

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018**SUNDRY NOTICES AND REPORTS ON WELLS**
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on page 2		5. Lease Serial No. NMNM125658
		6. If Indian, Allottee or Tribe Name
		7. If Unit or CA/Agreement, Name and/or No.
1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other	NOV 28 2018	8. Well Name and No. FEZ FEDERAL COM 602H
2. Name of Operator COG OPERATING LLC	Contact: MAYTE X REYES E-Mail: mreyes1@concho.com	9. API Well No. 30-025-45275-00-X1
3a. Address ONE CONCHO CENTER 600 W ILLINOIS AVENUE MIDLAND, TX 79701-4287	3b. Phone No. (include area code) Ph: 575-748-6945	10. Field and Pool or Exploratory Area WC025G09S243532M-WOLFBONE
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 9 T25S R35E SESW 280FSL 1690FWL 32.138405 N Lat, 103.375565 W Lon		11. County or Parish, State LEA COUNTY, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	Change to Original A
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	PD

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

COG Operating LLC, respectfully requests approval for the following changes to the originally approved APD.

BHL

From: 200' FNL & 1450' FWL Section 4. T25S. R35E.
To: 200' FNL & 1845' FWL Section 4. T25S. R35E

Deepest TVD has increased to 12,455' TVD and MD has increased to 22,321' MD.

C102 Attached.
AC Report Attached.

Field Office
Hobbs

14. I hereby certify that the foregoing is true and correct.	
Electronic Submission #442370 verified by the BLM Well Information System	
For COG OPERATING LLC, sent to the Hobbs	
Committed to AFMSS for processing by MUSTAFA HAQUE on 11/02/2018 (19MH0012SE)	
Name (Printed/Typed) MAYTE X REYES	Title REGULATORY ANALYST
Signature (Electronic Submission)	Date 11/01/2018

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By MUSTAFA HAQUE	Title PETROLEUM ENGINEER	Date 11/08/2018
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		
Office Hobbs		

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

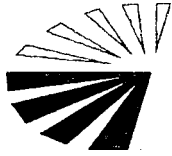
(Instructions on page 2)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

Additional data for EC transaction #442370 that would not fit on the form

32. Additional remarks, continued

Directional Plan Attached.



C O N C H O

Concho Resources

Lea County, NM
Fez Federal Com
Fez Federal Com 602H

Wellbore #1
plan1

Anticollision Report

23 October, 2018



Company:	Concho Resources	Local Co-ordinate Reference:	Well Fez Federal Com 602H
Project:	Lea County, NM	TVD Reference:	GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
Reference Site:	Fez Federal Com	MD Reference:	GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Fez Federal Com 602H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Single User Db
Reference Design:	plan1	Offset TVD Reference:	Reference Datum

Reference	plan1
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	Stations
Depth Range:	0.00 to 22,320.57usft
Results Limited by:	Maximum center-center distance of 2,000.00 us
Warning Levels Evaluated at:	2.00 Sigma
Error Model:	ISCWSA
Scan Method:	Closest Approach 3D
Error Surface:	Pedal Curve
Casing Method:	Not applied

Survey Tool Program		Date	10/23/18		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	22,320.57	plan1 (Wellbore #1)	MWD+IFR1+SAG+MS	OWSG MWD + IFR1 + Sag + Multi-Station Corre-	

Summary

Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Fez Federal Com						
Fez Federal Com 601H - Wellbore #1 - plan1	2,500.00	2,500.40	60.00	42.53	3.434	CC, ES
Fez Federal Com 601H - Wellbore #1 - plan1	22,320.57	22,163.38	422.26	255.54	2.533	SF
Fez Federal Com 701H - Wellbore #1 - plan1	3,000.00	3,000.10	30.01	8.95	1.425	Level 3, CC, ES, SF

Offset Design													Offset Site Error:	0.00 usft
Fez Federal Com - Fez Federal Com 601H - Wellbore #1 - plan1													Offset Well Error:	0.00 usft
Survey Program: 0-MWD+IFR1+SAG+MS														
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.40	0.00	0.00	0.00	89.33		0.70	60.00	60.00				
100.00	100.00	100.40	100.00	0.13	0.13	89.33		0.70	60.00	60.00	59.74	0.27	224.985	
200.00	200.00	200.40	200.00	0.49	0.49	89.33		0.70	60.00	60.00	59.02	0.98	61.002	
300.00	300.00	300.40	300.00	0.85	0.85	89.33		0.70	60.00	60.00	58.30	1.70	35.284	
400.00	400.00	400.40	400.00	1.21	1.21	89.33		0.70	60.00	60.00	57.59	2.42	24.820	
500.00	500.00	500.40	500.00	1.57	1.57	89.33		0.70	60.00	60.00	56.87	3.13	19.143	
600.00	600.00	600.40	600.00	1.92	1.93	89.33		0.70	60.00	60.00	56.15	3.85	15.580	
700.00	700.00	700.40	700.00	2.28	2.28	89.33		0.70	60.00	60.00	55.44	4.57	13.135	
800.00	800.00	800.40	800.00	2.64	2.64	89.33		0.70	60.00	60.00	54.72	5.29	11.353	
900.00	900.00	900.40	900.00	3.00	3.00	89.33		0.70	60.00	60.00	54.00	6.00	9.997	
1,000.00	1,000.00	1,000.40	1,000.00	3.36	3.36	89.33		0.70	60.00	60.00	53.28	6.72	8.930	
1,100.00	1,100.00	1,100.40	1,100.00	3.72	3.72	89.33		0.70	60.00	60.00	52.57	7.44	8.069	
1,200.00	1,200.00	1,200.40	1,200.00	4.08	4.08	89.33		0.70	60.00	60.00	51.85	8.15	7.360	
1,300.00	1,300.00	1,300.40	1,300.00	4.43	4.44	89.33		0.70	60.00	60.00	51.13	8.87	6.765	
1,400.00	1,400.00	1,400.40	1,400.00	4.79	4.79	89.33		0.70	60.00	60.00	50.42	9.59	6.259	
1,500.00	1,500.00	1,500.40	1,500.00	5.15	5.15	89.33		0.70	60.00	60.00	49.70	10.30	5.823	
1,600.00	1,600.00	1,600.40	1,600.00	5.51	5.51	89.33		0.70	60.00	60.00	48.98	11.02	5.445	
1,700.00	1,700.00	1,700.40	1,700.00	5.87	5.87	89.33		0.70	60.00	60.00	48.27	11.74	5.112	
1,800.00	1,800.00	1,800.40	1,800.00	6.23	6.23	89.33		0.70	60.00	60.00	47.55	12.45	4.818	
1,900.00	1,900.00	1,900.40	1,900.00	6.59	6.59	89.33		0.70	60.00	60.00	46.83	13.17	4.556	
2,000.00	2,000.00	2,000.40	2,000.00	6.94	6.95	89.33		0.70	60.00	60.00	46.12	13.89	4.320	
2,100.00	2,100.00	2,100.40	2,100.00	7.30	7.30	89.33		0.70	60.00	60.00	45.40	14.61	4.108	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

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Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Fez Federal Com 602H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Single User Db
Reference Design:	plan1	Offset TVD Reference:	Reference Datum

Offset Design Fez Federal Com - Fez Federal Com 601H - Wellbore #1 - plan1												Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+SAG+MS												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,200.00	2,200.00	2,200.40	2,200.00	7.66	7.66	89.33	0.70	60.00	60.00	44.68	15.32	3.916	
2,300.00	2,300.00	2,300.40	2,300.00	8.02	8.02	89.33	0.70	60.00	60.00	43.96	16.04	3.741	
2,400.00	2,400.00	2,400.40	2,400.00	8.38	8.38	89.33	0.70	60.00	60.00	43.25	16.76	3.581	
2,500.00	2,500.00	2,500.40	2,500.00	8.74	8.74	89.33	0.70	60.00	60.00	42.53	17.47	3.434	CC, ES
2,600.00	2,600.00	2,598.30	2,597.88	9.09	9.08	89.35	0.70	61.69	61.73	43.56	18.16	3.398	
2,700.00	2,700.00	2,695.98	2,695.43	9.45	9.41	89.40	0.70	66.70	66.86	48.03	18.83	3.551	
2,800.00	2,800.00	2,805.66	2,793.46	9.81	9.79	89.46	0.70	74.77	75.06	55.52	19.54	3.842	
2,900.00	2,900.00	2,906.04	2,892.70	10.17	10.14	89.52	0.70	83.45	83.77	63.53	20.24	4.139	
3,000.00	3,000.00	3,006.42	2,991.94	10.53	10.49	89.56	0.70	92.13	92.49	71.54	20.94	4.417	
3,100.00	3,100.00	3,106.80	3,091.18	10.89	10.84	89.60	0.70	100.81	101.20	79.56	21.64	4.676	
3,200.00	3,200.00	3,207.18	3,190.42	11.25	11.19	89.63	0.70	109.50	109.92	87.57	22.35	4.918	
3,300.00	3,300.00	3,307.56	3,289.66	11.60	11.54	89.66	0.70	118.18	118.63	95.58	23.05	5.146	
3,400.00	3,400.00	3,407.94	3,388.90	11.96	11.89	89.68	0.70	126.86	127.35	103.59	23.76	5.360	
3,500.00	3,500.00	3,508.32	3,488.14	12.32	12.24	89.70	0.70	135.54	136.06	111.60	24.47	5.561	
3,600.00	3,600.00	3,608.70	3,587.38	12.68	12.60	89.72	0.70	144.23	144.78	119.60	25.17	5.751	
3,700.00	3,700.00	3,709.08	3,686.62	13.04	12.95	89.74	0.70	152.91	153.49	127.61	25.88	5.931	
3,800.00	3,800.00	3,809.46	3,785.86	13.40	13.30	89.75	0.70	161.59	162.21	135.62	26.59	6.100	
3,900.00	3,900.00	3,890.16	3,885.10	13.75	13.59	89.76	0.70	170.27	170.92	143.69	27.23	6.277	
4,000.00	4,000.00	3,989.78	3,984.34	14.11	13.94	89.78	0.70	178.96	179.64	151.70	27.94	6.430	
4,100.00	4,099.98	4,089.53	4,083.72	14.46	14.30	-0.22	0.70	187.65	186.62	157.98	28.63	6.517	
4,200.00	4,199.84	4,189.46	4,183.27	14.80	14.65	-0.21	0.70	196.36	190.11	160.78	29.33	6.483	
4,250.00	4,249.68	4,239.46	4,233.08	14.98	14.83	-0.21	0.70	200.72	190.54	160.87	29.67	6.422	
4,300.00	4,299.49	4,289.46	4,282.89	15.15	15.01	-0.21	0.70	205.07	190.54	160.52	30.02	6.348	
4,400.00	4,399.11	4,389.46	4,382.51	15.49	15.36	-0.21	0.70	213.79	190.54	159.83	30.71	6.204	
4,500.00	4,498.73	4,489.46	4,482.12	15.84	15.72	-0.21	0.70	222.51	190.54	159.14	31.41	6.067	
4,600.00	4,598.35	4,589.46	4,581.74	16.18	16.07	-0.21	0.70	231.22	190.54	158.44	32.10	5.936	
4,700.00	4,697.97	4,689.46	4,681.36	16.53	16.43	-0.21	0.70	239.94	190.54	157.74	32.80	5.810	
4,800.00	4,797.59	4,789.46	4,780.98	16.88	16.79	-0.21	0.70	248.65	190.54	157.05	33.50	5.689	
4,900.00	4,897.21	4,889.46	4,880.60	17.22	17.14	-0.21	0.70	257.37	190.54	156.35	34.19	5.572	
5,000.00	4,996.83	4,989.46	4,980.22	17.57	17.50	-0.21	0.70	266.08	190.54	155.65	34.89	5.461	
5,100.00	5,096.45	5,089.46	5,079.84	17.92	17.86	-0.21	0.70	274.80	190.54	154.95	35.59	5.353	
5,200.00	5,196.07	5,189.46	5,179.46	18.27	18.22	-0.21	0.70	283.51	190.54	154.25	36.29	5.250	
5,300.00	5,295.69	5,289.46	5,279.08	18.62	18.57	-0.21	0.70	292.23	190.54	153.55	37.00	5.150	
5,400.00	5,395.31	5,389.46	5,378.70	18.97	18.93	-0.21	0.70	300.95	190.54	152.84	37.70	5.054	
5,500.00	5,494.93	5,489.46	5,478.32	19.32	19.29	-0.21	0.70	309.66	190.54	152.14	38.40	4.962	
5,600.00	5,594.55	5,589.46	5,577.94	19.67	19.65	-0.21	0.70	318.38	190.54	151.44	39.10	4.873	
5,700.00	5,694.17	5,689.46	5,677.56	20.03	20.01	-0.21	0.70	327.09	190.54	150.73	39.81	4.786	
5,778.27	5,772.14	5,767.73	5,755.53	20.30	20.29	-0.21	0.70	333.91	190.54	150.18	40.36	4.721	
5,800.00	5,793.79	5,789.46	5,777.18	20.38	20.37	-0.21	0.70	335.81	190.62	150.11	40.51	4.705	
5,900.00	5,893.59	5,889.42	5,876.76	20.73	20.73	-0.21	0.70	344.52	193.13	151.91	41.22	4.686	
6,000.00	5,993.55	5,989.24	5,976.20	21.08	21.09	-0.20	0.70	353.22	199.12	157.20	41.92	4.750	
6,028.27	6,021.82	6,017.41	6,004.26	21.18	21.19	89.80	0.70	355.68	201.44	159.32	42.12	4.782	
6,100.00	6,093.55	6,088.87	6,075.45	21.44	21.44	89.81	0.70	361.90	207.69	165.06	42.63	4.872	
6,200.00	6,193.55	6,188.49	6,174.69	21.79	21.80	89.81	0.70	370.59	216.41	173.07	43.34	4.993	
6,300.00	6,293.55	6,288.11	6,273.93	22.15	22.16	89.82	0.70	379.27	225.13	181.07	44.05	5.110	
6,400.00	6,393.55	6,387.73	6,373.17	22.51	22.52	89.83	0.70	387.95	233.84	189.08	44.76	5.224	
6,500.00	6,493.55	6,487.35	6,472.41	22.86	22.88	89.83	0.70	396.63	242.56	197.08	45.47	5.334	
6,600.00	6,593.55	6,586.97	6,571.65	23.22	23.24	89.84	0.70	405.32	251.27	205.09	46.18	5.441	
6,700.00	6,693.55	6,686.59	6,670.89	23.57	23.59	89.85	0.70	414.00	259.99	213.09	46.89	5.544	
6,800.00	6,793.55	6,786.21	6,770.13	23.93	23.95	89.85	0.70	422.68	268.70	221.10	47.60	5.644	
6,900.00	6,893.55	6,885.83	6,869.37	24.29	24.31	89.85	0.70	431.36	277.42	229.10	48.32	5.742	

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Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference Offset (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
7,000.00	6,993.55	6,985.45	6,968.61	24.64	24.67	89.86	0.70	440.04	286.13	237.11	49.03	5.836		
7,100.00	7,093.55	7,085.07	7,067.85	25.00	25.03	89.86	0.70	448.73	294.85	245.11	49.74	5.928		
7,200.00	7,193.55	7,184.69	7,167.09	25.36	25.39	89.87	0.70	457.41	303.57	253.12	50.45	6.017		
7,300.00	7,293.55	7,284.30	7,266.33	25.72	25.75	89.87	0.70	466.09	312.28	261.12	51.16	6.104		
7,400.00	7,393.55	7,383.92	7,365.57	26.07	26.11	89.87	0.70	474.77	321.00	269.12	51.87	6.188		
7,500.00	7,493.55	7,483.54	7,464.81	26.43	26.47	89.88	0.70	483.46	329.71	277.13	52.58	6.270		
7,600.00	7,593.55	7,583.16	7,564.05	26.79	26.83	89.88	0.70	492.14	338.43	285.13	53.30	6.350		
7,700.00	7,693.55	7,682.78	7,663.29	27.14	27.18	89.88	0.70	500.82	347.14	293.13	54.01	6.428		
7,800.00	7,793.55	7,782.40	7,762.54	27.50	27.54	89.89	0.70	509.50	355.86	301.14	54.72	6.503		
7,900.00	7,893.55	7,882.02	7,861.78	27.86	27.90	89.89	0.70	518.19	364.57	309.14	55.43	6.577		
8,000.00	7,993.55	7,981.64	7,961.02	28.21	28.26	89.89	0.70	526.87	373.29	317.14	56.15	6.649		
8,100.00	8,093.55	8,082.63	8,071.68	28.57	28.66	89.89	0.70	535.27	380.90	323.96	56.94	6.689		
8,200.00	8,193.55	8,207.98	8,186.94	28.93	29.08	89.90	0.70	539.58	384.63	326.92	57.71	6.665		
8,300.00	8,293.55	8,314.59	8,293.55	29.29	29.45	89.90	0.70	540.00	385.00	326.58	58.42	6.590		
8,400.00	8,393.55	8,414.59	8,393.55	29.64	29.80	89.90	0.70	540.00	385.00	325.87	59.13	6.512		
8,500.00	8,493.55	8,514.59	8,493.55	30.00	30.14	89.90	0.70	540.00	385.00	325.17	59.83	6.435		
8,600.00	8,593.55	8,614.59	8,593.55	30.36	30.49	89.90	0.70	540.00	385.00	324.46	60.54	6.360		
8,700.00	8,693.55	8,714.59	8,693.55	30.72	30.84	89.90	0.70	540.00	385.00	323.76	61.24	6.286		
8,800.00	8,793.55	8,814.59	8,793.55	31.07	31.19	89.90	0.70	540.00	385.00	323.05	61.95	6.215		
8,900.00	8,893.55	8,914.59	8,893.55	31.43	31.54	89.90	0.70	540.00	385.00	322.34	62.66	6.144		
9,000.00	8,993.55	9,014.59	8,993.55	31.79	31.89	89.90	0.70	540.00	385.00	321.63	63.37	6.076		
9,100.00	9,093.55	9,114.59	9,093.55	32.15	32.24	89.90	0.70	540.00	385.00	320.93	64.07	6.009		
9,200.00	9,193.55	9,214.59	9,193.55	32.50	32.59	89.90	0.70	540.00	385.00	320.22	64.78	5.943		
9,300.00	9,293.55	9,314.59	9,293.55	32.86	32.94	89.90	0.71	540.00	385.00	319.51	65.49	5.879		
9,400.00	9,393.55	9,414.59	9,393.55	33.22	33.29	89.89	0.71	540.00	385.00	318.80	66.20	5.816		
9,500.00	9,493.55	9,514.59	9,493.55	33.58	33.64	89.89	0.71	540.00	385.00	318.10	66.91	5.754		
9,600.00	9,593.55	9,614.59	9,593.55	33.93	33.99	89.89	0.71	540.00	385.00	317.39	67.61	5.694		
9,700.00	9,693.55	9,714.59	9,693.55	34.29	34.34	89.89	0.71	540.00	385.00	316.68	68.32	5.635		
9,800.00	9,793.55	9,814.59	9,793.55	34.65	34.69	89.89	0.71	540.00	385.00	315.97	69.03	5.577		
9,900.00	9,893.55	9,914.59	9,893.55	35.01	35.04	89.89	0.71	540.00	385.00	315.26	69.74	5.520		
10,000.00	9,993.55	10,014.59	9,993.55	35.36	35.40	89.89	0.71	540.00	385.00	314.55	70.45	5.465		
10,100.00	10,093.55	10,114.59	10,093.55	35.72	35.75	89.89	0.71	540.00	385.00	313.84	71.16	5.410		
10,200.00	10,193.55	10,214.59	10,193.55	36.08	36.10	89.89	0.71	540.00	385.00	313.13	71.87	5.357		
10,300.00	10,293.55	10,314.59	10,293.55	36.44	36.45	89.89	0.71	540.00	385.00	312.42	72.58	5.305		
10,400.00	10,393.55	10,414.59	10,393.55	36.79	36.80	89.89	0.71	540.00	385.00	311.71	73.29	5.253		
10,500.00	10,493.55	10,514.59	10,493.55	37.15	37.15	89.89	0.71	540.00	385.00	311.00	74.00	5.203		
10,600.00	10,593.55	10,614.59	10,593.55	37.51	37.51	89.89	0.71	540.00	385.00	310.29	74.71	5.153		
10,700.00	10,693.55	10,714.59	10,693.55	37.87	37.86	89.89	0.71	540.00	385.00	309.58	75.42	5.105		
10,800.00	10,793.55	10,814.59	10,793.55	38.23	38.21	89.89	0.71	540.00	385.00	308.87	76.13	5.057		
10,900.00	10,893.55	10,914.59	10,893.55	38.58	38.56	89.89	0.71	540.00	385.00	308.16	76.84	5.011		
11,000.00	10,993.55	11,014.59	10,993.55	38.94	38.92	89.89	0.71	540.00	385.00	307.45	77.55	4.965		
11,100.00	11,093.55	11,114.59	11,093.55	39.30	39.27	89.89	0.71	540.00	385.00	306.74	78.26	4.920		
11,200.00	11,193.55	11,214.59	11,193.55	39.66	39.62	89.89	0.71	540.00	385.00	306.03	78.97	4.875		
11,300.00	11,293.55	11,314.59	11,293.55	40.01	39.97	89.89	0.71	540.00	385.00	305.32	79.68	4.832		
11,400.00	11,393.55	11,414.59	11,393.55	40.37	40.33	89.89	0.72	540.00	385.00	304.61	80.39	4.789		
11,500.00	11,493.55	11,514.59	11,493.55	40.73	40.68	89.89	0.72	540.00	385.00	303.90	81.10	4.747		
11,600.00	11,593.55	11,614.59	11,593.55	41.09	41.03	89.89	0.72	540.00	385.00	303.19	81.81	4.706		
11,700.00	11,693.55	11,714.59	11,693.55	41.45	41.39	89.89	0.72	540.00	385.00	302.48	82.53	4.665		
11,764.88	11,758.43	11,779.53	11,758.43	41.68	41.62	89.57	2.88	539.98	384.99	302.01	82.99	4.639		
11,800.00	11,793.55	11,814.29	11,792.95	41.80	41.74	88.97	6.95	539.95	385.02	301.78	83.24	4.626		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Concho Resources	Local Co-ordinate Reference:	Well Fez Federal Com 602H
Project:	Lea County, NM	TVD Reference:	GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
Reference Site:	Fez Federal Com	MD Reference:	GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Fez Federal Com 602H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Single User Db
Reference Design:	plan1	Offset TVD Reference:	Reference Datum

Offset Design Fez Federal Com - Fez Federal Com 601H - Wellbore #1 - plan1													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+IFR1+SAG+MS													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)		
11,888.50	11,882.05	11,898.67	11,875.19	42.12	42.02	86.22	25.46	539.81	385.72	301.85	83.86	4.599	
11,900.00	11,893.55	11,909.21	11,885.25	42.16	42.06	86.17	28.61	539.79	385.93	301.99	83.94	4.598	
11,950.00	11,943.43	11,954.45	11,927.69	42.34	42.20	84.14	44.24	539.67	387.19	302.92	84.27	4.595	
12,000.00	11,992.85	11,998.78	11,967.95	42.52	42.34	82.17	62.75	539.54	388.90	304.34	84.56	4.599	
12,050.00	12,041.42	12,042.29	12,005.97	42.69	42.46	80.28	83.89	539.38	391.01	306.21	84.80	4.611	
12,100.00	12,088.78	12,085.06	12,041.67	42.85	42.57	78.47	107.43	539.20	393.43	308.46	84.97	4.630	
12,150.00	12,134.57	12,127.17	12,075.00	43.01	42.67	76.77	133.15	539.01	396.10	311.03	85.07	4.656	
12,200.00	12,178.43	12,168.69	12,105.94	43.15	42.76	75.17	160.82	538.80	398.94	313.83	85.11	4.688	
12,250.00	12,220.04	12,209.67	12,134.43	43.28	42.84	73.68	190.27	538.58	401.86	316.79	85.07	4.724	
12,300.00	12,259.08	12,250.00	12,160.34	43.40	42.91	72.31	221.17	538.35	404.80	319.84	84.96	4.765	
12,350.00	12,295.24	12,290.29	12,183.99	43.51	42.97	71.06	253.78	538.10	407.68	322.87	84.81	4.807	
12,400.00	12,328.26	12,330.03	12,205.02	43.62	43.02	69.94	287.49	537.85	410.44	325.83	84.61	4.851	
12,450.00	12,357.89	12,369.46	12,223.52	43.73	43.07	68.95	322.29	537.59	413.02	328.62	84.39	4.894	
12,500.00	12,383.90	12,408.61	12,239.48	43.82	43.12	68.10	358.03	537.32	415.35	331.18	84.17	4.935	
12,550.00	12,406.08	12,447.54	12,252.89	43.91	43.17	67.37	394.57	537.05	417.41	333.45	83.95	4.972	
12,600.00	12,424.28	12,486.28	12,263.75	43.99	43.22	66.78	431.75	536.77	419.14	335.37	83.76	5.004	
12,650.00	12,438.35	12,524.88	12,272.05	44.05	43.27	66.32	469.44	536.49	420.51	336.90	83.61	5.029	
12,700.00	12,448.19	12,563.37	12,277.77	44.10	43.31	66.00	507.49	536.20	421.49	337.98	83.51	5.047	
12,750.00	12,453.72	12,601.79	12,280.93	44.14	43.34	65.81	545.77	535.92	422.08	338.61	83.47	5.057	
12,790.30	12,455.01	12,633.11	12,281.60	44.16	43.36	65.75	577.08	535.68	422.25	338.76	83.49	5.058	
12,800.00	12,454.97	12,642.81	12,281.57	44.17	43.37	65.75	586.78	535.61	422.25	338.75	83.50	5.057	
12,900.00	12,454.66	12,742.81	12,281.25	44.23	43.44	65.75	686.78	534.86	422.25	338.61	83.63	5.049	
13,000.00	12,454.35	12,842.81	12,280.94	44.30	43.52	65.75	786.77	534.11	422.25	338.45	83.79	5.039	
13,100.00	12,454.03	12,942.81	12,280.62	44.39	43.62	65.75	886.77	533.36	422.25	338.27	83.98	5.028	
13,200.00	12,453.72	13,042.81	12,280.31	44.49	43.74	65.75	986.77	532.61	422.25	338.06	84.18	5.016	
13,300.00	12,453.40	13,142.81	12,279.99	44.60	43.86	65.75	1,086.76	531.87	422.25	337.83	84.42	5.002	
13,400.00	12,453.09	13,242.81	12,279.68	44.72	44.00	65.75	1,186.76	531.12	422.25	337.58	84.67	4.987	
13,500.00	12,452.77	13,342.81	12,279.36	44.86	44.15	65.75	1,286.76	530.37	422.25	337.30	84.95	4.970	
13,600.00	12,452.46	13,442.81	12,279.05	45.01	44.31	65.75	1,386.75	529.62	422.25	336.99	85.26	4.953	
13,700.00	12,452.14	13,542.81	12,278.73	45.17	44.49	65.75	1,486.75	528.87	422.25	336.67	85.58	4.934	
13,800.00	12,451.83	13,642.81	12,278.42	45.34	44.68	65.75	1,586.75	528.12	422.25	336.32	85.93	4.914	
13,900.00	12,451.51	13,742.81	12,278.10	45.53	44.88	65.75	1,686.74	527.37	422.25	335.94	86.30	4.893	
14,000.00	12,451.20	13,842.81	12,277.79	45.73	45.09	65.75	1,786.74	526.62	422.25	335.55	86.70	4.870	
14,100.00	12,450.88	13,942.81	12,277.48	45.94	45.31	65.75	1,886.74	525.87	422.25	335.13	87.12	4.847	
14,200.00	12,450.57	14,042.81	12,277.16	46.16	45.55	65.75	1,986.73	525.13	422.25	334.69	87.55	4.823	
14,300.00	12,450.25	14,142.81	12,276.85	46.39	45.80	65.75	2,086.73	524.38	422.25	334.23	88.01	4.797	
14,400.00	12,449.94	14,242.81	12,276.53	46.64	46.05	65.75	2,186.73	523.63	422.25	333.75	88.50	4.771	
14,500.00	12,449.62	14,342.81	12,276.22	46.89	46.32	65.75	2,286.72	522.88	422.25	333.25	89.00	4.744	
14,600.00	12,449.31	14,442.81	12,275.90	47.16	46.60	65.75	2,386.72	522.13	422.25	332.73	89.52	4.717	
14,700.00	12,448.99	14,542.81	12,275.59	47.44	46.89	65.75	2,486.72	521.38	422.25	332.19	90.06	4.688	
14,800.00	12,448.68	14,642.81	12,275.27	47.73	47.20	65.75	2,586.71	520.63	422.25	331.62	90.63	4.659	
14,900.00	12,448.36	14,742.81	12,274.96	48.02	47.51	65.75	2,686.71	519.88	422.25	331.04	91.21	4.630	
15,000.00	12,448.05	14,842.81	12,274.64	48.33	47.83	65.75	2,786.71	519.13	422.25	330.44	91.81	4.599	
15,100.00	12,447.73	14,942.81	12,274.33	48.65	48.16	65.75	2,886.70	518.39	422.25	329.82	92.43	4.568	
15,200.00	12,447.42	15,042.81	12,274.01	48.98	48.50	65.75	2,986.70	517.64	422.25	329.18	93.07	4.537	
15,300.00	12,447.10	15,142.81	12,273.70	49.32	48.85	65.75	3,086.70	516.89	422.25	328.53	93.72	4.505	
15,400.00	12,446.79	15,242.81	12,273.38	49.67	49.21	65.75	3,186.69	516.14	422.25	327.86	94.39	4.473	
15,500.00	12,446.47	15,342.81	12,273.07	50.02	49.58	65.75	3,286.69	515.39	422.25	327.17	95.08	4.441	
15,600.00	12,446.16	15,442.81	12,272.75	50.39	49.96	65.75	3,386.69	514.64	422.25	326.46	95.79	4.408	
15,700.00	12,445.84	15,542.81	12,272.44	50.77	50.35	65.75	3,486.68	513.89	422.25	325.74	96.52	4.375	
15,800.00	12,445.53	15,642.81	12,272.13	51.15	50.74	65.75	3,586.68	513.14	422.25	325.00	97.25	4.342	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Concho Resources	Local Co-ordinate Reference:	Well Fez Federal Com 602H
Project:	Lea County, NM	TVD Reference:	GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
Reference Site:	Fez Federal Com	MD Reference:	GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Fez Federal Com 602H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Single User Db
Reference Design:	plan1	Offset TVD Reference:	Reference Datum

Offset Design Fez Federal Com - Fez Federal Com 601H - Wellbore #1 - plan1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+SAG+MS													Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Distance		Minimum Separation		Warning						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
15,900.00	12,445.21	15,742.81	12,271.81	51.54	51.15	65.75	3,686.68	512.39	422.25	324.24	98.01	4.308		
16,000.00	12,444.90	15,842.81	12,271.50	51.94	51.56	65.75	3,786.67	511.64	422.25	323.47	98.78	4.275		
16,100.00	12,444.59	15,942.81	12,271.18	52.35	51.98	65.75	3,886.67	510.90	422.25	322.69	99.57	4.241		
16,200.00	12,444.27	16,042.81	12,270.87	52.77	52.41	65.75	3,986.67	510.15	422.25	321.89	100.37	4.207		
16,300.00	12,443.96	16,142.81	12,270.55	53.19	52.84	65.75	4,086.66	509.40	422.25	321.07	101.18	4.173		
16,400.00	12,443.64	16,242.81	12,270.24	53.62	53.29	65.75	4,186.66	508.65	422.25	320.24	102.01	4.139		
16,500.00	12,443.33	16,342.81	12,269.92	54.06	53.74	65.75	4,286.66	507.90	422.25	319.40	102.85	4.105		
16,600.00	12,443.01	16,442.81	12,269.61	54.51	54.19	65.75	4,386.65	507.15	422.25	318.55	103.71	4.072		
16,700.00	12,442.70	16,542.81	12,269.29	54.96	54.66	65.75	4,486.65	506.40	422.25	317.68	104.57	4.038		
16,800.00	12,442.38	16,642.81	12,268.98	55.42	55.13	65.75	4,586.65	505.65	422.25	316.80	105.45	4.004		
16,900.00	12,442.07	16,742.81	12,268.66	55.89	55.61	65.75	4,686.64	504.90	422.25	315.91	106.35	3.971		
17,000.00	12,441.75	16,842.81	12,268.35	56.36	56.09	65.75	4,786.64	504.16	422.25	315.00	107.25	3.937		
17,100.00	12,441.44	16,942.81	12,268.03	56.84	56.58	65.75	4,886.64	503.41	422.25	314.08	108.17	3.904		
17,200.00	12,441.12	17,042.81	12,267.72	57.32	57.07	65.75	4,986.63	502.66	422.25	313.16	109.10	3.870		
17,300.00	12,440.81	17,142.81	12,267.40	57.82	57.58	65.75	5,086.63	501.91	422.25	312.22	110.04	3.837		
17,400.00	12,440.49	17,242.81	12,267.09	58.31	58.08	65.75	5,186.63	501.16	422.25	311.27	110.99	3.805		
17,500.00	12,440.18	17,342.81	12,266.77	58.82	58.60	65.75	5,286.62	500.41	422.25	310.31	111.95	3.772		
17,600.00	12,439.86	17,442.81	12,266.46	59.32	59.11	65.75	5,386.62	499.66	422.25	309.34	112.92	3.740		
17,700.00	12,439.55	17,542.81	12,266.15	59.84	59.64	65.75	5,486.62	498.91	422.25	308.36	113.90	3.707		
17,800.00	12,439.23	17,642.81	12,265.83	60.36	60.17	65.75	5,586.61	498.16	422.25	307.37	114.89	3.675		
17,900.00	12,438.92	17,742.81	12,265.52	60.88	60.70	65.75	5,686.61	497.42	422.25	306.37	115.89	3.644		
18,000.00	12,438.60	17,842.81	12,265.20	61.41	61.24	65.75	5,786.61	496.67	422.25	305.36	116.90	3.612		
18,100.00	12,438.29	17,942.81	12,264.89	61.95	61.78	65.75	5,886.60	495.92	422.25	304.34	117.92	3.581		
18,200.00	12,437.97	18,042.81	12,264.57	62.49	62.33	65.75	5,986.60	495.17	422.25	303.31	118.94	3.550		
18,300.00	12,437.66	18,142.81	12,264.26	63.03	62.88	65.75	6,086.60	494.42	422.25	302.28	119.98	3.519		
18,400.00	12,437.34	18,242.81	12,263.94	63.58	63.44	65.75	6,186.59	493.67	422.25	301.23	121.02	3.489		
18,500.00	12,437.03	18,342.81	12,263.63	64.13	64.00	65.75	6,286.59	492.92	422.25	300.18	122.07	3.459		
18,600.00	12,436.71	18,442.81	12,263.31	64.69	64.56	65.75	6,386.59	492.17	422.25	299.12	123.13	3.429		
18,700.00	12,436.40	18,542.81	12,263.00	65.25	65.13	65.75	6,486.58	491.42	422.25	298.05	124.20	3.400		
18,800.00	12,436.08	18,642.81	12,262.68	65.81	65.71	65.75	6,586.58	490.67	422.25	296.98	125.28	3.371		
18,900.00	12,435.77	18,742.81	12,262.37	66.38	66.28	65.75	6,686.58	489.93	422.25	295.89	126.36	3.342		
19,000.00	12,435.45	18,842.81	12,262.05	66.96	66.86	65.75	6,786.57	489.18	422.25	294.80	127.45	3.313		
19,100.00	12,435.14	18,942.81	12,261.74	67.53	67.45	65.75	6,886.57	488.43	422.25	293.71	128.55	3.285		
19,200.00	12,434.83	19,042.81	12,261.42	68.11	68.04	65.75	6,986.57	487.68	422.26	292.60	129.65	3.257		
19,300.00	12,434.51	19,142.81	12,261.11	68.70	68.63	65.75	7,086.56	486.93	422.26	291.49	130.76	3.229		
19,400.00	12,434.20	19,242.81	12,260.80	69.29	69.22	65.75	7,186.56	486.18	422.26	290.38	131.88	3.202		
19,500.00	12,433.88	19,342.81	12,260.48	69.88	69.82	65.75	7,286.56	485.43	422.26	289.25	133.00	3.175		
19,600.00	12,433.57	19,442.81	12,260.17	70.47	70.42	65.75	7,386.55	484.68	422.26	288.13	134.13	3.148		
19,700.00	12,433.25	19,542.81	12,259.85	71.07	71.03	65.75	7,486.55	483.93	422.26	286.99	135.27	3.122		
19,800.00	12,432.94	19,642.81	12,259.54	71.67	71.63	65.75	7,586.55	483.19	422.26	285.85	136.41	3.096		
19,900.00	12,432.62	19,742.81	12,259.22	72.27	72.24	65.75	7,686.54	482.44	422.26	284.70	137.55	3.070		
20,000.00	12,432.31	19,842.81	12,258.91	72.88	72.86	65.75	7,786.54	481.69	422.26	283.55	138.70	3.044		
20,100.00	12,431.99	19,942.81	12,258.59	73.49	73.47	65.75	7,886.54	480.94	422.26	282.39	139.86	3.019		
20,200.00	12,431.68	20,042.81	12,258.28	74.10	74.09	65.75	7,986.54	480.19	422.26	281.23	141.03	2.994		
20,300.00	12,431.36	20,142.81	12,257.96	74.72	74.71	65.75	8,086.53	479.44	422.26	280.06	142.19	2.970		
20,400.00	12,431.05	20,242.81	12,257.65	75.34	75.34	65.75	8,186.53	478.69	422.26	278.89	143.37	2.945		
20,500.00	12,430.73	20,342.81	12,257.33	75.96	75.97	65.75	8,286.53	477.94	422.26	277.71	144.54	2.921		
20,600.00	12,430.42	20,442.81	12,257.02	76.58	76.59	65.75	8,386.52	477.19	422.26	276.53	145.73	2.898		
20,700.00	12,430.10	20,542.81	12,256.70	77.21	77.23	65.75	8,486.52	476.44	422.26	275.34	146.91	2.874		
20,800.00	12,429.79	20,642.81	12,256.39	77.84	77.86	65.75	8,586.52	475.70	422.26	274.15	148.11	2.851		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Concho Resources	Local Co-ordinate Reference:	Well Fez Federal Com 602H
Project:	Lea County, NM	TVD Reference:	GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
Reference Site:	Fez Federal Com	MD Reference:	GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Fez Federal Com 602H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Single User Db
Reference Design:	plan1	Offset TVD Reference:	Reference Datum

Offset Design Fez Federal Com - Fez Federal Com 601H - Wellbore #1 - plan1													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+IFR1+SAG+MS													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
20,900.00	12,429.47	20,742.81	12,256.07	78.47	78.50	65.75	8,686.51	474.95	422.26	272.96	149.30	2.828	
21,000.00	12,429.16	20,842.81	12,255.76	79.10	79.14	65.75	8,786.51	474.20	422.26	271.75	150.50	2.806	
21,100.00	12,428.84	20,942.81	12,255.45	79.74	79.78	65.75	8,886.51	473.45	422.26	270.55	151.71	2.783	
21,200.00	12,428.53	21,042.81	12,255.13	80.37	80.42	65.75	8,986.50	472.70	422.26	269.34	152.92	2.761	
21,300.00	12,428.21	21,142.81	12,254.82	81.01	81.06	65.75	9,086.50	471.95	422.26	268.13	154.13	2.740	
21,400.00	12,427.90	21,242.81	12,254.50	81.65	81.71	65.75	9,186.50	471.20	422.26	266.91	155.35	2.718	
21,500.00	12,427.58	21,342.81	12,254.19	82.30	82.36	65.75	9,286.49	470.45	422.26	265.69	156.57	2.697	
21,600.00	12,427.27	21,442.81	12,253.87	82.94	83.01	65.75	9,386.49	469.70	422.26	264.47	157.79	2.676	
21,700.00	12,426.95	21,542.81	12,253.56	83.59	83.66	65.75	9,486.49	468.96	422.26	263.24	159.02	2.655	
21,800.00	12,426.64	21,642.81	12,253.24	84.24	84.32	65.75	9,586.48	468.21	422.26	262.01	160.25	2.635	
21,900.00	12,426.32	21,742.81	12,252.93	84.89	84.98	65.75	9,686.48	467.46	422.26	260.77	161.49	2.615	
22,000.00	12,426.01	21,842.81	12,252.61	85.55	85.63	65.75	9,786.48	466.71	422.26	259.53	162.73	2.595	
22,100.00	12,425.69	21,942.81	12,252.30	86.20	86.29	65.75	9,886.47	465.96	422.26	258.29	163.97	2.575	
22,200.00	12,425.38	22,042.81	12,251.98	86.86	86.96	65.75	9,986.47	465.21	422.26	257.05	165.21	2.556	
22,300.00	12,425.07	22,142.81	12,251.67	87.52	87.62	65.75	10,086.47	464.46	422.26	255.80	166.46	2.537	
22,320.57	12,425.00	22,163.38	12,251.60	87.66	87.76	65.75	10,107.04	464.31	422.26	255.54	166.72	2.533 SF	

Company:	Concho Resources	Local Co-ordinate Reference:	Well Fez Federal Com 602H
Project:	Lea County, NM	TVD Reference:	GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
Reference Site:	Fez Federal Com	MD Reference:	GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Fez Federal Com 602H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Single User Db
Reference Design:	plan1	Offset TVD Reference:	Reference Datum

Offset Design Fez Federal Com - Fez Federal Com 701H - Wellbore #1 - plan1													Offset Site Error: 0.00 usft	
Survey Program: 0-MWD+IFR1+SAG+MS													Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis		Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.10	0.00	0.00	0.00	88.66	0.70	30.00	30.01					
100.00	100.00	100.10	100.00	0.13	0.13	88.66	0.70	30.00	30.01	29.74	0.27	112.971		
200.00	200.00	200.10	200.00	0.49	0.49	88.66	0.70	30.00	30.01	29.03	0.98	30.540		
300.00	300.00	300.10	300.00	0.85	0.85	88.66	0.70	30.00	30.01	28.31	1.70	17.657		
400.00	400.00	400.10	400.00	1.21	1.21	88.66	0.70	30.00	30.01	27.59	2.42	12.418		
500.00	500.00	500.10	500.00	1.57	1.57	88.66	0.70	30.00	30.01	26.87	3.13	9.577		
600.00	600.00	600.10	600.00	1.92	1.93	88.66	0.70	30.00	30.01	26.16	3.85	7.794		
700.00	700.00	700.10	700.00	2.28	2.28	88.66	0.70	30.00	30.01	25.44	4.57	6.570		
800.00	800.00	800.10	800.00	2.64	2.64	88.66	0.70	30.00	30.01	24.72	5.28	5.679		
900.00	900.00	900.10	900.00	3.00	3.00	88.66	0.70	30.00	30.01	24.01	6.00	5.000		
1,000.00	1,000.00	1,000.10	1,000.00	3.36	3.36	88.66	0.70	30.00	30.01	23.29	6.72	4.467		
1,100.00	1,100.00	1,100.10	1,100.00	3.72	3.72	88.66	0.70	30.00	30.01	22.57	7.44	4.036		
1,200.00	1,200.00	1,200.10	1,200.00	4.08	4.08	88.66	0.70	30.00	30.01	21.86	8.15	3.681		
1,300.00	1,300.00	1,300.10	1,300.00	4.43	4.43	88.66	0.70	30.00	30.01	21.14	8.87	3.384		
1,400.00	1,400.00	1,400.10	1,400.00	4.79	4.79	88.66	0.70	30.00	30.01	20.42	9.59	3.130		
1,500.00	1,500.00	1,500.10	1,500.00	5.15	5.15	88.66	0.70	30.00	30.01	19.71	10.30	2.913		
1,600.00	1,600.00	1,600.10	1,600.00	5.51	5.51	88.66	0.70	30.00	30.01	18.99	11.02	2.723		
1,700.00	1,700.00	1,700.10	1,700.00	5.87	5.87	88.66	0.70	30.00	30.01	18.27	11.74	2.557		
1,800.00	1,800.00	1,800.10	1,800.00	6.23	6.23	88.66	0.70	30.00	30.01	17.55	12.45	2.410		
1,900.00	1,900.00	1,900.10	1,900.00	6.59	6.59	88.66	0.70	30.00	30.01	16.84	13.17	2.278		
2,000.00	2,000.00	2,000.10	2,000.00	6.94	6.94	88.66	0.70	30.00	30.01	16.12	13.89	2.161		
2,100.00	2,100.00	2,100.10	2,100.00	7.30	7.30	88.66	0.70	30.00	30.01	15.40	14.60	2.055		
2,200.00	2,200.00	2,200.10	2,200.00	7.66	7.66	88.66	0.70	30.00	30.01	14.69	15.32	1.959		
2,300.00	2,300.00	2,300.10	2,300.00	8.02	8.02	88.66	0.70	30.00	30.01	13.97	16.04	1.871		
2,400.00	2,400.00	2,400.10	2,400.00	8.38	8.38	88.66	0.70	30.00	30.01	13.25	16.76	1.791		
2,500.00	2,500.00	2,500.10	2,500.00	8.74	8.74	88.66	0.70	30.00	30.01	12.54	17.47	1.717		
2,600.00	2,600.00	2,600.10	2,600.00	9.09	9.09	88.66	0.70	30.00	30.01	11.82	18.19	1.650		
2,700.00	2,700.00	2,700.10	2,700.00	9.45	9.45	88.66	0.70	30.00	30.01	11.10	18.91	1.587		
2,800.00	2,800.00	2,800.10	2,800.00	9.81	9.81	88.66	0.70	30.00	30.01	10.39	19.62	1.529		
2,900.00	2,900.00	2,900.10	2,900.00	10.17	10.17	88.66	0.70	30.00	30.01	9.67	20.34	1.475 Level 3		
3,000.00	3,000.00	3,000.10	3,000.00	10.53	10.53	88.66	0.70	30.00	30.01	8.95	21.06	1.425 Level 3, CC, ES, SF		
3,100.00	3,100.00	3,099.02	3,098.90	10.89	10.87	88.74	0.70	31.71	31.74	9.99	21.75	1.459 Level 3		
3,200.00	3,200.00	3,197.71	3,197.45	11.25	11.21	88.91	0.70	36.82	36.91	14.50	22.41	1.647		
3,300.00	3,300.00	3,303.34	3,296.07	11.60	11.58	89.11	0.70	44.97	45.15	22.04	23.10	1.954		
3,400.00	3,400.00	3,403.72	3,395.31	11.96	11.92	89.25	0.70	53.65	53.86	30.06	23.80	2.263		
3,500.00	3,500.00	3,504.10	3,494.55	12.32	12.27	89.36	0.70	62.33	62.57	38.07	24.50	2.554		
3,600.00	3,600.00	3,595.52	3,593.79	12.68	12.59	89.44	0.70	71.02	71.29	46.11	25.18	2.832		
3,700.00	3,700.00	3,704.86	3,693.03	13.04	12.97	89.50	0.70	79.70	80.01	54.10	25.91	3.088		
3,800.00	3,800.00	3,805.24	3,792.27	13.40	13.32	89.55	0.70	88.38	88.72	62.11	26.61	3.334		
3,900.00	3,900.00	3,905.62	3,891.51	13.75	13.67	89.59	0.70	97.06	97.44	70.12	27.32	3.567		
4,000.00	4,000.00	3,994.00	3,990.75	14.11	13.98	89.62	0.70	105.74	106.15	78.17	27.98	3.794		
4,100.00	4,099.98	4,106.25	4,090.12	14.46	14.37	-0.36	0.70	114.44	113.13	84.41	28.72	3.939		
4,200.00	4,199.84	4,206.32	4,189.67	14.80	14.72	-0.34	0.70	123.15	116.62	87.21	29.41	3.965		
4,250.00	4,249.68	4,243.68	4,239.48	14.98	14.85	-0.34	0.70	127.51	117.05	87.34	29.71	3.940		
4,300.00	4,299.49	4,306.32	4,289.29	15.15	15.07	-0.34	0.70	131.86	117.05	86.95	30.10	3.889		
4,400.00	4,399.11	4,406.32	4,388.91	15.49	15.43	-0.34	0.70	140.58	117.05	86.26	30.79	3.802		
4,500.00	4,498.73	4,493.68	4,488.53	15.84	15.74	-0.34	0.70	149.30	117.05	85.62	31.44	3.724		
4,600.00	4,598.35	4,606.32	4,588.15	16.18	16.13	-0.34	0.70	158.01	117.05	84.88	32.17	3.638		
4,700.00	4,697.97	4,706.32	4,687.77	16.53	16.49	-0.34	0.70	166.73	117.05	84.19	32.87	3.561		
4,800.00	4,797.59	4,806.32	4,787.39	16.88	16.84	-0.34	0.70	175.44	117.05	83.49	33.56	3.488		
4,900.00	4,897.21	4,906.32	4,887.01	17.22	17.20	-0.34	0.70	184.16	117.05	82.80	34.26	3.417		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Concho Resources	Local Co-ordinate Reference:	Well Fez Federal Com 602H
Project:	Lea County, NM	TVD Reference:	GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
Reference Site:	Fez Federal Com	MD Reference:	GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Fez Federal Com 602H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Single User Db
Reference Design:	plan1	Offset TVD Reference:	Reference Datum

Offset Design Fez Federal Com - Fez Federal Com 701H - Wellbore #1 - plan1													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+IFR1+SAG+MS													Offset Well Error: 0.00 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.00	4,996.83	5,006.32	4,986.63	17.57	17.55	-0.34	0.70	192.87	117.05	82.10	34.95	3.349	
5,100.00	5,096.45	5,106.32	5,086.25	17.92	17.91	-0.34	0.70	201.59	117.05	81.40	35.65	3.283	
5,200.00	5,196.07	5,193.68	5,185.87	18.27	18.22	-0.34	0.70	210.30	117.05	80.75	36.31	3.224	
5,300.00	5,295.69	5,306.32	5,285.49	18.62	18.62	-0.34	0.70	219.02	117.05	80.00	37.05	3.159	
5,400.00	5,395.31	5,406.32	5,385.11	18.97	18.97	-0.34	0.70	227.74	117.05	79.30	37.75	3.101	
5,500.00	5,494.93	5,506.32	5,484.72	19.32	19.33	-0.34	0.70	236.45	117.05	78.60	38.45	3.044	
5,600.00	5,594.55	5,593.68	5,584.34	19.67	19.64	-0.34	0.70	245.17	117.05	77.95	39.11	2.993	
5,700.00	5,694.17	5,706.32	5,683.96	20.03	20.04	-0.34	0.70	253.88	117.05	77.20	39.85	2.937	
5,778.27	5,772.14	5,771.95	5,761.94	20.30	20.28	-0.34	0.70	260.70	117.05	76.69	40.36	2.900	
5,800.00	5,793.79	5,793.68	5,783.58	20.38	20.36	-0.34	0.70	262.60	117.14	76.62	40.51	2.891	
5,900.00	5,893.59	5,906.36	5,883.17	20.73	20.76	-0.34	0.70	271.31	119.64	78.38	41.26	2.900	
6,000.00	5,993.55	6,006.54	5,982.60	21.08	21.12	-0.32	0.70	280.01	125.63	83.66	41.97	2.994	
6,028.27	6,021.82	6,021.63	6,010.67	21.18	21.17	89.69	0.70	282.47	127.95	85.84	42.12	3.038	
6,100.00	6,093.55	6,106.91	6,081.85	21.44	21.47	89.70	0.70	288.69	134.21	91.53	42.68	3.145	
6,200.00	6,193.55	6,207.29	6,181.09	21.79	21.83	89.72	0.70	297.38	142.92	99.53	43.39	3.294	
6,300.00	6,293.55	6,307.67	6,280.33	22.15	22.19	89.73	0.70	306.06	151.64	107.54	44.10	3.439	
6,400.00	6,393.55	6,391.95	6,379.57	22.51	22.50	89.75	0.70	314.74	160.35	115.60	44.75	3.583	
6,500.00	6,493.55	6,491.57	6,478.82	22.86	22.85	89.76	0.70	323.42	169.07	123.61	45.46	3.719	
6,600.00	6,593.55	6,608.81	6,578.06	23.22	23.27	89.77	0.70	332.11	177.78	131.55	46.23	3.845	
6,700.00	6,693.55	6,709.19	6,677.30	23.57	23.63	89.78	0.70	340.79	186.50	139.55	46.94	3.973	
6,800.00	6,793.55	6,809.57	6,776.54	23.93	23.99	89.79	0.70	349.47	195.21	147.56	47.66	4.096	
6,900.00	6,893.55	6,909.95	6,875.78	24.29	24.35	89.80	0.70	358.15	203.93	155.56	48.37	4.216	
7,000.00	6,993.55	6,989.66	6,975.02	24.64	24.64	89.81	0.70	366.83	212.64	163.64	49.01	4.339	
7,100.00	7,093.55	7,089.28	7,074.26	25.00	25.00	89.82	0.70	375.52	221.36	171.64	49.72	4.452	
7,200.00	7,193.55	7,188.90	7,173.50	25.36	25.35	89.83	0.70	384.20	230.08	179.65	50.43	4.562	
7,300.00	7,293.55	7,288.52	7,272.74	25.72	25.71	89.83	0.70	392.88	238.79	187.65	51.14	4.669	
7,400.00	7,393.55	7,388.14	7,371.98	26.07	26.07	89.84	0.70	401.56	247.51	195.66	51.85	4.773	
7,500.00	7,493.55	7,487.76	7,471.22	26.43	26.43	89.84	0.70	410.25	256.22	203.66	52.56	4.875	
7,600.00	7,593.55	7,587.38	7,570.46	26.79	26.79	89.85	0.70	418.93	264.94	211.67	53.27	4.973	
7,700.00	7,693.55	7,687.00	7,669.70	27.14	27.15	89.85	0.70	427.61	273.65	219.67	53.98	5.069	
7,800.00	7,793.55	7,786.62	7,768.94	27.50	27.50	89.86	0.70	436.29	282.37	227.68	54.69	5.163	
7,900.00	7,893.55	7,887.38	7,869.32	27.86	27.87	89.86	0.70	445.05	291.07	235.65	55.42	5.252	
8,000.00	7,993.55	7,998.61	7,980.31	28.21	28.27	89.87	0.70	452.16	297.46	241.24	56.22	5.291	
8,100.00	8,093.55	8,110.22	8,091.88	28.57	28.66	89.87	0.70	454.96	299.96	243.00	56.96	5.266	
8,200.00	8,193.55	8,211.89	8,193.55	28.93	29.02	89.87	0.70	455.00	300.00	242.34	57.66	5.203	
8,300.00	8,293.55	8,311.89	8,293.55	29.29	29.37	89.87	0.70	455.00	300.00	241.63	58.37	5.140	
8,400.00	8,393.55	8,411.89	8,393.55	29.64	29.72	89.87	0.70	455.00	300.00	240.92	59.08	5.078	
8,500.00	8,493.55	8,511.89	8,493.55	30.00	30.07	89.87	0.70	455.00	300.00	240.21	59.79	5.018	
8,600.00	8,593.55	8,611.89	8,593.55	30.36	30.42	89.87	0.70	455.00	300.00	239.51	60.50	4.959	
8,700.00	8,693.55	8,711.89	8,693.55	30.72	30.77	89.87	0.70	455.00	300.00	238.80	61.20	4.902	
8,800.00	8,793.55	8,811.89	8,793.55	31.07	31.12	89.87	0.70	455.00	300.00	238.09	61.91	4.846	
8,900.00	8,893.55	8,911.89	8,893.55	31.43	31.47	89.87	0.70	455.00	300.00	237.38	62.62	4.791	
9,000.00	8,993.55	9,011.89	8,993.55	31.79	31.82	89.87	0.70	455.00	300.00	236.67	63.33	4.737	
9,100.00	9,093.55	9,111.89	9,093.55	32.15	32.18	89.87	0.70	455.00	300.00	235.96	64.04	4.685	
9,200.00	9,193.55	9,211.89	9,193.55	32.50	32.53	89.87	0.70	455.00	300.00	235.25	64.75	4.633	
9,300.00	9,293.55	9,311.89	9,293.55	32.86	32.88	89.87	0.70	455.00	300.00	234.54	65.46	4.583	
9,400.00	9,393.55	9,411.89	9,393.55	33.22	33.23	89.87	0.70	455.00	300.00	233.83	66.17	4.534	
9,500.00	9,493.55	9,511.89	9,493.55	33.58	33.58	89.87	0.70	455.00	300.00	233.12	66.88	4.486	
9,600.00	9,593.55	9,611.89	9,593.55	33.93	33.94	89.87	0.70	455.00	300.00	232.41	67.59	4.439	
9,700.00	9,693.55	9,711.89	9,693.55	34.29	34.29	89.87	0.70	455.00	300.00	231.70	68.30	4.392	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company: Concho Resources
Project: Lea County, NM
Reference Site: Fez Federal Com
Site Error: 0.00 usft
Reference Well: Fez Federal Com 602H
Well Error: 0.00 usft
Reference Wellbore: Wellbore #1
Reference Design: plan1

Local Co-ordinate Reference: Well Fez Federal Com 602H
TVD Reference: GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
MD Reference: GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.14 Single User Db
Offset TVD Reference: Reference Datum

Offset Design Fez Federal Com - Fez Federal Com 701H - Wellbore #1 - plan1													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+IFR1+SAG+MS													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance					Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)		Separation Factor
9,800.00	9,793.55	9,811.89	9,793.55	34.65	34.64	89.87	0.70	455.00	300.00	230.99	69.01	4.347	
9,900.00	9,893.55	9,911.89	9,893.55	35.01	34.99	89.87	0.70	455.00	300.00	230.28	69.72	4.303	
10,000.00	9,993.55	10,011.89	9,993.55	35.36	35.35	89.87	0.70	455.00	300.00	229.57	70.43	4.260	
10,100.00	10,093.55	10,111.89	10,093.55	35.72	35.70	89.87	0.70	455.00	300.00	228.86	71.14	4.217	
10,200.00	10,193.55	10,211.89	10,193.55	36.08	36.05	89.87	0.70	455.00	300.00	228.15	71.85	4.175	
10,300.00	10,293.55	10,311.89	10,293.55	36.44	36.41	89.87	0.70	455.00	300.00	227.44	72.56	4.134	
10,400.00	10,393.55	10,411.89	10,393.55	36.79	36.76	89.87	0.70	455.00	300.00	226.73	73.27	4.094	
10,500.00	10,493.55	10,511.89	10,493.55	37.15	37.11	89.87	0.70	455.00	300.00	226.02	73.98	4.055	
10,600.00	10,593.55	10,611.89	10,593.55	37.51	37.47	89.87	0.70	455.00	300.00	225.30	74.70	4.016	
10,700.00	10,693.55	10,711.89	10,693.55	37.87	37.82	89.87	0.70	455.00	300.00	224.59	75.41	3.978	
10,800.00	10,793.55	10,811.89	10,793.55	38.23	38.17	89.87	0.70	455.00	300.00	223.88	76.12	3.941	
10,900.00	10,893.55	10,911.89	10,893.55	38.58	38.53	89.87	0.70	455.00	300.00	223.17	76.83	3.905	
11,000.00	10,993.55	11,011.89	10,993.55	38.94	38.88	89.87	0.70	455.00	300.00	222.46	77.54	3.869	
11,100.00	11,093.55	11,111.89	11,093.55	39.30	39.23	89.87	0.70	455.00	300.00	221.75	78.25	3.834	
11,200.00	11,193.55	11,211.89	11,193.55	39.66	39.59	89.87	0.70	455.00	300.00	221.03	78.97	3.799	
11,300.00	11,293.55	11,311.89	11,293.55	40.01	39.94	89.87	0.70	455.00	300.00	220.32	79.68	3.765	
11,400.00	11,393.55	11,411.89	11,393.55	40.37	40.30	89.87	0.70	455.00	300.00	219.61	80.39	3.732	
11,500.00	11,493.55	11,511.89	11,493.55	40.73	40.65	89.87	0.70	455.00	300.00	218.90	81.10	3.699	
11,600.00	11,593.55	11,611.89	11,593.55	41.09	41.00	89.87	0.70	455.00	300.00	218.19	81.81	3.667	
11,700.00	11,693.55	11,711.89	11,693.55	41.45	41.36	89.87	0.70	455.00	300.00	217.47	82.53	3.635	
11,757.44	11,750.99	11,769.36	11,750.99	41.65	41.56	89.57	2.25	454.99	300.00	217.06	82.94	3.617	
11,800.00	11,793.55	11,811.51	11,792.86	41.80	41.71	88.69	6.88	454.95	300.03	216.79	83.24	3.604	
11,888.50	11,882.05	11,895.82	11,875.06	42.12	42.00	85.17	25.31	454.82	300.96	217.10	83.87	3.589	
11,900.00	11,893.55	11,906.36	11,885.12	42.16	42.03	85.00	28.46	454.79	301.25	217.30	83.94	3.589	
11,950.00	11,943.43	11,951.57	11,927.54	42.34	42.18	82.41	44.04	454.68	302.87	218.62	84.26	3.595	
12,000.00	11,992.85	11,995.87	11,967.81	42.52	42.31	79.92	62.51	454.54	305.07	220.56	84.51	3.610	
12,050.00	12,041.42	12,039.37	12,005.83	42.69	42.43	77.53	83.61	454.38	307.76	223.08	84.69	3.634	
12,100.00	12,088.78	12,082.13	12,041.54	42.85	42.55	75.27	107.11	454.20	310.84	226.07	84.77	3.667	
12,150.00	12,134.57	12,124.23	12,074.89	43.01	42.65	73.15	132.78	454.01	314.21	229.46	84.75	3.708	
12,200.00	12,178.43	12,165.74	12,105.84	43.15	42.74	71.18	160.43	453.80	317.77	233.14	84.63	3.755	
12,250.00	12,220.04	12,206.72	12,134.36	43.28	42.81	69.37	189.85	453.58	321.42	237.01	84.41	3.808	
12,300.00	12,259.08	12,247.24	12,160.42	43.40	42.88	67.71	220.86	453.35	325.08	240.96	84.11	3.865	
12,350.00	12,295.24	12,287.34	12,183.98	43.51	42.94	66.22	253.30	453.11	328.64	244.90	83.75	3.924	
12,400.00	12,328.26	12,327.08	12,205.04	43.62	43.00	64.88	286.99	452.86	332.04	248.70	83.34	3.984	
12,450.00	12,357.89	12,366.51	12,223.58	43.73	43.05	63.72	321.78	452.60	335.20	252.29	82.91	4.043	
12,500.00	12,383.90	12,405.67	12,239.58	43.82	43.11	62.71	357.52	452.33	338.06	255.57	82.49	4.098	
12,550.00	12,406.08	12,444.61	12,253.03	43.91	43.17	61.87	394.04	452.05	340.55	258.46	82.09	4.149	
12,600.00	12,424.28	12,483.36	12,263.92	43.99	43.22	61.18	431.23	451.78	342.64	260.90	81.74	4.192	
12,650.00	12,438.35	12,521.97	12,272.26	44.05	43.27	60.66	468.92	451.49	344.30	262.83	81.46	4.226	
12,700.00	12,448.19	12,560.47	12,278.02	44.10	43.30	60.29	506.98	451.21	345.48	264.21	81.27	4.251	
12,750.00	12,453.72	12,600.00	12,281.26	44.14	43.34	60.07	546.37	450.91	346.17	264.98	81.18	4.264	
12,790.30	12,455.01	12,630.09	12,281.90	44.16	43.36	60.01	576.45	450.69	346.36	265.18	81.18	4.266	
12,800.00	12,454.97	12,639.79	12,281.87	44.17	43.36	60.01	586.14	450.61	346.36	265.16	81.19	4.266	
12,900.00	12,454.66	12,739.79	12,281.56	44.23	43.43	60.01	686.14	449.87	346.36	265.03	81.32	4.259	
13,000.00	12,454.35	12,839.79	12,281.24	44.30	43.52	60.01	786.14	449.12	346.36	264.88	81.48	4.251	
13,100.00	12,454.03	12,939.79	12,280.93	44.39	43.62	60.01	886.13	448.37	346.36	264.70	81.66	4.242	
13,200.00	12,453.72	13,039.79	12,280.61	44.49	43.73	60.01	986.13	447.62	346.36	264.50	81.86	4.231	
13,300.00	12,453.40	13,139.79	12,280.30	44.60	43.85	60.01	1,086.13	446.87	346.36	264.27	82.08	4.220	
13,400.00	12,453.09	13,239.79	12,279.98	44.72	43.99	60.01	1,186.12	446.12	346.36	264.03	82.33	4.207	
13,500.00	12,452.77	13,339.79	12,279.67	44.86	44.13	60.01	1,286.12	445.37	346.36	263.75	82.60	4.193	
13,600.00	12,452.46	13,439.79	12,279.35	45.01	44.30	60.01	1,386.12	444.62	346.36	263.46	82.90	4.178	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Concho Resources	Local Co-ordinate Reference:	Well Fez Federal Com 602H
Project:	Lea County, NM	TVD Reference:	GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
Reference Site:	Fez Federal Com	MD Reference:	GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Fez Federal Com 602H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Single User Db
Reference Design:	plan1	Offset TVD Reference:	Reference Datum

Offset Design Fez Federal Com - Fez Federal Com 701H - Wellbore #1 - plan1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+SAG+MS													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
13,700.00	12,452.14	13,539.79	12,279.04	45.17	44.47	60.01	1,486.11	443.87	346.36	263.14	83.22	4.162		
13,800.00	12,451.83	13,639.79	12,278.72	45.34	44.66	60.01	1,586.11	443.13	346.36	262.80	83.55	4.145		
13,900.00	12,451.51	13,739.79	12,278.41	45.53	44.85	60.01	1,686.11	442.38	346.36	262.44	83.92	4.127		
14,000.00	12,451.20	13,839.79	12,278.09	45.73	45.05	60.01	1,786.10	441.63	346.36	262.06	84.30	4.109		
14,100.00	12,450.88	13,939.79	12,277.78	45.94	45.29	60.01	1,886.10	440.88	346.36	261.66	84.70	4.089		
14,200.00	12,450.57	14,039.79	12,277.46	46.16	45.52	60.01	1,986.10	440.13	346.36	261.23	85.13	4.069		
14,300.00	12,450.25	14,139.79	12,277.15	46.39	45.77	60.01	2,086.09	439.38	346.36	260.79	85.57	4.048		
14,400.00	12,449.94	14,239.79	12,276.84	46.64	46.02	60.01	2,186.09	438.63	346.36	260.32	86.04	4.026		
14,500.00	12,449.62	14,339.79	12,276.52	46.89	46.29	60.01	2,286.09	437.88	346.36	259.83	86.53	4.003		
14,600.00	12,449.31	14,439.79	12,276.21	47.16	46.57	60.01	2,386.08	437.13	346.36	259.33	87.03	3.980		
14,700.00	12,448.99	14,539.79	12,275.89	47.44	46.86	60.01	2,486.08	436.38	346.36	258.80	87.56	3.956		
14,800.00	12,448.68	14,639.79	12,275.58	47.73	47.16	60.01	2,586.08	435.64	346.36	258.26	88.10	3.931		
14,900.00	12,448.36	14,739.79	12,275.26	48.02	47.47	60.01	2,686.07	434.89	346.36	257.69	88.67	3.906		
15,000.00	12,448.05	14,839.79	12,274.95	48.33	47.79	60.01	2,786.07	434.14	346.36	257.11	89.25	3.881		
15,100.00	12,447.73	14,939.79	12,274.63	48.65	48.12	60.01	2,886.07	433.39	346.36	256.51	89.85	3.855		
15,200.00	12,447.42	15,039.79	12,274.32	48.98	48.46	60.01	2,986.06	432.64	346.36	255.89	90.47	3.828		
15,300.00	12,447.10	15,139.79	12,274.00	49.32	48.81	60.01	3,086.06	431.89	346.36	255.26	91.10	3.802		
15,400.00	12,446.79	15,239.79	12,273.69	49.67	49.17	60.01	3,186.06	431.14	346.36	254.60	91.76	3.775		
15,500.00	12,446.47	15,339.79	12,273.37	50.02	49.54	60.01	3,286.05	430.39	346.36	253.93	92.43	3.747		
15,600.00	12,446.16	15,439.79	12,273.06	50.39	49.91	60.01	3,386.05	429.64	346.36	253.25	93.11	3.720		
15,700.00	12,445.84	15,539.79	12,272.74	50.77	50.30	60.01	3,486.05	428.89	346.36	252.55	93.81	3.692		
15,800.00	12,445.53	15,639.79	12,272.43	51.15	50.69	60.01	3,586.04	428.15	346.36	251.83	94.53	3.664		
15,900.00	12,445.21	15,739.79	12,272.11	51.54	51.10	60.01	3,686.04	427.40	346.36	251.10	95.26	3.636		
16,000.00	12,444.90	15,839.79	12,271.80	51.94	51.51	60.01	3,786.04	426.65	346.36	250.35	96.01	3.608		
16,100.00	12,444.59	15,939.79	12,271.48	52.35	51.93	60.01	3,886.03	425.90	346.36	249.59	96.77	3.579		
16,200.00	12,444.27	16,039.79	12,271.17	52.77	52.35	60.02	3,986.03	425.15	346.36	248.82	97.54	3.551		
16,300.00	12,443.96	16,139.79	12,270.85	53.19	52.79	60.02	4,086.03	424.40	346.36	248.03	98.33	3.522		
16,400.00	12,443.64	16,239.79	12,270.54	53.62	53.23	60.02	4,186.02	423.65	346.36	247.22	99.14	3.494		
16,500.00	12,443.33	16,339.79	12,270.22	54.06	53.68	60.02	4,286.02	422.90	346.36	246.41	99.95	3.465		
16,600.00	12,443.01	16,439.79	12,269.91	54.51	54.14	60.02	4,386.02	422.15	346.36	245.58	100.78	3.437		
16,700.00	12,442.70	16,539.79	12,269.60	54.96	54.60	60.02	4,486.01	421.40	346.36	244.74	101.62	3.408		
16,800.00	12,442.38	16,639.79	12,269.28	55.42	55.07	60.02	4,586.01	420.66	346.36	243.88	102.48	3.380		
16,900.00	12,442.07	16,739.79	12,268.97	55.89	55.54	60.02	4,686.01	419.91	346.36	243.02	103.34	3.352		
17,000.00	12,441.75	16,839.79	12,268.65	56.36	56.03	60.02	4,786.01	419.16	346.36	242.14	104.22	3.323		
17,100.00	12,441.44	16,939.79	12,268.34	56.84	56.52	60.02	4,886.00	418.41	346.36	241.25	105.11	3.295		
17,200.00	12,441.12	17,039.79	12,268.02	57.32	57.01	60.02	4,986.00	417.66	346.36	240.35	106.01	3.267		
17,300.00	12,440.81	17,139.79	12,267.71	57.82	57.51	60.02	5,086.00	416.91	346.36	239.44	106.92	3.240		
17,400.00	12,440.49	17,239.79	12,267.39	58.31	58.02	60.02	5,185.99	416.16	346.36	238.52	107.84	3.212		
17,500.00	12,440.18	17,339.79	12,267.08	58.82	58.53	60.02	5,285.99	415.41	346.36	237.59	108.77	3.184		
17,600.00	12,439.86	17,439.79	12,266.76	59.32	59.05	60.02	5,385.99	414.66	346.36	236.65	109.71	3.157		
17,700.00	12,439.55	17,539.79	12,266.45	59.84	59.57	60.02	5,485.98	413.91	346.36	235.70	110.66	3.130		
17,800.00	12,439.23	17,639.79	12,266.13	60.36	60.10	60.02	5,585.98	413.17	346.36	234.74	111.62	3.103		
17,900.00	12,438.92	17,739.79	12,265.82	60.88	60.63	60.02	5,685.98	412.42	346.36	233.77	112.59	3.076		
18,000.00	12,438.60	17,839.79	12,265.50	61.41	61.17	60.02	5,785.97	411.67	346.36	232.79	113.57	3.050		
18,100.00	12,438.29	17,939.79	12,265.19	61.95	61.71	60.02	5,885.97	410.92	346.36	231.81	114.56	3.023		
18,200.00	12,437.97	18,039.79	12,264.87	62.49	62.26	60.02	5,985.97	410.17	346.36	230.81	115.55	2.997		
18,300.00	12,437.66	18,139.79	12,264.56	63.03	62.81	60.02	6,085.96	409.42	346.36	229.81	116.56	2.972		
18,400.00	12,437.34	18,239.79	12,264.24	63.58	63.37	60.02	6,185.96	408.67	346.36	228.79	117.57	2.946		
18,500.00	12,437.03	18,339.79	12,263.93	64.13	63.93	60.02	6,285.96	407.92	346.36	227.77	118.59	2.921		
18,600.00	12,436.71	18,439.79	12,263.61	64.69	64.49	60.02	6,385.95	407.17	346.36	226.75	119.62	2.896		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company: Concho Resources
Project: Lea County, NM
Reference Site: Fez Federal Com
Site Error: 0.00 usft
Reference Well: Fez Federal Com 602H
Well Error: 0.00 usft
Reference Wellbore: Wellbore #1
Reference Design: plan1

Local Co-ordinate Reference: Well Fez Federal Com 602H
TVD Reference: GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
MD Reference: GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM 5000.14 Single User Db
Offset TVD Reference: Reference Datum

Offset Design Fez Federal Com - Fez Federal Com 701H - Wellbore #1 - plan1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+SAG+MS													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
18,700.00	12,436.40	18,539.79	12,263.30	65.25	65.08	60.02	6,485.95	406.42	346.36	225.71	120.65	2.871		
18,800.00	12,436.08	18,639.79	12,262.99	65.81	65.63	60.02	6,585.95	405.68	346.36	224.67	121.70	2.846		
18,900.00	12,435.77	18,739.79	12,262.67	66.38	66.21	60.02	6,685.94	404.93	346.36	223.62	122.75	2.822		
19,000.00	12,435.45	18,839.79	12,262.36	66.96	66.79	60.02	6,785.94	404.18	346.36	222.56	123.80	2.798		
19,100.00	12,435.14	18,939.79	12,262.04	67.53	67.37	60.02	6,885.94	403.43	346.36	221.50	124.87	2.774		
19,200.00	12,434.83	19,039.79	12,261.73	68.11	67.96	60.02	6,985.93	402.68	346.36	220.43	125.94	2.750		
19,300.00	12,434.51	19,139.79	12,261.41	68.70	68.55	60.02	7,085.93	401.93	346.36	219.35	127.01	2.727		
19,400.00	12,434.20	19,239.79	12,261.10	69.29	69.15	60.02	7,185.93	401.18	346.36	218.27	128.09	2.704		
19,500.00	12,433.88	19,339.79	12,260.78	69.88	69.75	60.02	7,285.92	400.43	346.36	217.18	129.18	2.681		
19,600.00	12,433.57	19,439.79	12,260.47	70.47	70.35	60.02	7,385.92	399.68	346.36	216.09	130.28	2.659		
19,700.00	12,433.25	19,539.79	12,260.15	71.07	70.95	60.02	7,485.92	398.94	346.36	214.99	131.38	2.636		
19,800.00	12,432.94	19,639.79	12,259.84	71.67	71.56	60.02	7,585.91	398.19	346.36	213.88	132.49	2.614		
19,900.00	12,432.62	19,739.79	12,259.52	72.27	72.17	60.02	7,685.91	397.44	346.36	212.77	133.60	2.593		
20,000.00	12,432.31	19,839.79	12,259.21	72.88	72.78	60.02	7,785.91	396.69	346.36	211.65	134.71	2.571		
20,100.00	12,431.99	19,939.79	12,258.89	73.49	73.40	60.02	7,885.90	395.94	346.36	210.53	135.84	2.550		
20,200.00	12,431.68	20,039.79	12,258.58	74.10	74.01	60.02	7,985.90	395.19	346.36	209.40	136.96	2.529		
20,300.00	12,431.36	20,139.79	12,258.26	74.72	74.64	60.02	8,085.90	394.44	346.36	208.27	138.10	2.508		
20,400.00	12,431.05	20,239.79	12,257.95	75.34	75.26	60.02	8,185.89	393.69	346.36	207.13	139.23	2.488		
20,500.00	12,430.73	20,339.79	12,257.63	75.96	75.89	60.02	8,285.89	392.94	346.37	205.99	140.38	2.467		
20,600.00	12,430.42	20,439.79	12,257.32	76.58	76.51	60.02	8,385.89	392.19	346.37	204.84	141.52	2.447		
20,700.00	12,430.10	20,539.79	12,257.00	77.21	77.15	60.02	8,485.88	391.45	346.37	203.69	142.68	2.428		
20,800.00	12,429.79	20,639.79	12,256.69	77.84	77.78	60.02	8,585.88	390.70	346.37	202.53	143.83	2.408		
20,900.00	12,429.47	20,739.79	12,256.37	78.47	78.42	60.02	8,685.88	389.95	346.37	201.37	144.99	2.389		
21,000.00	12,429.16	20,839.79	12,256.06	79.10	79.05	60.02	8,785.87	389.20	346.37	200.21	146.16	2.370		
21,100.00	12,428.84	20,939.79	12,255.75	79.74	79.69	60.02	8,885.87	388.45	346.37	199.04	147.32	2.351		
21,200.00	12,428.53	21,039.79	12,255.43	80.37	80.34	60.02	8,985.87	387.70	346.37	197.87	148.50	2.332		
21,300.00	12,428.21	21,139.79	12,255.12	81.01	80.98	60.02	9,085.86	386.95	346.37	196.69	149.67	2.314		
21,400.00	12,427.90	21,239.79	12,254.80	81.65	81.63	60.02	9,185.86	386.20	346.37	195.51	150.85	2.296		
21,500.00	12,427.58	21,339.79	12,254.49	82.30	82.28	60.02	9,285.86	385.45	346.37	194.33	152.04	2.278		
21,600.00	12,427.27	21,439.79	12,254.17	82.94	82.93	60.02	9,385.85	384.70	346.37	193.14	153.23	2.261		
21,700.00	12,426.95	21,539.79	12,253.86	83.59	83.58	60.02	9,485.85	383.96	346.37	191.95	154.42	2.243		
21,800.00	12,426.64	21,639.79	12,253.54	84.24	84.24	60.02	9,585.85	383.21	346.37	190.76	155.61	2.226		
21,900.00	12,426.32	21,739.79	12,253.23	84.89	84.89	60.02	9,685.84	382.46	346.37	189.56	156.81	2.209		
22,000.00	12,426.01	21,839.79	12,252.91	85.55	85.55	60.02	9,785.84	381.71	346.37	188.36	158.01	2.192		
22,100.00	12,425.69	21,939.79	12,252.60	86.20	86.21	60.02	9,885.84	380.96	346.37	187.15	159.22	2.175		
22,200.00	12,425.38	22,039.79	12,252.28	86.86	86.87	60.02	9,985.83	380.21	346.37	185.94	160.42	2.159		
22,300.00	12,425.07	22,139.79	12,251.97	87.52	87.54	60.02	10,085.83	379.46	346.37	184.73	161.63	2.143		
22,320.57	12,425.00	22,160.36	12,251.90	87.66	87.67	60.02	10,106.40	379.31	346.37	184.48	161.88	2.140		

Company: Concho Resources
Project: Lea County, NM
Reference Site: Fez Federal Com
Site Error: 0.00 usft
Reference Well: Fez Federal Com 602H
Well Error: 0.00 usft
Reference Wellbore: Wellbore #1
Reference Design: plan1

Local Co-ordinate Reference: Well Fez Federal Com 602H
TVD Reference: GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
MD Reference: GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM 5000.14 Single User Db
Offset TVD Reference: Reference Datum

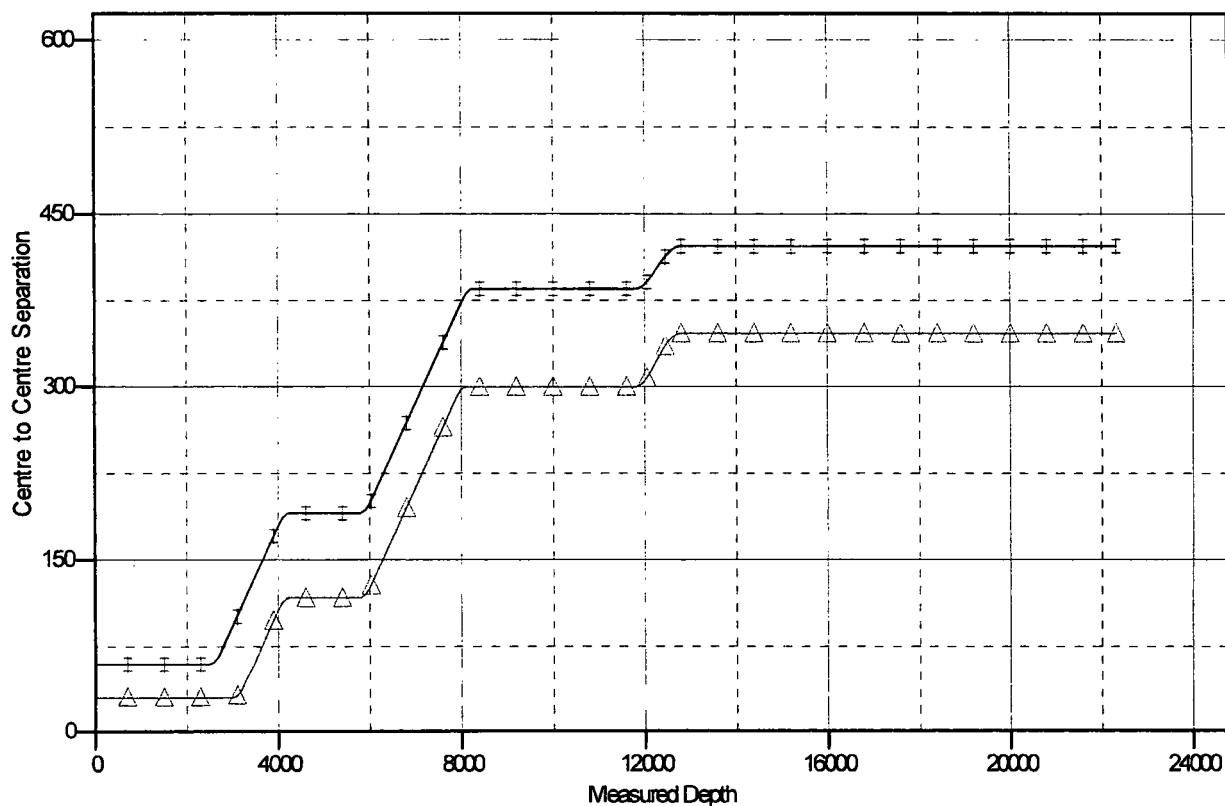
Reference Depths are relative to GL 3243.5' + 26' KB @ 3269.50usft (Coordinates are relative to: Fez Federal Com 602H)

Offset Depths are relative to Offset Datum

Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30

Grid Convergence at Surface is: 0.51°

Ladder Plot



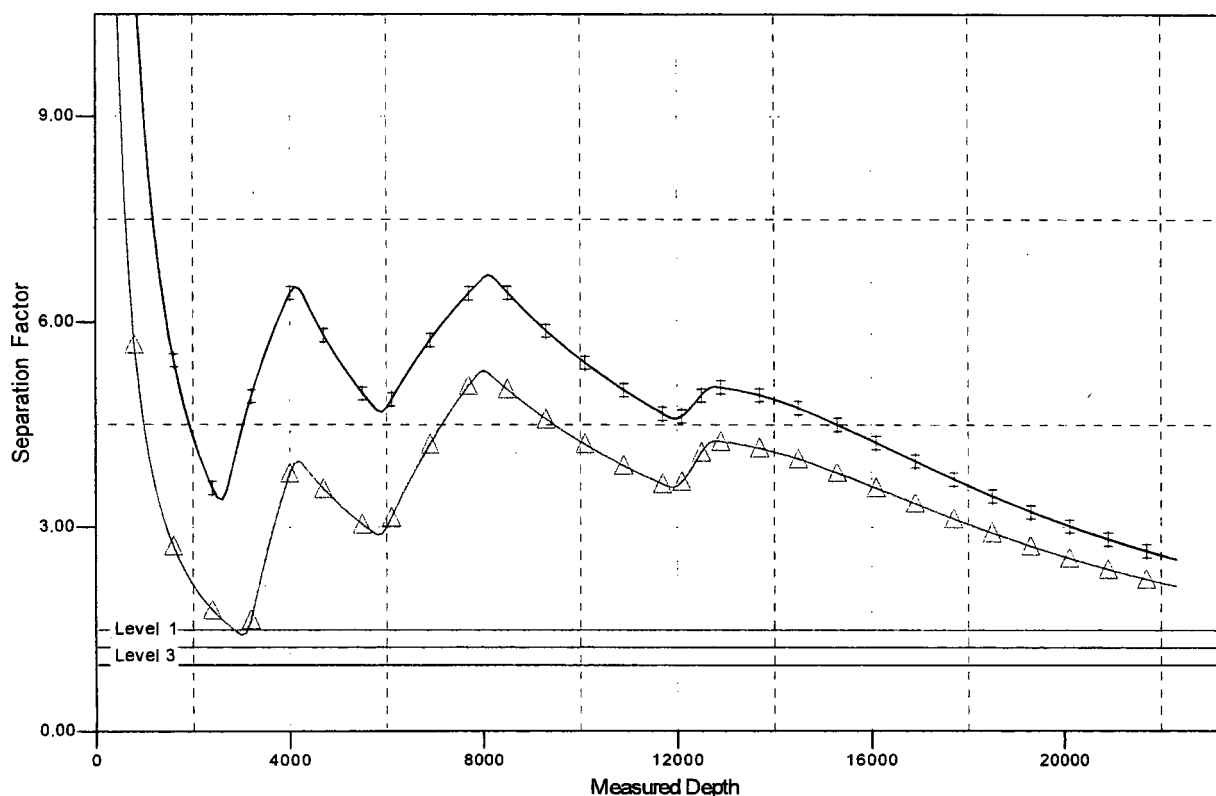
LEGEND

▲ Fez Federal Com 701H, Wellbore #1, plan1 VD ● Fez Federal Com 601H, Wellbore #1, plan1 VD

Company:	Concho Resources	Local Co-ordinate Reference:	Well Fez Federal Com 602H
Project:	Lea County, NM	TVD Reference:	GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
Reference Site:	Fez Federal Com	MD Reference:	GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Fez Federal Com 602H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Single User Db
Reference Design:	plan1	Offset TVD Reference:	Reference Datum

Reference Depths are relative to GL 3243.5' + 26' KB @ 3269.50usft (Coordinates are relative to: Fez Federal Com 602H)
 Offset Depths are relative to Offset Datum
 Central Meridian is 104° 20' 0.000 W
 Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
 Grid Convergence at Surface is: 0.51°

Separation Factor Plot



LEGEND

▲ Fez Federal Com 701H, Wellbore #1, p 1an1 V0 ● Fez Federal Com 601H, Wellbore #1, p 1an1 V0



Concho Resources

**Lea County, NM
Fez Federal Com
Fez Federal Com 602H**

Wellbore #1

Plan: plan1

Standard Planning Report

23 October, 2018





Project: Lea County, NM
 Site: Fez Federal Com
 Well: Fez Federal Com 602H
 Depth Reference: GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
 SHL Northing: 415347.60
 SHL Easting: 796607.50
 Rig: Independence 205
 Plan: plan1



SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSecl	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4000.00	0.00	0.00	4000.00	0.00	0.00	0.00	0.00	0.00	Start Build 2.00
4250.00	5.00	90.00	4249.88	0.00	10.90	2.00	90.00	-0.08	Start 1528.27 hold at 4250.00 MD
5778.27	5.00	90.00	5772.14	0.00	144.10	0.00	0.00	-1.08	Start Drop -2.00
6028.27	0.00	0.00	6021.82	0.00	155.00	2.00	180.00	-1.16	Start 5860.23 hold at 6028.27 MD
11868.50	0.00	0.00	11862.05	0.00	155.00	0.00	0.00	-1.16	Start DLS 10.00 TFO 359.57
12790.30	90.18	359.57	12455.00	574.75	150.69	10.00	359.57	573.60	Start 9530.27 hold at 12790.30 MD
22320.57	90.18	359.57	12425.00	10104.70	79.30	0.00	0.00	10103.82	TD @ 22320.57 MD

FORMATION TOP DETAILS

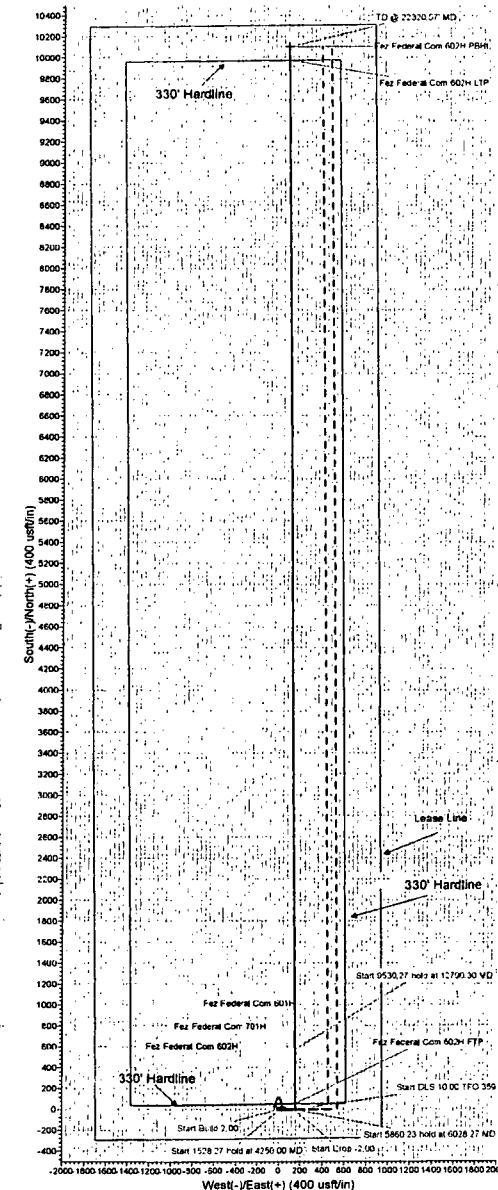
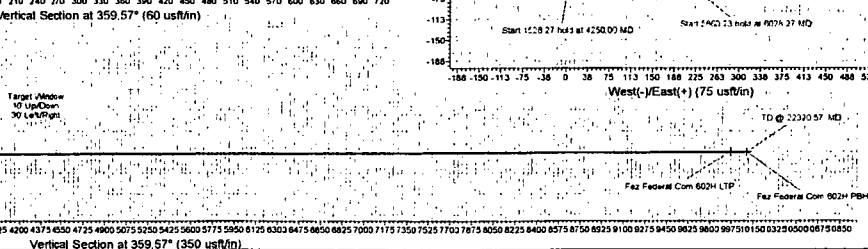
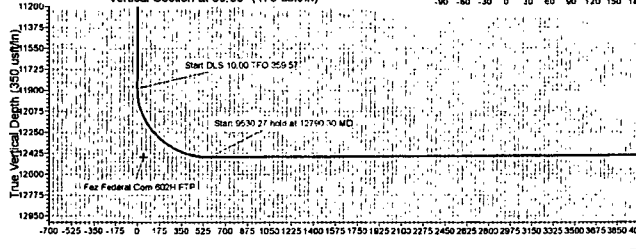
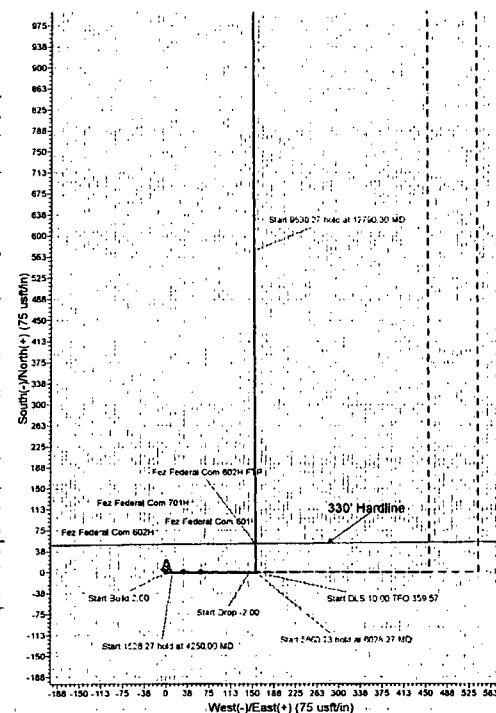
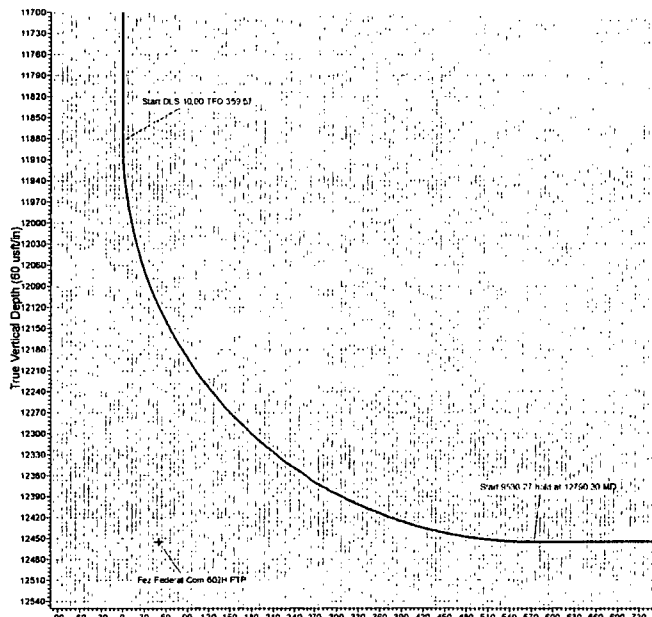
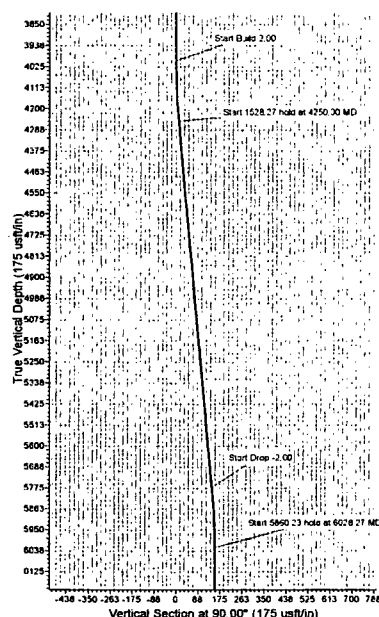
No formation data is available

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting
Fez Federal Com 602H FTP	12455.00	51.40	154.50	415399.00	796782.00
Fez Federal Com 602H LTP	12425.00	9974.70	80.30	425322.30	796687.80
Fez Federal Com 602H PBHL	12425.00	10104.70	79.30	425452.30	796686.80



Azimuths to Grid North
 True North: -0.51°
 Magnetic North: 6.18°
 Magnetic Field
 Strength: 47832.9nT
 Dip Angle: 59.80°
 Date: 10/23/2018
 Model: HDGM



Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Fez Federal Com 602H
Company:	Concho Resources	TVD Reference:	GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
Project:	Lea County, NM	MD Reference:	GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
Site:	Fez Federal Com	North Reference:	Grid
Well:	Fez Federal Com 602H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	plan1		

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		

Site	Fez Federal Com				
Site Position:		Northing:	415,348.30 usft	Latitude:	32° 8' 17.809 N
From:	Map	Easting:	796,667.50 usft	Longitude:	103° 22' 29.652 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.51 °

Well	Fez Federal Com 602H				
Well Position	+N-S	-0.70 usft	Northing:	415,347.60 usft	Latitude: 32° 8' 17.808 N
	+E-W	-60.00 usft	Easting:	796,607.50 usft	Longitude: 103° 22' 30.350 W
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level: 3,243.50 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	10/23/18	6.67	59.80	47.832.90000000

Design	plan1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	359.57

Plan Survey Tool Program			Date	10/23/18	
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	22,320.57	plan1 (Wellbore #1)	MWD+IFR1+SAG+MS	
				OWSG MWD + IFR1 + Sag	

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Fez Federal Com 602H
Company:	Concho Resources	TVD Reference:	GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
Project:	Lea County, NM	MD Reference:	GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
Site:	Fez Federal Com	North Reference:	Grid
Well:	Fez Federal Com 602H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	plan1		

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,250.00	5.00	90.00	4,249.68	0.00	10.90	2.00	2.00	0.00	90.00	
5,778.27	5.00	90.00	5,772.14	0.00	144.10	0.00	0.00	0.00	0.00	
6,028.27	0.00	0.00	6,021.82	0.00	155.00	2.00	-2.00	0.00	180.00	
11,888.50	0.00	0.00	11,882.05	0.00	155.00	0.00	0.00	0.00	0.00	
12,790.30	90.18	359.57	12,455.01	574.75	150.69	10.00	10.00	-0.05	359.57	
22,320.57	90.18	359.57	12,425.00	10,104.70	79.30	0.00	0.00	0.00	0.00	

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Fez Federal Com 602H
Company:	Concho Resources	TVD Reference:	GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
Project:	Lea County, NM	MD Reference:	GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
Site:	Fez Federal Com	North Reference:	Grid
Well:	Fez Federal Com 602H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	plan1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
4,100.00	2.00	90.00	4,099.98	0.00	1.75	-0.01	2.00	2.00	0.00
4,200.00	4.00	90.00	4,199.84	0.00	6.98	-0.05	2.00	2.00	0.00
4,250.00	5.00	90.00	4,249.68	0.00	10.90	-0.08	2.00	2.00	0.00
Start 1528.27 hold at 4250.00 MD									
4,300.00	5.00	90.00	4,299.49	0.00	15.26	-0.11	0.00	0.00	0.00
4,400.00	5.00	90.00	4,399.11	0.00	23.97	-0.18	0.00	0.00	0.00
4,500.00	5.00	90.00	4,498.73	0.00	32.69	-0.25	0.00	0.00	0.00
4,600.00	5.00	90.00	4,598.35	0.00	41.41	-0.31	0.00	0.00	0.00
4,700.00	5.00	90.00	4,697.97	0.00	50.12	-0.38	0.00	0.00	0.00
4,800.00	5.00	90.00	4,797.59	0.00	58.84	-0.44	0.00	0.00	0.00

Database: EDM 5000.14 Single User Db
Company: Concho Resources
Project: Lea County, NM
Site: Fez Federal Com
Well: Fez Federal Com 602H
Wellbore: Wellbore #1
Design: plan1

Local Co-ordinate Reference: Well Fez Federal Com 602H
TVD Reference: GL 3243.5' + 26' KB @ 3269.50usft
 (Independence 205)
MD Reference: GL 3243.5' + 26' KB @ 3269.50usft
 (Independence 205)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,900.00	5.00	90.00	4,897.21	0.00	67.55	-0.51	0.00	0.00	0.00
5,000.00	5.00	90.00	4,996.83	0.00	76.27	-0.57	0.00	0.00	0.00
5,100.00	5.00	90.00	5,096.45	0.00	84.98	-0.64	0.00	0.00	0.00
5,200.00	5.00	90.00	5,196.07	0.00	93.70	-0.70	0.00	0.00	0.00
5,300.00	5.00	90.00	5,295.69	0.00	102.41	-0.77	0.00	0.00	0.00
5,400.00	5.00	90.00	5,395.31	0.00	111.13	-0.83	0.00	0.00	0.00
5,500.00	5.00	90.00	5,494.93	0.00	119.85	-0.90	0.00	0.00	0.00
5,600.00	5.00	90.00	5,594.55	0.00	128.56	-0.96	0.00	0.00	0.00
5,700.00	5.00	90.00	5,694.17	0.00	137.28	-1.03	0.00	0.00	0.00
5,778.27	5.00	90.00	5,772.14	0.00	144.10	-1.08	0.00	0.00	0.00
Start Drop -2.00									
5,800.00	4.57	90.00	5,793.79	0.00	145.91	-1.10	2.00	-2.00	0.00
5,900.00	2.57	90.00	5,893.59	0.00	152.13	-1.14	2.00	-2.00	0.00
6,000.00	0.57	90.00	5,993.55	0.00	154.86	-1.16	2.00	-2.00	0.00
6,028.27	0.00	0.00	6,021.82	0.00	155.00	-1.16	2.00	-2.00	-318.36
Start 5860.23 hold at 6028.27 MD									
6,100.00	0.00	0.00	6,093.55	0.00	155.00	-1.16	0.00	0.00	0.00
6,200.00	0.00	0.00	6,193.55	0.00	155.00	-1.16	0.00	0.00	0.00
6,300.00	0.00	0.00	6,293.55	0.00	155.00	-1.16	0.00	0.00	0.00
6,400.00	0.00	0.00	6,393.55	0.00	155.00	-1.16	0.00	0.00	0.00
6,500.00	0.00	0.00	6,493.55	0.00	155.00	-1.16	0.00	0.00	0.00
6,600.00	0.00	0.00	6,593.55	0.00	155.00	-1.16	0.00	0.00	0.00
6,700.00	0.00	0.00	6,693.55	0.00	155.00	-1.16	0.00	0.00	0.00
6,800.00	0.00	0.00	6,793.55	0.00	155.00	-1.16	0.00	0.00	0.00
6,900.00	0.00	0.00	6,893.55	0.00	155.00	-1.16	0.00	0.00	0.00
7,000.00	0.00	0.00	6,993.55	0.00	155.00	-1.16	0.00	0.00	0.00
7,100.00	0.00	0.00	7,093.55	0.00	155.00	-1.16	0.00	0.00	0.00
7,200.00	0.00	0.00	7,193.55	0.00	155.00	-1.16	0.00	0.00	0.00
7,300.00	0.00	0.00	7,293.55	0.00	155.00	-1.16	0.00	0.00	0.00
7,400.00	0.00	0.00	7,393.55	0.00	155.00	-1.16	0.00	0.00	0.00
7,500.00	0.00	0.00	7,493.55	0.00	155.00	-1.16	0.00	0.00	0.00
7,600.00	0.00	0.00	7,593.55	0.00	155.00	-1.16	0.00	0.00	0.00
7,700.00	0.00	0.00	7,693.55	0.00	155.00	-1.16	0.00	0.00	0.00
7,800.00	0.00	0.00	7,793.55	0.00	155.00	-1.16	0.00	0.00	0.00
7,900.00	0.00	0.00	7,893.55	0.00	155.00	-1.16	0.00	0.00	0.00
8,000.00	0.00	0.00	7,993.55	0.00	155.00	-1.16	0.00	0.00	0.00
8,100.00	0.00	0.00	8,093.55	0.00	155.00	-1.16	0.00	0.00	0.00
8,200.00	0.00	0.00	8,193.55	0.00	155.00	-1.16	0.00	0.00	0.00
8,300.00	0.00	0.00	8,293.55	0.00	155.00	-1.16	0.00	0.00	0.00
8,400.00	0.00	0.00	8,393.55	0.00	155.00	-1.16	0.00	0.00	0.00
8,500.00	0.00	0.00	8,493.55	0.00	155.00	-1.16	0.00	0.00	0.00
8,600.00	0.00	0.00	8,593.55	0.00	155.00	-1.16	0.00	0.00	0.00
8,700.00	0.00	0.00	8,693.55	0.00	155.00	-1.16	0.00	0.00	0.00
8,800.00	0.00	0.00	8,793.55	0.00	155.00	-1.16	0.00	0.00	0.00
8,900.00	0.00	0.00	8,893.55	0.00	155.00	-1.16	0.00	0.00	0.00
9,000.00	0.00	0.00	8,993.55	0.00	155.00	-1.16	0.00	0.00	0.00
9,100.00	0.00	0.00	9,093.55	0.00	155.00	-1.16	0.00	0.00	0.00
9,200.00	0.00	0.00	9,193.55	0.00	155.00	-1.16	0.00	0.00	0.00
9,300.00	0.00	0.00	9,293.55	0.00	155.00	-1.16	0.00	0.00	0.00
9,400.00	0.00	0.00	9,393.55	0.00	155.00	-1.16	0.00	0.00	0.00
9,500.00	0.00	0.00	9,493.55	0.00	155.00	-1.16	0.00	0.00	0.00
9,600.00	0.00	0.00	9,593.55	0.00	155.00	-1.16	0.00	0.00	0.00

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Fez Federal Com 602H
Company:	Concho Resources	TVD Reference:	GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
Project:	Lea County, NM	MD Reference:	GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
Site:	Fez Federal Com	North Reference:	Grid
Well:	Fez Federal Com 602H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	plan1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,700.00	0.00	0.00	9,693.55	0.00	155.00	-1.16	0.00	0.00	0.00
9,800.00	0.00	0.00	9,793.55	0.00	155.00	-1.16	0.00	0.00	0.00
9,900.00	0.00	0.00	9,893.55	0.00	155.00	-1.16	0.00	0.00	0.00
10,000.00	0.00	0.00	9,993.55	0.00	155.00	-1.16	0.00	0.00	0.00
10,100.00	0.00	0.00	10,093.55	0.00	155.00	-1.16	0.00	0.00	0.00
10,200.00	0.00	0.00	10,193.55	0.00	155.00	-1.16	0.00	0.00	0.00
10,300.00	0.00	0.00	10,293.55	0.00	155.00	-1.16	0.00	0.00	0.00
10,400.00	0.00	0.00	10,393.55	0.00	155.00	-1.16	0.00	0.00	0.00
10,500.00	0.00	0.00	10,493.55	0.00	155.00	-1.16	0.00	0.00	0.00
10,600.00	0.00	0.00	10,593.55	0.00	155.00	-1.16	0.00	0.00	0.00
10,700.00	0.00	0.00	10,693.55	0.00	155.00	-1.16	0.00	0.00	0.00
10,800.00	0.00	0.00	10,793.55	0.00	155.00	-1.16	0.00	0.00	0.00
10,900.00	0.00	0.00	10,893.55	0.00	155.00	-1.16	0.00	0.00	0.00
11,000.00	0.00	0.00	10,993.55	0.00	155.00	-1.16	0.00	0.00	0.00
11,100.00	0.00	0.00	11,093.55	0.00	155.00	-1.16	0.00	0.00	0.00
11,200.00	0.00	0.00	11,193.55	0.00	155.00	-1.16	0.00	0.00	0.00
11,300.00	0.00	0.00	11,293.55	0.00	155.00	-1.16	0.00	0.00	0.00
11,400.00	0.00	0.00	11,393.55	0.00	155.00	-1.16	0.00	0.00	0.00
11,500.00	0.00	0.00	11,493.55	0.00	155.00	-1.16	0.00	0.00	0.00
11,600.00	0.00	0.00	11,593.55	0.00	155.00	-1.16	0.00	0.00	0.00
11,700.00	0.00	0.00	11,693.55	0.00	155.00	-1.16	0.00	0.00	0.00
11,800.00	0.00	0.00	11,793.55	0.00	155.00	-1.16	0.00	0.00	0.00
11,888.50	0.00	0.00	11,882.05	0.00	155.00	-1.16	0.00	0.00	0.00
Start DLS 10.00 TFO 359.57									
11,900.00	1.15	359.57	11,893.55	0.12	155.00	-1.05	10.00	10.00	0.00
12,000.00	11.15	359.57	11,992.85	10.81	154.92	9.65	10.00	10.00	0.00
12,100.00	21.15	359.57	12,088.78	38.59	154.71	37.43	10.00	10.00	0.00
12,200.00	31.15	359.57	12,178.43	82.61	154.38	81.45	10.00	10.00	0.00
12,300.00	41.15	359.57	12,259.08	141.52	153.94	140.36	10.00	10.00	0.00
12,370.83	48.23	359.57	12,309.39	191.30	153.57	190.14	10.00	10.00	0.00
Fez Federal Com 602H FTP									
12,400.00	51.15	359.57	12,328.26	213.54	153.40	212.39	10.00	10.00	0.00
12,500.00	61.15	359.57	12,383.90	296.49	152.78	295.33	10.00	10.00	0.00
12,600.00	71.15	359.57	12,424.28	387.83	152.09	386.68	10.00	10.00	0.00
12,700.00	81.15	359.57	12,448.19	484.80	151.37	483.65	10.00	10.00	0.00
12,790.30	90.18	359.57	12,455.01	574.75	150.69	573.60	10.00	10.00	0.00
Start 9530.27 hold at 12790.30 MD									
12,800.00	90.18	359.57	12,454.97	584.44	150.62	583.29	0.00	0.00	0.00
12,900.00	90.18	359.57	12,454.66	684.44	149.87	683.29	0.00	0.00	0.00
13,000.00	90.18	359.57	12,454.35	784.43	149.12	783.29	0.00	0.00	0.00
13,100.00	90.18	359.57	12,454.03	884.43	148.37	883.29	0.00	0.00	0.00
13,200.00	90.18	359.57	12,453.72	984.43	147.63	983.29	0.00	0.00	0.00
13,300.00	90.18	359.57	12,453.40	1,084.42	146.88	1,083.29	0.00	0.00	0.00
13,400.00	90.18	359.57	12,453.09	1,184.42	146.13	1,183.29	0.00	0.00	0.00
13,500.00	90.18	359.57	12,452.77	1,284.42	145.38	1,283.29	0.00	0.00	0.00
13,600.00	90.18	359.57	12,452.46	1,384.42	144.63	1,383.29	0.00	0.00	0.00
13,700.00	90.18	359.57	12,452.14	1,484.41	143.88	1,483.29	0.00	0.00	0.00
13,800.00	90.18	359.57	12,451.83	1,584.41	143.13	1,583.29	0.00	0.00	0.00
13,900.00	90.18	359.57	12,451.51	1,684.41	142.38	1,683.29	0.00	0.00	0.00
14,000.00	90.18	359.57	12,451.20	1,784.40	141.63	1,783.29	0.00	0.00	0.00
14,100.00	90.18	359.57	12,450.88	1,884.40	140.88	1,883.29	0.00	0.00	0.00
14,200.00	90.18	359.57	12,450.57	1,984.40	140.13	1,983.29	0.00	0.00	0.00

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Fez Federal Com 602H
Company:	Concho Resources	TVD Reference:	GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
Project:	Lea County, NM	MD Reference:	GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
Site:	Fez Federal Com	North Reference:	Grid
Well:	Fez Federal Com 602H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	plan1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,300.00	90.18	359.57	12,450.25	2,084.39	139.38	2,083.29	0.00	0.00	0.00
14,400.00	90.18	359.57	12,449.94	2,184.39	138.64	2,183.29	0.00	0.00	0.00
14,500.00	90.18	359.57	12,449.62	2,284.39	137.89	2,283.29	0.00	0.00	0.00
14,600.00	90.18	359.57	12,449.31	2,384.38	137.14	2,383.29	0.00	0.00	0.00
14,700.00	90.18	359.57	12,448.99	2,484.38	136.39	2,483.29	0.00	0.00	0.00
14,800.00	90.18	359.57	12,448.68	2,584.38	135.64	2,583.28	0.00	0.00	0.00
14,900.00	90.18	359.57	12,448.36	2,684.37	134.89	2,683.28	0.00	0.00	0.00
15,000.00	90.18	359.57	12,448.05	2,784.37	134.14	2,783.28	0.00	0.00	0.00
15,100.00	90.18	359.57	12,447.73	2,884.37	133.39	2,883.28	0.00	0.00	0.00
15,200.00	90.18	359.57	12,447.42	2,984.36	132.64	2,983.28	0.00	0.00	0.00
15,300.00	90.18	359.57	12,447.10	3,084.36	131.89	3,083.28	0.00	0.00	0.00
15,400.00	90.18	359.57	12,446.79	3,184.36	131.14	3,183.28	0.00	0.00	0.00
15,500.00	90.18	359.57	12,446.47	3,284.35	130.40	3,283.28	0.00	0.00	0.00
15,600.00	90.18	359.57	12,446.16	3,384.35	129.65	3,383.28	0.00	0.00	0.00
15,700.00	90.18	359.57	12,445.84	3,484.35	128.90	3,483.28	0.00	0.00	0.00
15,800.00	90.18	359.57	12,445.53	3,584.34	128.15	3,583.28	0.00	0.00	0.00
15,900.00	90.18	359.57	12,445.21	3,684.34	127.40	3,683.28	0.00	0.00	0.00
16,000.00	90.18	359.57	12,444.90	3,784.34	126.65	3,783.28	0.00	0.00	0.00
16,100.00	90.18	359.57	12,444.59	3,884.33	125.90	3,883.28	0.00	0.00	0.00
16,200.00	90.18	359.57	12,444.27	3,984.33	125.15	3,983.28	0.00	0.00	0.00
16,300.00	90.18	359.57	12,443.96	4,084.33	124.40	4,083.28	0.00	0.00	0.00
16,400.00	90.18	359.57	12,443.64	4,184.32	123.65	4,183.28	0.00	0.00	0.00
16,500.00	90.18	359.57	12,443.33	4,284.32	122.90	4,283.28	0.00	0.00	0.00
16,600.00	90.18	359.57	12,443.01	4,384.32	122.15	4,383.28	0.00	0.00	0.00
16,700.00	90.18	359.57	12,442.70	4,484.31	121.41	4,483.28	0.00	0.00	0.00
16,800.00	90.18	359.57	12,442.38	4,584.31	120.66	4,583.27	0.00	0.00	0.00
16,900.00	90.18	359.57	12,442.07	4,684.31	119.91	4,683.27	0.00	0.00	0.00
17,000.00	90.18	359.57	12,441.75	4,784.30	119.16	4,783.27	0.00	0.00	0.00
17,100.00	90.18	359.57	12,441.44	4,884.30	118.41	4,883.27	0.00	0.00	0.00
17,200.00	90.18	359.57	12,441.12	4,984.30	117.66	4,983.27	0.00	0.00	0.00
17,300.00	90.18	359.57	12,440.81	5,084.29	116.91	5,083.27	0.00	0.00	0.00
17,400.00	90.18	359.57	12,440.49	5,184.29	116.16	5,183.27	0.00	0.00	0.00
17,500.00	90.18	359.57	12,440.18	5,284.29	115.41	5,283.27	0.00	0.00	0.00
17,600.00	90.18	359.57	12,439.86	5,384.28	114.66	5,383.27	0.00	0.00	0.00
17,700.00	90.18	359.57	12,439.55	5,484.28	113.91	5,483.27	0.00	0.00	0.00
17,800.00	90.18	359.57	12,439.23	5,584.28	113.17	5,583.27	0.00	0.00	0.00
17,900.00	90.18	359.57	12,438.92	5,684.27	112.42	5,683.27	0.00	0.00	0.00
18,000.00	90.18	359.57	12,438.60	5,784.27	111.67	5,783.27	0.00	0.00	0.00
18,100.00	90.18	359.57	12,438.29	5,884.27	110.92	5,883.27	0.00	0.00	0.00
18,200.00	90.18	359.57	12,437.97	5,984.26	110.17	5,983.27	0.00	0.00	0.00
18,300.00	90.18	359.57	12,437.66	6,084.26	109.42	6,083.27	0.00	0.00	0.00
18,400.00	90.18	359.57	12,437.34	6,184.26	108.67	6,183.27	0.00	0.00	0.00
18,500.00	90.18	359.57	12,437.03	6,284.25	107.92	6,283.27	0.00	0.00	0.00
18,600.00	90.18	359.57	12,436.71	6,384.25	107.17	6,383.27	0.00	0.00	0.00
18,700.00	90.18	359.57	12,436.40	6,484.25	106.42	6,483.27	0.00	0.00	0.00
18,800.00	90.18	359.57	12,436.08	6,584.24	105.67	6,583.27	0.00	0.00	0.00
18,900.00	90.18	359.57	12,435.77	6,684.24	104.92	6,683.26	0.00	0.00	0.00
19,000.00	90.18	359.57	12,435.45	6,784.24	104.18	6,783.26	0.00	0.00	0.00
19,100.00	90.18	359.57	12,435.14	6,884.23	103.43	6,883.26	0.00	0.00	0.00
19,200.00	90.18	359.57	12,434.83	6,984.23	102.68	6,983.26	0.00	0.00	0.00
19,300.00	90.18	359.57	12,434.51	7,084.23	101.93	7,083.26	0.00	0.00	0.00
19,400.00	90.18	359.57	12,434.20	7,184.22	101.18	7,183.26	0.00	0.00	0.00

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Fez Federal Com 602H
Company:	Concho Resources	TVD Reference:	GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
Project:	Lea County, NM	MD Reference:	GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
Site:	Fez Federal Com	North Reference:	Grid
Well:	Fez Federal Com 602H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	plan1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
19,500.00	90.18	359.57	12,433.88	7,284.22	100.43	7,283.26	0.00	0.00	0.00
19,600.00	90.18	359.57	12,433.57	7,384.22	99.68	7,383.26	0.00	0.00	0.00
19,700.00	90.18	359.57	12,433.25	7,484.21	98.93	7,483.26	0.00	0.00	0.00
19,800.00	90.18	359.57	12,432.94	7,584.21	98.18	7,583.26	0.00	0.00	0.00
19,900.00	90.18	359.57	12,432.62	7,684.21	97.43	7,683.26	0.00	0.00	0.00
20,000.00	90.18	359.57	12,432.31	7,784.20	96.68	7,783.26	0.00	0.00	0.00
20,100.00	90.18	359.57	12,431.99	7,884.20	95.94	7,883.26	0.00	0.00	0.00
20,200.00	90.18	359.57	12,431.68	7,984.20	95.19	7,983.26	0.00	0.00	0.00
20,300.00	90.18	359.57	12,431.36	8,084.19	94.44	8,083.26	0.00	0.00	0.00
20,400.00	90.18	359.57	12,431.05	8,184.19	93.69	8,183.26	0.00	0.00	0.00
20,500.00	90.18	359.57	12,430.73	8,284.19	92.94	8,283.26	0.00	0.00	0.00
20,600.00	90.18	359.57	12,430.42	8,384.18	92.19	8,383.26	0.00	0.00	0.00
20,700.00	90.18	359.57	12,430.10	8,484.18	91.44	8,483.26	0.00	0.00	0.00
20,800.00	90.18	359.57	12,429.79	8,584.18	90.69	8,583.26	0.00	0.00	0.00
20,900.00	90.18	359.57	12,429.47	8,684.17	89.94	8,683.25	0.00	0.00	0.00
21,000.00	90.18	359.57	12,429.16	8,784.17	89.19	8,783.25	0.00	0.00	0.00
21,100.00	90.18	359.57	12,428.84	8,884.17	88.44	8,883.25	0.00	0.00	0.00
21,200.00	90.18	359.57	12,428.53	8,984.16	87.69	8,983.25	0.00	0.00	0.00
21,300.00	90.18	359.57	12,428.21	9,084.16	86.95	9,083.25	0.00	0.00	0.00
21,400.00	90.18	359.57	12,427.90	9,184.16	86.20	9,183.25	0.00	0.00	0.00
21,500.00	90.18	359.57	12,427.58	9,284.15	85.45	9,283.25	0.00	0.00	0.00
21,600.00	90.18	359.57	12,427.27	9,384.15	84.70	9,383.25	0.00	0.00	0.00
21,700.00	90.18	359.57	12,426.95	9,484.15	83.95	9,483.25	0.00	0.00	0.00
21,800.00	90.18	359.57	12,426.64	9,584.14	83.20	9,583.25	0.00	0.00	0.00
21,900.00	90.18	359.57	12,426.32	9,684.14	82.45	9,683.25	0.00	0.00	0.00
22,000.00	90.18	359.57	12,426.01	9,784.14	81.70	9,783.25	0.00	0.00	0.00
22,100.00	90.18	359.57	12,425.69	9,884.13	80.95	9,883.25	0.00	0.00	0.00
22,190.57	90.18	359.57	12,425.41	9,974.70	80.27	9,973.82	0.00	0.00	0.00
Fez Federal Com 602H LTP									
22,200.00	90.18	359.57	12,425.38	9,984.13	80.20	9,983.25	0.00	0.00	0.00
22,300.00	90.18	359.57	12,425.07	10,084.13	79.45	10,083.25	0.00	0.00	0.00
22,320.57	90.18	359.57	12,425.00	10,104.70	79.30	10,103.82	0.00	0.00	0.00

TD @ 22320.57' MD - Fez Federal Com 602H PBHL

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Fez Federal Com 602	0.00	0.00	12,425.00	9,974.70	80.30	425,322.30	796,687.80	32° 9' 56.501 N	103° 22' 28.383 W
- hit/miss target									
- Shape									
- plan misses target center by 0.41usft at 22190.57usft MD (12425.41 TVD, 9974.70 N, 80.27 E)									
- Point									
Fez Federal Com 602	0.00	0.00	12,425.00	10,104.70	79.30	425,452.30	796,686.80	32° 9' 57.788 N	103° 22' 28.381 W
- plan hits target center									
- Point									
Fez Federal Com 602	0.00	0.01	12,455.00	51.40	154.50	415,399.00	796,762.00	32° 8' 18.303 N	103° 22' 28.548 W
- plan misses target center by 201.93usft at 12370.83usft MD (12309.39 TVD, 191.30 N, 153.57 E)									
- Point									

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Fez Federal Com 602H
Company:	Concho Resources	TVD Reference:	GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
Project:	Lea County, NM	MD Reference:	GL 3243.5' + 26' KB @ 3269.50usft (Independence 205)
Site:	Fez Federal Com	North Reference:	Grid
Well:	Fez Federal Com 602H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	plan1		

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
4,000.00	4,000.00	0.00	0.00	Start Build 2.00
4,250.00	4,249.68	0.00	10.90	Start 1528.27 hold at 4250.00 MD
5,778.27	5,772.14	0.00	144.10	Start Drop -2.00
6,028.27	6,021.82	0.00	155.00	Start 5860.23 hold at 6028.27 MD
11,888.50	11,882.05	0.00	155.00	Start DLS 10.00 TFO 359.57
12,790.30	12,455.01	574.75	150.69	Start 9530.27 hold at 12790.30 MD
22,320.57	12,425.00	10,104.70	79.30	TD @ 22320.57' MD

DISTRICT I
1825 N. FREYER DR., HOBBS, NM 88240
Phone: (878) 333-6181 Fax: (878) 333-6722

DISTRICT II
811 S. FIRST ST., ARTESIA, NM 88210
Phone: (878) 748-1253 Fax: (878) 748-0720

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410
Phone: (606) 334-4176 Fax: (606) 334-6170

DISTRICT IV
1820 S. ST. FRANCIS DR., SANTA FE, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-45275	Pool Code 98098	Pool Name Wildcat; Wolfbone
Property Code 322742	Property Name FEZ FEDERAL COM	Well Number 602H
OCRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3243.5'

Surface Location

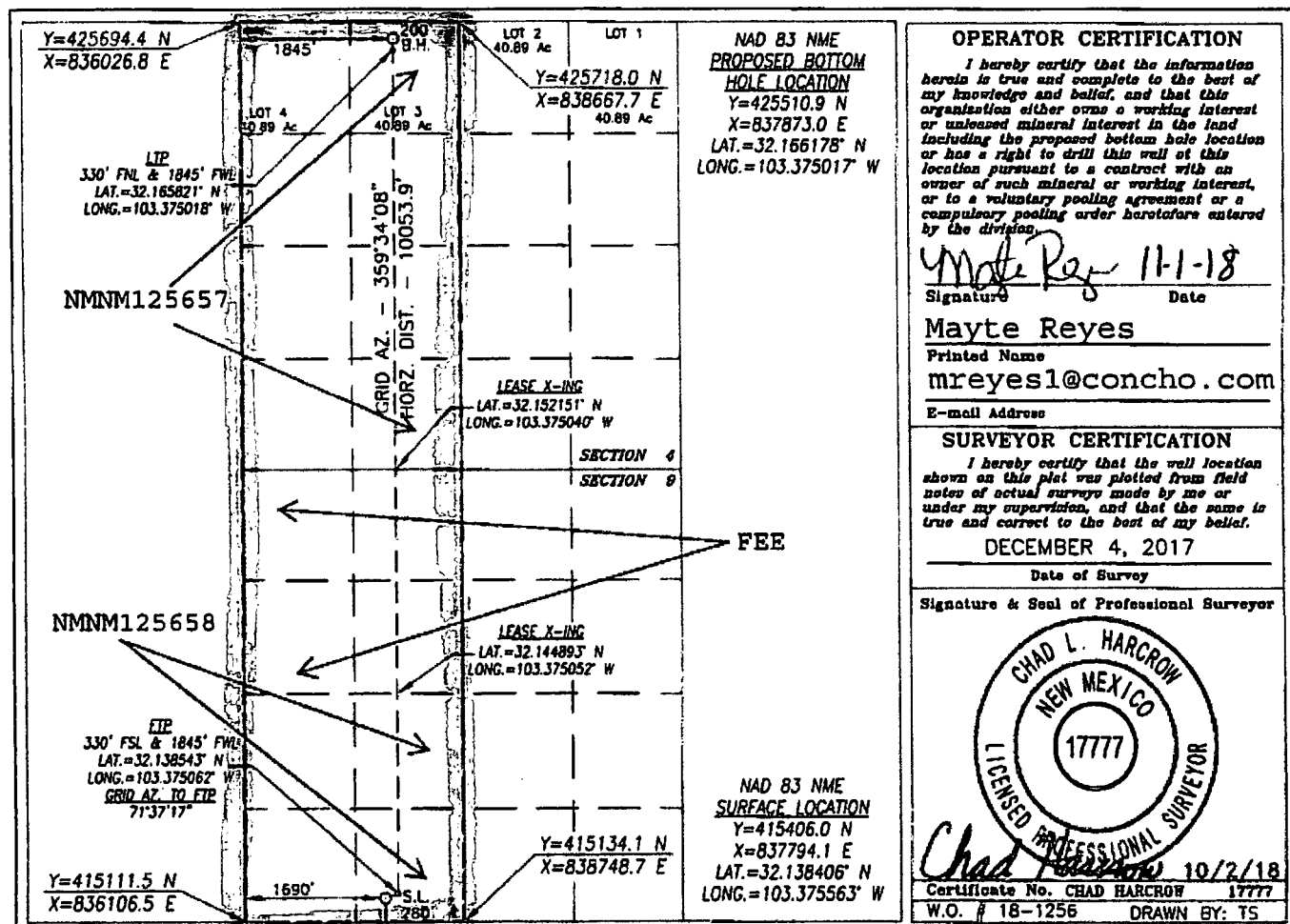
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	9	25-S	35-E		280	SOUTH	1690	WEST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
3	4	25-S	35-E		200	NORTH	1845	WEST	LEA

Dedicated Acres 639.8	Joint or Infill 641.72	Consolidation Code	Order No.
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**NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION**



As Per LR2000 Lot 3: 39.89 Lot 4: 39.91