

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.5. Lease Serial No.
NMNM123528

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.
SEBASTIAN FEDERAL COM 704H9. API Well No.
30-025-46988-00-X110. Field and Pool or Exploratory Area
WILDCAT11. County or Parish, State
LEA COUNTY, NM**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other2. Name of Operator
COG OPERATING LLCContact: STAN WAGNER
E-Mail: swagner@concho.com3a. Address
ONE CONCHO CENTER 600 W ILLINOIS AVENUE
MIDLAND, TX 79701-42873b. Phone No. (include area code)
Ph: 432.253.9685

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 18 T24S R34E NWNE 250FNL 2225FEL
32.224136 N Lat, 103.507683 W Lon

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 requests an amendment to our approved APD for this well to reflect a change in BHL as detailed by the attachments to this sundry.

Change BHL TO: 50' FSL & 2310' FEL SWSE 18-24S-34E

Entered - KMS NMOCD

14. I hereby certify that the foregoing is true and correct.

**Electronic Submission #507369 verified by the BLM Well Information System
For COG OPERATING LLC, sent to the Hobbs
Committed to AFMSS for processing by PRISCILLA PEREZ on 03/17/2020 (20PP1700SE)**

Name (Printed/Typed) STAN WAGNER

Title REGULATORY ADVISOR

Signature (Electronic Submission)

Date 03/17/2020

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By DYLAN ROSSMANGO

Title PETROLEUM ENGINEER

Date 08/11/2020

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 ****

DISTRICT I
1825 N. FRENCH DR., HOBBS, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

DISTRICT II
811 S. FIRST ST., ARTESIA, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505
Phone: (505) 476-3480 Fax: (505) 476-3482

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- 46988	Pool Code 98135	Pool Name WC-025 G-09 S243310P; Upper Wolfcamp
Property Code	Property Name SEBASTIAN FEDERAL COM	Well Number 704H
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3585.8'

Surface Location

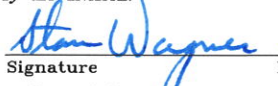
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	18	24-S	34-E		250	NORTH	2225	EAST	LEA

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
O	18	24-S	34-E		50	SOUTH	2310	EAST	LEA

Dedicated Acres 160	Joint or Infill	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

LOT 1 39.32 Ac	$Y=446502.5\ N$ $X=796233.1\ E$	250' S.L.	2225'	$Y=446514.0\ N$ $X=797556.7\ E$	OPERATOR CERTIFICATION <i>I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i>  Signature Date Stan Wagner Printed Name E-mail Address
LOT 2 39.42 Ac	<u>FTP</u> 100' FNL & 2310' FEL $Y=446405.4\ N$ $X=796571.2\ E$ LAT.=32.224550° N LONG.=103.507962° W <u>GRID AZ. TO FTP</u> 329°50'54"	GRID AZ. - 179°30'09" HORZ. DIST. - 5128.0'	NAD 83 NME <u>SURFACE LOCATION</u> $Y=446256.2\ N$ $X=796657.9\ E$ LAT.=32.224138° N LONG.=103.507685° W		
LOT 3 39.51 Ac	LEASE X-ING LAT.=32.217571° N LONG.=103.507953° W		NAD 83 NME <u>PROPOSED BOTTOM HOLE LOCATION</u> $Y=441277.6\ N$ $X=796615.7\ E$ LAT.=32.210455° N LONG.=103.507945° W		
LOT 4 39.60 Ac	<u>LTP</u> 100' FSL & 2310' FEL $Y=441327.6\ N$ $X=796615.3\ E$ LAT.=32.210592° N LONG.=103.507945° W		$Y=441224.9\ N$ $X=796286.2\ E$	$Y=441235.8\ N$ $X=797606.1\ E$	
			50' B.H.	2310'	

Intent ☒ As Drilled ☐

API # 30-025- 46988			
Operator Name: COG Operating LLC		Property Name: Sebastian Federal Com	Well Number 704H

Kick Off Point (KOP)

UL B	Section 18	Township 24S	Range 34E	Lot	Feet	From N/S	Feet	From E/W	County Lea
Latitude					Longitude				NAD 83

First Take Point (FTP)

UL B	Section 18	Township 24S	Range 34E	Lot	Feet 100	From N/S North	Feet 2310	From E/W East	County Lea
Latitude 32.224550					Longitude -103.507962				NAD NAD 83

Last Take Point (LTP)

UL O	Section 18	Township 24S	Range 34E	Lot	Feet 100	From N/S South	Feet 2310	From E/W East	County Lea
Latitude 32.210592					Longitude -103.507945				NAD NAD 83

Is this well the defining well for the Horizontal Spacing Unit? ☐ YES

Is this well an infill well? ☐ NO

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #			
Operator Name:		Property Name:	Well Number

KZ 06/29/2018

NORTHERN DELAWARE BASIN

LEA COUNTY, NM

BULLDOG

SEBASTIAN FEDERAL COM 704H

OWB

PWP2

Anticollision Report

16 March, 2020

Concho Resources LLC

Anticollision Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well SEBASTIAN FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=31' @ 3616.0usft (P 106)
Reference Site:	BULLDOG	MD Reference:	KB=31' @ 3616.0usft (P 106)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	SEBASTIAN FEDERAL COM 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

Reference	PWP2
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	Stations
Depth Range:	Unlimited
Results Limited by:	Maximum ellipse separation of 1,000.0 usft
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	3/16/2020		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	17,009.6	PWP2 (OWB)	MWD+IFR1+FDIR	OWSG MWD + IFR1 + FDIR Correction	

Summary						
Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
BULLDOG						
SEBASTIAN FEDERAL COM 703H - OWB - PWP2	2,416.6	2,416.7	30.0	17.6	2.426	CC
SEBASTIAN FEDERAL COM 703H - OWB - PWP2	2,500.0	2,500.0	30.0	17.3	2.367	ES, SF
DEEP BSS						
SEBASTIAN FEDERAL COM #3H - OWB - ACTUAL WE	0.0	0.0	459.0			
SEBASTIAN FEDERAL COM #3H - OWB - ACTUAL WE	10,600.0	10,554.0	587.9	540.6	12.431	SF

Offset Design												BULLDOG - SEBASTIAN FEDERAL COM 703H - OWB - PWP2		Offset Site Error:		0.0 usft
Survey Program:												0-Standard Keeper 104, 11601-MWD+IFR1+FDIR		Offset Well Error:		3.0 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				
0.0	0.0	0.1	0.1	3.0	3.0	89.43	0.3	30.0	30.0							
100.0	100.0	100.1	100.1	3.0	3.0	89.43	0.3	30.0	30.0	24.0	6.00	4.998				
200.0	200.0	200.1	200.1	3.0	3.0	89.43	0.3	30.0	30.0	24.0	6.04	4.967				
300.0	300.0	300.1	300.1	3.1	3.0	89.43	0.3	30.0	30.0	23.9	6.12	4.902				
400.0	400.0	400.1	400.1	3.2	3.0	89.43	0.3	30.0	30.0	23.8	6.24	4.808				
500.0	500.0	500.1	500.1	3.4	3.1	89.43	0.3	30.0	30.0	23.6	6.40	4.691				
600.0	600.0	600.1	600.1	3.6	3.1	89.43	0.3	30.0	30.0	23.4	6.58	4.557				
700.0	700.0	700.1	700.1	3.8	3.1	89.43	0.3	30.0	30.0	23.2	6.80	4.413				
800.0	800.0	800.1	800.1	4.0	3.2	89.43	0.3	30.0	30.0	23.0	7.04	4.264				
900.0	900.0	900.1	900.1	4.2	3.2	89.43	0.3	30.0	30.0	22.7	7.29	4.113				
1,000.0	1,000.0	1,000.1	1,000.1	4.5	3.2	89.43	0.3	30.0	30.0	22.4	7.57	3.964				
1,100.0	1,100.0	1,100.1	1,100.1	4.8	3.3	89.43	0.3	30.0	30.0	22.1	7.86	3.819				
1,200.0	1,200.0	1,200.1	1,200.1	5.1	3.4	89.43	0.3	30.0	30.0	21.8	8.16	3.678				
1,300.0	1,300.0	1,300.1	1,300.1	5.3	3.4	89.43	0.3	30.0	30.0	21.5	8.47	3.543				
1,400.0	1,400.0	1,400.1	1,400.1	5.6	3.5	89.43	0.3	30.0	30.0	21.2	8.79	3.413				
1,500.0	1,500.0	1,500.1	1,500.1	6.0	3.5	89.43	0.3	30.0	30.0	20.9	9.12	3.291				
1,600.0	1,600.0	1,600.1	1,600.1	6.3	3.6	89.43	0.3	30.0	30.0	20.5	9.45	3.174				
1,700.0	1,700.0	1,700.1	1,700.1	6.6	3.7	89.43	0.3	30.0	30.0	20.2	9.79	3.063				
1,800.0	1,800.0	1,800.1	1,800.1	6.9	3.8	89.43	0.3	30.0	30.0	19.9	10.14	2.959				
1,900.0	1,900.0	1,900.1	1,900.1	7.2	3.9	89.43	0.3	30.0	30.0	19.5	10.49	2.860				
2,000.0	2,000.0	2,000.1	2,000.1	7.6	3.9	89.43	0.3	30.0	30.0	19.2	10.85	2.766				

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

Concho Resources LLC

Anticollision Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well SEBASTIAN FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=31' @ 3616.0usft (P 106)
Reference Site:	BULLDOG	MD Reference:	KB=31' @ 3616.0usft (P 106)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	SEBASTIAN FEDERAL COM 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 usft
BULLDOG - SEBASTIAN FEDERAL COM 703H - OWB - PWP2													Offset Well Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 11601-MWD+IFR1+FDIR														
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	
2,100.0	2,100.0	2,100.1	2,100.1	7.9	4.0	89.43	0.3	30.0	30.0	18.8	11.21	2.677		
2,200.0	2,200.0	2,200.1	2,200.1	8.2	4.1	89.43	0.3	30.0	30.0	18.4	11.57	2.593		
2,300.0	2,300.0	2,300.1	2,300.1	8.6	4.2	89.43	0.3	30.0	30.0	18.1	11.94	2.513		
2,400.0	2,400.0	2,400.1	2,400.1	8.9	4.3	89.43	0.3	30.0	30.0	17.7	12.31	2.438		
2,416.6	2,416.6	2,416.7	2,416.7	8.9	4.3	89.43	0.3	30.0	30.0	17.6	12.37	2.426 CC		
2,500.0	2,500.0	2,500.0	2,500.0	9.2	4.4	89.43	0.3	30.0	30.0	17.3	12.68	2.367 ES, SF		
2,600.0	2,600.0	2,599.0	2,599.0	9.6	4.5	89.30	0.4	31.7	31.7	18.7	13.05	2.432		
2,700.0	2,700.0	2,697.7	2,697.6	9.9	4.5	88.98	0.7	36.8	36.9	23.5	13.41	2.751		
2,800.0	2,800.0	2,796.7	2,796.2	10.3	4.5	88.62	1.1	44.9	45.1	31.3	13.79	3.274		
2,900.0	2,900.0	2,896.3	2,895.4	10.6	4.6	88.36	1.5	53.6	53.8	39.7	14.18	3.797		
3,000.0	3,000.0	2,995.9	2,994.6	10.9	4.6	88.17	2.0	62.3	62.6	48.0	14.58	4.292		
3,100.0	3,100.0	3,095.5	3,093.9	11.3	4.7	88.03	2.4	71.0	71.3	56.3	14.98	4.758		
3,200.0	3,200.0	3,195.1	3,193.1	11.6	4.7	87.91	2.9	79.6	80.0	64.6	15.39	5.199		
3,300.0	3,300.0	3,294.8	3,292.4	12.0	4.8	87.82	3.4	88.3	88.7	72.9	15.80	5.615		
3,400.0	3,400.0	3,394.4	3,391.6	12.3	4.8	87.75	3.8	97.0	97.4	81.2	16.21	6.009		
3,500.0	3,500.0	3,494.0	3,490.9	12.7	4.9	87.69	4.3	105.6	106.1	89.5	16.63	6.382		
3,600.0	3,600.0	3,593.6	3,590.1	13.0	4.9	87.64	4.7	114.3	114.8	97.8	17.05	6.736		
3,700.0	3,700.0	3,693.2	3,689.3	13.4	5.0	87.59	5.2	123.0	123.6	106.1	17.47	7.071		
3,800.0	3,800.0	3,792.9	3,788.6	13.7	5.1	87.55	5.6	131.7	132.3	114.4	17.90	7.389		
3,900.0	3,900.0	3,892.5	3,887.8	14.1	5.2	87.52	6.1	140.3	141.0	122.7	18.33	7.691		
4,000.0	4,000.0	3,992.1	3,987.1	14.4	5.2	87.49	6.5	149.0	149.7	130.9	18.77	7.978		
4,100.0	4,100.0	4,091.7	4,086.3	14.8	5.3	87.46	7.0	157.7	158.4	139.2	19.20	8.251		
4,200.0	4,200.0	4,191.3	4,185.5	15.1	5.4	87.44	7.4	166.3	167.1	147.5	19.64	8.510		
4,300.0	4,300.0	4,291.0	4,284.8	15.5	5.5	87.42	7.9	175.0	175.9	155.8	20.08	8.758		
4,400.0	4,400.0	4,390.6	4,384.0	15.8	5.5	87.40	8.4	183.7	184.6	164.0	20.52	8.994		
4,500.0	4,500.0	4,490.2	4,483.3	16.2	5.6	87.38	8.8	192.3	193.3	172.3	20.97	9.219		
4,600.0	4,600.0	4,589.8	4,582.5	16.5	5.7	87.36	9.3	201.0	202.0	180.6	21.41	9.434		
4,700.0	4,700.0	4,689.4	4,681.7	16.9	5.8	87.35	9.7	209.7	210.7	188.9	21.86	9.640		
4,800.0	4,800.0	4,789.1	4,781.0	17.2	5.9	87.33	10.2	218.4	219.4	197.1	22.31	9.836		
4,900.0	4,900.0	4,888.7	4,880.2	17.6	6.0	87.32	10.6	227.0	228.1	205.4	22.76	10.024		
5,000.0	5,000.0	4,988.3	4,979.5	17.9	6.1	87.31	11.1	235.7	236.9	213.6	23.21	10.204		
5,100.0	5,100.0	5,087.9	5,078.7	18.3	6.2	87.30	11.5	244.4	245.6	221.9	23.67	10.377		
5,200.0	5,200.0	5,187.5	5,177.9	18.7	6.3	87.29	12.0	253.0	254.3	230.2	24.12	10.543		
5,300.0	5,300.0	5,287.1	5,277.2	19.0	6.3	87.28	12.4	261.7	263.0	238.4	24.58	10.701		
5,400.0	5,400.0	5,386.8	5,376.4	19.4	6.4	87.27	12.9	270.4	271.7	246.7	25.03	10.854		
5,500.0	5,500.0	5,486.4	5,475.7	19.7	6.5	87.26	13.4	279.1	280.4	254.9	25.49	11.001		
5,603.0	5,603.0	5,589.0	5,577.8	20.1	6.6	109.79	13.8	288.0	290.0	264.1	25.96	11.175		
5,700.0	5,699.9	5,685.4	5,673.9	20.4	6.7	110.40	14.3	296.4	299.7	273.3	26.38	11.360		
5,800.0	5,799.9	5,784.8	5,773.0	20.8	6.8	111.00	14.7	305.0	309.7	282.9	26.82	11.545		
5,900.0	5,899.8	5,884.3	5,872.0	21.1	6.9	111.55	15.2	313.7	319.7	292.4	27.27	11.725		
6,000.0	5,999.7	5,983.7	5,971.1	21.5	7.0	112.07	15.6	322.3	329.7	302.0	27.71	11.899		
6,100.0	6,099.7	6,083.2	6,070.2	21.8	7.2	112.56	16.1	331.0	339.8	311.6	28.16	12.068		
6,200.0	6,199.6	6,182.6	6,169.3	22.2	7.3	113.02	16.5	339.7	349.9	321.3	28.60	12.232		
6,300.0	6,299.5	6,282.1	6,268.3	22.5	7.4	113.46	17.0	348.3	360.0	331.0	29.05	12.392		
6,400.0	6,399.5	6,381.5	6,367.4	22.9	7.5	113.87	17.4	357.0	370.1	340.6	29.50	12.546		
6,500.0	6,499.4	6,481.0	6,466.5	23.3	7.6	114.26	17.9	365.6	380.3	350.3	29.95	12.696		
6,600.0	6,599.3	6,580.4	6,565.6	23.6	7.7	114.63	18.3	374.3	390.5	360.0	30.40	12.842		
6,700.0	6,699.3	6,679.9	6,664.6	24.0	7.8	114.98	18.8	382.9	400.6	369.8	30.86	12.984		
6,800.0	6,799.2	6,779.3	6,763.7	24.3	7.9	115.32	19.2	391.6	410.8	379.5	31.31	13.121		
6,900.0	6,899.1	6,878.8	6,862.8	24.7	8.0	115.63	19.7	400.2	421.0	389.3	31.77	13.255		
7,000.0	6,999.1	6,978.3	6,961.8	25.0	8.1	115.94	20.2	408.9	431.3	399.0	32.22	13.384		
7,100.0	7,099.0	7,077.7	7,060.9	25.4	8.2	116.23	20.6	417.6	441.5	408.8	32.68	13.511		

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

Concho Resources LLC

Anticollision Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well SEBASTIAN FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=31' @ 3616.0usft (P 106)
Reference Site:	BULLDOG	MD Reference:	KB=31' @ 3616.0usft (P 106)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	SEBASTIAN FEDERAL COM 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
BULLDOG - SEBASTIAN FEDERAL COM 703H - OWB - PWP2												Offset Well Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 11601-MWD+IFR1+FDIR													
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
7,200.0	7,198.9	7,177.2	7,160.0	25.7	8.3	116.50	21.1	426.2	451.7	418.6	33.13	13.633	
7,300.0	7,298.9	7,276.6	7,259.1	26.1	8.5	116.76	21.5	434.9	462.0	428.4	33.59	13.752	
7,400.0	7,398.8	7,376.1	7,358.1	26.4	8.6	117.02	22.0	443.5	472.3	438.2	34.05	13.869	
7,500.0	7,498.8	7,475.5	7,457.2	26.8	8.7	117.26	22.4	452.2	482.5	448.0	34.51	13.981	
7,600.0	7,598.7	7,575.0	7,556.3	27.2	8.8	117.49	22.9	460.8	492.8	457.8	34.97	14.091	
7,700.0	7,698.6	7,674.4	7,655.4	27.5	8.9	117.71	23.3	469.5	503.1	467.7	35.43	14.198	
7,800.0	7,798.6	7,773.9	7,754.4	27.9	9.0	117.92	23.8	478.1	513.4	477.5	35.89	14.302	
7,900.0	7,898.5	7,873.3	7,853.5	28.2	9.1	118.13	24.2	486.8	523.7	487.3	36.36	14.404	
8,000.0	7,998.4	7,972.8	7,952.6	28.6	9.3	118.32	24.7	495.5	534.0	497.2	36.82	14.503	
8,100.0	8,098.4	8,072.2	8,051.6	28.9	9.4	118.51	25.1	504.1	544.3	507.0	37.28	14.599	
8,200.0	8,198.3	8,171.7	8,150.7	29.3	9.5	118.69	25.6	512.8	554.6	516.9	37.75	14.693	
8,300.0	8,298.2	8,271.1	8,249.8	29.7	9.6	118.87	26.1	521.4	564.9	526.7	38.21	14.784	
8,400.0	8,398.2	8,370.6	8,348.9	30.0	9.7	119.04	26.5	530.1	575.3	536.6	38.68	14.874	
8,500.0	8,498.1	8,470.0	8,447.9	30.4	9.8	119.20	27.0	538.7	585.6	546.5	39.14	14.961	
8,600.0	8,598.0	8,569.5	8,547.0	30.7	10.0	119.36	27.4	547.4	595.9	556.3	39.61	15.046	
8,700.0	8,698.0	8,668.9	8,646.1	31.1	10.1	119.51	27.9	556.0	606.3	566.2	40.08	15.129	
8,800.0	8,797.9	8,768.4	8,745.2	31.4	10.2	119.66	28.3	564.7	616.6	576.1	40.54	15.209	
8,900.0	8,897.8	8,867.8	8,844.2	31.8	10.3	119.80	28.8	573.4	627.0	586.0	41.01	15.288	
9,000.0	8,997.8	8,967.3	8,943.3	32.1	10.4	119.94	29.2	582.0	637.3	595.9	41.48	15.366	
9,100.0	9,097.7	9,066.7	9,042.4	32.5	10.6	120.07	29.7	590.7	647.7	605.7	41.95	15.441	
9,200.0	9,197.7	9,166.2	9,141.4	32.9	10.7	120.20	30.1	599.3	658.1	615.6	42.42	15.514	
9,300.0	9,297.6	9,265.6	9,240.5	33.2	10.8	120.33	30.6	608.0	668.4	625.5	42.88	15.586	
9,400.0	9,397.5	9,365.1	9,339.6	33.6	10.9	120.45	31.0	616.6	678.8	635.4	43.35	15.657	
9,500.0	9,497.5	9,464.5	9,438.7	33.9	11.0	120.56	31.5	625.3	689.2	645.3	43.82	15.725	
9,600.0	9,597.4	9,564.0	9,537.7	34.3	11.2	120.68	32.0	633.9	699.5	655.2	44.29	15.793	
9,700.0	9,697.3	9,663.4	9,636.8	34.6	11.3	120.79	32.4	642.6	709.9	665.1	44.77	15.858	
9,800.0	9,797.3	9,762.9	9,735.9	35.0	11.4	120.90	32.9	651.3	720.3	675.0	45.24	15.923	
9,900.0	9,897.2	9,862.3	9,835.0	35.4	11.5	121.00	33.3	659.9	730.7	685.0	45.71	15.985	
10,000.0	9,997.1	9,961.8	9,934.0	35.7	11.6	121.10	33.8	668.6	741.0	694.9	46.18	16.047	
10,100.0	10,097.1	10,061.2	10,033.1	36.1	11.8	121.20	34.2	677.2	751.4	704.8	46.65	16.107	
10,200.0	10,197.0	10,160.7	10,132.2	36.4	11.9	121.30	34.7	685.9	761.8	714.7	47.12	16.166	
10,300.0	10,296.9	10,260.1	10,231.2	36.8	12.0	121.39	35.1	694.5	772.2	724.6	47.60	16.224	
10,400.0	10,396.9	10,359.6	10,330.3	37.1	12.1	121.48	35.6	703.2	782.6	734.5	48.07	16.280	
10,500.0	10,496.8	10,459.0	10,429.4	37.5	12.3	121.57	36.0	711.9	793.0	744.5	48.54	16.336	
10,600.0	10,596.7	10,558.5	10,528.5	37.9	12.4	121.66	36.5	720.5	803.4	754.4	49.02	16.390	
10,700.0	10,696.7	10,657.9	10,627.5	38.2	12.5	121.74	36.9	729.2	813.8	764.3	49.49	16.443	
10,800.0	10,796.6	10,757.4	10,726.6	38.6	12.6	121.82	37.4	737.8	824.2	774.2	49.97	16.495	
10,900.0	10,896.6	10,856.8	10,825.7	38.9	12.8	121.90	37.8	746.5	834.6	784.1	50.44	16.546	
11,000.0	10,996.5	10,956.3	10,924.7	39.3	12.9	121.98	38.3	755.1	845.0	794.1	50.91	16.596	
11,100.0	11,096.4	11,055.7	11,023.8	39.7	13.0	122.06	38.8	763.8	855.4	804.0	51.39	16.645	
11,200.0	11,196.4	11,155.2	11,122.9	40.0	13.1	122.13	39.2	772.4	865.8	813.9	51.86	16.693	
11,300.0	11,296.3	11,254.6	11,222.0	40.4	13.3	122.20	39.7	781.1	876.2	823.9	52.34	16.741	
11,400.0	11,396.2	11,354.1	11,321.0	40.7	13.4	122.27	40.1	789.8	886.6	833.8	52.82	16.787	
11,500.0	11,496.2	11,453.5	11,420.1	41.1	13.5	122.34	40.6	798.4	897.0	843.7	53.29	16.832	
11,541.7	11,537.8	11,495.0	11,461.4	41.2	13.6	122.37	40.8	802.0	901.4	847.9	53.49	16.851	
11,550.0	11,546.1	11,503.3	11,469.7	41.3	13.6	140.67	40.8	802.7	902.2	848.7	53.53	16.855	
11,575.0	11,571.1	11,528.1	11,494.4	41.3	13.6	-99.34	40.9	804.9	904.6	851.0	53.63	16.867	
11,600.0	11,596.1	11,553.0	11,519.1	41.4	13.6	-87.62	41.0	807.1	906.8	853.0	53.73	16.876	
11,625.0	11,620.9	11,577.7	11,543.7	41.5	13.6	-84.45	41.1	809.2	908.7	854.9	53.84	16.879	
11,650.0	11,645.5	11,601.2	11,567.2	41.6	13.7	-83.07	41.2	811.3	910.4	856.4	53.94	16.878	
11,675.0	11,669.9	11,612.8	11,578.8	41.7	13.7	-82.21	41.2	812.3	912.0	858.0	54.00	16.891	
11,700.0	11,694.0	11,625.0	11,590.9	41.7	13.7	-81.65	40.8	813.6	913.8	859.8	54.06	16.905	

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

Concho Resources LLC

Anticollision Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well SEBASTIAN FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=31' @ 3616.0usft (P 106)
Reference Site:	BULLDOG	MD Reference:	KB=31' @ 3616.0usft (P 106)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	SEBASTIAN FEDERAL COM 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

Offset Design BULLDOG - SEBASTIAN FEDERAL COM 703H - OWB - PWP2												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 11601-MWD+IFR1+FDIR												Offset Well Error:	3.0 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	
11,725.0	11,717.7	11,635.0	11,600.8	41.8	13.7	-81.23	40.3	814.8	915.8	861.7	54.12	16.922	
11,750.0	11,741.0	11,650.0	11,615.6	41.9	13.7	-81.01	39.3	816.7	917.9	863.7	54.19	16.938	
11,775.0	11,763.7	11,656.9	11,622.5	41.9	13.7	-80.69	38.6	817.7	920.1	865.8	54.25	16.960	
11,800.0	11,785.8	11,667.8	11,633.2	42.0	13.7	-80.50	37.5	819.3	922.5	868.1	54.32	16.981	
11,825.0	11,807.3	11,675.0	11,640.2	42.1	13.7	-80.25	36.6	820.4	925.0	870.6	54.39	17.007	
11,850.0	11,828.2	11,689.2	11,654.1	42.1	13.7	-80.21	34.5	822.7	927.7	873.2	54.47	17.031	
11,875.0	11,848.2	11,700.0	11,664.5	42.2	13.7	-80.10	32.8	824.7	930.5	876.0	54.55	17.059	
11,900.0	11,867.5	11,710.2	11,674.4	42.2	13.7	-79.98	30.9	826.6	933.6	878.9	54.63	17.090	
11,925.0	11,885.9	11,725.0	11,688.6	42.3	13.7	-80.02	27.8	829.5	936.8	882.1	54.71	17.122	
11,950.0	11,903.4	11,725.0	11,688.6	42.3	13.7	-79.56	27.8	829.5	940.1	885.4	54.77	17.164	
11,975.0	11,919.9	11,740.8	11,703.6	42.4	13.7	-79.66	24.1	832.9	943.6	888.8	54.86	17.201	
12,000.0	11,935.5	11,750.0	11,712.2	42.4	13.7	-79.52	21.7	835.0	947.4	892.4	54.94	17.245	
12,025.0	11,949.9	11,760.6	11,722.0	42.4	13.7	-79.42	18.8	837.5	951.3	896.3	55.02	17.291	
12,050.0	11,963.3	11,775.0	11,735.4	42.5	13.7	-79.49	14.6	841.0	955.4	900.3	55.10	17.340	
12,075.0	11,975.6	11,775.0	11,735.4	42.5	13.7	-78.95	14.6	841.0	959.7	904.5	55.16	17.398	
12,100.0	11,986.7	11,789.0	11,748.1	42.6	13.7	-78.99	10.1	844.6	964.2	908.9	55.24	17.453	
12,125.0	11,996.7	11,800.0	11,758.0	42.6	13.7	-78.89	6.3	847.6	968.8	913.5	55.32	17.515	
12,150.0	12,005.4	11,807.0	11,764.3	42.6	13.7	-78.61	3.8	849.5	973.7	918.3	55.38	17.581	
12,175.0	12,012.9	11,815.7	11,772.0	42.7	13.7	-78.40	0.6	852.0	978.8	923.4	55.45	17.651	
12,200.0	12,019.1	11,825.0	11,780.1	42.7	13.7	-78.19	-3.0	854.6	984.1	928.6	55.52	17.725	
12,225.0	12,024.0	11,832.5	11,786.6	42.7	13.7	-77.89	-5.9	856.9	989.6	934.0	55.58	17.804	
12,250.0	12,027.7	11,840.5	11,793.5	42.7	13.7	-77.59	-9.2	859.3	995.3	939.7	55.64	17.887	

Concho Resources LLC

Anticollision Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well SEBASTIAN FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=31' @ 3616.0usft (P 106)
Reference Site:	BULLDOG	MD Reference:	KB=31' @ 3616.0usft (P 106)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	SEBASTIAN FEDERAL COM 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

Offset Design DEEP BSS - SEBASTIAN FEDERAL COM #3H - OWB - ACTUAL WELLPATH												Offset Site Error:	0.0 usft
Survey Program: 100- VES GyroFlex, 10459-MWD												Offset Well Error:	2.0 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 Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.0	0.0	0.0	0.0	3.0	2.0	82.07	63.3	454.4	459.0				
100.0	100.0	80.2	80.2	3.0	2.0	82.11	63.1	454.9	459.3	454.3	5.00	91.797	
200.0	200.0	178.8	178.8	3.0	2.0	82.20	62.5	456.3	460.6	455.6	5.05	91.293	
300.0	300.0	281.5	281.5	3.1	2.0	82.26	62.2	457.6	461.8	456.6	5.14	89.826	
400.0	400.0	380.4	380.4	3.2	2.1	82.30	62.0	458.4	462.6	457.3	5.28	87.546	
500.0	500.0	479.8	479.8	3.4	2.1	82.34	61.8	459.6	463.8	458.3	5.47	84.741	
600.0	600.0	579.3	579.3	3.6	2.2	82.38	61.6	460.8	465.0	459.3	5.70	81.558	
700.0	700.0	679.5	679.5	3.8	2.2	82.42	61.5	462.1	466.2	460.3	5.97	78.153	
800.0	800.0	781.3	781.2	4.0	2.3	82.44	61.5	463.2	467.3	461.0	6.26	74.621	
900.0	900.0	883.2	883.1	4.2	2.4	82.47	61.4	463.9	468.0	461.4	6.58	71.106	
1,000.0	1,000.0	981.6	981.6	4.5	2.5	82.51	61.1	464.5	468.5	461.6	6.91	67.753	
1,100.0	1,100.0	1,079.9	1,079.8	4.8	2.5	82.56	60.8	465.5	469.5	462.2	7.27	64.581	
1,200.0	1,200.0	1,178.9	1,178.8	5.1	2.6	82.63	60.4	466.8	470.7	463.1	7.64	61.600	
1,300.0	1,300.0	1,278.8	1,278.7	5.3	2.8	82.71	59.9	468.3	472.1	464.1	8.03	58.801	
1,400.0	1,400.0	1,380.8	1,380.7	5.6	2.9	82.77	59.6	469.5	473.3	464.9	8.43	56.133	
1,500.0	1,500.0	1,484.1	1,484.0	6.0	3.0	82.79	59.5	470.2	474.0	465.1	8.85	53.557	
1,600.0	1,600.0	1,584.6	1,584.5	6.3	3.1	82.80	59.5	470.4	474.1	464.8	9.28	51.114	
1,700.0	1,700.0	1,684.4	1,684.3	6.6	3.2	82.78	59.6	470.5	474.3	464.6	9.69	48.948	
1,800.0	1,800.0	1,784.8	1,784.7	6.9	3.2	82.72	60.1	470.6	474.4	464.3	10.07	47.106	
1,900.0	1,900.0	1,886.9	1,886.8	7.2	3.2	82.61	61.0	470.4	474.3	463.9	10.42	45.527	
2,000.0	2,000.0	1,985.4	1,985.3	7.6	3.2	82.51	61.8	470.0	474.1	463.3	10.76	44.053	
2,005.9	2,005.9	1,991.2	1,991.1	7.6	3.2	82.50	61.9	470.0	474.1	463.3	10.78	43.971	
2,100.0	2,100.0	2,084.8	2,084.7	7.9	3.2	82.42	62.5	470.0	474.1	463.0	11.13	42.612	
2,200.0	2,200.0	2,186.5	2,186.4	8.2	3.3	82.31	63.4	469.8	474.1	462.6	11.49	41.265	
2,300.0	2,300.0	2,289.9	2,289.8	8.6	3.3	82.16	64.6	469.1	473.5	461.7	11.82	40.052	
2,400.0	2,400.0	2,388.8	2,388.7	8.9	3.3	81.97	66.0	468.0	472.6	460.4	12.15	38.887	
2,500.0	2,500.0	2,489.5	2,489.3	9.2	3.3	81.72	68.0	466.9	471.8	459.3	12.50	37.754	
2,600.0	2,600.0	2,588.9	2,588.7	9.6	3.3	81.44	70.1	465.7	471.0	458.2	12.85	36.658	
2,700.0	2,700.0	2,690.6	2,690.4	9.9	3.3	81.19	72.0	464.5	470.1	456.9	13.20	35.626	
2,800.0	2,800.0	2,788.7	2,788.4	10.3	3.4	81.00	73.4	463.4	469.2	455.6	13.54	34.644	
2,900.0	2,900.0	2,886.3	2,886.0	10.6	3.4	80.82	74.8	462.7	468.7	454.8	13.91	33.701	
2,969.9	2,969.9	2,955.4	2,955.1	10.8	3.5	80.68	75.9	462.5	468.7	454.5	14.18	33.060	
3,000.0	3,000.0	2,985.2	2,984.9	10.9	3.5	80.62	76.4	462.4	468.7	454.4	14.29	32.790	
3,100.0	3,100.0	3,084.0	3,083.7	11.3	3.6	80.37	78.4	462.3	468.9	454.2	14.69	31.917	
3,200.0	3,200.0	3,182.6	3,182.3	11.6	3.7	80.11	80.6	462.4	469.3	454.2	15.10	31.085	
3,300.0	3,300.0	3,281.9	3,281.6	12.0	3.8	79.89	82.5	462.7	470.0	454.5	15.52	30.291	
3,400.0	3,400.0	3,382.5	3,382.2	12.3	3.9	79.67	84.4	463.1	470.8	454.8	15.94	29.534	
3,500.0	3,500.0	3,479.1	3,478.8	12.7	4.0	79.44	86.4	463.7	471.7	455.3	16.37	28.821	
3,600.0	3,600.0	3,577.8	3,577.4	13.0	4.1	79.18	88.8	464.8	473.3	456.5	16.81	28.160	
3,700.0	3,700.0	3,675.8	3,675.3	13.4	4.3	78.91	91.4	466.1	475.1	457.8	17.25	27.540	
3,800.0	3,800.0	3,772.0	3,771.5	13.7	4.4	78.64	94.0	468.0	477.5	459.8	17.70	26.974	
3,900.0	3,900.0	3,872.4	3,871.8	14.1	4.5	78.46	96.1	470.6	480.5	462.3	18.17	26.440	
4,000.0	4,000.0	3,973.6	3,973.0	14.4	4.7	78.30	97.9	472.9	483.1	464.5	18.65	25.908	
4,100.0	4,100.0	4,073.9	4,073.3	14.8	4.8	78.14	99.8	475.1	485.6	466.5	19.12	25.396	
4,200.0	4,200.0	4,173.1	4,172.4	15.1	4.9	77.98	101.6	477.3	488.1	468.5	19.60	24.909	
4,300.0	4,300.0	4,271.0	4,270.3	15.5	5.1	77.86	103.2	479.7	490.9	470.9	20.07	24.456	
4,400.0	4,400.0	4,365.0	4,364.2	15.8	5.2	77.79	104.4	482.8	494.5	473.9	20.55	24.064	
4,500.0	4,500.0	4,461.2	4,460.3	16.2	5.3	77.76	105.7	487.3	499.2	478.2	21.03	23.742	
4,600.0	4,600.0	4,561.5	4,560.4	16.5	5.4	77.79	106.5	492.2	504.2	482.7	21.51	23.437	
4,700.0	4,700.0	4,661.9	4,660.8	16.9	5.6	77.79	107.5	497.0	509.1	487.0	22.00	23.134	
4,800.0	4,800.0	4,762.1	4,760.8	17.2	5.7	77.86	107.9	501.8	513.8	491.3	22.49	22.844	
4,900.0	4,900.0	4,862.2	4,860.8	17.6	5.8	78.01	107.6	506.7	518.6	495.6	22.98	22.568	

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

Concho Resources LLC

Anticollision Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well SEBASTIAN FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=31' @ 3616.0usft (P 106)
Reference Site:	BULLDOG	MD Reference:	KB=31' @ 3616.0usft (P 106)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	SEBASTIAN FEDERAL COM 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

Offset Design DEEP BSS - SEBASTIAN FEDERAL COM #3H - OWB - ACTUAL WELLPATH												Offset Site Error:	0.0 usft
Survey Program: 100- VES GyroFlex, 10459-MWD												Offset Well Error:	2.0 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 Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.0	5,000.0	4,964.2	4,962.7	17.9	5.9	78.24	106.5	511.7	523.1	499.7	23.46	22.298	
5,100.0	5,100.0	5,066.7	5,065.1	18.3	6.0	78.44	105.6	516.1	527.2	503.2	23.95	22.014	
5,200.0	5,200.0	5,171.1	5,169.4	18.7	6.1	78.60	104.8	519.9	530.6	506.2	24.44	21.713	
5,300.0	5,300.0	5,275.5	5,273.8	19.0	6.2	78.74	104.1	522.8	533.2	508.2	24.93	21.386	
5,400.0	5,400.0	5,376.4	5,374.7	19.4	6.3	78.85	103.5	524.9	535.1	509.7	25.41	21.058	
5,500.0	5,500.0	5,478.6	5,476.8	19.7	6.4	78.98	102.7	527.0	537.0	511.1	25.90	20.735	
5,603.0	5,603.0	5,581.4	5,579.6	20.1	6.5	101.61	102.0	528.7	538.9	512.5	26.39	20.424	
5,700.0	5,699.9	5,679.5	5,677.7	20.4	6.6	102.08	101.3	530.4	541.1	514.3	26.84	20.158	
5,800.0	5,799.9	5,781.1	5,779.3	20.8	6.8	102.53	100.8	531.7	543.1	515.8	27.32	19.880	
5,900.0	5,899.8	5,884.2	5,882.4	21.1	6.9	102.96	100.5	532.6	544.7	516.9	27.79	19.598	
6,000.0	5,999.7	5,982.4	5,980.5	21.5	7.0	103.37	100.1	533.2	546.0	517.8	28.25	19.327	
6,100.0	6,099.7	6,083.0	6,081.1	21.8	7.1	103.80	99.7	534.1	547.7	519.0	28.72	19.071	
6,200.0	6,199.6	6,182.5	6,180.7	22.2	7.2	104.23	99.2	534.8	549.2	520.1	29.19	18.819	
6,300.0	6,299.5	6,282.9	6,281.0	22.5	7.3	104.63	98.9	535.6	550.9	521.2	29.66	18.572	
6,400.0	6,399.5	6,381.9	6,380.1	22.9	7.4	105.03	98.6	536.4	552.5	522.4	30.14	18.333	
6,500.0	6,499.4	6,482.4	6,480.5	23.3	7.5	105.42	98.4	537.2	554.3	523.6	30.62	18.100	
6,600.0	6,599.3	6,582.2	6,580.4	23.6	7.7	105.80	98.3	538.0	556.0	524.9	31.11	17.869	
6,700.0	6,699.3	6,682.4	6,680.5	24.0	7.8	106.15	98.4	538.7	557.7	526.1	31.61	17.644	
6,800.0	6,799.2	6,783.9	6,782.1	24.3	7.9	106.51	98.5	539.3	559.3	527.2	32.11	17.420	
6,900.0	6,899.1	6,881.8	6,880.0	24.7	8.1	106.86	98.5	539.8	560.9	528.3	32.60	17.207	
7,000.0	6,999.1	6,981.9	6,980.0	25.0	8.2	107.21	98.6	540.6	562.7	529.6	33.09	17.006	
7,100.0	7,099.0	7,083.8	7,082.0	25.4	8.4	107.57	98.6	541.2	564.4	530.8	33.59	16.803	
7,200.0	7,198.9	7,184.5	7,182.6	25.7	8.5	107.93	98.6	541.5	565.8	531.7	34.08	16.601	
7,300.0	7,298.9	7,284.3	7,282.4	26.1	8.6	108.28	98.5	541.8	567.2	532.6	34.57	16.408	
7,400.0	7,398.8	7,383.9	7,382.1	26.4	8.7	108.66	98.2	542.2	568.7	533.6	35.03	16.232	
7,500.0	7,498.8	7,485.3	7,483.5	26.8	8.8	109.08	97.5	542.5	570.1	534.6	35.46	16.076	
7,600.0	7,598.7	7,585.3	7,583.5	27.2	8.8	109.50	96.7	542.5	571.3	535.4	35.86	15.932	
7,700.0	7,698.6	7,685.6	7,683.8	27.5	8.9	109.89	96.2	542.6	572.6	536.3	36.26	15.792	
7,800.0	7,798.6	7,785.3	7,783.4	27.9	8.9	110.27	95.7	542.7	573.8	537.2	36.65	15.656	
7,900.0	7,898.5	7,884.8	7,882.9	28.2	8.9	110.68	94.9	542.8	575.2	538.1	37.05	15.522	
8,000.0	7,998.4	7,983.1	7,981.2	28.6	9.0	111.09	94.1	543.1	576.7	539.3	37.48	15.390	
8,100.0	8,098.4	8,084.2	8,082.3	28.9	9.1	111.50	93.4	543.4	578.4	540.5	37.92	15.255	
8,200.0	8,198.3	8,181.9	8,180.0	29.3	9.2	111.85	93.1	543.8	580.1	541.7	38.38	15.116	
8,300.0	8,298.2	8,281.8	8,279.9	29.7	9.3	112.21	92.9	544.5	582.1	543.2	38.86	14.979	
8,400.0	8,398.2	8,382.3	8,380.5	30.0	9.4	112.59	92.3	545.0	584.0	544.7	39.33	14.849	
8,500.0	8,498.1	8,484.9	8,483.0	30.4	9.5	112.99	91.6	545.3	585.7	545.9	39.77	14.729	
8,600.0	8,598.0	8,585.9	8,584.0	30.7	9.5	113.36	91.1	545.2	587.1	546.9	40.12	14.631	
8,700.0	8,698.0	8,687.1	8,685.2	31.1	9.4	113.70	91.1	545.0	588.3	547.8	40.43	14.550	
8,800.0	8,797.9	8,789.3	8,787.4	31.4	9.4	114.02	91.1	544.5	589.2	548.5	40.73	14.465	
8,900.0	8,897.8	8,888.7	8,886.8	31.8	9.3	114.33	91.2	543.8	590.0	548.9	41.03	14.378	
9,000.0	8,997.8	8,989.0	8,987.1	32.1	9.3	114.64	91.3	543.1	590.8	549.5	41.34	14.292	
9,100.0	9,097.7	9,095.9	9,094.0	32.5	9.2	114.97	91.4	541.8	591.1	549.4	41.65	14.191	
9,200.0	9,197.7	9,194.4	9,192.5	32.9	9.2	115.30	91.4	540.0	590.8	548.9	41.96	14.082	
9,300.0	9,297.6	9,302.3	9,300.3	33.2	9.1	115.70	90.9	537.6	590.1	547.8	42.28	13.955	
9,400.0	9,397.5	9,403.7	9,401.7	33.6	9.1	116.15	89.7	534.3	588.6	546.0	42.61	13.814	
9,500.0	9,497.5	9,503.5	9,501.5	33.9	9.0	116.60	88.6	531.1	587.0	544.0	42.93	13.674	
9,600.0	9,597.4	9,604.0	9,601.9	34.3	9.0	117.04	87.5	527.7	585.3	542.1	43.25	13.534	
9,700.0	9,697.3	9,700.0	9,697.8	34.6	9.0	117.46	86.5	524.8	584.0	540.5	43.56	13.408	
9,800.0	9,797.3	9,799.3	9,797.1	35.0	8.9	117.86	85.9	522.2	583.2	539.3	43.88	13.289	
9,900.0	9,897.2	9,899.5	9,897.3	35.4	8.9	118.30	84.8	519.5	582.3	538.1	44.22	13.170	
10,000.0	9,997.1	10,000.0	9,997.7	35.7	8.9	118.82	83.0	516.7	581.4	536.8	44.56	13.047	
10,100.0	10,097.1	10,096.2	10,093.9	36.1	8.9	119.29	81.5	514.2	580.7	535.9	44.89	12.937	

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

Concho Resources LLC

Anticollision Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well SEBASTIAN FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=31' @ 3616.0usft (P 106)
Reference Site:	BULLDOG	MD Reference:	KB=31' @ 3616.0usft (P 106)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	SEBASTIAN FEDERAL COM 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
DEEP BSS - SEBASTIAN FEDERAL COM #3H - OWB - ACTUAL WELLPATH												Offset Well Error:	2.0 usft
Survey Program: 100- VES GyroFlex, 10459-MWD													
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
10,130.9	10,127.9	10,125.7	10,123.4	36.2	8.9	119.42	81.2	513.6	580.7	535.7	44.99	12.907	
10,200.0	10,197.0	10,191.8	10,189.5	36.4	8.9	119.70	80.6	512.5	580.9	535.7	45.22	12.845	
10,300.0	10,296.9	10,292.3	10,289.9	36.8	8.8	120.08	80.0	511.1	581.4	535.9	45.57	12.759	
10,400.0	10,396.9	10,390.1	10,387.7	37.1	9.1	120.53	78.7	509.7	582.0	535.8	46.20	12.599	
10,500.0	10,496.8	10,482.9	10,480.2	37.5	9.8	121.49	71.9	508.2	583.3	536.4	46.92	12.432	
10,600.0	10,596.7	10,554.0	10,549.8	37.9	9.9	123.07	57.8	507.5	587.9	540.6	47.29	12.431 SF	
10,700.0	10,696.7	10,625.7	10,617.2	38.2	10.0	125.60	33.3	507.5	597.7	550.1	47.66	12.542	
10,800.0	10,796.6	10,692.9	10,676.6	38.6	10.1	128.65	2.1	507.8	613.8	565.8	48.08	12.768	
10,900.0	10,896.6	10,753.3	10,726.3	38.9	10.2	131.85	-32.2	507.5	636.8	588.3	48.54	13.119	
11,000.0	10,996.5	10,800.9	10,762.5	39.3	10.4	134.64	-63.1	506.8	667.7	618.7	49.03	13.618	
11,100.0	11,096.4	10,840.0	10,789.6	39.7	10.5	137.05	-91.2	506.4	707.4	657.9	49.48	14.296	
11,200.0	11,196.4	10,871.0	10,809.6	40.0	10.6	139.00	-114.9	506.4	755.5	705.7	49.82	15.163	
11,300.0	11,296.3	10,891.5	10,822.0	40.4	10.7	140.29	-131.3	506.7	811.0	761.0	50.05	16.206	
11,400.0	11,396.2	10,915.6	10,835.7	40.7	10.8	141.81	-151.1	507.2	873.0	822.7	50.21	17.387	
11,500.0	11,496.2	10,935.0	10,846.0	41.1	10.9	143.03	-167.4	507.5	940.2	889.9	50.31	18.688	
11,541.7	11,537.8	10,945.4	10,851.3	41.2	11.0	143.68	-176.4	507.7	969.5	919.2	50.36	19.254	
11,550.0	11,546.1	10,947.0	10,852.1	41.3	11.0	162.84	-177.8	507.7	975.5	925.1	50.36	19.369	
11,575.0	11,571.1	10,952.1	10,854.6	41.3	11.0	-74.64	-182.2	507.8	993.1	942.7	50.38	19.712	

Concho Resources LLC

Anticollision Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well SEBASTIAN FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=31' @ 3616.0usft (P 106)
Reference Site:	BULLDOG	MD Reference:	KB=31' @ 3616.0usft (P 106)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	SEBASTIAN FEDERAL COM 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB=31' @ 3616.0usft (P 106)

Offset Depths are relative to Offset Datum

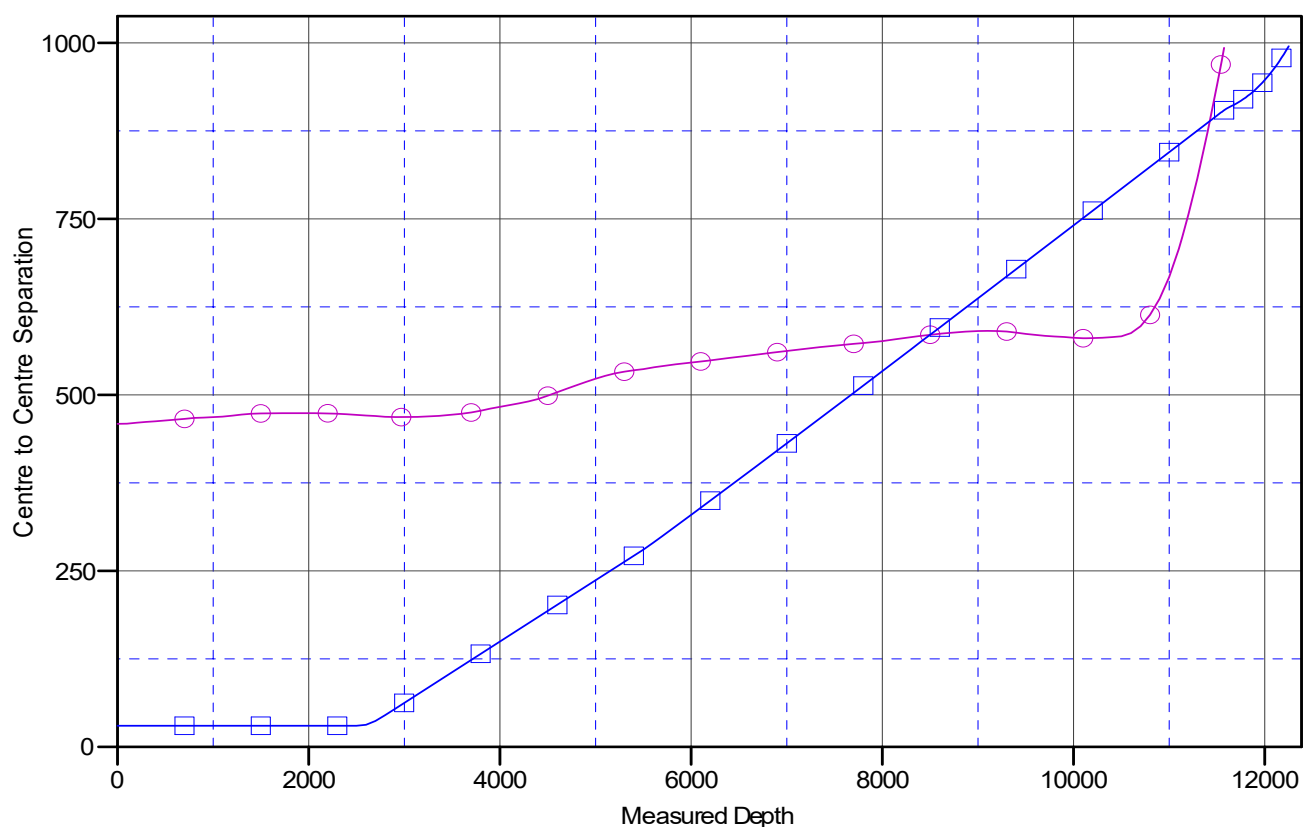
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: SEBASTIAN FEDERAL COM 704H

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

Grid Convergence at Surface is: 0.44°

Ladder Plot



LEGEND

 SEBASTIAN FEDERAL COM#3H, OWB, ACTUAL WELLPATH V0
  SEBASTIAN FEDERAL COM703H, OWB, PWP2 V0

Concho Resources LLC

Anticollision Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well SEBASTIAN FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=31' @ 3616.0usft (P 106)
Reference Site:	BULLDOG	MD Reference:	KB=31' @ 3616.0usft (P 106)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	SEBASTIAN FEDERAL COM 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB=31' @ 3616.0usft (P 106)

Offset Depths are relative to Offset Datum

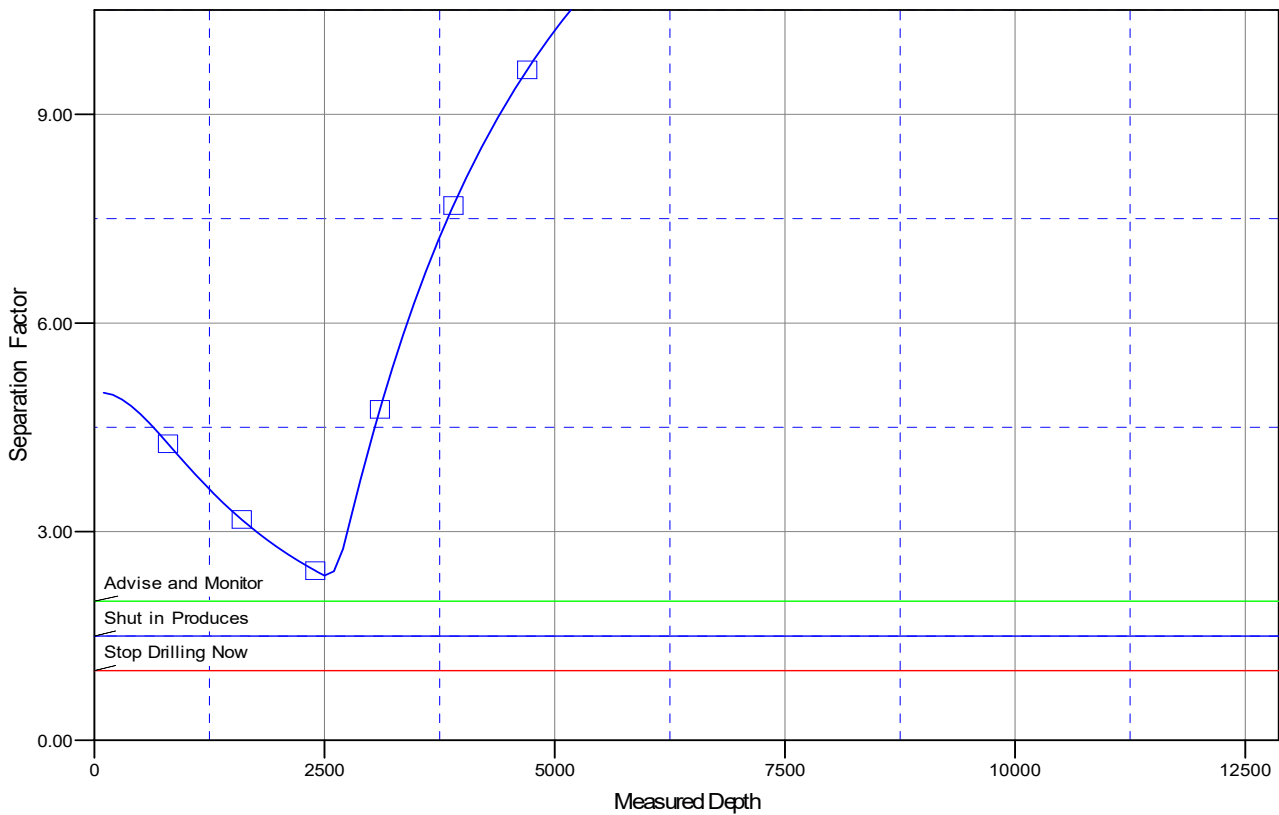
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: SEBASTIAN FEDERAL COM 704H

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

Grid Convergence at Surface is: 0.44°

Separation Factor Plot



LEGEND

SEBASTIAN FEDERAL COM703H, OWB, ACTUAL WELLPATH V0 SEBASTIAN FEDERAL COM703H, OWB, PWP2 V0

NORTHERN DELAWARE BASIN

LEA COUNTY, NM

BULLDOG

SEBASTIAN FEDERAL COM 704H

OWB

Plan: PWP2

Standard Survey Report

16 March, 2020

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well SEBASTIAN FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=31' @ 3616.0usft (P 106)
Site:	BULLDOG	MD Reference:	KB=31' @ 3616.0usft (P 106)
Well:	SEBASTIAN FEDERAL COM 704H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP2	Database:	edm

Project	LEA COUNTY, NM		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Well	SEBASTIAN FEDERAL COM 704H				
Well Position	+N/-S	0.0 usft	Northing:	446,197.40 usft	Latitude: 32° 13' 26.450 N
	+E/-W	0.0 usft	Easting:	755,473.60 usft	Longitude: 103° 30' 25.950 W
Position Uncertainty		3.0 usft	Wellhead Elevation:	usft	Ground Level: 3,585.8 usft

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	3/16/2020	6.62	60.04	47,661.09224462

Design	PWP2				
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.0	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	180.49	

Survey Tool Program	Date	3/16/2020			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	17,009.6	PWP2 (OWB)	MWD+IFR1+FDIR	OWSG MWD + IFR1 + FDIR Correction	

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00	

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well SEBASTIAN FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=31' @ 3616.0usft (P 106)
Site:	BULLDOG	MD Reference:	KB=31' @ 3616.0usft (P 106)
Well:	SEBASTIAN FEDERAL COM 704H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP2	Database:	edm

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Build 2.00									
5,600.0	2.00	337.63	5,600.0	1.6	-0.7	-1.6	2.00	2.00	0.00
5,603.0	2.06	337.63	5,603.0	1.7	-0.7	-1.7	2.00	2.00	0.00

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well SEBASTIAN FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=31' @ 3616.0usft (P 106)
Site:	BULLDOG	MD Reference:	KB=31' @ 3616.0usft (P 106)
Well:	SEBASTIAN FEDERAL COM 704H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP2	Database:	edm

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)
Start 5938.6 hold at 5603.0 MD									
5,700.0	2.06	337.63	5,699.9	4.9	-2.0	-4.9	0.00	0.00	0.00
5,800.0	2.06	337.63	5,799.9	8.3	-3.4	-8.2	0.00	0.00	0.00
5,900.0	2.06	337.63	5,899.8	11.6	-4.8	-11.5	0.00	0.00	0.00
6,000.0	2.06	337.63	5,999.7	14.9	-6.1	-14.9	0.00	0.00	0.00
6,100.0	2.06	337.63	6,099.7	18.2	-7.5	-18.2	0.00	0.00	0.00
6,200.0	2.06	337.63	6,199.6	21.6	-8.9	-21.5	0.00	0.00	0.00
6,300.0	2.06	337.63	6,299.5	24.9	-10.2	-24.8	0.00	0.00	0.00
6,400.0	2.06	337.63	6,399.5	28.2	-11.6	-28.1	0.00	0.00	0.00
6,500.0	2.06	337.63	6,499.4	31.5	-13.0	-31.4	0.00	0.00	0.00
6,600.0	2.06	337.63	6,599.3	34.9	-14.4	-34.7	0.00	0.00	0.00
6,700.0	2.06	337.63	6,699.3	38.2	-15.7	-38.1	0.00	0.00	0.00
6,800.0	2.06	337.63	6,799.2	41.5	-17.1	-41.4	0.00	0.00	0.00
6,900.0	2.06	337.63	6,899.1	44.8	-18.5	-44.7	0.00	0.00	0.00
7,000.0	2.06	337.63	6,999.1	48.2	-19.8	-48.0	0.00	0.00	0.00
7,100.0	2.06	337.63	7,099.0	51.5	-21.2	-51.3	0.00	0.00	0.00
7,200.0	2.06	337.63	7,198.9	54.8	-22.6	-54.6	0.00	0.00	0.00
7,300.0	2.06	337.63	7,298.9	58.1	-23.9	-57.9	0.00	0.00	0.00
7,400.0	2.06	337.63	7,398.8	61.5	-25.3	-61.3	0.00	0.00	0.00
7,500.0	2.06	337.63	7,498.8	64.8	-26.7	-64.6	0.00	0.00	0.00
7,600.0	2.06	337.63	7,598.7	68.1	-28.0	-67.9	0.00	0.00	0.00
7,700.0	2.06	337.63	7,698.6	71.4	-29.4	-71.2	0.00	0.00	0.00
7,800.0	2.06	337.63	7,798.6	74.8	-30.8	-74.5	0.00	0.00	0.00
7,900.0	2.06	337.63	7,898.5	78.1	-32.1	-77.8	0.00	0.00	0.00
8,000.0	2.06	337.63	7,998.4	81.4	-33.5	-81.1	0.00	0.00	0.00
8,100.0	2.06	337.63	8,098.4	84.7	-34.9	-84.4	0.00	0.00	0.00
8,200.0	2.06	337.63	8,198.3	88.1	-36.3	-87.8	0.00	0.00	0.00
8,300.0	2.06	337.63	8,298.2	91.4	-37.6	-91.1	0.00	0.00	0.00
8,400.0	2.06	337.63	8,398.2	94.7	-39.0	-94.4	0.00	0.00	0.00
8,500.0	2.06	337.63	8,498.1	98.1	-40.4	-97.7	0.00	0.00	0.00
8,600.0	2.06	337.63	8,598.0	101.4	-41.7	-101.0	0.00	0.00	0.00
8,700.0	2.06	337.63	8,698.0	104.7	-43.1	-104.3	0.00	0.00	0.00
8,800.0	2.06	337.63	8,797.9	108.0	-44.5	-107.6	0.00	0.00	0.00
8,900.0	2.06	337.63	8,897.8	111.4	-45.8	-111.0	0.00	0.00	0.00
9,000.0	2.06	337.63	8,997.8	114.7	-47.2	-114.3	0.00	0.00	0.00
9,100.0	2.06	337.63	9,097.7	118.0	-48.6	-117.6	0.00	0.00	0.00
9,200.0	2.06	337.63	9,197.7	121.3	-49.9	-120.9	0.00	0.00	0.00
9,300.0	2.06	337.63	9,297.6	124.7	-51.3	-124.2	0.00	0.00	0.00
9,400.0	2.06	337.63	9,397.5	128.0	-52.7	-127.5	0.00	0.00	0.00
9,500.0	2.06	337.63	9,497.5	131.3	-54.1	-130.8	0.00	0.00	0.00
9,600.0	2.06	337.63	9,597.4	134.6	-55.4	-134.2	0.00	0.00	0.00
9,700.0	2.06	337.63	9,697.3	138.0	-56.8	-137.5	0.00	0.00	0.00
9,800.0	2.06	337.63	9,797.3	141.3	-58.2	-140.8	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well SEBASTIAN FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=31' @ 3616.0usft (P 106)
Site:	BULLDOG	MD Reference:	KB=31' @ 3616.0usft (P 106)
Well:	SEBASTIAN FEDERAL COM 704H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP2	Database:	edm

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)
9,900.0	2.06	337.63	9,897.2	144.6	-59.5	-144.1	0.00	0.00	0.00
10,000.0	2.06	337.63	9,997.1	147.9	-60.9	-147.4	0.00	0.00	0.00
10,100.0	2.06	337.63	10,097.1	151.3	-62.3	-150.7	0.00	0.00	0.00
10,200.0	2.06	337.63	10,197.0	154.6	-63.6	-154.0	0.00	0.00	0.00
10,300.0	2.06	337.63	10,296.9	157.9	-65.0	-157.3	0.00	0.00	0.00
10,400.0	2.06	337.63	10,396.9	161.2	-66.4	-160.7	0.00	0.00	0.00
10,500.0	2.06	337.63	10,496.8	164.6	-67.7	-164.0	0.00	0.00	0.00
10,600.0	2.06	337.63	10,596.7	167.9	-69.1	-167.3	0.00	0.00	0.00
10,700.0	2.06	337.63	10,696.7	171.2	-70.5	-170.6	0.00	0.00	0.00
10,800.0	2.06	337.63	10,796.6	174.5	-71.8	-173.9	0.00	0.00	0.00
10,900.0	2.06	337.63	10,896.6	177.9	-73.2	-177.2	0.00	0.00	0.00
11,000.0	2.06	337.63	10,996.5	181.2	-74.6	-180.5	0.00	0.00	0.00
11,100.0	2.06	337.63	11,096.4	184.5	-76.0	-183.9	0.00	0.00	0.00
11,200.0	2.06	337.63	11,196.4	187.8	-77.3	-187.2	0.00	0.00	0.00
11,300.0	2.06	337.63	11,296.3	191.2	-78.7	-190.5	0.00	0.00	0.00
11,400.0	2.06	337.63	11,396.2	194.5	-80.1	-193.8	0.00	0.00	0.00
11,500.0	2.06	337.63	11,496.2	197.8	-81.4	-197.1	0.00	0.00	0.00
11,541.7	2.06	337.63	11,537.8	199.2	-82.0	-198.5	0.00	0.00	0.00
Start DLS 12.00 TFO -158.14									
11,600.0	5.14	188.02	11,596.1	197.6	-82.8	-196.9	12.00	5.29	-256.45
11,700.0	17.10	181.97	11,694.0	178.4	-83.9	-177.6	12.00	11.96	-6.06
11,800.0	29.10	180.85	11,785.8	139.2	-84.8	-138.5	12.00	11.99	-1.12
11,900.0	41.09	180.35	11,867.5	81.8	-85.3	-81.1	12.00	12.00	-0.50
12,000.0	53.09	180.05	11,935.5	8.7	-85.6	-8.0	12.00	12.00	-0.30
12,100.0	65.09	179.83	11,986.7	-76.9	-85.5	77.6	12.00	12.00	-0.22
12,200.0	77.09	179.65	12,019.1	-171.3	-85.0	172.1	12.00	12.00	-0.18
12,296.0	88.60	179.49	12,031.0	-266.4	-84.3	267.1	12.00	12.00	-0.16
Start 4713.6 hold at 12296.0 MD									
12,300.0	88.60	179.49	12,031.1	-270.4	-84.3	271.1	0.00	0.00	0.00
12,400.0	88.60	179.49	12,033.6	-370.4	-83.4	371.1	0.00	0.00	0.00
12,500.0	88.60	179.49	12,036.0	-470.4	-82.5	471.1	0.00	0.00	0.00
12,600.0	88.60	179.49	12,038.4	-570.3	-81.6	571.0	0.00	0.00	0.00
12,700.0	88.60	179.49	12,040.9	-670.3	-80.7	671.0	0.00	0.00	0.00
12,800.0	88.60	179.49	12,043.3	-770.3	-79.8	770.9	0.00	0.00	0.00
12,900.0	88.60	179.49	12,045.8	-870.2	-78.9	870.9	0.00	0.00	0.00
13,000.0	88.60	179.49	12,048.2	-970.2	-78.1	970.8	0.00	0.00	0.00
13,100.0	88.60	179.49	12,050.6	-1,070.2	-77.2	1,070.8	0.00	0.00	0.00
13,200.0	88.60	179.49	12,053.1	-1,170.1	-76.3	1,170.7	0.00	0.00	0.00
13,300.0	88.60	179.49	12,055.5	-1,270.1	-75.4	1,270.7	0.00	0.00	0.00
13,400.0	88.60	179.49	12,057.9	-1,370.1	-74.5	1,370.6	0.00	0.00	0.00
13,500.0	88.60	179.49	12,060.4	-1,470.0	-73.6	1,470.6	0.00	0.00	0.00
13,600.0	88.60	179.49	12,062.8	-1,570.0	-72.7	1,570.6	0.00	0.00	0.00
13,700.0	88.60	179.49	12,065.3	-1,670.0	-71.8	1,670.5	0.00	0.00	0.00
13,800.0	88.60	179.49	12,067.7	-1,769.9	-70.9	1,770.5	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well SEBASTIAN FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=31' @ 3616.0usft (P 106)
Site:	BULLDOG	MD Reference:	KB=31' @ 3616.0usft (P 106)
Well:	SEBASTIAN FEDERAL COM 704H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP2	Database:	edm

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)
13,900.0	88.60	179.49	12,070.1	-1,869.9	-70.0	1,870.4	0.00	0.00	0.00
14,000.0	88.60	179.49	12,072.6	-1,969.9	-69.2	1,970.4	0.00	0.00	0.00
14,100.0	88.60	179.49	12,075.0	-2,069.8	-68.3	2,070.3	0.00	0.00	0.00
14,200.0	88.60	179.49	12,077.5	-2,169.8	-67.4	2,170.3	0.00	0.00	0.00
14,300.0	88.60	179.49	12,079.9	-2,269.8	-66.5	2,270.2	0.00	0.00	0.00
14,400.0	88.60	179.49	12,082.3	-2,369.7	-65.6	2,370.2	0.00	0.00	0.00
14,500.0	88.60	179.49	12,084.8	-2,469.7	-64.7	2,470.2	0.00	0.00	0.00
14,600.0	88.60	179.49	12,087.2	-2,569.7	-63.8	2,570.1	0.00	0.00	0.00
14,700.0	88.60	179.49	12,089.7	-2,669.6	-62.9	2,670.1	0.00	0.00	0.00
14,800.0	88.60	179.49	12,092.1	-2,769.6	-62.0	2,770.0	0.00	0.00	0.00
14,900.0	88.60	179.49	12,094.5	-2,869.6	-61.2	2,870.0	0.00	0.00	0.00
15,000.0	88.60	179.49	12,097.0	-2,969.5	-60.3	2,969.9	0.00	0.00	0.00
15,100.0	88.60	179.49	12,099.4	-3,069.5	-59.4	3,069.9	0.00	0.00	0.00
15,200.0	88.60	179.49	12,101.9	-3,169.5	-58.5	3,169.8	0.00	0.00	0.00
15,300.0	88.60	179.49	12,104.3	-3,269.4	-57.6	3,269.8	0.00	0.00	0.00
15,400.0	88.60	179.49	12,106.7	-3,369.4	-56.7	3,369.8	0.00	0.00	0.00
15,500.0	88.60	179.49	12,109.2	-3,469.4	-55.8	3,469.7	0.00	0.00	0.00
15,600.0	88.60	179.49	12,111.6	-3,569.3	-54.9	3,569.7	0.00	0.00	0.00
15,700.0	88.60	179.49	12,114.1	-3,669.3	-54.0	3,669.6	0.00	0.00	0.00
15,800.0	88.60	179.49	12,116.5	-3,769.3	-53.2	3,769.6	0.00	0.00	0.00
15,900.0	88.60	179.49	12,118.9	-3,869.2	-52.3	3,869.5	0.00	0.00	0.00
16,000.0	88.60	179.49	12,121.4	-3,969.2	-51.4	3,969.5	0.00	0.00	0.00
16,100.0	88.60	179.49	12,123.8	-4,069.2	-50.5	4,069.4	0.00	0.00	0.00
16,200.0	88.60	179.49	12,126.3	-4,169.1	-49.6	4,169.4	0.00	0.00	0.00
16,300.0	88.60	179.49	12,128.7	-4,269.1	-48.7	4,269.3	0.00	0.00	0.00
16,400.0	88.60	179.49	12,131.1	-4,369.1	-47.8	4,369.3	0.00	0.00	0.00
16,500.0	88.60	179.49	12,133.6	-4,469.0	-46.9	4,469.3	0.00	0.00	0.00
16,600.0	88.60	179.49	12,136.0	-4,569.0	-46.0	4,569.2	0.00	0.00	0.00
16,700.0	88.60	179.49	12,138.4	-4,669.0	-45.2	4,669.2	0.00	0.00	0.00
16,800.0	88.60	179.49	12,140.9	-4,768.9	-44.3	4,769.1	0.00	0.00	0.00
16,900.0	88.60	179.49	12,143.3	-4,868.9	-43.4	4,869.1	0.00	0.00	0.00
17,000.0	88.60	179.49	12,145.8	-4,968.9	-42.5	4,969.0	0.00	0.00	0.00
17,009.6	88.60	179.49	12,146.0	-4,978.4	-42.4	4,978.6	0.00	0.00	0.00

TD at 17009.6

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well SEBASTIAN FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=31' @ 3616.0usft (P 106)
Site:	BULLDOG	MD Reference:	KB=31' @ 3616.0usft (P 106)
Well:	SEBASTIAN FEDERAL COM 704H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP2	Database:	edm

Design Targets

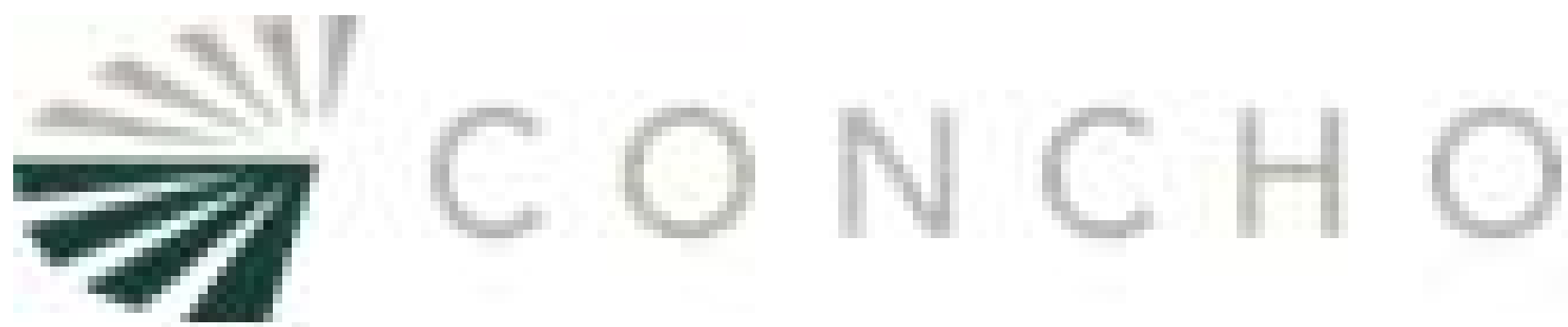
Target Name

- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
FTP (SEBASTIAN FE - plan misses target center by 163.3usft at 11961.9usft MD (11911.4 TVD, 38.2 N, -85.5 E) - Circle (radius 50.0)	0.00	0.00	12,031.0	149.4	-86.7	446,346.80	755,386.90	32° 13' 27.935 N	103° 30' 26.946 W
LTP (SEBASTIAN FEI - plan misses target center by 1.2usft at 16959.6usft MD (12144.8 TVD, -4928.4 N, -42.8 E) - Point	0.00	0.00	12,146.0	-4,928.4	-42.9	441,269.00	755,430.70	32° 12' 37.685 N	103° 30' 26.891 W
PBHL (SEBASTIAN F - plan hits target center - Rectangle (sides W100.0 H5,127.8 D20.0)	-1.40	359.51	12,146.0	-4,978.4	-42.4	441,219.00	755,431.20	32° 12' 37.190 N	103° 30' 26.889 W

Plan Annotations

Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
5500	5500	0	0	Start Build 2.00
5603	5603	2	-1	Start 5938.6 hold at 5603.0 MD
11,542	11,538	199	-82	Start DLS 12.00 TFO -158.14
12,296	12,031	-266	-84	Start 4713.6 hold at 12296.0 MD
17,010	12,146	-4978	-42	TD at 17009.6

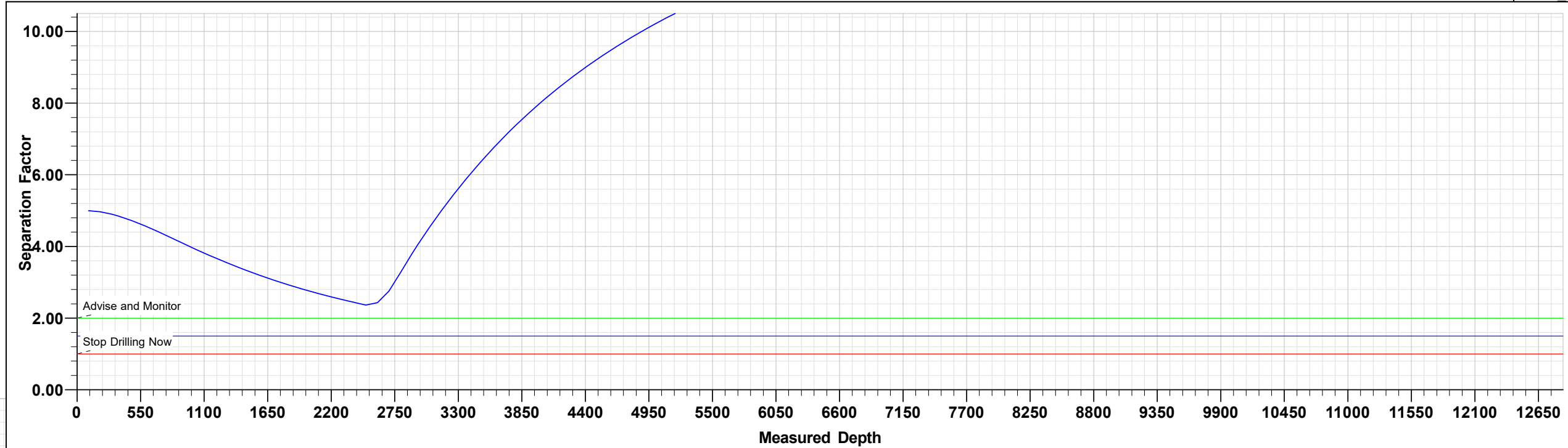
Checked By: _____ Approved By: _____ Date: _____



Project: LEA COUNTY, NM
Site: BULLDOG
Well: SEBASTIAN FEDERAL COM 704H
Wellbore: OWP2
Design: PWP2
GL: 3585.8
KB=31' @ 3616.0usft (P 106)

WELL DETAILS: SEBASTIAN FEDERAL COM 704H						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0.0	0.0	446197.40	755473.60	32° 13' 26.450 N	103° 30' 25.950 W	

DESIGN TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude
FTP (SEBASTIAN FEDERAL COM 704H)	12031.0	149.4	-86.7	446346.80	755386.90	32° 13' 27.935 N
LTP (SEBASTIAN FEDERAL COM 704H)	12146.0	-4928.4	-42.9	441269.00	755430.70	32° 12' 37.685 N
PBHL (SEBASTIAN FEDERAL COM 704H)	12146.0	-4978.4	-42.4	441219.00	755431.20	32° 12' 37.190 N



SEBASTIAN FEDERAL COM 704H										
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Annotation	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00		
5500.0	0.00	0.00	5500.0	0.0	0.0	0.00	0.00	0.0	Start Build 2.00	
5603.0	2.06	337.63	5603.0	1.7	-0.7	2.00	337.63	-1.7	Start 5938.6 hold at 5603.0 MD	
11541.7	2.06	337.63	11537.8	199.2	-82.0	0.00	0.00	-198.5	Start DLS 12.00 TFO -158.14	
12296.0	88.60	179.49	12031.0	-266.4	-84.3	12.00	-158.14	267.1	Start 4713.6 hold at 12296.0 MD	
17009.6	88.60	179.49	12146.0	-4978.4	-42.4	0.00	0.00	4978.6	TD at 17009.6	

