

NORTHERN DELAWARE BASIN

LEA COUNTY, NM

BULLDOG

VALOR ST COM 801H

OWB

Design: AWP

Standard Survey Report

27 March, 2020

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well VALOR ST COM 801H
Project:	LEA COUNTY, NM	TVD Reference:	KB=30' @ 3359.3usft (SCAN QUEST)
Site:	BULLDOG	MD Reference:	KB=30' @ 3359.3usft (SCAN QUEST)
Well:	VALOR ST COM 801H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWP	Database:	edm

Project	LEA COUNTY, NM		
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		

Well	VALOR ST COM 801H, ACTIVE			
Well Position	+N/-S	0.0 usft	Northing:	398,669.30 usft
	+E/-W	0.0 usft	Easting:	746,776.60 usft
Position Uncertainty		3.0 usft	Wellhead Elevation:	usft
			Ground Level:	3,329.3 usft

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	3/4/2020	6.63	59.91	47,586.28847237

Design	AWP				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	181.55	

Survey Program	Date	3/27/2020			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.0	11,588.1	GYRO-INTERMEDIATE (OWB)	Standard Keeper 104	Standard Wireline Keeper ver 1.0.4	
11,718.0	20,168.0	MWD-CURVE/LATERAL (OWB)	MWD+IFR1+FDIR	OWSG MWD + IFR1 + FDIR Correction	

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	0.51	86.56	100.0	0.0	0.4	0.0	0.51	0.51	0.00	
125.0	0.58	89.77	125.0	0.0	0.7	-0.1	0.31	0.28	12.84	
150.0	0.58	87.94	150.0	0.0	0.9	-0.1	0.07	0.00	-7.32	
175.0	0.59	77.78	175.0	0.1	1.2	-0.1	0.42	0.04	-40.64	
200.0	0.66	79.14	200.0	0.1	1.5	-0.2	0.29	0.28	5.44	
225.0	0.64	79.35	225.0	0.2	1.7	-0.2	0.08	-0.08	0.84	
250.0	0.63	76.76	250.0	0.2	2.0	-0.3	0.12	-0.04	-10.36	
275.0	0.65	80.03	275.0	0.3	2.3	-0.4	0.17	0.08	13.08	
300.0	0.71	76.98	300.0	0.4	2.6	-0.4	0.28	0.24	-12.20	
325.0	0.73	74.29	325.0	0.4	2.9	-0.5	0.16	0.08	-10.76	
350.0	0.86	70.78	350.0	0.5	3.2	-0.6	0.56	0.52	-14.04	
375.0	0.92	69.52	375.0	0.7	3.6	-0.8	0.25	0.24	-5.04	
400.0	1.01	69.43	400.0	0.8	4.0	-0.9	0.36	0.36	-0.36	
425.0	1.11	66.37	425.0	1.0	4.4	-1.1	0.46	0.40	-12.24	

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Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWP	Database:	edm

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)
450.0	1.08	66.08	450.0	1.2	4.8	-1.3	0.12	-0.12	-1.16
475.0	1.06	67.02	475.0	1.4	5.3	-1.5	0.11	-0.08	3.76
500.0	1.05	65.48	500.0	1.6	5.7	-1.7	0.12	-0.04	-6.16
525.0	0.99	66.03	525.0	1.7	6.1	-1.9	0.24	-0.24	2.20
550.0	1.07	63.00	550.0	1.9	6.5	-2.1	0.39	0.32	-12.12
575.0	1.07	56.79	574.9	2.2	6.9	-2.3	0.46	0.00	-24.84
600.0	1.11	51.75	599.9	2.4	7.3	-2.6	0.42	0.16	-20.16
625.0	1.13	47.91	624.9	2.8	7.6	-3.0	0.31	0.08	-15.36
650.0	1.14	45.14	649.9	3.1	8.0	-3.3	0.22	0.04	-11.08
675.0	1.18	45.19	674.9	3.5	8.4	-3.7	0.16	0.16	0.20
700.0	1.07	42.12	699.9	3.8	8.7	-4.0	0.50	-0.44	-12.28
725.0	1.00	40.30	724.9	4.1	9.0	-4.4	0.31	-0.28	-7.28
750.0	1.00	43.73	749.9	4.5	9.3	-4.7	0.24	0.00	13.72
775.0	0.70	40.13	774.9	4.7	9.5	-5.0	1.22	-1.20	-14.40
800.0	0.60	46.31	799.9	5.0	9.7	-5.2	0.49	-0.40	24.72
825.0	0.61	48.41	824.9	5.1	9.9	-5.4	0.10	0.04	8.40
850.0	0.61	49.54	849.9	5.3	10.1	-5.6	0.05	0.00	4.52
875.0	0.68	51.88	874.9	5.5	10.4	-5.8	0.30	0.28	9.36
900.0	0.62	50.26	899.9	5.7	10.6	-5.9	0.25	-0.24	-6.48
925.0	0.73	54.35	924.9	5.8	10.8	-6.1	0.48	0.44	16.36
950.0	0.64	52.82	949.9	6.0	11.0	-6.3	0.37	-0.36	-6.12
975.0	0.57	47.44	974.9	6.2	11.2	-6.5	0.36	-0.28	-21.52
1,000.0	0.54	59.71	999.9	6.3	11.4	-6.6	0.49	-0.12	49.08
1,025.0	0.43	79.37	1,024.9	6.4	11.6	-6.7	0.79	-0.44	78.64
1,050.0	0.44	87.09	1,049.9	6.4	11.8	-6.7	0.24	0.04	30.88
1,075.0	0.40	95.92	1,074.9	6.4	12.0	-6.7	0.30	-0.16	35.32
1,100.0	0.34	108.79	1,099.9	6.4	12.2	-6.7	0.41	-0.24	51.48
1,125.0	0.47	113.72	1,124.9	6.3	12.3	-6.7	0.54	0.52	19.72
1,150.0	0.55	124.00	1,149.9	6.2	12.5	-6.6	0.48	0.32	41.12
1,175.0	0.66	128.43	1,174.9	6.1	12.7	-6.4	0.48	0.44	17.72
1,200.0	0.72	131.33	1,199.9	5.9	13.0	-6.2	0.28	0.24	11.60
1,225.0	0.76	131.58	1,224.9	5.7	13.2	-6.0	0.16	0.16	1.00
1,250.0	0.74	130.71	1,249.9	5.4	13.5	-5.8	0.09	-0.08	-3.48
1,275.0	0.75	135.04	1,274.9	5.2	13.7	-5.6	0.23	0.04	17.32
1,300.0	0.80	141.45	1,299.9	5.0	13.9	-5.3	0.40	0.20	25.64
1,325.0	0.87	135.87	1,324.9	4.7	14.2	-5.1	0.43	0.28	-22.32
1,350.0	0.85	141.53	1,349.9	4.4	14.4	-4.8	0.35	-0.08	22.64
1,375.0	0.86	142.81	1,374.9	4.1	14.6	-4.5	0.09	0.04	5.12
1,400.0	0.84	144.30	1,399.9	3.8	14.9	-4.2	0.12	-0.08	5.96
1,425.0	0.90	140.93	1,424.9	3.5	15.1	-3.9	0.32	0.24	-13.48
1,450.0	0.88	144.82	1,449.9	3.2	15.3	-3.6	0.25	-0.08	15.56
1,475.0	0.91	139.40	1,474.9	2.9	15.6	-3.3	0.36	0.12	-21.68
1,500.0	0.99	144.13	1,499.9	2.6	15.8	-3.0	0.45	0.32	18.92

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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)	
1,525.0	0.97	144.79	1,524.9	2.2	16.1	-2.7	0.09	-0.08	2.64	
1,550.0	0.98	141.99	1,549.9	1.9	16.3	-2.3	0.19	0.04	-11.20	
1,575.0	1.02	142.26	1,574.8	1.5	16.6	-2.0	0.16	0.16	1.08	
1,600.0	1.04	139.28	1,599.8	1.2	16.9	-1.7	0.23	0.08	-11.92	
1,625.0	1.01	143.05	1,624.8	0.8	17.1	-1.3	0.30	-0.12	15.08	
1,650.0	1.09	139.23	1,649.8	0.5	17.4	-1.0	0.43	0.32	-15.28	
1,675.0	1.09	136.45	1,674.8	0.1	17.8	-0.6	0.21	0.00	-11.12	
1,700.0	1.12	137.70	1,699.8	-0.2	18.1	-0.3	0.15	0.12	5.00	
1,725.0	1.17	135.39	1,724.8	-0.6	18.4	0.1	0.27	0.20	-9.24	
1,750.0	1.27	134.58	1,749.8	-1.0	18.8	0.4	0.41	0.40	-3.24	
1,775.0	1.21	132.70	1,774.8	-1.3	19.2	0.8	0.29	-0.24	-7.52	
1,800.0	1.31	132.12	1,799.8	-1.7	19.6	1.2	0.40	0.40	-2.32	
1,825.0	1.27	134.01	1,824.8	-2.1	20.0	1.5	0.23	-0.16	7.56	
1,850.0	1.27	132.59	1,849.8	-2.5	20.4	1.9	0.13	0.00	-5.68	
1,875.0	1.32	131.10	1,874.8	-2.8	20.8	2.3	0.24	0.20	-5.96	
1,900.0	1.33	130.61	1,899.8	-3.2	21.3	2.6	0.06	0.04	-1.96	
1,925.0	1.36	129.61	1,924.8	-3.6	21.7	3.0	0.15	0.12	-4.00	
1,950.0	1.29	133.73	1,949.8	-4.0	22.2	3.4	0.47	-0.28	16.48	
1,975.0	1.38	130.44	1,974.8	-4.4	22.6	3.8	0.47	0.36	-13.16	
2,000.0	1.39	130.88	1,999.7	-4.8	23.0	4.1	0.06	0.04	1.76	
2,025.0	1.45	127.36	2,024.7	-5.2	23.5	4.5	0.42	0.24	-14.08	
2,050.0	1.40	131.35	2,049.7	-5.5	24.0	4.9	0.44	-0.20	15.96	
2,075.0	1.48	129.99	2,074.7	-6.0	24.5	5.3	0.35	0.32	-5.44	
2,100.0	1.43	133.55	2,099.7	-6.4	25.0	5.7	0.41	-0.20	14.24	
2,125.0	1.51	130.18	2,124.7	-6.8	25.4	6.1	0.47	0.32	-13.48	
2,150.0	1.55	129.53	2,149.7	-7.2	25.9	6.5	0.17	0.16	-2.60	
2,175.0	1.57	129.05	2,174.7	-7.7	26.5	6.9	0.10	0.08	-1.92	
2,200.0	1.56	127.35	2,199.7	-8.1	27.0	7.4	0.19	-0.04	-6.80	
2,225.0	1.56	128.40	2,224.7	-8.5	27.5	7.8	0.11	0.00	4.20	
2,250.0	1.56	127.18	2,249.7	-8.9	28.1	8.2	0.13	0.00	-4.88	
2,275.0	1.64	125.83	2,274.7	-9.3	28.6	8.6	0.35	0.32	-5.40	
2,300.0	1.63	126.32	2,299.6	-9.8	29.2	9.0	0.07	-0.04	1.96	
2,325.0	1.75	124.31	2,324.6	-10.2	29.8	9.4	0.54	0.48	-8.04	
2,350.0	1.72	124.75	2,349.6	-10.6	30.4	9.8	0.13	-0.12	1.76	
2,375.0	1.80	122.55	2,374.6	-11.0	31.1	10.2	0.42	0.32	-8.80	
2,400.0	1.83	121.31	2,399.6	-11.5	31.8	10.6	0.20	0.12	-4.96	
2,425.0	1.86	122.04	2,424.6	-11.9	32.4	11.0	0.15	0.12	2.92	
2,450.0	1.88	121.98	2,449.6	-12.3	33.1	11.4	0.08	0.08	-0.24	
2,475.0	1.94	119.50	2,474.6	-12.7	33.9	11.8	0.41	0.24	-9.92	
2,500.0	1.95	119.73	2,499.5	-13.2	34.6	12.2	0.05	0.04	0.92	
2,525.0	2.09	117.27	2,524.5	-13.6	35.4	12.6	0.66	0.56	-9.84	
2,550.0	2.13	114.87	2,549.5	-14.0	36.2	13.0	0.39	0.16	-9.60	
2,575.0	2.23	112.73	2,574.5	-14.4	37.1	13.4	0.52	0.40	-8.56	

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2,600.0	2.33	110.95	2,599.5	-14.7	38.0	13.7	0.49	0.40	-7.12
2,625.0	2.45	110.08	2,624.5	-15.1	39.0	14.0	0.50	0.48	-3.48
2,650.0	2.51	109.25	2,649.4	-15.5	40.0	14.4	0.28	0.24	-3.32
2,675.0	2.53	109.08	2,674.4	-15.8	41.0	14.7	0.09	0.08	-0.68
2,700.0	2.54	109.80	2,699.4	-16.2	42.1	15.0	0.13	0.04	2.88
2,725.0	2.52	108.54	2,724.4	-16.6	43.1	15.4	0.24	-0.08	-5.04
2,750.0	2.59	107.89	2,749.3	-16.9	44.2	15.7	0.30	0.28	-2.60
2,775.0	2.37	100.17	2,774.3	-17.2	45.2	15.9	1.60	-0.88	-30.88
2,800.0	2.34	77.59	2,799.3	-17.1	46.2	15.9	3.69	-0.12	-90.32
2,825.0	2.52	64.80	2,824.3	-16.8	47.2	15.5	2.28	0.72	-51.16
2,850.0	2.78	62.17	2,849.2	-16.3	48.2	15.0	1.15	1.04	-10.52
2,875.0	3.27	56.97	2,874.2	-15.6	49.4	14.3	2.24	1.96	-20.80
2,900.0	4.29	51.05	2,899.1	-14.6	50.7	13.3	4.36	4.08	-23.68
2,925.0	4.88	48.89	2,924.1	-13.4	52.2	11.9	2.46	2.36	-8.64
2,950.0	4.93	48.27	2,949.0	-11.9	53.8	10.5	0.29	0.20	-2.48
2,975.0	4.88	42.45	2,973.9	-10.4	55.4	8.9	2.00	-0.20	-23.28
3,000.0	4.87	33.31	2,998.8	-8.8	56.7	7.2	3.10	-0.04	-36.56
3,025.0	4.90	29.87	3,023.7	-7.0	57.8	5.4	1.18	0.12	-13.76
3,050.0	4.95	30.62	3,048.6	-5.1	58.9	3.5	0.33	0.20	3.00
3,075.0	4.62	32.19	3,073.5	-3.3	59.9	1.7	1.42	-1.32	6.28
3,100.0	3.64	39.82	3,098.5	-1.9	61.0	0.2	4.49	-3.92	30.52
3,125.0	3.41	44.62	3,123.4	-0.7	62.0	-1.0	1.50	-0.92	19.20
3,150.0	3.34	47.81	3,148.4	0.3	63.1	-2.0	0.80	-0.28	12.76
3,175.0	3.41	49.90	3,173.3	1.3	64.2	-3.0	0.57	0.28	8.36
3,200.0	3.49	51.12	3,198.3	2.2	65.3	-4.0	0.43	0.32	4.88
3,225.0	3.57	53.79	3,223.2	3.2	66.6	-5.0	0.73	0.32	10.68
3,250.0	3.80	55.88	3,248.2	4.1	67.9	-5.9	1.07	0.92	8.36
3,275.0	3.92	56.53	3,273.1	5.0	69.3	-6.9	0.51	0.48	2.60
3,300.0	3.89	57.39	3,298.1	5.9	70.7	-7.9	0.26	-0.12	3.44
3,325.0	3.94	57.19	3,323.0	6.9	72.1	-8.8	0.21	0.20	-0.80
3,350.0	3.98	57.76	3,347.9	7.8	73.6	-9.8	0.22	0.16	2.28
3,375.0	3.90	61.52	3,372.9	8.7	75.1	-10.7	1.08	-0.32	15.04
3,400.0	3.89	64.34	3,397.8	9.4	76.6	-11.5	0.77	-0.04	11.28
3,425.0	3.97	64.23	3,422.8	10.2	78.1	-12.3	0.32	0.32	-0.44
3,450.0	3.89	65.58	3,447.7	10.9	79.7	-13.1	0.49	-0.32	5.40
3,475.0	3.94	65.82	3,472.7	11.6	81.2	-13.8	0.21	0.20	0.96
3,500.0	3.92	65.38	3,497.6	12.3	82.8	-14.6	0.14	-0.08	-1.76
3,525.0	3.94	65.35	3,522.5	13.0	84.4	-15.3	0.08	0.08	-0.12
3,550.0	3.94	65.23	3,547.5	13.8	85.9	-16.1	0.03	0.00	-0.48
3,575.0	3.94	65.10	3,572.4	14.5	87.5	-16.8	0.04	0.00	-0.52
3,600.0	3.97	65.21	3,597.4	15.2	89.0	-17.6	0.12	0.12	0.44
3,625.0	3.92	66.05	3,622.3	15.9	90.6	-18.4	0.31	-0.20	3.36
3,650.0	3.33	76.84	3,647.3	16.4	92.1	-18.9	3.60	-2.36	43.16
3,675.0	3.10	86.15	3,672.2	16.6	93.5	-19.2	2.28	-0.92	37.24

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well VALOR ST COM 801H
Project:	LEA COUNTY, NM	TVD Reference:	KB=30' @ 3359.3usft (SCAN QUEST)
Site:	BULLDOG	MD Reference:	KB=30' @ 3359.3usft (SCAN QUEST)
Well:	VALOR ST COM 801H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWP	Database:	edm

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)
3,700.0	2.99	90.47	3,697.2	16.7	94.8	-19.2	1.02	-0.44	17.28
3,725.0	3.02	92.12	3,722.1	16.6	96.1	-19.2	0.37	0.12	6.60
3,750.0	2.99	92.13	3,747.1	16.6	97.4	-19.2	0.12	-0.12	0.04
3,775.0	3.02	91.99	3,772.1	16.5	98.7	-19.2	0.12	0.12	-0.56
3,800.0	3.07	92.26	3,797.0	16.5	100.1	-19.2	0.21	0.20	1.08
3,825.0	3.24	89.14	3,822.0	16.5	101.4	-19.2	0.97	0.68	-12.48
3,850.0	3.60	85.74	3,847.0	16.6	102.9	-19.3	1.65	1.44	-13.60
3,875.0	3.74	83.52	3,871.9	16.7	104.5	-19.5	0.80	0.56	-8.88
3,900.0	3.85	82.34	3,896.8	16.9	106.2	-19.8	0.54	0.44	-4.72
3,925.0	3.89	81.56	3,921.8	17.1	107.8	-20.1	0.26	0.16	-3.12
3,950.0	3.96	81.59	3,946.7	17.4	109.5	-20.4	0.28	0.28	0.12
3,975.0	3.92	81.58	3,971.7	17.6	111.2	-20.7	0.16	-0.16	-0.04
4,000.0	3.94	81.41	3,996.6	17.9	112.9	-21.0	0.09	0.08	-0.68
4,025.0	3.99	81.02	4,021.6	18.2	114.6	-21.3	0.23	0.20	-1.56
4,050.0	3.88	80.72	4,046.5	18.4	116.3	-21.6	0.45	-0.44	-1.20
4,075.0	3.72	79.42	4,071.4	18.7	118.0	-21.9	0.73	-0.64	-5.20
4,100.0	3.66	78.82	4,096.4	19.0	119.5	-22.3	0.29	-0.24	-2.40
4,125.0	3.68	78.65	4,121.3	19.3	121.1	-22.6	0.09	0.08	-0.68
4,150.0	3.76	78.40	4,146.3	19.7	122.7	-23.0	0.33	0.32	-1.00
4,175.0	3.76	77.83	4,171.2	20.0	124.3	-23.4	0.15	0.00	-2.28
4,200.0	3.55	69.13	4,196.2	20.4	125.8	-23.8	2.37	-0.84	-34.80
4,225.0	3.40	52.94	4,221.1	21.2	127.1	-24.6	3.96	-0.60	-64.76
4,250.0	3.48	44.47	4,246.1	22.2	128.3	-25.6	2.06	0.32	-33.88
4,275.0	3.54	41.32	4,271.0	23.3	129.3	-26.8	0.81	0.24	-12.60
4,300.0	3.58	41.12	4,296.0	24.4	130.3	-28.0	0.17	0.16	-0.80
4,325.0	3.58	40.80	4,320.9	25.6	131.3	-29.2	0.08	0.00	-1.28
4,350.0	3.66	41.28	4,345.9	26.8	132.4	-30.4	0.34	0.32	1.92
4,375.0	3.64	41.50	4,370.8	28.0	133.4	-31.6	0.10	-0.08	0.88
4,400.0	3.65	41.87	4,395.8	29.2	134.5	-32.8	0.10	0.04	1.48
4,425.0	3.74	43.82	4,420.7	30.4	135.6	-34.0	0.62	0.36	7.80
4,450.0	3.74	45.69	4,445.7	31.5	136.7	-35.2	0.49	0.00	7.48
4,475.0	3.77	47.47	4,470.6	32.7	137.9	-36.4	0.48	0.12	7.12
4,500.0	3.84	50.82	4,495.6	33.7	139.2	-37.5	0.93	0.28	13.40
4,525.0	3.85	52.89	4,520.5	34.8	140.5	-38.6	0.56	0.04	8.28
4,550.0	3.93	53.34	4,545.5	35.8	141.9	-39.6	0.34	0.32	1.80
4,575.0	3.96	54.29	4,570.4	36.8	143.2	-40.7	0.29	0.12	3.80
4,600.0	4.05	55.30	4,595.3	37.8	144.7	-41.7	0.46	0.36	4.04
4,625.0	3.97	55.51	4,620.3	38.8	146.1	-42.8	0.33	-0.32	0.84
4,650.0	4.03	56.29	4,645.2	39.8	147.5	-43.8	0.32	0.24	3.12
4,675.0	4.01	57.34	4,670.2	40.7	149.0	-44.8	0.31	-0.08	4.20
4,700.0	3.99	57.74	4,695.1	41.7	150.5	-45.7	0.14	-0.08	1.60
4,725.0	3.98	61.72	4,720.0	42.6	152.0	-46.7	1.11	-0.04	15.92
4,750.0	4.06	67.60	4,745.0	43.3	153.6	-47.5	1.68	0.32	23.52

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well VALOR ST COM 801H
Project:	LEA COUNTY, NM	TVD Reference:	KB=30' @ 3359.3usft (SCAN QUEST)
Site:	BULLDOG	MD Reference:	KB=30' @ 3359.3usft (SCAN QUEST)
Well:	VALOR ST COM 801H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWP	Database:	edm

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)
4,775.0	4.13	70.67	4,769.9	43.9	155.2	-48.1	0.92	0.28	12.28
4,800.0	4.11	73.46	4,794.9	44.5	156.9	-48.7	0.81	-0.08	11.16
4,825.0	4.14	75.65	4,819.8	45.0	158.7	-49.3	0.64	0.12	8.76
4,850.0	4.25	79.07	4,844.7	45.4	160.5	-49.7	1.09	0.44	13.68
4,875.0	4.36	79.47	4,869.7	45.7	162.3	-50.1	0.46	0.44	1.60
4,900.0	4.37	79.11	4,894.6	46.1	164.2	-50.5	0.12	0.04	-1.44
4,925.0	4.36	80.01	4,919.5	46.4	166.0	-50.9	0.28	-0.04	3.60
4,950.0	4.41	79.68	4,944.4	46.8	167.9	-51.3	0.22	0.20	-1.32
4,975.0	4.45	79.85	4,969.4	47.1	169.8	-51.7	0.17	0.16	0.68
5,000.0	4.37	80.29	4,994.3	47.4	171.7	-52.1	0.35	-0.32	1.76
5,025.0	4.42	79.72	5,019.2	47.8	173.6	-52.5	0.27	0.20	-2.28
5,050.0	4.52	79.56	5,044.1	48.1	175.5	-52.9	0.40	0.40	-0.64
5,075.0	4.41	80.30	5,069.1	48.5	177.4	-53.2	0.50	-0.44	2.96
5,100.0	4.37	79.81	5,094.0	48.8	179.3	-53.6	0.22	-0.16	-1.96
5,125.0	4.39	80.14	5,118.9	49.1	181.2	-54.0	0.13	0.08	1.32
5,150.0	4.25	81.03	5,143.8	49.4	183.1	-54.4	0.62	-0.56	3.56
5,175.0	3.94	82.09	5,168.8	49.7	184.8	-54.7	1.28	-1.24	4.24
5,200.0	3.79	83.32	5,193.7	49.9	186.5	-54.9	0.69	-0.60	4.92
5,225.0	3.79	83.37	5,218.7	50.1	188.1	-55.2	0.01	0.00	0.20
5,250.0	3.85	84.24	5,243.6	50.3	189.8	-55.4	0.33	0.24	3.48
5,275.0	3.72	84.56	5,268.6	50.4	191.4	-55.6	0.53	-0.52	1.28
5,300.0	3.75	85.91	5,293.5	50.6	193.1	-55.8	0.37	0.12	5.40
5,325.0	3.70	85.63	5,318.5	50.7	194.7	-56.0	0.21	-0.20	-1.12
5,350.0	3.76	85.39	5,343.4	50.8	196.3	-56.1	0.25	0.24	-0.96
5,375.0	3.65	85.36	5,368.3	50.9	197.9	-56.3	0.44	-0.44	-0.12
5,400.0	3.78	85.50	5,393.3	51.1	199.5	-56.5	0.52	0.52	0.56
5,425.0	3.71	85.61	5,418.2	51.2	201.2	-56.6	0.28	-0.28	0.44
5,450.0	3.42	86.74	5,443.2	51.3	202.7	-56.8	1.19	-1.16	4.52
5,475.0	3.24	88.17	5,468.1	51.4	204.2	-56.9	0.79	-0.72	5.72
5,500.0	3.21	87.79	5,493.1	51.4	205.6	-57.0	0.15	-0.12	-1.52
5,525.0	3.11	86.79	5,518.1	51.5	206.9	-57.1	0.46	-0.40	-4.00
5,550.0	3.08	85.48	5,543.0	51.6	208.3	-57.2	0.31	-0.12	-5.24
5,575.0	3.08	84.98	5,568.0	51.7	209.6	-57.4	0.11	0.00	-2.00
5,600.0	2.94	83.31	5,593.0	51.8	210.9	-57.5	0.66	-0.56	-6.68
5,625.0	2.85	82.86	5,617.9	52.0	212.2	-57.7	0.37	-0.36	-1.80
5,650.0	3.01	81.09	5,642.9	52.2	213.5	-57.9	0.74	0.64	-7.08
5,675.0	2.78	81.77	5,667.9	52.3	214.7	-58.1	0.93	-0.92	2.72
5,700.0	2.84	80.29	5,692.8	52.5	215.9	-58.4	0.38	0.24	-5.92
5,725.0	2.95	78.34	5,717.8	52.8	217.2	-58.6	0.59	0.44	-7.80
5,750.0	2.88	79.14	5,742.8	53.0	218.4	-58.9	0.32	-0.28	3.20
5,775.0	2.92	79.63	5,767.7	53.3	219.6	-59.2	0.19	0.16	1.96
5,800.0	2.91	80.51	5,792.7	53.5	220.9	-59.4	0.18	-0.04	3.52
5,825.0	2.84	81.25	5,817.7	53.7	222.1	-59.7	0.32	-0.28	2.96

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well VALOR ST COM 801H
Project:	LEA COUNTY, NM	TVD Reference:	KB=30' @ 3359.3usft (SCAN QUEST)
Site:	BULLDOG	MD Reference:	KB=30' @ 3359.3usft (SCAN QUEST)
Well:	VALOR ST COM 801H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWP	Database:	edm

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5,850.0	2.91	80.89	5,842.6	53.9	223.4	-59.9	0.29	0.28	-1.44	
5,875.0	2.88	80.74	5,867.6	54.1	224.6	-60.1	0.12	-0.12	-0.60	
5,900.0	2.87	81.08	5,892.6	54.3	225.9	-60.4	0.08	-0.04	1.36	
5,925.0	2.94	79.63	5,917.6	54.5	227.1	-60.6	0.41	0.28	-5.80	
5,950.0	2.86	81.17	5,942.5	54.7	228.4	-60.9	0.45	-0.32	6.16	
5,975.0	2.91	80.99	5,967.5	54.9	229.6	-61.1	0.20	0.20	-0.72	
6,000.0	3.00	77.55	5,992.5	55.1	230.9	-61.4	0.80	0.36	-13.76	
6,025.0	3.39	61.87	6,017.4	55.6	232.1	-61.9	3.81	1.56	-62.72	
6,050.0	3.73	56.65	6,042.4	56.4	233.5	-62.7	1.88	1.36	-20.88	
6,075.0	3.86	54.58	6,067.3	57.3	234.8	-63.7	0.76	0.52	-8.28	
6,100.0	3.85	53.56	6,092.3	58.3	236.2	-64.7	0.28	-0.04	-4.08	
6,125.0	3.81	53.92	6,117.2	59.3	237.6	-65.7	0.19	-0.16	1.44	
6,150.0	3.92	53.37	6,142.1	60.3	238.9	-66.8	0.46	0.44	-2.20	
6,175.0	3.87	51.97	6,167.1	61.3	240.3	-67.8	0.43	-0.20	-5.60	
6,200.0	3.92	49.97	6,192.0	62.4	241.6	-68.9	0.58	0.20	-8.00	
6,225.0	3.75	47.57	6,217.0	63.5	242.8	-70.1	0.94	-0.68	-9.60	
6,250.0	3.74	47.35	6,241.9	64.6	244.0	-71.2	0.07	-0.04	-0.88	
6,275.0	3.74	45.32	6,266.9	65.7	245.2	-72.4	0.53	0.00	-8.12	
6,300.0	3.78	43.01	6,291.8	66.9	246.4	-73.6	0.63	0.16	-9.24	
6,325.0	3.77	40.76	6,316.8	68.1	247.5	-74.8	0.59	-0.04	-9.00	
6,350.0	3.85	39.88	6,341.7	69.4	248.5	-76.1	0.40	0.32	-3.52	
6,375.0	3.87	39.34	6,366.6	70.7	249.6	-77.5	0.17	0.08	-2.16	
6,400.0	3.79	38.54	6,391.6	72.0	250.7	-78.8	0.38	-0.32	-3.20	
6,425.0	3.78	37.76	6,416.5	73.3	251.7	-80.1	0.21	-0.04	-3.12	
6,450.0	3.77	37.82	6,441.5	74.6	252.7	-81.4	0.04	-0.04	0.24	
6,475.0	3.87	36.17	6,466.4	75.9	253.7	-82.8	0.59	0.40	-6.60	
6,500.0	3.82	34.92	6,491.4	77.3	254.7	-84.2	0.39	-0.20	-5.00	
6,525.0	3.80	34.14	6,516.3	78.7	255.6	-85.6	0.22	-0.08	-3.12	
6,550.0	3.93	33.53	6,541.3	80.1	256.5	-87.0	0.55	0.52	-2.44	
6,575.0	3.95	33.35	6,566.2	81.5	257.5	-88.5	0.09	0.08	-0.72	
6,600.0	3.94	32.79	6,591.1	82.9	258.4	-89.9	0.16	-0.04	-2.24	
6,625.0	3.97	31.91	6,616.1	84.4	259.4	-91.4	0.27	0.12	-3.52	
6,650.0	4.00	30.53	6,641.0	85.9	260.3	-92.9	0.40	0.12	-5.52	
6,675.0	4.06	29.59	6,666.0	87.4	261.1	-94.5	0.36	0.24	-3.76	
6,700.0	4.18	29.40	6,690.9	89.0	262.0	-96.0	0.48	0.48	-0.76	
6,725.0	4.21	28.72	6,715.8	90.6	262.9	-97.7	0.23	0.12	-2.72	
6,750.0	4.31	26.61	6,740.8	92.2	263.8	-99.3	0.74	0.40	-8.44	
6,775.0	4.24	27.19	6,765.7	93.9	264.6	-101.0	0.33	-0.28	2.32	
6,800.0	4.24	27.53	6,790.6	95.5	265.5	-102.7	0.10	0.00	1.36	
6,825.0	4.28	27.86	6,815.5	97.2	266.3	-104.3	0.19	0.16	1.32	
6,850.0	4.19	27.19	6,840.5	98.8	267.2	-106.0	0.41	-0.36	-2.68	
6,875.0	4.18	34.37	6,865.4	100.4	268.1	-107.6	2.09	-0.04	28.72	
6,900.0	4.26	37.97	6,890.3	101.8	269.2	-109.1	1.11	0.32	14.40	
6,925.0	4.26	38.64	6,915.3	103.3	270.3	-110.6	0.20	0.00	2.68	

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well VALOR ST COM 801H
Project:	LEA COUNTY, NM	TVD Reference:	KB=30' @ 3359.3usft (SCAN QUEST)
Site:	BULLDOG	MD Reference:	KB=30' @ 3359.3usft (SCAN QUEST)
Well:	VALOR ST COM 801H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWP	Database:	edm

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)
6,950.0	4.26	39.32	6,940.2	104.7	271.5	-112.1	0.20	0.00	2.72
6,975.0	4.35	39.37	6,965.1	106.2	272.7	-113.6	0.36	0.36	0.20
7,000.0	4.31	39.04	6,990.1	107.7	273.9	-115.0	0.19	-0.16	-1.32
7,025.0	4.18	38.65	7,015.0	109.1	275.1	-116.5	0.53	-0.52	-1.56
7,050.0	4.20	37.97	7,039.9	110.5	276.2	-118.0	0.21	0.08	-2.72
7,075.0	4.17	37.62	7,064.9	112.0	277.3	-119.5	0.16	-0.12	-1.40
7,100.0	4.26	38.27	7,089.8	113.4	278.4	-120.9	0.41	0.36	2.60
7,125.0	4.21	37.62	7,114.7	114.9	279.6	-122.4	0.28	-0.20	-2.60
7,150.0	4.20	37.20	7,139.7	116.3	280.7	-123.9	0.13	-0.04	-1.68
7,175.0	4.25	38.15	7,164.6	117.8	281.8	-125.4	0.34	0.20	3.80
7,200.0	4.12	38.18	7,189.5	119.2	282.9	-126.9	0.52	-0.52	0.12
7,225.0	4.07	37.50	7,214.5	120.6	284.0	-128.3	0.28	-0.20	-2.72
7,250.0	4.19	37.76	7,239.4	122.1	285.1	-129.8	0.49	0.48	1.04
7,275.0	4.16	37.91	7,264.3	123.5	286.2	-131.2	0.13	-0.12	0.60
7,300.0	4.13	37.55	7,289.3	124.9	287.4	-132.7	0.16	-0.12	-1.44
7,325.0	4.24	37.94	7,314.2	126.4	288.5	-134.2	0.45	0.44	1.56
7,350.0	4.18	38.05	7,339.1	127.8	289.6	-135.6	0.24	-0.24	0.44
7,375.0	4.15	37.94	7,364.1	129.3	290.7	-137.1	0.12	-0.12	-0.44
7,400.0	4.10	37.84	7,389.0	130.7	291.8	-138.5	0.20	-0.20	-0.40
7,425.0	3.87	36.77	7,413.9	132.1	292.9	-139.9	0.97	-0.92	-4.28
7,450.0	3.73	33.76	7,438.9	133.4	293.8	-141.3	0.97	-0.56	-12.04
7,475.0	3.64	32.58	7,463.8	134.7	294.7	-142.7	0.47	-0.36	-4.72
7,500.0	3.71	32.73	7,488.8	136.1	295.6	-144.1	0.28	0.28	0.60
7,525.0	3.77	32.56	7,513.7	137.5	296.5	-145.5	0.24	0.24	-0.68
7,550.0	3.75	33.07	7,538.7	138.8	297.3	-146.9	0.16	-0.08	2.04
7,575.0	3.74	33.18	7,563.6	140.2	298.2	-148.3	0.05	-0.04	0.44
7,600.0	3.78	33.33	7,588.6	141.6	299.1	-149.6	0.16	0.16	0.60
7,625.0	3.69	29.89	7,613.5	143.0	300.0	-151.1	0.97	-0.36	-13.76
7,650.0	3.57	26.57	7,638.5	144.4	300.7	-152.5	0.97	-0.48	-13.28
7,675.0	3.49	24.84	7,663.4	145.8	301.4	-153.9	0.53	-0.32	-6.92
7,700.0	3.46	24.81	7,688.4	147.1	302.0	-155.3	0.12	-0.12	-0.12
7,725.0	3.49	24.79	7,713.3	148.5	302.7	-156.7	0.12	0.12	-0.08
7,750.0	3.44	23.98	7,738.3	149.9	303.3	-158.1	0.28	-0.20	-3.24
7,775.0	3.24	18.76	7,763.2	151.2	303.8	-159.4	1.46	-0.80	-20.88
7,800.0	2.63	8.36	7,788.2	152.5	304.1	-160.7	3.23	-2.44	-41.60
7,825.0	2.36	2.34	7,813.2	153.6	304.2	-161.7	1.50	-1.08	-24.08
7,850.0	2.22	358.48	7,838.2	154.6	304.3	-162.7	0.83	-0.56	-15.44
7,875.0	2.06	349.01	7,863.1	155.5	304.2	-163.7	1.55	-0.64	-37.88
7,900.0	2.05	331.63	7,888.1	156.3	303.9	-164.5	2.48	-0.04	-69.52
7,925.0	2.05	329.23	7,913.1	157.1	303.4	-165.3	0.34	0.00	-9.60
7,950.0	1.88	324.50	7,938.1	157.8	303.0	-166.0	0.94	-0.68	-18.92
7,975.0	1.46	296.48	7,963.1	158.3	302.4	-166.4	3.62	-1.68	-112.08
8,000.0	1.44	268.86	7,988.1	158.4	301.8	-166.5	2.77	-0.08	-110.48

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well VALOR ST COM 801H
Project:	LEA COUNTY, NM	TVD Reference:	KB=30' @ 3359.3usft (SCAN QUEST)
Site:	BULLDOG	MD Reference:	KB=30' @ 3359.3usft (SCAN QUEST)
Well:	VALOR ST COM 801H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWP	Database:	edm

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)
8,025.0	1.56	256.76	8,013.1	158.3	301.2	-166.4	1.35	0.48	-48.40
8,050.0	1.53	254.15	8,038.1	158.2	300.5	-166.3	0.31	-0.12	-10.44
8,075.0	1.49	253.83	8,063.1	158.0	299.9	-166.1	0.16	-0.16	-1.28
8,100.0	1.53	253.65	8,088.0	157.8	299.3	-165.9	0.16	0.16	-0.72
8,125.0	1.47	253.55	8,113.0	157.6	298.6	-165.7	0.24	-0.24	-0.40
8,150.0	1.50	247.20	8,138.0	157.4	298.0	-165.4	0.67	0.12	-25.40
8,175.0	1.45	242.34	8,163.0	157.1	297.4	-165.1	0.54	-0.20	-19.44
8,200.0	1.51	242.49	8,188.0	156.8	296.9	-164.8	0.24	0.24	0.60
8,225.0	1.47	240.89	8,213.0	156.5	296.3	-164.5	0.23	-0.16	-6.40
8,250.0	1.45	241.09	8,238.0	156.2	295.7	-164.2	0.08	-0.08	0.80
8,275.0	1.42	239.71	8,263.0	155.9	295.2	-163.8	0.18	-0.12	-5.52
8,300.0	1.32	235.84	8,288.0	155.6	294.7	-163.5	0.54	-0.40	-15.48
8,325.0	1.31	231.44	8,313.0	155.2	294.2	-163.2	0.41	-0.04	-17.60
8,350.0	1.27	228.17	8,338.0	154.9	293.8	-162.8	0.34	-0.16	-13.08
8,375.0	1.22	226.72	8,363.0	154.5	293.4	-162.4	0.24	-0.20	-5.80
8,400.0	1.26	226.56	8,388.0	154.1	293.0	-162.0	0.16	0.16	-0.64
8,425.0	1.26	227.03	8,412.9	153.8	292.6	-161.6	0.04	0.00	1.88
8,450.0	1.27	226.01	8,437.9	153.4	292.2	-161.3	0.10	0.04	-4.08
8,475.0	1.27	226.79	8,462.9	153.0	291.8	-160.9	0.07	0.00	3.12
8,500.0	1.33	226.11	8,487.9	152.6	291.4	-160.5	0.25	0.24	-2.72
8,525.0	1.33	225.59	8,512.9	152.2	291.0	-160.0	0.05	0.00	-2.08
8,550.0	1.21	223.34	8,537.9	151.8	290.6	-159.6	0.52	-0.48	-9.00
8,575.0	1.34	220.81	8,562.9	151.4	290.2	-159.2	0.57	0.52	-10.12
8,600.0	1.38	221.24	8,587.9	151.0	289.8	-158.8	0.17	0.16	1.72
8,625.0	1.35	218.61	8,612.9	150.5	289.4	-158.3	0.28	-0.12	-10.52
8,650.0	1.38	220.36	8,637.9	150.0	289.1	-157.8	0.21	0.12	7.00
8,675.0	1.39	219.60	8,662.9	149.6	288.7	-157.3	0.08	0.04	-3.04
8,700.0	1.39	221.50	8,687.9	149.1	288.3	-156.9	0.18	0.00	7.60
8,725.0	1.40	220.75	8,712.9	148.7	287.9	-156.4	0.08	0.04	-3.00
8,750.0	1.49	221.22	8,737.9	148.2	287.5	-155.9	0.36	0.36	1.88
8,775.0	1.41	222.19	8,762.9	147.7	287.1	-155.4	0.33	-0.32	3.88
8,800.0	1.39	220.80	8,787.8	147.2	286.6	-155.0	0.16	-0.08	-5.56
8,825.0	1.92	238.09	8,812.8	146.8	286.1	-154.5	2.89	2.12	69.16
8,850.0	2.69	249.93	8,837.8	146.4	285.2	-154.1	3.61	3.08	47.36
8,875.0	2.83	250.57	8,862.8	146.0	284.1	-153.6	0.57	0.56	2.56
8,900.0	2.83	251.41	8,887.8	145.6	282.9	-153.2	0.17	0.00	3.36
8,925.0	2.81	250.70	8,912.7	145.2	281.7	-152.8	0.16	-0.08	-2.84
8,950.0	2.89	251.70	8,937.7	144.8	280.5	-152.3	0.38	0.32	4.00
8,975.0	2.87	250.91	8,962.7	144.4	279.4	-151.9	0.18	-0.08	-3.16
9,000.0	2.79	251.84	8,987.6	144.0	278.2	-151.5	0.37	-0.32	3.72
9,025.0	2.81	251.32	9,012.6	143.6	277.0	-151.0	0.13	0.08	-2.08
9,050.0	2.75	250.51	9,037.6	143.2	275.9	-150.6	0.29	-0.24	-3.24
9,075.0	2.77	249.65	9,062.5	142.8	274.8	-150.2	0.18	0.08	-3.44

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well VALOR ST COM 801H
Project:	LEA COUNTY, NM	TVD Reference:	KB=30' @ 3359.3usft (SCAN QUEST)
Site:	BULLDOG	MD Reference:	KB=30' @ 3359.3usft (SCAN QUEST)
Well:	VALOR ST COM 801H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWP	Database:	edm

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)
9,100.0	2.77	248.75	9,087.5	142.3	273.6	-149.7	0.17	0.00	-3.60
9,125.0	2.73	249.46	9,112.5	141.9	272.5	-149.3	0.21	-0.16	2.84
9,150.0	2.72	247.88	9,137.5	141.5	271.4	-148.8	0.30	-0.04	-6.32
9,175.0	2.73	246.28	9,162.4	141.0	270.3	-148.3	0.31	0.04	-6.40
9,200.0	2.74	248.63	9,187.4	140.6	269.2	-147.8	0.45	0.04	9.40
9,225.0	2.66	246.52	9,212.4	140.1	268.1	-147.3	0.51	-0.32	-8.44
9,250.0	2.58	246.27	9,237.3	139.7	267.1	-146.9	0.32	-0.32	-1.00
9,275.0	2.55	248.22	9,262.3	139.2	266.0	-146.4	0.37	-0.12	7.80
9,300.0	2.47	254.00	9,287.3	138.9	265.0	-146.0	1.06	-0.32	23.12
9,325.0	2.51	256.86	9,312.3	138.6	263.9	-145.7	0.52	0.16	11.44
9,350.0	2.43	258.38	9,337.2	138.4	262.9	-145.4	0.41	-0.32	6.08
9,375.0	2.33	259.24	9,362.2	138.2	261.9	-145.2	0.42	-0.40	3.44
9,400.0	2.27	258.81	9,387.2	138.0	260.9	-145.0	0.25	-0.24	-1.72
9,425.0	2.30	257.84	9,412.2	137.8	259.9	-144.8	0.20	0.12	-3.88
9,450.0	2.28	258.12	9,437.2	137.6	258.9	-144.5	0.09	-0.08	1.12
9,475.0	2.26	258.20	9,462.1	137.4	258.0	-144.3	0.08	-0.08	0.32
9,500.0	2.26	253.06	9,487.1	137.1	257.0	-144.0	0.81	0.00	-20.56
9,525.0	2.19	249.91	9,512.1	136.8	256.1	-143.7	0.56	-0.28	-12.60
9,550.0	2.09	247.53	9,537.1	136.5	255.2	-143.3	0.54	-0.40	-9.52
9,575.0	1.96	241.69	9,562.1	136.1	254.4	-142.9	0.97	-0.52	-23.36
9,600.0	1.76	240.20	9,587.1	135.7	253.7	-142.5	0.82	-0.80	-5.96
9,625.0	1.73	240.21	9,612.1	135.3	253.1	-142.1	0.12	-0.12	0.04
9,650.0	1.81	239.71	9,637.0	134.9	252.4	-141.7	0.33	0.32	-2.00
9,675.0	1.81	242.72	9,662.0	134.6	251.7	-141.3	0.38	0.00	12.04
9,700.0	1.88	245.56	9,687.0	134.2	251.0	-141.0	0.46	0.28	11.36
9,725.0	1.87	246.43	9,712.0	133.9	250.2	-140.6	0.12	-0.04	3.48
9,750.0	1.90	248.33	9,737.0	133.6	249.5	-140.3	0.28	0.12	7.60
9,775.0	2.28	251.19	9,762.0	133.2	248.6	-139.9	1.58	1.52	11.44
9,800.0	2.38	252.63	9,787.0	132.9	247.6	-139.6	0.46	0.40	5.76
9,825.0	2.44	251.48	9,811.9	132.6	246.6	-139.2	0.31	0.24	-4.60
9,850.0	2.49	250.71	9,836.9	132.3	245.6	-138.9	0.24	0.20	-3.08
9,875.0	2.71	255.49	9,861.9	131.9	244.5	-138.5	1.23	0.88	19.12
9,900.0	2.72	258.61	9,886.9	131.7	243.4	-138.2	0.59	0.04	12.48
9,925.0	2.78	260.45	9,911.8	131.4	242.2	-138.0	0.43	0.24	7.36
9,950.0	2.81	260.19	9,936.8	131.2	241.0	-137.7	0.13	0.12	-1.04
9,975.0	2.72	258.53	9,961.8	131.0	239.8	-137.5	0.48	-0.36	-6.64
10,000.0	2.62	253.95	9,986.7	130.7	238.7	-137.2	0.94	-0.40	-18.32
10,025.0	2.61	250.86	10,011.7	130.4	237.6	-136.8	0.57	-0.04	-12.36
10,050.0	2.81	253.05	10,036.7	130.0	236.5	-136.4	0.90	0.80	8.76
10,075.0	3.17	256.64	10,061.6	129.7	235.2	-136.0	1.62	1.44	14.36
10,100.0	3.20	256.24	10,086.6	129.4	233.9	-135.7	0.15	0.12	-1.60
10,125.0	3.24	256.14	10,111.6	129.0	232.5	-135.3	0.16	0.16	-0.40
10,150.0	3.26	255.66	10,136.5	128.7	231.1	-134.9	0.14	0.08	-1.92
10,175.0	3.26	256.16	10,161.5	128.3	229.8	-134.5	0.11	0.00	2.00

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well VALOR ST COM 801H
Project:	LEA COUNTY, NM	TVD Reference:	KB=30' @ 3359.3usft (SCAN QUEST)
Site:	BULLDOG	MD Reference:	KB=30' @ 3359.3usft (SCAN QUEST)
Well:	VALOR ST COM 801H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWP	Database:	edm

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,200.0	3.37	256.09	10,186.4	128.0	228.4	-134.1	0.44	0.44	-0.28
10,225.0	3.41	259.27	10,211.4	127.7	226.9	-133.8	0.77	0.16	12.72
10,250.0	3.51	264.89	10,236.4	127.5	225.4	-133.5	1.41	0.40	22.48
10,275.0	3.49	267.94	10,261.3	127.4	223.9	-133.4	0.75	-0.08	12.20
10,300.0	3.55	267.89	10,286.3	127.3	222.4	-133.3	0.24	0.24	-0.20
10,325.0	3.63	269.15	10,311.2	127.3	220.8	-133.2	0.45	0.32	5.04
10,350.0	3.88	270.12	10,336.2	127.3	219.2	-133.2	1.03	1.00	3.88
10,375.0	4.41	272.04	10,361.1	127.3	217.4	-133.2	2.19	2.12	7.68
10,400.0	4.85	273.54	10,386.0	127.4	215.3	-133.2	1.83	1.76	6.00
10,425.0	5.14	274.91	10,410.9	127.6	213.2	-133.3	1.25	1.16	5.48
10,450.0	5.23	275.76	10,435.8	127.8	210.9	-133.5	0.47	0.36	3.40
10,475.0	5.32	276.72	10,460.7	128.0	208.6	-133.6	0.50	0.36	3.84
10,500.0	5.41	278.64	10,485.6	128.3	206.3	-133.9	0.80	0.36	7.68
10,525.0	5.40	279.13	10,510.5	128.7	204.0	-134.2	0.19	-0.04	1.96
10,550.0	5.57	279.37	10,535.4	129.1	201.6	-134.5	0.69	0.68	0.96
10,575.0	5.65	279.27	10,560.3	129.5	199.2	-134.8	0.32	0.32	-0.40
10,600.0	5.62	281.23	10,585.1	129.9	196.8	-135.2	0.78	-0.12	7.84
10,625.0	5.58	280.92	10,610.0	130.4	194.4	-135.6	0.20	-0.16	-1.24
10,650.0	5.55	282.35	10,634.9	130.9	192.0	-136.0	0.57	-0.12	5.72
10,675.0	5.47	284.24	10,659.8	131.4	189.7	-136.5	0.79	-0.32	7.56
10,700.0	5.26	286.06	10,684.7	132.0	187.4	-137.1	1.08	-0.84	7.28
10,725.0	5.10	286.36	10,709.6	132.7	185.3	-137.6	0.65	-0.64	1.20
10,750.0	4.53	285.15	10,734.5	133.2	183.3	-138.2	2.32	-2.28	-4.84
10,775.0	4.27	283.72	10,759.4	133.7	181.4	-138.6	1.13	-1.04	-5.72
10,800.0	4.14	282.94	10,784.3	134.1	179.6	-139.0	0.57	-0.52	-3.12
10,825.0	4.08	280.89	10,809.3	134.5	177.9	-139.3	0.63	-0.24	-8.20
10,850.0	4.05	277.92	10,834.2	134.8	176.1	-139.5	0.85	-0.12	-11.88
10,875.0	4.10	276.26	10,859.2	135.0	174.4	-139.7	0.51	0.20	-6.64
10,900.0	4.11	276.27	10,884.1	135.2	172.6	-139.8	0.04	0.04	0.04
10,925.0	4.25	276.26	10,909.0	135.4	170.8	-140.0	0.56	0.56	-0.04
10,950.0	4.25	274.85	10,934.0	135.6	168.9	-140.1	0.42	0.00	-5.64
10,975.0	4.26	275.97	10,958.9	135.8	167.1	-140.3	0.33	0.04	4.48
11,000.0	4.19	276.44	10,983.8	136.0	165.2	-140.4	0.31	-0.28	1.88
11,025.0	3.99	276.63	11,008.8	136.2	163.5	-140.6	0.80	-0.80	0.76
11,050.0	3.94	277.99	11,033.7	136.4	161.8	-140.7	0.43	-0.20	5.44
11,075.0	4.09	278.46	11,058.6	136.6	160.0	-140.9	0.61	0.60	1.88
11,100.0	4.04	279.52	11,083.6	136.9	158.3	-141.2	0.36	-0.20	4.24
11,125.0	4.23	281.18	11,108.5	137.2	156.5	-141.4	0.90	0.76	6.64
11,150.0	4.48	285.34	11,133.4	137.7	154.7	-141.8	1.61	1.00	16.64
11,175.0	4.78	289.62	11,158.3	138.3	152.7	-142.4	1.83	1.20	17.12
11,200.0	4.97	291.28	11,183.3	139.0	150.7	-143.1	0.95	0.76	6.64
11,225.0	5.09	291.09	11,208.2	139.8	148.7	-143.8	0.48	0.48	-0.76
11,250.0	5.19	291.64	11,233.1	140.6	146.6	-144.6	0.45	0.40	2.20

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well VALOR ST COM 801H
Project:	LEA COUNTY, NM	TVD Reference:	KB=30' @ 3359.3usft (SCAN QUEST)
Site:	BULLDOG	MD Reference:	KB=30' @ 3359.3usft (SCAN QUEST)
Well:	VALOR ST COM 801H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWP	Database:	edm

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)
11,275.0	5.13	290.82	11,258.0	141.5	144.5	-145.3	0.38	-0.24	-3.28
11,300.0	5.17	290.24	11,282.9	142.2	142.4	-146.1	0.26	0.16	-2.32
11,325.0	5.00	288.97	11,307.8	143.0	140.3	-146.7	0.82	-0.68	-5.08
11,350.0	5.37	287.92	11,332.7	143.7	138.2	-147.4	1.53	1.48	-4.20
11,375.0	5.53	285.45	11,357.5	144.4	135.9	-148.0	1.14	0.64	-9.88
11,400.0	5.73	283.54	11,382.4	145.0	133.5	-148.6	1.10	0.80	-7.64
11,425.0	5.91	281.50	11,407.3	145.5	131.1	-149.0	1.10	0.72	-8.16
11,450.0	6.13	281.27	11,432.2	146.1	128.5	-149.5	0.89	0.88	-0.92
11,475.0	6.31	280.36	11,457.0	146.6	125.8	-149.9	0.82	0.72	-3.64
11,500.0	6.60	280.77	11,481.9	147.1	123.1	-150.4	1.17	1.16	1.64
11,525.0	6.61	280.24	11,506.7	147.6	120.2	-150.8	0.25	0.04	-2.12
11,550.0	6.74	279.89	11,531.5	148.1	117.4	-151.2	0.54	0.52	-1.40
11,575.0	6.54	278.26	11,556.4	148.6	114.5	-151.6	1.10	-0.80	-6.52
11,588.1	6.61	278.78	11,569.3	148.8	113.0	-151.8	0.70	0.54	3.98
11,718.0	6.45	277.14	11,698.4	150.8	98.4	-153.5	0.19	-0.12	-1.26
11,813.0	4.95	273.39	11,792.9	151.7	89.0	-154.1	1.63	-1.58	-3.95
11,871.0	4.71	272.89	11,850.7	152.0	84.1	-154.2	0.42	-0.41	-0.86
11,908.0	4.59	273.32	11,887.6	152.2	81.2	-154.3	0.34	-0.32	1.16
11,939.0	3.73	282.18	11,918.5	152.5	78.9	-154.5	3.46	-2.77	28.58
12,003.0	1.13	185.07	11,982.5	152.3	76.8	-154.3	6.30	-4.06	-151.73
12,034.0	2.65	145.56	12,013.5	151.4	77.2	-153.4	6.19	4.90	-127.45
12,066.0	4.37	136.38	12,045.4	149.9	78.5	-152.0	5.64	5.38	-28.69
12,097.0	7.83	146.44	12,076.2	147.3	80.5	-149.4	11.64	11.16	32.45
12,129.0	13.66	159.02	12,107.7	141.9	83.0	-144.1	19.53	18.22	39.31
12,161.0	18.50	159.98	12,138.4	133.6	86.1	-135.9	15.15	15.13	3.00
12,192.0	23.09	160.09	12,167.4	123.3	89.9	-125.7	14.81	14.81	0.35
12,223.3	27.81	163.12	12,195.6	110.5	94.1	-113.0	15.65	15.09	9.69
FTP @ 12223.3'MD									
12,224.0	27.92	163.18	12,196.3	110.2	94.2	-112.7	15.65	15.18	8.12
12,255.0	31.68	164.85	12,223.1	95.4	98.4	-98.0	12.42	12.13	5.39
12,287.0	36.40	170.32	12,249.7	77.9	102.2	-80.6	17.57	14.75	17.09
12,319.0	41.89	177.93	12,274.5	57.8	104.2	-60.6	22.77	17.16	23.78
12,350.0	46.09	184.67	12,296.8	36.3	103.6	-39.1	20.27	13.55	21.74
12,382.0	48.09	189.94	12,318.6	13.1	100.7	-15.8	13.58	6.25	16.47
12,413.0	47.30	194.03	12,339.5	-9.3	95.9	6.7	10.08	-2.55	13.19
12,445.0	47.05	196.37	12,361.2	-31.9	89.7	29.5	5.42	-0.78	7.31
12,476.0	49.14	202.83	12,381.9	-53.7	82.0	51.4	16.91	6.74	20.84
12,508.0	49.97	204.76	12,402.7	-75.9	72.2	73.9	5.27	2.59	6.03
12,539.0	50.57	203.74	12,422.5	-97.7	62.4	95.9	3.19	1.94	-3.29
12,571.0	53.27	202.05	12,442.2	-120.9	52.6	119.4	9.41	8.44	-5.28
12,602.0	57.65	203.58	12,459.8	-144.4	42.7	143.2	14.70	14.13	4.94
12,633.0	62.17	204.49	12,475.4	-168.9	31.8	168.0	14.80	14.58	2.94
12,665.0	67.17	204.33	12,489.0	-195.2	19.8	194.6	15.63	15.63	-0.50

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well VALOR ST COM 801H
Project:	LEA COUNTY, NM	TVD Reference:	KB=30' @ 3359.3usft (SCAN QUEST)
Site:	BULLDOG	MD Reference:	KB=30' @ 3359.3usft (SCAN QUEST)
Well:	VALOR ST COM 801H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWP	Database:	edm

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)
12,696.0	73.16	203.64	12,499.6	-221.9	8.0	221.6	19.44	19.32	-2.23
12,727.0	77.71	203.91	12,507.3	-249.3	-4.1	249.3	14.70	14.68	0.87
12,759.0	81.86	205.47	12,513.0	-277.9	-17.3	278.3	13.83	12.97	4.88
12,853.0	89.78	205.13	12,519.9	-362.6	-57.3	364.0	8.43	8.43	-0.36
12,948.0	89.93	203.02	12,520.1	-449.3	-96.1	451.8	2.23	0.16	-2.22
13,042.0	88.68	199.98	12,521.2	-536.8	-130.5	540.1	3.50	-1.33	-3.23
13,136.0	91.30	197.43	12,521.3	-625.8	-160.7	629.9	3.89	2.79	-2.71
13,231.0	88.90	194.82	12,521.1	-717.0	-187.0	721.8	3.73	-2.53	-2.75
13,325.0	88.14	193.33	12,523.5	-808.2	-209.9	813.6	1.78	-0.81	-1.59
13,419.0	86.08	191.13	12,528.3	-899.9	-229.8	905.8	3.20	-2.19	-2.34
13,514.0	85.40	188.54	12,535.3	-993.3	-246.0	999.6	2.81	-0.72	-2.73
13,608.0	86.60	184.23	12,541.9	-1,086.4	-256.4	1,093.0	4.75	1.28	-4.59
13,703.0	88.51	180.70	12,545.9	-1,181.2	-260.5	1,187.9	4.22	2.01	-3.72
13,798.0	89.85	179.89	12,547.3	-1,276.2	-260.9	1,282.8	1.65	1.41	-0.85
13,892.0	88.54	179.35	12,548.6	-1,370.2	-260.3	1,376.8	1.51	-1.39	-0.57
13,986.0	89.55	179.06	12,550.2	-1,464.2	-259.0	1,470.7	1.12	1.07	-0.31
14,081.0	89.27	179.90	12,551.2	-1,559.2	-258.2	1,565.6	0.93	-0.29	0.88
14,175.0	88.82	180.85	12,552.7	-1,653.2	-258.8	1,659.6	1.12	-0.48	1.01
14,270.0	88.42	179.67	12,555.0	-1,748.1	-259.2	1,754.5	1.31	-0.42	-1.24
14,364.0	88.78	177.90	12,557.3	-1,842.1	-257.2	1,848.4	1.92	0.38	-1.88
14,458.0	89.99	177.05	12,558.3	-1,936.0	-253.1	1,942.1	1.57	1.29	-0.90
14,553.0	90.55	177.63	12,557.9	-2,030.9	-248.7	2,036.9	0.85	0.59	0.61
14,647.0	90.53	179.52	12,557.0	-2,124.8	-246.3	2,130.7	2.01	-0.02	2.01
14,741.0	88.62	179.27	12,557.7	-2,218.8	-245.3	2,224.7	2.05	-2.03	-0.27
14,837.0	89.17	180.66	12,559.5	-2,314.8	-245.3	2,320.6	1.56	0.57	1.45
14,931.0	87.61	178.57	12,562.2	-2,408.7	-244.6	2,414.5	2.77	-1.66	-2.22
15,026.0	88.97	180.53	12,565.0	-2,503.7	-243.9	2,509.4	2.51	1.43	2.06
15,120.0	90.47	184.35	12,565.5	-2,597.6	-247.9	2,603.4	4.37	1.60	4.06
15,214.0	89.59	183.74	12,565.4	-2,691.4	-254.5	2,697.3	1.14	-0.94	-0.65
15,309.0	90.01	181.96	12,565.8	-2,786.2	-259.3	2,792.2	1.93	0.44	-1.87
15,404.0	89.56	181.90	12,566.1	-2,881.2	-262.5	2,887.2	0.48	-0.47	-0.06
15,499.0	89.34	177.15	12,567.0	-2,976.1	-261.7	2,982.1	5.01	-0.23	-5.00
15,594.0	90.39	175.60	12,567.2	-3,070.9	-255.7	3,076.8	1.97	1.11	-1.63
15,689.0	89.35	172.86	12,567.5	-3,165.5	-246.1	3,171.0	3.08	-1.09	-2.88
15,783.0	90.23	177.89	12,567.8	-3,259.1	-238.5	3,264.4	5.43	0.94	5.35
15,878.0	90.98	179.49	12,566.8	-3,354.1	-236.4	3,359.3	1.86	0.79	1.68
15,973.0	90.50	178.65	12,565.6	-3,449.1	-234.8	3,454.2	1.02	-0.51	-0.88
16,066.0	91.95	179.38	12,563.6	-3,542.0	-233.2	3,547.0	1.75	1.56	0.78
16,161.0	92.34	180.59	12,560.0	-3,637.0	-233.2	3,641.9	1.34	0.41	1.27
16,256.0	90.95	180.47	12,557.3	-3,731.9	-234.1	3,736.9	1.47	-1.46	-0.13
16,351.0	90.14	180.49	12,556.4	-3,826.9	-234.9	3,831.9	0.85	-0.85	0.02
16,445.0	89.44	181.47	12,556.7	-3,920.9	-236.5	3,925.9	1.28	-0.74	1.04
16,540.0	86.26	180.09	12,560.3	-4,015.8	-237.8	4,020.8	3.65	-3.35	-1.45
16,635.0	87.12	179.20	12,565.8	-4,110.6	-237.2	4,115.6	1.30	0.91	-0.94

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well VALOR ST COM 801H
Project:	LEA COUNTY, NM	TVD Reference:	KB=30' @ 3359.3usft (SCAN QUEST)
Site:	BULLDOG	MD Reference:	KB=30' @ 3359.3usft (SCAN QUEST)
Well:	VALOR ST COM 801H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWP	Database:	edm

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)
16,729.0	89.63	179.56	12,568.5	-4,204.6	-236.2	4,209.4	2.70	2.67	0.38
16,824.0	90.40	179.22	12,568.4	-4,299.6	-235.2	4,304.4	0.89	0.81	-0.36
16,919.0	90.57	179.09	12,567.6	-4,394.6	-233.8	4,399.3	0.23	0.18	-0.14
17,014.0	90.08	178.52	12,567.1	-4,489.5	-231.8	4,494.2	0.79	-0.52	-0.60
17,109.0	89.25	177.56	12,567.6	-4,584.5	-228.5	4,589.0	1.34	-0.87	-1.01
17,203.0	90.35	177.49	12,568.0	-4,678.4	-224.5	4,682.8	1.17	1.17	-0.07
17,297.0	90.76	177.27	12,567.1	-4,772.3	-220.2	4,776.5	0.49	0.44	-0.23
17,392.0	90.44	178.52	12,566.1	-4,867.2	-216.7	4,871.3	1.36	-0.34	1.32
17,486.0	88.42	178.16	12,567.0	-4,961.2	-214.0	4,965.1	2.18	-2.15	-0.38
17,580.0	87.89	178.30	12,570.0	-5,055.1	-211.1	5,058.9	0.58	-0.56	0.15
17,675.0	88.06	180.16	12,573.4	-5,150.0	-209.8	5,153.8	1.96	0.18	1.96
17,769.0	90.93	183.49	12,574.2	-5,243.9	-212.8	5,247.8	4.68	3.05	3.54
17,864.0	90.71	184.50	12,572.9	-5,338.7	-219.4	5,342.7	1.09	-0.23	1.06
17,958.0	88.97	180.39	12,573.1	-5,432.6	-223.4	5,436.6	4.75	-1.85	-4.37
18,052.0	90.03	180.48	12,573.9	-5,526.6	-224.1	5,530.6	1.13	1.13	0.10
18,146.0	89.84	178.87	12,574.0	-5,620.6	-223.6	5,624.6	1.72	-0.20	-1.71
18,240.0	89.55	180.13	12,574.6	-5,714.6	-222.8	5,718.5	1.38	-0.31	1.34
18,335.0	89.80	177.52	12,575.1	-5,809.5	-220.8	5,813.4	2.76	0.26	-2.75
18,430.0	90.06	179.75	12,575.2	-5,904.5	-218.5	5,908.2	2.36	0.27	2.35
18,524.0	90.33	180.82	12,574.9	-5,998.5	-219.0	6,002.2	1.17	0.29	1.14
18,618.0	90.92	178.60	12,573.9	-6,092.5	-218.5	6,096.2	2.44	0.63	-2.36
18,713.0	88.89	178.42	12,574.0	-6,187.4	-216.1	6,191.0	2.15	-2.14	-0.19
18,808.0	91.47	178.65	12,573.7	-6,282.4	-213.6	6,285.9	2.73	2.72	0.24
18,903.0	91.25	179.08	12,571.5	-6,377.4	-211.8	6,380.8	0.51	-0.23	0.45
18,998.0	91.07	177.82	12,569.5	-6,472.3	-209.2	6,475.6	1.34	-0.19	-1.33
19,092.0	89.25	177.96	12,569.3	-6,566.2	-205.7	6,569.4	1.94	-1.94	0.15
19,186.0	88.96	179.86	12,570.7	-6,660.2	-203.9	6,663.3	2.04	-0.31	2.02
19,281.0	90.74	181.27	12,571.0	-6,755.2	-204.9	6,758.3	2.39	1.87	1.48
19,375.0	89.52	176.16	12,570.8	-6,849.1	-202.8	6,852.1	5.59	-1.30	-5.44
19,469.0	89.55	177.38	12,571.5	-6,943.0	-197.5	6,945.8	1.30	0.03	1.30
19,563.0	91.09	175.87	12,571.0	-7,036.8	-191.9	7,039.4	2.29	1.64	-1.61
19,657.0	88.03	177.67	12,571.7	-7,130.6	-186.6	7,133.1	3.78	-3.26	1.91
19,751.0	88.75	179.31	12,574.4	-7,224.6	-184.2	7,226.9	1.90	0.77	1.74
19,845.0	86.88	178.79	12,578.0	-7,318.5	-182.6	7,320.7	2.06	-1.99	-0.55
19,940.0	86.59	180.02	12,583.4	-7,413.3	-181.6	7,415.5	1.33	-0.31	1.29
20,034.0	88.21	182.13	12,587.6	-7,507.2	-183.4	7,509.4	2.83	1.72	2.24
20,100.0	88.22	177.06	12,589.7	-7,573.1	-182.9	7,575.3	7.68	0.02	-7.68
Last MWD Svy									
20,142.4	88.22	177.06	12,591.0	-7,615.5	-180.8	7,617.6	0.00	0.00	0.00
LTP @ 20142.4'MD									
20,168.0	88.22	177.06	12,591.8	-7,641.0	-179.4	7,643.1	0.00	0.00	0.00
PTD @ 20168'MD									

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well VALOR ST COM 801H
Project:	LEA COUNTY, NM	TVD Reference:	KB=30' @ 3359.3usft (SCAN QUEST)
Site:	BULLDOG	MD Reference:	KB=30' @ 3359.3usft (SCAN QUEST)
Well:	VALOR ST COM 801H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWP	Database:	edm

Design Targets

Target Name

- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
FTP (VALOR ST COM	0.00	0.00	12,508.8	108.0	-265.8	398,777.30	746,510.80	32° 5' 37.873 N	103° 32' 14.362 W
- actual wellpath misses target center by 396.7usft at 12543.5usft MD (12425.4 TVD, -100.9 N, 61.0 E)									
- Circle (radius 50.0)									
LTP (VALOR ST COM	0.00	0.00	12,549.0	-7,613.6	-208.3	391,055.70	746,568.30	32° 4' 21.459 N	103° 32' 14.356 W
- actual wellpath misses target center by 50.1usft at 20137.8usft MD (12590.9 TVD, -7610.9 N, -181.0 E)									
- Point									
PBHL (VALOR ST CC	0.18	359.57	12,570.0	-7,663.6	-207.9	391,005.70	746,568.70	32° 4' 20.964 N	103° 32' 14.356 W
- actual wellpath misses target center by 42.4usft at 20168.0usft MD (12591.8 TVD, -7641.0 N, -179.4 E)									
- Rectangle (sides W100.0 H1,566.5 D20.0)									

Design Annotations

Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S	+E/-W	
(usft)	(usft)	(usft)	(usft)	
12,223.3	12,195.6	110.5	94.1	FTP @ 12223.3'MD
20,100.0	12,589.7	-7,573.1	-182.9	Last MWD Svy
20,142.4	12,591.0	-7,615.5	-180.8	LTP @ 20142.4'MD
20,168.0	12,591.8	-7,641.0	-179.4	PTD @ 20168'MD

Checked By: _____ Approved By: _____ Date: _____