8,200.00	1.25	359.83	8,197.95	67.98	50.93	414,902.18	795,784.83	32.137°N	103.378°W
8,225.00	1.29	29.47	8,222.95	68.50	51.07	414,902.69	795,784.97	32.137°N	103.378°W
8,250.00	1.40	44.20	8,247.94	68.96	51.42	414,903.16	795,785.32	32.137°N	103.378°W
8,275.00	1.51	43.87	8,272.93	69.42	51.86	414,903.62	795,785.76	32.137°N	103.378°W
8,300.00	1.71	43.79	8,297.92	69.92	52.35	414,904.12	795,786.25	32.137°N	103.378°W
8,325.00	1.61	48.72	8,322.91	70.42	52.87	414,904.62	795,786.77	32.137°N	103.378°W
8,350.00	1.59	50.17	8,347.90	70.88	53.40	414,905.08	795,787.30	32.137°N	103.378°W
8,375.00	1.69	47.04	8,372.89	71.35	53.94	414,905.55	795,787.83	32.137°N	103.378°W
8,400.00	1.74	46.72	8,397.88	71.86	54.48	414,906.06	795,788.38	32.137°N	103.378°W
8,425.00	1.66	47.48	8,422.87	72.37	55.03	414,906.57	795,788.92	32.137°N	103.378°W
8,450.00	1.72	48.31	8,447.86	72.86	55.57	414,907.06	795,789.47	32.137°N	103.378°W
8,475.00	1.72	49.83	8,472.85	73.35	56.14	414,907.55	795,790.04	32.137°N	103.378°W
8,500.00	1.66	49.28	8,497.84	73.83	56.70	414,908.03	795,790.60	32.137°N	103.378°W
8,525.00	1.73	48.33	8,522.83	74.32	57.26	414,908.52	795,791.16	32.137°N	103.378°W
8,550.00	1.77	47.86	8,547.81	74.83	57.83	414,909.03	795,791.72	32.137°N	103.378°W



Survey Report - Geographic

Company:	Concho Operating	Local Co-ordinate Reference:	Well White Falcon 16 State #23H
Project:	Lea County, NM (Nad 27)	TVD Reference:	3257' GL - 29' RKB @ 3286.00ft (Noram #23)
Site:	White Falcon 16 State	MD Reference:	3257' GL - 29' RKB @ 3286.00ft (Noram #23)
Well:	White Falcon 16 State #23H	North Reference:	Grid
Wellbore:	#23H	Survey Calculation Method:	Minimum Curvature
Design:	#23H	Database:	EDM 5000.14 Single User Db

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
8,575.00	1.74	49.39	8,572.80	75.33	58.40	414,909.53	795,792.30	32.137°N	103.378°W
8,600.00	1.69	50.21	8,597.79	75.82	58.97	414,910.02	795,792.87	32.137°N	103.378°W
8,625.00	1.69	51.26	8,622.78	76.28	59.54	414,910.48	795,793.44	32.137°N	103.378°W
8,650.00	1.74	48.76	8,647.77	76.77	60.12	414,910.96	795,794.01	32.137°N	103.378°W
8,675.00	1.83	48.35	8,672.76	77.28	60.70	414,911.48	795,794.60	32.137°N	103.378°W
8,700.00	1.88	48.22	8,697.74	77.82	61.30	414,912.02	795,795.20	32.137°N	103.378°W
8,725.00	1.81	50.10	8,722.73	78.35	61.91	414,912.54	795,795.81	32.137°N	103.378°W
8,750.00	1.81	48.97	8,747.72	78.86	62.51	414,913.06	795,796.41	32.137°N	103.378°W
8,775.00	1.75	48.58	8,772.71	79.37	63.10	414,913.57	795,796.99	32.137°N	103.378°W
8,800.00	1.76	48.06	8,797.69	79.88	63.67	414,914.08	795,797.57	32.137°N	103.378°W
8,825.00	1.85	48.77	8,822.68	80.40	64.26	414,914.60	795,798.16	32.137°N	103.378°W
8,850.00	1.89	45.23	8,847.67	80.96	64.85	414,915.16	795,798.75	32.137°N	103.378°W
8,875.00	1.78	45.88	8,872.66	81.52	65.43	414,915.72	795,799.32	32.137°N	103.378°W
8,900.00	1.90	46.91	8,897.64	82.07	66.01	414,916.27	795,799.90	32.137°N	103.378°W
8,925.00	1.98	48.26	8,922.63	82.64	66.63	414,916.84	795,800.53	32.137°N	103.378°W
8,950.00	1.91	49.81	8,947.61	83.20	67.27	414,917.40	795,801.17	32.137°N	103.378°W
8,975.00	1.83	51.17	8,972.60	83.72	67.90	414,917.92	795,801.80	32.137°N	103.378°W
9,000.00	1.74	51.42	8,997.59	84.21	68.51	414,918.40	795,802.41	32.137°N	103.378°W
9,025.00	1.71	53.96	9,022.58	84.66	69.11	414,918.86	795,803.00	32.137°N	103.378°W
9,050.00	1.77	53.17	9,047.57	85.11	69.72	414,919.31	795,803.62	32.137°N	103.378°W
9,075.00	1.71	54.16	9,072.55	85.56	70.33	414,919.76	795,804.23	32.137°N	103.378°W
9,100.00	1.72	57.14	9,097.54	85.98	70.95	414,920.18	795,804.84	32.137°N	103.378°W
9,125.00	1.71	60.55	9,122.53	86.37	71.59	414,920.57	795,805.48	32.137°N	103.378°W
9,150.00	1.66	64.17	9,147.52	86.71	72.24	414,920.91	795,806.14	32.137°N	103.378°W
9,175.00	1.69	64.58	9,172.51	87.03	72.90	414,921.23	795,806.79	32.137°N	103.378°W
9,200.00	1.63	66.56	9,197.50	87.33	73.56	414,921.53	795,807.45	32.137°N	103.378°W
9,225.00	1.60	65.33	9,222.49	87.61	74.20	414,921.81	795,808.10	32.137°N	103.378°W
9,250.00	1.66	67.68	9,247.48	87.90	74.85	414,922.10	795,808.75	32.137°N	103.378°W
9,275.00	1.53	73.98	9,272.47	88.13	75.51	414,922.33	795,809.40	32.137°N	103.378°W
9,300.00	1.53	71.92	9,297.46	88.32	76.15	414,922.52	795,810.04	32.137°N	103.378°W
9,325.00	1.57	74.37	9,322.45	88.52	76.79	414,922.72	795,810.69	32.137°N	103.378°W
9,350.00	1.43	79.13	9,347.44	88.67	77.43	414,922.87	795,811.33	32.137°N	103.378°W
9,375.00	1.52	76.43	9,372.43	88.81	78.06	414,923.01	795,811.95	32.137°N	103.378°W
9,400.00	1.50	76.84	9,397.43	88.96	78.70	414,923.16	795,812.60	32.137°N	103.378°W
9,425.00	1.38	76.75	9,422.42	89.10	79.31	414,923.30	795,813.21	32.137°N	103.378°W
9,450.00	1.35	80.94	9,447.41	89.22	79.89	414,923.42	795,813.79	32.137°N	103.378°W
9,475.00	1.33	79.02	9,472.40	89.32	80.47	414,923.52	795,814.37	32.137°N	103.378°W
9,500.00	1.35	79.59	9,497.40	89.43	81.04	414,923.63	795,814.94	32.137°N	103.378°W
9,525.00	1.31	77.18	9,522.39	89.54	81.61	414,923.74	795,815.51	32.137°N	103.378°W
9,550.00	1.27	78.30	9,547.38	89.66	82.16	414,923.86	795,816.06	32.137°N	103.378°W
9,575.00	1.27	79.59	9,572.38	89.77	82.71	414,923.97	795,816.60	32.137°N	103.378°W
9,600.00	1.18	81.13	9,597.37	89.86	83.23	414,924.06	795,817.13	32.137°N	103.378°W
9,625.00	1.20	80.90	9,622.37	89.94	83.75	414,924.14	795,817.64	32.137°N	103.378°W
9,650.00	1.25	81.25	9,647.36	90.02	84.27	414,924.22	795,818.17	32.137°N	103.378°W
9,675.00	1.14	81.92	9,672.36	90.10	84.79	414,924.30	795,818.69	32.137°N	103.378°W
9,700.00	1.14	75.92	9,697.35	90.20	85.28	414,924.40	795,819.17	32.137°N	103.378°W
9,725.00	1.16	68.35	9,722.35	90.35	85.75	414,924.55	795,819.65	32.137°N	103.378°W
9,750.00	1.08	67.28	9,747.34	90.53	86.21	414,924.73	795,820.10	32.137°N	103.378°W
9,775.00	1.15	64.60	9,772.34	90.73	86.65	414,924.93	795,820.55	32.137°N	103.378°W
9,800.00	1.13	67.60	9,797.33	90.93	87.10	414,925.13	795,821.00	32.137°N	103.378°W
9,825.00	1.00	61.35	9,822.33	91.13	87.52	414,925.33	795,821.42	32.137°N	103.378°W
9,850.00	1.03	57.24	9,847.32	91.36	87.90	414,925.56	795,821.80	32.137°N	103.378°W
9,875.00	1.01	60.04	9,872.32	91.59	88.28	414,925.79	795,822.18	32.137°N	103.378°W
9,900.00	1.10	55.73	9,897.32	91.84	88.67	414,926.04	795,822.57	32.137°N	103.378°W
9,925.00	1.08	59.75	9,922.31	92.09	89.07	414,926.29	795,822.97	32.137°N	103.378°W



Survey Report - Geographic

Company:	Concho Operating	Local Co-ordinate Reference:	Well White Falcon 16 State #23H
Project:	Lea County, NM (Nad 27)	TVD Reference:	3257' GL - 29' RKB @ 3286.00ft (Noram #23)
Site:	White Falcon 16 State	MD Reference:	3257' GL - 29' RKB @ 3286.00ft (Noram #23)
Well:	White Falcon 16 State #23H	North Reference:	Grid
Wellbore:	#23H	Survey Calculation Method:	Minimum Curvature
Design:	#23H	Database:	EDM 5000.14 Single User Db

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
9,950.00	0.97	56.13	9,947.31	92.33	89.45	414,926.53	795,823.35	32.137°N	103.378°W	
9,975.00	1.15	59.13	9,972.30	92.57	89.84	414,926.77	795,823.74	32.137°N	103.378°W	
10,000.00	1.08	61.48	9,997.30	92.81	90.27	414,927.01	795,824.16	32.137°N	103.378°W	
10,025.00	1.01	56.87	10,022.29	93.05	90.66	414,927.25	795,824.56	32.137°N	103.378°W	
10,050.00	1.03	56.33	10,047.29	93.29	91.03	414,927.49	795,824.93	32.137°N	103.378°W	
10,075.00	1.07	59.89	10,072.29	93.53	91.42	414,927.73	795,825.32	32.137°N	103.378°W	
10,100.00	1.02	61.01	10,097.28	93.76	91.82	414,927.96	795,825.71	32.137°N	103.378°W	
10,125.00	0.91	62.32	10,122.28	93.96	92.19	414,928.16	795,826.08	32.137°N	103.378°W	
10,150.00	0.89	68.43	10,147.27	94.12	92.54	414,928.32	795,826.44	32.137°N	103.378°W	
10,175.00	0.84	74.60	10,172.27	94.24	92.90	414,928.44	795,826.80	32.137°N	103.378°W	
10,200.00	0.79	80.50	10,197.27	94.32	93.25	414,928.52	795,827.14	32.137°N	103.378°W	
10,225.00	0.67	106.09	10,222.27	94.31	93.56	414,928.51	795,827.45	32.137°N	103.378°W	
10,250.00	0.98	148.46	10,247.26	94.09	93.81	414,928.28	795,827.71	32.137°N	103.378°W	
10,275.00	1.41	165.07	10,272.26	93.61	94.00	414,927.80	795,827.90	32.137°N	103.378°W	
10,300.00	1.91	171.48	10,297.25	92.90	94.14	414,927.10	795,828.04	32.137°N	103.378°W	
10,325.00	2.06	171.93	10,322.23	92.04	94.27	414,926.24	795,828.16	32.137°N	103.378°W	
10,350.00	2.20	172.91	10,347.22	91.12	94.39	414,925.32	795,828.29	32.137°N	103.378°W	
10,375.00	2.43	171.30	10,372.20	90.12	94.53	414,924.32	795,828.43	32.137°N	103.378°W	
10,400.00	2.41	171.62	10,397.17	89.07	94.68	414,923.27	795,828.58	32.137°N	103.378°W	
10,425.00	2.49	173.12	10,422.15	88.02	94.83	414,922.21	795,828.72	32.137°N	103.378°W	
10,450.00	2.45	171.27	10,447.13	86.95	94.97	414,921.15	795,828.87	32.137°N	103.378°W	
10,475.00	2.54	170.11	10,472.10	85.87	95.15	414,920.07	795,829.05	32.137°N	103.378°W	
10,500.00	2.60	170.01	10,497.08	84.77	95.34	414,918.97	795,829.24	32.137°N	103.378°W	
10,525.00	2.64	169.78	10,522.05	83.64	95.54	414,917.84	795,829.44	32.137°N	103.378°W	
10,550.00	2.64	170.54	10,547.03	82.51	95.74	414,916.71	795,829.64	32.137°N	103.378°W	
10,575.00	2.47	170.01	10,572.00	81.41	95.93	414,915.61	795,829.82	32.137°N	103.378°W	
10,600.00	2.46	166.05	10,596.98	80.36	96.15	414,914.56	795,830.05	32.137°N	103.378°W	
10,625.00	2.42	168.24	10,621.96	79.32	96.39	414,913.52	795,830.28	32.137°N	103.378°W	
10,650.00	2.10	160.13	10,646.94	78.38	96.65	414,912.57	795,830.55	32.137°N	103.378°W	
10,675.00	1.95	155.04	10,671.92	77.56	96.99	414,911.76	795,830.88	32.137°N	103.378°W	
10,700.00	1.78	152.70	10,696.91	76.83	97.34	414,911.03	795,831.24	32.137°N	103.378°W	
10,725.00	1.89	147.72	10,721.89	76.14	97.74	414,910.33	795,831.64	32.137°N	103.378°W	
10,750.00	1.96	151.56	10,746.88	75.41	98.17	414,909.61	795,832.06	32.137°N	103.378°W	
10,775.00	1.93	149.87	10,771.87	74.67	98.58	414,908.87	795,832.48	32.137°N	103.378°W	
10,800.00	1.99	147.70	10,796.85	73.94	99.02	414,908.14	795,832.92	32.137°N	103.378°W	
10,825.00	2.01	150.74	10,821.84	73.19	99.47	414,907.39	795,833.37	32.137°N	103.378°W	
10,850.00	2.06	149.55	10,846.82	72.42	99.91	414,906.62	795,833.81	32.137°N	103.378°W	
10,875.00	2.06	146.53	10,871.80	71.66	100.39	414,905.86	795,834.28	32.137°N	103.378°W	
10,900.00	2.10	144.02	10,896.79	70.91	100.90	414,905.11	795,834.80	32.137°N	103.378°W	
10,925.00	2.10	145.31	10,921.77	70.17	101.43	414,904.36	795,835.33	32.137°N	103.378°W	
10,950.00	2.16	143.75	10,946.75	69.41	101.97	414,903.61	795,835.87	32.137°N	103.378°W	
10,975.00	2.27	143.08	10,971.74	68.63	102.55	414,902.83	795,836.45	32.137°N	103.378°W	
11,000.00	2.30	145.39	10,996.72	67.82	103.13	414,902.02	795,837.03	32.137°N	103.378°W	
11,025.00	2.36	144.48	11,021.69	66.99	103.72	414,901.19	795,837.61	32.137°N	103.378°W	
11,050.00	2.42	144.47	11,046.67	66.14	104.32	414,900.34	795,838.22	32.137°N	103.378°W	
11,075.00	2.44	145.04	11,071.65	65.28	104.93	414,899.48	795,838.83	32.137°N	103.378°W	
11,100.00	2.45	143.87	11,096.63	64.41	105.55	414,898.61	795,839.45	32.137°N	103.378°W	
11,125.00	2.48	143.91	11,121.60	63.54	106.19	414,897.74	795,840.08	32.137°N	103.378°W	
11,150.00	2.27	143.08	11,146.58	62.71	106.80	414,896.91	795,840.70	32.137°N	103.378°W	
11,175.00	2.18	140.41	11,171.56	61.95	107.40	414,896.15	795,841.30	32.137°N	103.378°W	
11,200.00	1.99	138.07	11,196.55	61.26	108.00	414,895.46	795,841.89	32.137°N	103.378°W	
11,225.00	1.85	136.15	11,221.53	60.64	108.57	414,894.84	795,842.46	32.137°N	103.378°W	
11,250.00	1.77	134.25	11,246.52	60.08	109.12	414,894.28	795,843.02	32.137°N	103.378°W	
11,275.00	1.62	132.82	11,271.51	59.57	109.66	414,893.77	795,843.55	32.137°N	103.378°W	
11,300.00	1.49	132.13	11,296.50	59.12	110.16	414,893.31	795,844.06	32.137°N	103.378°W	



Survey Report - Geographic

Company:	Concho Operating	Local Co-ordinate Reference:	Well White Falcon 16 State #23H
Project:	Lea County, NM (Nad 27)	TVD Reference:	3257' GL - 29' RKB @ 3286.00ft (Noram #23)
Site:	White Falcon 16 State	MD Reference:	3257' GL - 29' RKB @ 3286.00ft (Noram #23)
Well:	White Falcon 16 State #23H	North Reference:	Grid
Wellbore:	#23H	Survey Calculation Method:	Minimum Curvature
Design:	#23H	Database:	EDM 5000.14 Single User Db

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
11,325.00	1.49	131.47	11,321.49	58.68	110.64	414,892.88	795,844.54	32.137°N	103.378°W
11,350.00	1.43	132.51	11,346.48	58.26	111.12	414,892.46	795,845.01	32.137°N	103.378°W
11,375.00	1.46	135.99	11,371.48	57.82	111.57	414,892.02	795,845.46	32.137°N	103.378°W
11,400.00	1.32	131.85	11,396.47	57.40	112.00	414,891.59	795,845.90	32.137°N	103.378°W
11,425.00	1.39	134.57	11,421.46	56.99	112.43	414,891.19	795,846.33	32.137°N	103.378°W
11,450.00	1.31	126.02	11,446.46	56.61	112.88	414,890.81	795,846.78	32.137°N	103.378°W
11,475.00	1.45	143.49	11,471.45	56.19	113.30	414,890.39	795,847.20	32.137°N	103.378°W
11,500.00	1.50	142.02	11,496.44	55.67	113.69	414,889.87	795,847.59	32.137°N	103.378°W
11,525.00	1.54	140.72	11,521.43	55.16	114.10	414,889.36	795,848.00	32.137°N	103.378°W
11,550.00	1.61	142.54	11,546.42	54.62	114.53	414,888.82	795,848.43	32.137°N	103.378°W
11,575.00	1.74	147.15	11,571.41	54.02	114.95	414,888.22	795,848.85	32.137°N	103.378°W
11,600.00	1.87	150.19	11,596.40	53.35	115.36	414,887.55	795,849.26	32.137°N	103.378°W
11,625.00	1.86	148.19	11,621.39	52.65	115.77	414,886.85	795,849.67	32.137°N	103.378°W
11,627.00	1.86	148.03	11,623.38	52.59	115.81	414,886.79	795,849.71	32.137°N	103.378°W
11627'MD: Final Gyro Survey - 11627'MD: Tie into Scientific Gyro Survey									
11,735.00	2.31	147.92	11,731.31	49.26	117.89	414,883.46	795,851.79	32.137°N	103.378°W
11735'MD: Begin DrillTech MWD									
11,800.00	2.07	151.38	11,796.26	47.12	119.15	414,881.32	795,853.05	32.137°N	103.378°W
11,895.00	2.03	155.73	11,891.20	44.08	120.66	414,878.28	795,854.56	32.137°N	103.378°W
11,942.00	7.41	157.69	11,938.03	40.52	122.16	414,874.72	795,856.06	32.137°N	103.378°W
11,989.00	15.19	164.17	11,984.08	31.78	124.99	414,865.97	795,858.89	32.137°N	103.378°W
12,036.00	19.90	167.49	12,028.88	18.03	128.41	414,852.23	795,862.30	32.137°N	103.378°W
12,083.00	22.85	169.00	12,072.65	1.26	131.88	414,835.46	795,865.78	32.137°N	103.378°W
12,130.00	27.74	171.99	12,115.13	-18.54	135.15	414,815.66	795,869.05	32.137°N	103.377°W
12,177.00	32.28	172.68	12,155.82	-41.83	138.27	414,792.37	795,872.17	32.137°N	103.377°W
12,224.00	35.72	172.26	12,194.78	-67.88	141.72	414,766.32	795,875.62	32.137°N	103.377°W
12,271.00	39.39	174.47	12,232.03	-96.33	145.01	414,737.87	795,878.91	32.137°N	103.377°W
12,318.00	40.91	175.45	12,267.96	-126.52	147.67	414,707.68	795,881.56	32.137°N	103.377°W
12,366.00	41.99	176.05	12,303.93	-158.20	150.02	414,676.00	795,883.92	32.136°N	103.377°W
12,413.00	44.54	177.81	12,338.16	-190.37	151.73	414,643.83	795,885.63	32.136°N	103.377°W
12,460.00	47.54	179.07	12,370.78	-224.18	152.64	414,610.02	795,886.54	32.136°N	103.377°W
12,507.00	52.37	180.59	12,401.01	-260.15	152.73	414,574.05	795,886.63	32.136°N	103.377°W
12,555.00	56.60	183.93	12,428.89	-299.17	151.16	414,535.03	795,885.06	32.136°N	103.377°W
12,601.00	61.39	184.58	12,452.58	-338.47	148.23	414,495.73	795,882.13	32.136°N	103.377°W
12,648.00	66.83	184.11	12,473.10	-380.62	145.04	414,453.58	795,878.93	32.136°N	103.377°W
12,685.00	72.43	181.48	12,485.97	-415.25	143.36	414,418.95	795,877.26	32.136°N	103.377°W
12,751.00	82.13	177.58	12,500.49	-479.54	143.93	414,354.66	795,877.83	32.136°N	103.377°W
12,798.00	81.99	177.79	12,506.99	-526.05	145.81	414,308.15	795,879.71	32.135°N	103.377°W
12,845.00	83.66	177.20	12,512.86	-572.63	147.85	414,261.57	795,881.74	32.135°N	103.377°W
12,892.00	86.06	177.42	12,517.07	-619.39	150.04	414,214.81	795,883.94	32.135°N	103.377°W
12,939.00	87.98	177.35	12,519.51	-666.27	152.19	414,167.93	795,886.08	32.135°N	103.377°W
13,034.00	89.49	177.92	12,521.61	-761.17	156.10	414,073.03	795,890.00	32.135°N	103.377°W
13,128.00	90.62	179.66	12,521.52	-855.14	158.09	413,979.06	795,891.99	32.135°N	103.377°W
13,222.00	91.39	180.76	12,519.87	-949.12	157.74	413,885.08	795,891.64	32.134°N	103.377°W
13,316.00	88.61	179.10	12,519.87	-1,043.11	157.86	413,791.09	795,891.76	32.134°N	103.377°W
13,411.00	88.29	179.27	12,522.44	-1,138.07	159.21	413,696.14	795,893.11	32.134°N	103.377°W
13,505.00	88.32	178.74	12,525.22	-1,232.01	160.84	413,602.19	795,894.74	32.133°N	103.377°W
13,600.00	88.66	178.44	12,527.72	-1,326.95	163.18	413,507.25	795,897.08	32.133°N	103.377°W
13,694.00	90.65	178.03	12,528.29	-1,420.90	166.07	413,413.30	795,899.97	32.133°N	103.377°W
13,788.00	92.65	177.93	12,525.58	-1,514.80	169.39	413,319.41	795,903.28	32.133°N	103.377°W
13,883.00	93.41	178.08	12,520.56	-1,609.60	172.69	413,224.60	795,906.59	32.132°N	103.377°W
13,977.00	93.35	178.97	12,515.02	-1,703.41	175.10	413,130.79	795,909.00	32.132°N	103.377°W
14,071.00	91.46	180.17	12,511.07	-1,797.32	175.81	413,036.89	795,909.71	32.132°N	103.377°W
14,166.00	90.36	179.02	12,509.56	-1,892.30	176.48	412,941.90	795,910.38	32.132°N	103.377°W
14,261.00	91.74	179.20	12,507.82	-1,987.27	177.95	412,846.93	795,911.85	32.131°N	103.377°W



Survey Report - Geographic

Company:	Concho Operating	Local Co-ordinate Reference:	Well White Falcon 16 State #23H
Project:	Lea County, NM (Nad 27)	TVD Reference:	3257' GL - 29' RKB @ 3286.00ft (Noram #23)
Site:	White Falcon 16 State	MD Reference:	3257' GL - 29' RKB @ 3286.00ft (Noram #23)
Well:	White Falcon 16 State #23H	North Reference:	Grid
Wellbore:	#23H	Survey Calculation Method:	Minimum Curvature
Design:	#23H	Database:	EDM 5000.14 Single User Db

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
14,355.00	90.48	178.19	12,506.00	-2,081.23	180.10	412,752.98	795,913.99	32.131°N	103.377°W
14,449.00	90.36	176.91	12,505.31	-2,175.13	184.11	412,659.07	795,918.01	32.131°N	103.377°W
14,543.00	88.90	174.83	12,505.92	-2,268.88	190.88	412,565.32	795,924.78	32.131°N	103.377°W
14,640.00	91.66	177.53	12,505.45	-2,365.65	197.34	412,468.56	795,931.24	32.130°N	103.377°W
14,704.00	90.69	176.53	12,504.13	-2,429.54	200.66	412,404.66	795,934.56	32.130°N	103.377°W
14,797.00	90.61	178.76	12,503.08	-2,522.45	204.48	412,311.75	795,938.38	32.130°N	103.377°W
14,892.00	89.33	180.38	12,503.13	-2,617.45	205.19	412,216.76	795,939.09	32.130°N	103.377°W
14,987.00	89.25	180.43	12,504.31	-2,712.44	204.52	412,121.77	795,938.42	32.129°N	103.377°W
15,081.00	89.14	180.35	12,505.63	-2,806.43	203.88	412,027.78	795,937.78	32.129°N	103.377°W
15,175.00	88.90	179.90	12,507.23	-2,900.41	203.68	411,933.79	795,937.57	32.129°N	103.377°W
15,270.00	88.01	178.84	12,509.80	-2,995.37	204.72	411,838.84	795,938.62	32.129°N	103.377°W
15,364.00	89.24	179.20	12,512.05	-3,089.33	206.33	411,744.88	795,940.22	32.128°N	103.377°W
15,459.00	89.85	179.02	12,512.81	-3,184.31	207.80	411,649.89	795,941.70	32.128°N	103.377°W
15,554.00	88.80	179.18	12,513.92	-3,279.29	209.30	411,554.91	795,943.19	32.128°N	103.377°W
15,649.00	90.56	182.33	12,514.46	-3,374.27	208.04	411,459.94	795,941.94	32.128°N	103.377°W
15,744.00	90.47	182.85	12,513.60	-3,469.16	203.75	411,365.04	795,937.65	32.127°N	103.377°W
15,839.00	90.71	183.51	12,512.62	-3,564.01	198.48	411,270.19	795,932.38	32.127°N	103.377°W
15,935.00	90.12	180.83	12,511.93	-3,659.93	194.85	411,174.27	795,928.74	32.127°N	103.377°W
16,030.00	89.66	180.11	12,512.11	-3,754.93	194.07	411,079.28	795,927.96	32.127°N	103.377°W
16,125.00	90.15	179.87	12,512.27	-3,849.93	194.08	410,984.28	795,927.98	32.126°N	103.377°W
16,220.00	88.80	178.81	12,513.14	-3,944.91	195.18	410,889.29	795,929.08	32.126°N	103.377°W
16,316.00	87.70	177.68	12,516.07	-4,040.82	198.12	410,793.39	795,932.01	32.126°N	103.377°W
16,411.00	89.18	179.18	12,518.66	-4,135.74	200.72	410,698.46	795,934.62	32.126°N	103.377°W
16,440.00	89.33	179.56	12,519.03	-4,164.74	201.04	410,669.47	795,934.93	32.125°N	103.377°W
16,535.00	90.42	179.33	12,519.24	-4,259.73	201.96	410,574.47	795,935.85	32.125°N	103.377°W
16,630.00	90.75	179.36	12,518.27	-4,354.72	203.04	410,479.49	795,936.94	32.125°N	103.377°W
16,725.00	90.75	180.27	12,517.03	-4,449.71	203.35	410,384.49	795,937.25	32.125°N	103.377°W
16,821.00	89.80	182.79	12,516.57	-4,545.67	200.79	410,288.54	795,934.68	32.124°N	103.377°W
16,915.00	89.01	181.65	12,517.54	-4,639.59	197.15	410,194.62	795,931.04	32.124°N	103.377°W
17,011.00	88.53	179.46	12,519.60	-4,735.56	196.22	410,098.65	795,930.11	32.124°N	103.377°W
17,106.00	89.12	179.32	12,521.55	-4,830.53	197.23	410,003.68	795,931.12	32.124°N	103.377°W
17,201.00	88.64	177.47	12,523.41	-4,925.47	199.89	409,908.74	795,933.78	32.123°N	103.377°W
17,296.00	89.60	177.15	12,524.87	-5,020.36	204.34	409,813.85	795,938.24	32.123°N	103.377°W
17,391.00	89.48	176.22	12,525.63	-5,115.19	209.84	409,719.02	795,943.74	32.123°N	103.377°W
17,486.00	89.87	175.33	12,526.17	-5,209.93	216.84	409,624.28	795,950.73	32.123°N	103.377°W
17,580.00	90.31	175.42	12,526.02	-5,303.63	224.42	409,530.58	795,958.31	32.122°N	103.377°W
17,675.00	92.34	175.82	12,523.82	-5,398.32	231.67	409,435.89	795,965.57	32.122°N	103.377°W
17,769.00	93.69	179.19	12,518.88	-5,492.08	235.76	409,342.13	795,969.65	32.122°N	103.377°W
17,863.00	92.96	182.65	12,513.43	-5,585.90	234.25	409,248.31	795,968.15	32.122°N	103.377°W
17,957.00	92.42	182.59	12,509.01	-5,679.70	229.96	409,154.52	795,963.85	32.121°N	103.377°W
18,052.00	89.17	182.17	12,507.70	-5,774.59	226.01	409,059.62	795,959.91	32.121°N	103.377°W
18,147.00	88.31	181.12	12,509.79	-5,869.53	223.29	408,964.68	795,957.18	32.121°N	103.377°W
18,241.00	89.14	180.24	12,511.88	-5,963.50	222.17	408,870.72	795,956.07	32.120°N	103.377°W
18,335.00	88.23	179.33	12,514.03	-6,057.47	222.52	408,776.74	795,956.42	32.120°N	103.377°W
18,430.00	88.47	179.70	12,516.77	-6,152.42	223.33	408,681.79	795,957.22	32.120°N	103.377°W
18,525.00	88.17	180.04	12,519.55	-6,247.38	223.54	408,586.83	795,957.44	32.120°N	103.377°W
18,619.00	90.10	179.92	12,520.97	-6,341.37	223.58	408,492.84	795,957.47	32.119°N	103.377°W
18,714.00	90.23	179.92	12,520.70	-6,436.37	223.71	408,397.84	795,957.61	32.119°N	103.377°W
18,809.00	91.06	180.32	12,519.63	-6,531.36	223.51	408,302.85	795,957.41	32.119°N	103.377°W
18,903.00	90.99	179.11	12,517.95	-6,625.34	223.98	408,208.87	795,957.87	32.119°N	103.377°W
18,998.00	92.09	180.25	12,515.40	-6,720.30	224.51	408,113.91	795,958.41	32.118°N	103.377°W
19,092.00	92.53	181.37	12,511.61	-6,814.22	223.18	408,020.00	795,957.08	32.118°N	103.377°W
19,187.00	91.21	181.60	12,508.51	-6,909.13	220.72	407,925.08	795,954.62	32.118°N	103.377°W
19,281.00	90.97	182.07	12,506.72	-7,003.07	217.71	407,831.15	795,951.61	32.118°N	103.377°W
19,375.00	90.29	181.99	12,505.69	-7,097.00	214.38	407,737.21	795,948.28	32.117°N	103.377°W



Survey Report - Geographic

Company:	Concho Operating	Local Co-ordinate Reference:	Well White Falcon 16 State #23H
Project:	Lea County, NM (Nad 27)	TVD Reference:	3257' GL - 29' RKB @ 3286.00ft (Noram #23)
Site:	White Falcon 16 State	MD Reference:	3257' GL - 29' RKB @ 3286.00ft (Noram #23)
Well:	White Falcon 16 State #23H	North Reference:	Grid
Wellbore:	#23H	Survey Calculation Method:	Minimum Curvature
Design:	#23H	Database:	EDM 5000.14 Single User Db

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
19,469.00	88.82	180.71	12,506.42	-7,190.97	212.17	407,643.25	795,946.06	32.117°N	103.377°W
19,564.00	87.75	178.24	12,509.26	-7,285.91	213.04	407,548.30	795,946.93	32.117°N	103.377°W
19,658.00	87.40	177.63	12,513.24	-7,379.77	216.42	407,454.45	795,950.32	32.117°N	103.377°W
19,752.00	88.92	177.96	12,516.25	-7,473.65	220.03	407,360.57	795,953.93	32.116°N	103.377°W
19,846.00	88.97	177.33	12,517.99	-7,567.55	223.90	407,266.66	795,957.79	32.116°N	103.377°W
19,940.00	88.87	176.83	12,519.76	-7,661.41	228.68	407,172.80	795,962.58	32.116°N	103.377°W
20,035.00	89.05	176.73	12,521.48	-7,756.24	234.02	407,077.97	795,967.92	32.116°N	103.377°W
20,128.00	89.49	177.04	12,522.67	-7,849.10	239.07	406,985.12	795,972.97	32.115°N	103.377°W
20,223.00	89.99	176.94	12,523.10	-7,943.97	244.06	406,890.25	795,977.96	32.115°N	103.377°W
20,317.00	91.56	177.74	12,521.83	-8,037.85	248.42	406,796.36	795,982.32	32.115°N	103.377°W
20,412.00	91.80	178.32	12,519.04	-8,132.76	251.69	406,701.46	795,985.58	32.115°N	103.377°W
20,506.00	91.65	178.13	12,516.21	-8,226.67	254.60	406,607.55	795,988.49	32.114°N	103.377°W
20,600.00	90.82	178.77	12,514.18	-8,320.61	257.14	406,513.60	795,991.04	32.114°N	103.377°W
20,695.00	88.13	178.45	12,515.06	-8,415.57	259.44	406,418.65	795,993.34	32.114°N	103.377°W
20,789.00	87.76	178.09	12,518.43	-8,509.47	262.28	406,324.75	795,996.18	32.113°N	103.377°W
20,884.00	88.17	178.15	12,521.80	-8,604.36	265.39	406,229.86	795,999.29	32.113°N	103.377°W
20,977.00	88.41	178.53	12,524.57	-8,697.27	268.09	406,136.94	796,001.98	32.113°N	103.377°W
21,072.00	87.99	177.60	12,527.56	-8,792.17	271.29	406,042.04	796,005.19	32.113°N	103.377°W
21,166.00	89.54	178.38	12,529.58	-8,886.09	274.59	405,948.13	796,008.49	32.112°N	103.377°W
21,260.00	90.17	179.14	12,529.82	-8,980.07	276.62	405,854.15	796,010.52	32.112°N	103.377°W
21,355.00	90.62	180.28	12,529.17	-9,075.06	277.10	405,759.16	796,011.00	32.112°N	103.377°W
21,445.00	90.56	179.80	12,528.24	-9,165.06	277.04	405,669.16	796,010.94	32.112°N	103.377°W
21,540.00	91.57	180.38	12,526.48	-9,260.04	276.89	405,574.18	796,010.79	32.111°N	103.377°W
21,634.00	88.91	178.40	12,526.08	-9,354.02	277.89	405,480.20	796,011.79	32.111°N	103.377°W
21,728.00	88.70	178.04	12,528.04	-9,447.95	280.81	405,386.27	796,014.71	32.111°N	103.377°W
21,823.00	88.60	177.93	12,530.28	-9,542.87	284.15	405,291.35	796,018.05	32.111°N	103.377°W
21,917.00	89.87	179.03	12,531.54	-9,636.82	286.64	405,197.40	796,020.54	32.110°N	103.377°W
22,012.00	90.18	179.11	12,531.49	-9,731.81	288.19	405,102.41	796,022.08	32.110°N	103.377°W
22,106.00	90.66	178.67	12,530.80	-9,825.79	290.01	405,008.43	796,023.90	32.110°N	103.377°W
22,201.00	89.26	178.26	12,530.87	-9,920.75	292.55	404,913.47	796,026.45	32.110°N	103.377°W
22,296.00	89.20	177.80	12,532.15	-10,015.69	295.82	404,818.53	796,029.71	32.109°N	103.377°W
22,342.00	89.87	179.82	12,532.52	-10,061.67	296.77	404,772.55	796,030.67	32.109°N	103.377°W
22342'MD: Final MWD Survey									
22,410.00	89.87	179.82	12,532.68	-10,129.67	296.99	404,704.55	796,030.88	32.109°N	103.377°W
22410'MD: Projection to Total Depth									

Design Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
100.00	100.00	-0.06	0.01	100'MD: Begin Scientific Keeper Gyro Survey
11,627.00	11,623.38	52.59	115.81	11627'MD: Final Gyro Survey
11,627.00	11,623.38	52.59	115.81	11627'MD: Tie into Scientific Gyro Survey
11,735.00	11,731.31	49.26	117.89	11735'MD: Begin DrillTech MWD
22,342.00	12,532.52	-10,061.67	296.77	22342'MD: Final MWD Survey
22,410.00	12,532.68	-10,129.67	296.99	22410'MD: Projection to Total Depth

Checked By: _____ Approved By: _____ Date: _____