

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.
NMNM124664

6. If Indian, Allottee or Tribe Name

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

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.

GUNNER 8 FEDERAL COM 704H

2. Name of Operator

COG OPERATING LLC

Contact: STAN WAGNER

E-Mail: swagner@concho.com

9. API Well No.

30-025-47172-00-X1

3a. Address

ONE CONCHO CENTER 600 W ILLINOIS AVENUE
MIDLAND, TX 79701-4287

3b. Phone No. (include area code)

Ph: 432.253.9685

10. Field and Pool or Exploratory Area
BLINEBRY-TUBB-DRINKARD

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

Sec 5 T26S R34E NENW 220FNL 1950FWL
32.079128 N Lat, 103.494171 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 requests an amendment to our approved APD for this well to reflect changes in the drill plan and BHL as detailed by attachments to this sundry.

Change BHL TO: 50' FSL & 1000' FWL SWSW 8-26S-34E Lea County NM.

Entered - KMS NMOCD

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

**Electronic Submission #515297 verified by the BLM Well Information System
For COG OPERATING LLC, sent to the Hobbs
Committed to AFMSS for processing by PRISCILLA PEREZ on 05/14/2020 (20PP2567SE)**

Name (Printed/Typed) STAN WAGNER

Title REGULATORY ADVISOR

Signature (Electronic Submission)

Date 05/14/2020

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By DYLAN ROSSMANGO

Title PETROLEUM ENGINEER

Date 08/25/2020

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
1625 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) 476-3460 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 30-025-47172	Pool Code 98094	Pool Name Bobcat Draw; Upper Wolfcamp
Property Code	Property Name GUNNER 8 FEDERAL COM	Well Number 704H
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3339.3'

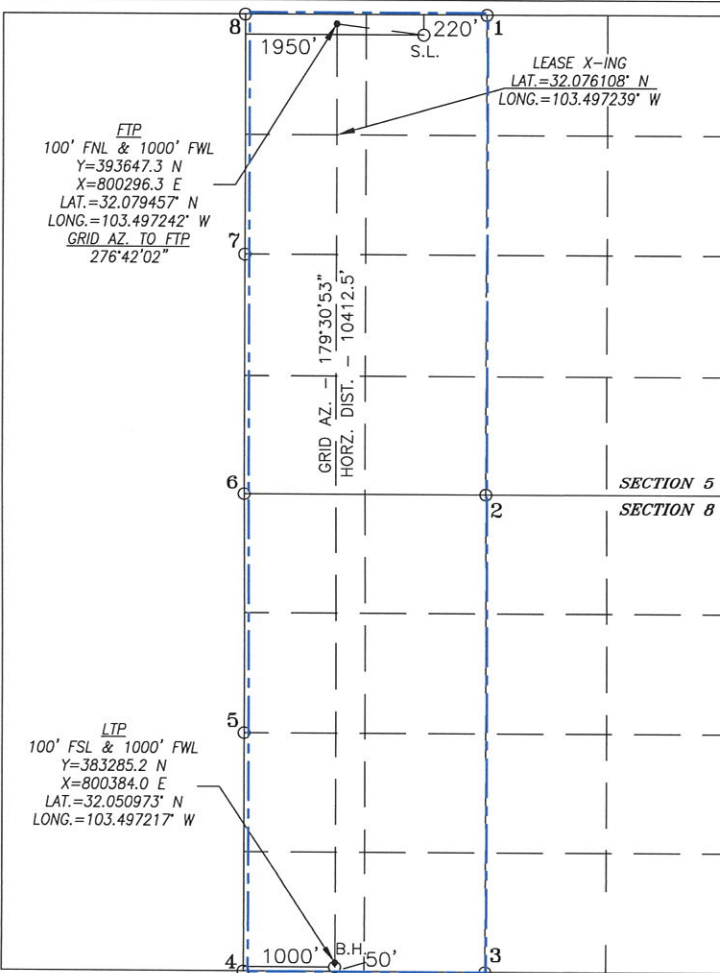
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	5	26-S	34-E		220	NORTH	1950	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
M	8	26-S	34-E		50	SOUTH	1000	WEST	LEA
Dedicated Acres 640	Joint or Infill	Consolidation Code	Order No.						

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

 FTP 100' FNL & 1000' FWL Y=393647.3 N X=800296.3 E LAT.=32.079457° N LONG.=103.497242° W GRID AZ. TO FTP 276°42'02" LEASE X-ING LAT.=32.076108° N LONG.=103.497239° W GRID AZ. - 179°30'53" HORZ. DIST. - 10412.5' SECTION 5 SECTION 8 100' FSL & 1000' FWL Y=383285.2 N X=800384.0 E LAT.=32.050973° N LONG.=103.497217° W 1000' B.H. 50'	NAD 83 NME SURFACE LOCATION Y=393535.6 N X=801247.2 E LAT.=32.079130° N LONG.=103.494174° W <table><tr><th colspan="2">POINT LEGEND</th></tr><tr><td>1</td><td>Y=393761.6 N X=801937.5 E</td></tr><tr><td>2</td><td>Y=388481.8 N X=801990.0 E</td></tr><tr><td>3</td><td>Y=383197.3 N X=802030.8 E</td></tr><tr><td>4</td><td>Y=383177.8 N X=799384.9 E</td></tr><tr><td>5</td><td>Y=385820.8 N X=799363.3 E</td></tr><tr><td>6</td><td>Y=388463.5 N X=799339.8 E</td></tr><tr><td>7</td><td>Y=391104.4 N X=799318.3 E</td></tr><tr><td>8</td><td>Y=393738.6 N X=799295.4 E</td></tr></table> NAD 83 NME PROPOSED BOTTOM HOLE LOCATION Y=383235.2 N X=800384.4 E LAT.=32.050836° N LONG.=103.497217° W	POINT LEGEND		1	Y=393761.6 N X=801937.5 E	2	Y=388481.8 N X=801990.0 E	3	Y=383197.3 N X=802030.8 E	4	Y=383177.8 N X=799384.9 E	5	Y=385820.8 N X=799363.3 E	6	Y=388463.5 N X=799339.8 E	7	Y=391104.4 N X=799318.3 E	8	Y=393738.6 N X=799295.4 E	OPERATOR CERTIFICATION 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. Signature <u>Stan Wagner</u> Date <u>5/13/2020</u> Printed Name _____ E-mail Address _____ SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. NOVEMBER 15, 2019 Date of Survey _____ Signature & Seal of Professional Surveyor  Chad Harcrow 3/30/20 Certificate No. CHAD HARCROW 17777 W.O. # 20-492 DRAWN BY: WN
POINT LEGEND																				
1	Y=393761.6 N X=801937.5 E																			
2	Y=388481.8 N X=801990.0 E																			
3	Y=383197.3 N X=802030.8 E																			
4	Y=383177.8 N X=799384.9 E																			
5	Y=385820.8 N X=799363.3 E																			
6	Y=388463.5 N X=799339.8 E																			
7	Y=391104.4 N X=799318.3 E																			
8	Y=393738.6 N X=799295.4 E																			

Intent ☒ As Drilled ☐

API #

30-025-47172

Operator Name:

COG Operating LLC

Property Name:

Gunner 8 Federal Com

Well Number

704H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
C	5	26S	34E						Lea
Latitude					Longitude				NAD
									83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
D	5	26S	34E		100	North	1000	West	Lea
Latitude					Longitude				NAD
32.079457					-103.497242				NAD 83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
M	8	26S	34E		100	South	1000	West	Lea
Latitude					Longitude				NAD
32.050973					-103.497217				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

Gunner 8 Federal Com 704H drill sundry:

Interval	Hole Size	Casing Interval		Csg. Size	Weight	Grade	Conn.
		From	To		(lbs)		
Surface	14.75"	0	900	10.75"	45.5	J55	BTC
Intermediate	9.875"	0	8000	7.625"	29.7	L80 HC	BTC
	8.75"	8000*	12000	7.625"	29.7	P-110 HC	Tech Lock Flush Joint
Production	6.75"	0	12000	5.5"	23	P110	BTC
	6.75"	12000	23,062	5.5"	23	P110	Tech Lock Wedge

*The Tech Lock Flush Joint by BTC cross over will be 200' above where the bit size changes from 9.875" to 8.75"

Cement

Surface

Lead: 300 sx 13.5#; 1.75 cuft/sx; 9.21 H2O Gal/sx; Class C + 4% Gel

Tail: 300 sx 14.8#; 1.34 cuft/sx; 6.34 H2O Gal/sx; Class C + 2% CaCl₂

Intermediate

Lead: 900 sx 10.3#; 3.6 cuft/sx; 21.87 H2O Gal/sx; NeoCem

Tail: 150 sx 15.6#; 1.2 cuft/sx; 5.41 H2O Gal/sx; Class H

Production

Lead: 650 sx; 12.7#; 1.97 cuft/sx; 10.8 H2O Gal/sx; 35:65:6 H Blend

Tail: 950 sx; 14.5#; 1.22 cuft.sx; 5.56 H2O Gal/sx; 50:50:2 H Blend



TEC-LOCK WEDGE

5.500" 23.00 LB/FT (.415"Wall) with 5.875" Special Clearance OD
BORUSAN P110 CY

Pipe Body Data

Nominal OD:	5.500	in
Nominal Wall:	.415	in
Nominal Weight:	23.00	lb/ft
Plain End Weight:	22.56	lb/ft
Material Grade:	P110 CY	
Mill/Specification:	BORUSAN	
Yield Strength:	110,000	psi
Tensile Strength:	125,000	psi
Nominal ID:	4.670	in
API Drift Diameter:	4.545	in
Special Drift Diameter:	None	in
RBW:	87.5 %	
Body Yield:	729,000	lbf
Burst:	14,540	psi
Collapse:	14,540	psi

Connection Data

Standard OD:	5.875	in
Pin Bored ID:	4.670	in
Critical Section Area:	6.457	in ²
Tensile Efficiency:	97.4 %	
Compressive Efficiency:	100 %	
Longitudinal Yield Strength:	710,000	lbf
Compressive Limit:	729,000	lbf
Internal Pressure Rating:	14,540	psi
External Pressure Rating:	14,540	psi
Maximum Bend:	89.4	°/100ft

Operational Data

Minimum Makeup Torque:	14,900	ft*lbf
Optimum Makeup Torque:	18,600	ft*lbf
Maximum Makeup Torque:	40,800	ft*lbf
Minimum Yield:	45,300	ft*lbf
Makeup Loss:	5.97	in

Notes Operational Torque is equivalent to the Maximum Make-Up Torque



TEC-LOCK FJ

7.625" 29.7 LB/FT (.375" Wall)

P110 HC

Pipe Body Data

Nominal OD:	7.625	in
Nominal Wall:	0.375	in
Nominal Weight:	29.70	lb/ft
Plain End Weight:	29.22	lb/ft
Material Grade:	P110 HC	
Mill/Specification:	BORUSAN MANNESMANN	
Yield Strength:	110,000	psi
Tensile Strength:	125,000	psi
Nominal ID:	6.875	in
API Drift Diameter:	6.750	in
Special Drift Diameter:	NA	in
RBW:	87.5%	
Body Yield:	940,000	lbf
Burst:	9,460	psi
Collapse:	7,050	psi

Connection Data

Standard OD:	7.625	in
Pin Bored ID:	6.875	in
Critical Section Area:	6.299	in ²
Tensile Efficiency:	70.0%	
Compressive Efficiency:	61.9%	
Longitudinal Yield Strength:	658,000	lbf
Compressive Limit:	581,860	lbf
Internal Pressure Rating:	7,570	psi
External Pressure Rating:	7,050	psi
Maximum Bend:	26	°/100ft

Operational Data

Minimum Makeup Torque:	3,600	ft*lbf
Optimum Makeup Torque:	6,500	ft*lbf
Maximum Makeup Torque:	9,400	ft*lbf
Minimum Yield:	14,500	ft*lbf
Makeup Loss:	5.97	in

Notes Preliminary DataSheet

The Connection ratings are structural



NORTHERN DELAWARE BASIN

LEA COUNTY, NM

BULLDOG

GUNNER 8 FEDERAL COM 704H

OWB

PWP3

Anticollision Report

31 March, 2020

Concho Resources LLC

Anticollision Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well GUNNER 8 FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Reference Site:	BULLDOG	MD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	GUNNER 8 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:	PWP3	Offset TVD Reference:	Offset Datum

Reference	PWP3		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum ellipse separation of 1,000.0 usft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	3/31/2020		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	12,246.0	PWP3 (OWB)	Standard Keeper 104	Standard Wireline Keeper ver 1.0.4	
12,246.0	22,917.4	PWP3 (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						
GUNNER 8 FED COM 604H - OWB - PWP3	12,390.9	12,442.4	158.7	130.9	5.703	CC
GUNNER 8 FED COM 604H - OWB - PWP3	12,400.0	12,453.8	158.7	130.6	5.650	ES
GUNNER 8 FED COM 604H - OWB - PWP3	22,917.4	23,062.1	650.0	468.7	3.585	SF
GUNNER 8 FED COM 6H - OWB - ACTUAL WELLPLAN	9,709.3	19,640.0	712.2	536.6	4.054	CC, ES, SF
GUNNER 8 FED COM 705H - OWB - PWP3	14,072.0	14,139.3	669.1	604.8	10.402	CC
GUNNER 8 FED COM 705H - OWB - PWP3	22,917.4	22,984.0	670.1	481.5	3.554	ES, SF
GUNNER 8 FEDERAL COM #9H - OWB - ACTUAL WEL	9,877.2	19,727.0	662.9	491.7	3.872	CC, ES, SF
GUNNER 8 FEDERAL COM 703H - OWB - PWP3	5,416.5	5,416.9	60.0	35.8	2.478	CC
GUNNER 8 FEDERAL COM 703H - OWB - PWP3	5,500.0	5,500.0	60.0	35.4	2.443	ES, SF

Offset Design BULLDOG - GUNNER 8 FED COM 604H - OWB - PWP3												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 12241-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	
6,500.0	6,496.9	6,588.2	6,573.2	8.2	8.0	2.45	41.4	-1,054.4	983.3	970.9	12.44	79.063	
6,600.0	6,596.5	6,686.7	6,671.4	8.3	8.1	2.61	43.4	-1,046.1	966.4	953.8	12.63	76.519	
6,700.0	6,696.2	6,785.2	6,769.5	8.4	8.2	2.79	45.5	-1,037.8	949.5	936.7	12.83	74.036	
6,800.0	6,795.8	6,883.7	6,867.7	8.4	8.3	2.97	47.6	-1,029.4	932.6	919.6	13.02	71.615	
6,900.0	6,895.4	6,982.2	6,965.8	8.5	8.4	3.15	49.7	-1,021.1	915.8	902.5	13.22	69.254	
7,000.0	6,995.0	7,080.8	7,064.0	8.5	8.5	3.35	51.8	-1,012.8	898.9	885.5	13.43	66.952	
7,100.0	7,094.7	7,179.3	7,162.1	8.6	8.6	3.55	53.8	-1,004.5	882.1	868.4	13.63	64.709	
7,200.0	7,194.3	7,277.8	7,260.3	8.7	8.7	3.76	55.9	-996.1	865.2	851.4	13.84	62.523	
7,300.0	7,293.9	7,376.3	7,358.4	8.7	8.9	3.98	58.0	-987.8	848.4	834.3	14.05	60.393	
7,400.0	7,393.6	7,474.9	7,456.6	8.8	9.0	4.20	60.1	-979.5	831.6	817.3	14.26	58.319	
7,500.0	7,493.2	7,573.4	7,554.7	8.9	9.1	4.44	62.1	-971.1	814.8	800.3	14.47	56.298	
7,600.0	7,592.8	7,671.9	7,652.8	8.9	9.2	4.68	64.2	-962.8	798.0	783.3	14.69	54.331	
7,700.0	7,692.4	7,770.4	7,751.0	9.0	9.3	4.94	66.3	-954.5	781.2	766.3	14.90	52.414	
7,800.0	7,792.1	7,868.9	7,849.1	9.1	9.4	5.20	68.4	-946.1	764.5	749.3	15.12	50.548	
7,900.0	7,891.7	7,967.5	7,947.3	9.2	9.6	5.48	70.4	-937.8	747.7	732.4	15.34	48.731	
8,000.0	7,991.3	8,066.0	8,045.4	9.2	9.7	5.78	72.5	-929.5	731.0	715.4	15.57	46.962	
8,100.0	8,091.0	8,164.5	8,143.6	9.3	9.8	6.08	74.6	-921.1	714.3	698.5	15.79	45.239	

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 GUNNER 8 FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Reference Site:	BULLDOG	MD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	GUNNER 8 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:	PWP3	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
BULLDOG - GUNNER 8 FED COM 604H - OWB - PWP3												Offset Well Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 12241-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 Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,200.0	8,190.6	8,263.0	8,241.7	9.4	9.9	6.40	76.7	-912.8	697.6	681.6	16.01	43.562	
8,300.0	8,290.2	8,361.5	8,339.9	9.5	10.0	6.74	78.8	-904.5	680.9	664.7	16.24	41.929	
8,400.0	8,389.8	8,460.1	8,438.0	9.6	10.1	7.09	80.8	-896.1	664.3	647.8	16.47	40.339	
8,500.0	8,489.5	8,558.6	8,536.2	9.6	10.3	7.46	82.9	-887.8	647.7	631.0	16.70	38.791	
8,600.0	8,589.1	8,657.1	8,634.3	9.7	10.4	7.85	85.0	-879.5	631.1	614.2	16.93	37.284	
8,700.0	8,688.7	8,755.6	8,732.5	9.8	10.5	8.26	87.1	-871.1	614.6	597.4	17.16	35.816	
8,800.0	8,788.4	8,854.2	8,830.6	9.9	10.6	8.69	89.1	-862.8	598.0	580.7	17.39	34.387	
8,900.0	8,888.0	8,952.7	8,928.8	10.0	10.7	9.15	91.2	-854.5	581.6	563.9	17.63	32.996	
9,000.0	8,987.6	9,051.2	9,026.9	10.1	10.9	9.63	93.3	-846.1	565.1	547.3	17.86	31.642	
9,100.0	9,087.3	9,149.7	9,125.1	10.2	11.0	10.15	95.4	-837.8	548.7	530.6	18.10	30.323	
9,200.0	9,186.9	9,248.2	9,223.2	10.3	11.1	10.69	97.5	-829.5	532.3	514.0	18.33	29.040	
9,300.0	9,286.5	9,346.8	9,321.3	10.4	11.2	11.27	99.5	-821.2	516.0	497.5	18.57	27.790	
9,400.0	9,386.1	9,445.3	9,419.5	10.5	11.3	11.89	101.6	-812.8	499.8	481.0	18.81	26.574	
9,500.0	9,485.8	9,543.8	9,517.6	10.5	11.5	12.55	103.7	-804.5	483.6	464.5	19.05	25.391	
9,600.0	9,585.4	9,642.3	9,615.8	10.6	11.6	13.25	105.8	-796.2	467.5	448.2	19.28	24.240	
9,700.0	9,685.0	9,740.9	9,713.9	10.7	11.7	14.01	107.8	-787.8	451.4	431.9	19.52	23.121	
9,800.0	9,784.7	9,839.4	9,812.1	10.8	11.8	14.81	109.9	-779.5	435.4	415.7	19.76	22.032	
9,900.0	9,884.3	9,937.9	9,910.2	10.9	11.9	15.68	112.0	-771.2	419.6	399.6	20.00	20.974	
10,000.0	9,983.9	10,036.4	10,008.4	11.0	12.1	16.62	114.1	-762.8	403.8	383.5	20.24	19.946	
10,100.0	10,083.5	10,134.9	10,106.5	11.1	12.2	17.64	116.1	-754.5	388.1	367.6	20.48	18.948	
10,200.0	10,183.2	10,233.5	10,204.7	11.2	12.3	18.73	118.2	-746.2	372.6	351.9	20.72	17.980	
10,300.0	10,282.8	10,332.0	10,302.8	11.3	12.4	19.93	120.3	-737.8	357.2	336.2	20.96	17.042	
10,400.0	10,382.4	10,430.5	10,401.0	11.4	12.6	21.23	122.4	-729.5	342.0	320.8	21.20	16.133	
10,500.0	10,482.1	10,529.0	10,499.1	11.5	12.7	22.64	124.5	-721.2	326.9	305.5	21.43	15.255	
10,600.0	10,581.7	10,627.6	10,597.3	11.7	12.8	24.20	126.5	-712.8	312.1	290.5	21.66	14.407	
10,700.0	10,681.3	10,726.1	10,695.4	11.8	12.9	25.90	128.6	-704.5	297.5	275.7	21.89	13.590	
10,800.0	10,780.9	10,824.6	10,793.6	11.9	13.0	27.78	130.7	-696.2	283.3	261.1	22.12	12.805	
10,900.0	10,880.6	10,923.1	10,891.7	12.0	13.2	29.85	132.8	-687.8	269.3	247.0	22.34	12.053	
11,000.0	10,980.2	11,021.6	10,989.8	12.1	13.3	32.14	134.8	-679.5	255.7	233.2	22.56	11.335	
11,100.0	11,079.8	11,120.2	11,088.0	12.2	13.4	34.68	136.9	-671.2	242.6	219.9	22.77	10.654	
11,200.0	11,179.5	11,218.7	11,186.1	12.3	13.5	37.51	139.0	-662.9	230.0	207.1	22.98	10.010	
11,300.0	11,279.1	11,317.2	11,284.3	12.4	13.7	40.64	141.1	-654.5	218.1	194.9	23.18	9.408	
11,400.0	11,378.7	11,415.7	11,382.4	12.5	13.8	44.12	143.2	-646.2	206.8	183.5	23.37	8.850	
11,500.0	11,478.3	11,514.2	11,480.6	12.6	13.9	47.98	145.2	-637.9	196.5	172.9	23.56	8.340	
11,600.0	11,578.0	11,612.8	11,578.7	12.7	14.0	52.23	147.3	-629.5	187.1	163.3	23.74	7.882	
11,700.0	11,677.6	11,711.3	11,676.9	12.8	14.2	56.90	149.4	-621.2	178.8	154.9	23.91	7.480	
11,800.0	11,777.2	11,809.8	11,775.0	13.0	14.3	61.97	151.5	-612.9	171.9	147.8	24.08	7.139	
11,900.0	11,876.9	11,908.3	11,873.2	13.1	14.4	67.41	153.5	-604.5	166.5	142.2	24.25	6.865	
12,000.0	11,976.5	12,006.9	11,971.3	13.2	14.5	73.15	155.6	-596.2	162.7	138.3	24.42	6.662	
12,100.0	12,076.1	12,105.4	12,069.5	13.3	14.7	79.10	157.7	-587.9	160.6	136.0	24.58	6.534	
12,163.6	12,139.5	12,168.1	12,131.9	13.4	14.8	82.93	159.0	-582.6	160.2	135.6	24.68	6.492	
12,200.0	12,175.7	12,203.9	12,167.6	13.4	14.8	85.12	159.8	-579.5	160.4	135.6	24.74	6.482	
12,245.9	12,221.5	12,252.2	12,215.7	13.5	14.9	88.08	160.7	-575.4	160.8	136.0	24.77	6.491	
12,250.0	12,225.6	12,257.7	12,221.2	13.5	14.9	92.78	160.7	-574.9	160.8	136.0	24.77	6.489	
12,300.0	12,275.2	12,324.8	12,287.7	13.5	14.9	131.02	156.4	-567.8	160.1	134.7	25.34	6.318	
12,350.0	12,324.4	12,390.3	12,351.6	13.5	14.9	149.70	145.0	-559.1	159.1	132.5	26.60	5.980	
12,390.9	12,363.9	12,442.4	12,401.0	13.5	14.9	160.62	130.9	-550.9	158.7	130.9	27.83	5.703 CC	
12,400.0	12,372.6	12,453.8	12,411.7	13.5	14.9	162.83	127.2	-549.0	158.7	130.6	28.10	5.650 ES	
12,450.0	12,419.6	12,515.0	12,467.2	13.5	14.9	174.18	103.9	-537.9	160.0	130.7	29.33	5.455	
12,500.0	12,464.9	12,574.0	12,517.9	13.6	14.9	-175.23	76.2	-526.2	163.8	133.8	29.99	5.462	
12,550.0	12,508.3	12,630.6	12,563.4	13.6	15.0	-165.20	44.9	-513.9	171.0	141.0	29.95	5.708	
12,600.0	12,549.4	12,685.0	12,603.8	13.6	15.0	-155.75	10.8	-501.4	181.8	152.4	29.38	6.188	

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 GUNNER 8 FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Reference Site:	BULLDOG	MD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	GUNNER 8 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:	PWP3	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 12241-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	
12,650.0	12,587.8	12,737.3	12,639.3	13.6	15.0	-146.93	-25.5	-488.7	196.2	167.7	28.54	6.875	
12,700.0	12,623.4	12,787.8	12,670.1	13.7	15.1	-138.75	-63.4	-476.1	214.0	186.3	27.73	7.717	
12,750.0	12,655.8	12,836.7	12,696.6	13.7	15.2	-131.21	-102.6	-463.5	234.6	207.5	27.12	8.653	
12,800.0	12,684.7	12,884.4	12,718.8	13.8	15.2	-124.25	-142.8	-451.0	257.6	230.8	26.75	9.627	
12,850.0	12,710.0	12,930.9	12,737.2	13.9	15.3	-117.83	-183.8	-438.7	282.3	255.6	26.62	10.602	
12,900.0	12,731.5	12,976.6	12,751.8	14.0	15.4	-111.91	-225.3	-426.6	308.3	281.6	26.67	11.558	
12,950.0	12,749.0	13,021.8	12,762.7	14.1	15.5	-106.46	-267.5	-414.6	335.1	308.3	26.84	12.486	
13,000.0	12,762.3	13,066.6	12,770.2	14.2	15.6	-101.45	-310.1	-402.9	362.5	335.4	27.08	13.385	
13,050.0	12,771.4	13,111.3	12,774.2	14.3	15.7	-96.86	-353.1	-391.3	390.0	362.6	27.36	14.251	
13,100.0	12,776.2	13,157.8	12,775.1	14.4	15.9	-92.72	-398.0	-379.7	417.3	389.6	27.68	15.075	
13,127.7	12,777.0	13,185.2	12,775.2	14.5	15.9	-90.80	-424.6	-373.1	432.1	404.2	27.87	15.506	
13,200.0	12,777.4	13,259.0	12,775.6	14.7	16.2	-90.72	-496.6	-356.6	468.9	440.5	28.39	16.518	
13,300.0	12,777.9	13,366.6	12,776.1	15.0	16.5	-90.64	-602.1	-335.9	514.4	485.2	29.21	17.609	
13,400.0	12,778.3	13,479.8	12,776.7	15.4	17.0	-90.57	-714.0	-318.4	553.2	523.1	30.15	18.348	
13,500.0	12,778.8	13,598.1	12,777.2	15.8	17.5	-90.52	-831.5	-304.8	585.0	553.8	31.20	18.752	
13,600.0	12,779.3	13,720.7	12,777.8	16.2	18.0	-90.49	-953.7	-295.9	609.4	577.1	32.34	18.845	
13,700.0	12,779.8	13,846.4	12,778.5	16.6	18.6	-90.46	-1,079.3	-292.2	626.2	592.6	33.55	18.666	
13,800.0	12,780.3	13,945.1	12,779.0	17.1	19.1	-90.44	-1,178.0	-291.4	637.4	602.8	34.62	18.410	
13,900.0	12,780.7	14,044.7	12,779.5	17.6	19.6	-90.43	-1,277.7	-290.5	645.1	609.4	35.75	18.046	
14,000.0	12,781.2	14,144.7	12,779.9	18.1	20.2	-90.41	-1,377.6	-289.6	649.4	612.5	36.92	17.589	
14,072.3	12,781.6	14,216.9	12,780.3	18.5	20.6	-90.41	-1,449.9	-289.0	650.3	612.5	37.79	17.209	
14,100.0	12,781.7	14,244.6	12,780.4	18.7	20.7	-90.41	-1,477.6	-288.8	650.3	612.2	38.13	17.056	
14,200.0	12,782.2	14,344.6	12,780.9	19.2	21.3	-90.41	-1,577.6	-287.9	650.3	610.9	39.38	16.515	
14,300.0	12,782.7	14,444.6	12,781.4	19.8	21.9	-90.41	-1,677.6	-287.1	650.3	609.6	40.66	15.994	
14,400.0	12,783.1	14,544.6	12,781.9	20.4	22.6	-90.41	-1,777.6	-286.2	650.3	608.3	41.97	15.493	
14,500.0	12,783.6	14,644.6	12,782.4	21.0	23.2	-90.41	-1,877.6	-285.4	650.3	607.0	43.32	15.012	
14,600.0	12,784.1	14,744.6	12,782.9	21.7	23.9	-90.41	-1,977.6	-284.5	650.3	605.6	44.69	14.552	
14,700.0	12,784.6	14,844.6	12,783.4	22.3	24.6	-90.42	-2,077.6	-283.7	650.3	604.2	46.08	14.111	
14,800.0	12,785.1	14,944.6	12,783.9	23.0	25.2	-90.42	-2,177.6	-282.8	650.3	602.8	47.50	13.691	
14,900.0	12,785.5	15,044.6	12,784.4	23.7	25.9	-90.42	-2,277.6	-281.9	650.3	601.4	48.93	13.289	
15,000.0	12,786.0	15,144.6	12,784.9	24.4	26.6	-90.42	-2,377.6	-281.1	650.3	599.9	50.39	12.905	
15,100.0	12,786.5	15,244.6	12,785.4	25.1	27.4	-90.42	-2,477.6	-280.2	650.3	598.4	51.86	12.539	
15,200.0	12,787.0	15,344.6	12,785.9	25.8	28.1	-90.42	-2,577.6	-279.4	650.3	596.9	53.35	12.190	
15,300.0	12,787.5	15,444.6	12,786.4	26.5	28.8	-90.42	-2,677.5	-278.5	650.3	595.4	54.85	11.856	
15,400.0	12,787.9	15,544.6	12,786.9	27.3	29.6	-90.42	-2,777.5	-277.7	650.3	593.9	56.36	11.538	
15,500.0	12,788.4	15,644.6	12,787.4	28.0	30.3	-90.43	-2,877.5	-276.8	650.3	592.4	57.88	11.234	
15,600.0	12,788.9	15,744.6	12,787.8	28.8	31.1	-90.43	-2,977.5	-275.9	650.3	590.8	59.42	10.943	
15,700.0	12,789.4	15,844.6	12,788.3	29.6	31.8	-90.43	-3,077.5	-275.1	650.3	589.3	60.97	10.666	
15,800.0	12,789.9	15,944.6	12,788.8	30.3	32.6	-90.43	-3,177.5	-274.2	650.3	587.7	62.52	10.400	
15,900.0	12,790.3	16,044.6	12,789.3	31.1	33.4	-90.43	-3,277.5	-273.4	650.3	586.2	64.09	10.146	
16,000.0	12,790.8	16,144.6	12,789.8	31.9	34.2	-90.43	-3,377.5	-272.5	650.3	584.6	65.66	9.903	
16,100.0	12,791.3	16,244.6	12,790.3	32.7	34.9	-90.43	-3,477.5	-271.7	650.2	583.0	67.24	9.671	
16,200.0	12,791.8	16,344.6	12,790.8	33.4	35.7	-90.43	-3,577.5	-270.8	650.2	581.4	68.83	9.448	
16,300.0	12,792.3	16,444.6	12,791.3	34.2	36.5	-90.44	-3,677.5	-270.0	650.2	579.8	70.42	9.234	
16,400.0	12,792.7	16,544.6	12,791.8	35.0	37.3	-90.44	-3,777.5	-269.1	650.2	578.2	72.02	9.029	
16,500.0	12,793.2	16,644.6	12,792.3	35.8	38.1	-90.44	-3,877.5	-268.2	650.2	576.6	73.63	8.832	
16,600.0	12,793.7	16,744.6	12,792.8	36.6	38.9	-90.44	-3,977.5	-267.4	650.2	575.0	75.24	8.643	
16,700.0	12,794.2	16,844.6	12,793.3	37.4	39.7	-90.44	-4,077.5	-266.5	650.2	573.4	76.85	8.461	
16,800.0	12,794.7	16,944.6	12,793.8	38.2	40.5	-90.44	-4,177.5	-265.7	650.2	571.8	78.47	8.286	
16,900.0	12,795.1	17,044.6	12,794.3	39.1	41.3	-90.44	-4,277.5	-264.8	650.2	570.1	80.10	8.118	
17,000.0	12,795.6	17,144.6	12,794.8	39.9	42.1	-90.44	-4,377.5	-264.0	650.2	568.5	81.73	7.956	
17,100.0	12,796.1	17,244.6	12,795.3	40.7	42.9	-90.45	-4,477.5	-263.1	650.2	566.9	83.36	7.800	

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 GUNNER 8 FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Reference Site:	BULLDOG	MD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	GUNNER 8 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:	PWP3	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 12241-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	
17,200.0	12,796.6	17,344.6	12,795.8	41.5	43.7	-90.45	-4,577.5	-262.3	650.2	565.2	85.00	7.650	
17,300.0	12,797.1	17,444.6	12,796.2	42.3	44.5	-90.45	-4,677.5	-261.4	650.2	563.6	86.64	7.505	
17,400.0	12,797.5	17,544.6	12,796.7	43.1	45.4	-90.45	-4,777.4	-260.5	650.2	561.9	88.28	7.365	
17,500.0	12,798.0	17,644.6	12,797.2	44.0	46.2	-90.45	-4,877.4	-259.7	650.2	560.3	89.92	7.231	
17,600.0	12,798.5	17,744.6	12,797.7	44.8	47.0	-90.45	-4,977.4	-258.8	650.2	558.6	91.57	7.100	
17,700.0	12,799.0	17,844.6	12,798.2	45.6	47.8	-90.45	-5,077.4	-258.0	650.2	557.0	93.23	6.974	
17,800.0	12,799.5	17,944.6	12,798.7	46.4	48.6	-90.45	-5,177.4	-257.1	650.2	555.3	94.88	6.853	
17,900.0	12,799.9	18,044.6	12,799.2	47.3	49.5	-90.46	-5,277.4	-256.3	650.2	553.7	96.54	6.735	
18,000.0	12,800.4	18,144.6	12,799.7	48.1	50.3	-90.46	-5,377.4	-255.4	650.2	552.0	98.20	6.621	
18,100.0	12,800.9	18,244.6	12,800.2	48.9	51.1	-90.46	-5,477.4	-254.5	650.2	550.3	99.86	6.511	
18,200.0	12,801.4	18,344.6	12,800.7	49.8	51.9	-90.46	-5,577.4	-253.7	650.2	548.7	101.52	6.404	
18,300.0	12,801.9	18,444.6	12,801.2	50.6	52.8	-90.46	-5,677.4	-252.8	650.2	547.0	103.19	6.301	
18,400.0	12,802.3	18,544.6	12,801.7	51.4	53.6	-90.46	-5,777.4	-252.0	650.2	545.3	104.86	6.201	
18,500.0	12,802.8	18,644.6	12,802.2	52.3	54.4	-90.46	-5,877.4	-251.1	650.2	543.7	106.53	6.103	
18,600.0	12,803.3	18,744.6	12,802.7	53.1	55.3	-90.47	-5,977.4	-250.3	650.2	542.0	108.20	6.009	
18,700.0	12,803.8	18,844.6	12,803.2	53.9	56.1	-90.47	-6,077.4	-249.4	650.2	540.3	109.87	5.918	
18,800.0	12,804.2	18,944.6	12,803.7	54.8	56.9	-90.47	-6,177.4	-248.6	650.2	538.6	111.55	5.829	
18,900.0	12,804.7	19,044.6	12,804.1	55.6	57.8	-90.47	-6,277.4	-247.7	650.2	536.9	113.22	5.742	
19,000.0	12,805.2	19,144.6	12,804.6	56.4	58.6	-90.47	-6,377.4	-246.8	650.2	535.3	114.90	5.658	
19,100.0	12,805.7	19,244.6	12,805.1	57.3	59.4	-90.47	-6,477.4	-246.0	650.2	533.6	116.58	5.577	
19,200.0	12,806.2	19,344.6	12,805.6	58.1	60.3	-90.47	-6,577.4	-245.1	650.2	531.9	118.26	5.498	
19,300.0	12,806.6	19,444.6	12,806.1	59.0	61.1	-90.47	-6,677.4	-244.3	650.2	530.2	119.94	5.421	
19,400.0	12,807.1	19,544.6	12,806.6	59.8	62.0	-90.48	-6,777.3	-243.4	650.2	528.5	121.63	5.345	
19,500.0	12,807.6	19,644.6	12,807.1	60.6	62.8	-90.48	-6,877.3	-242.6	650.1	526.8	123.31	5.272	
19,600.0	12,808.1	19,744.6	12,807.6	61.5	63.6	-90.48	-6,977.3	-241.7	650.1	525.1	125.00	5.201	
19,700.0	12,808.6	19,844.6	12,808.1	62.3	64.5	-90.48	-7,077.3	-240.8	650.1	523.5	126.68	5.132	
19,800.0	12,809.0	19,944.6	12,808.6	63.2	65.3	-90.48	-7,177.3	-240.0	650.1	521.8	128.37	5.065	
19,900.0	12,809.5	20,044.6	12,809.1	64.0	66.2	-90.48	-7,277.3	-239.1	650.1	520.1	130.06	4.999	
20,000.0	12,810.0	20,144.6	12,809.6	64.9	67.0	-90.48	-7,377.3	-238.3	650.1	518.4	131.75	4.935	
20,100.0	12,810.5	20,244.6	12,810.1	65.7	67.8	-90.48	-7,477.3	-237.4	650.1	516.7	133.44	4.872	
20,200.0	12,811.0	20,344.6	12,810.6	66.6	68.7	-90.49	-7,577.3	-236.6	650.1	515.0	135.13	4.811	
20,300.0	12,811.4	20,444.6	12,811.1	67.4	69.5	-90.49	-7,677.3	-235.7	650.1	513.3	136.82	4.752	
20,400.0	12,811.9	20,544.6	12,811.6	68.3	70.4	-90.49	-7,777.3	-234.9	650.1	511.6	138.51	4.694	
20,500.0	12,812.4	20,644.6	12,812.1	69.1	71.2	-90.49	-7,877.3	-234.0	650.1	509.9	140.21	4.637	
20,600.0	12,812.9	20,744.6	12,812.5	69.9	72.1	-90.49	-7,977.3	-233.1	650.1	508.2	141.90	4.581	
20,700.0	12,813.4	20,844.6	12,813.0	70.8	72.9	-90.49	-8,077.3	-232.3	650.1	506.5	143.60	4.527	
20,800.0	12,813.8	20,944.6	12,813.5	71.6	73.8	-90.49	-8,177.3	-231.4	650.1	504.8	145.29	4.474	
20,900.0	12,814.3	21,044.6	12,814.0	72.5	74.6	-90.49	-8,277.3	-230.6	650.1	503.1	146.99	4.423	
21,000.0	12,814.8	21,144.6	12,814.5	73.3	75.4	-90.50	-8,377.3	-229.7	650.1	501.4	148.69	4.372	
21,100.0	12,815.3	21,244.6	12,815.0	74.2	76.3	-90.50	-8,477.3	-228.9	650.1	499.7	150.39	4.323	
21,200.0	12,815.8	21,344.6	12,815.5	75.0	77.1	-90.50	-8,577.3	-228.0	650.1	498.0	152.09	4.275	
21,300.0	12,816.2	21,444.6	12,816.0	75.9	78.0	-90.50	-8,677.3	-227.2	650.1	496.3	153.79	4.227	
21,400.0	12,816.7	21,544.6	12,816.5	76.7	78.8	-90.50	-8,777.3	-226.3	650.1	494.6	155.49	4.181	
21,500.0	12,817.2	21,644.6	12,817.0	77.6	79.7	-90.50	-8,877.2	-225.4	650.1	492.9	157.19	4.136	
21,600.0	12,817.7	21,744.6	12,817.5	78.4	80.5	-90.50	-8,977.2	-224.6	650.1	491.2	158.89	4.091	
21,700.0	12,818.2	21,844.6	12,818.0	79.3	81.4	-90.50	-9,077.2	-223.7	650.1	489.5	160.59	4.048	
21,800.0	12,818.6	21,944.6	12,818.5	80.1	82.2	-90.51	-9,177.2	-222.9	650.1	487.8	162.29	4.006	
21,900.0	12,819.1	22,044.6	12,819.0	81.0	83.1	-90.51	-9,277.2	-222.0	650.1	486.1	163.99	3.964	
22,000.0	12,819.6	22,144.6	12,819.5	81.8	83.9	-90.51	-9,377.2	-221.2	650.1	484.4	165.70	3.923	
22,100.0	12,820.1	22,244.6	12,820.0	82.7	84.8	-90.51	-9,477.2	-220.3	650.1	482.7	167.40	3.883	
22,200.0	12,820.6	22,344.6	12,820.5	83.6	85.6	-90.51	-9,577.2	-219.4	650.1	481.0	169.10	3.844	
22,300.0	12,821.0	22,444.6	12,820.9	84.4	86.5	-90.51	-9,677.2	-218.6	650.1	479.3	170.81	3.806	

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 GUNNER 8 FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Reference Site:	BULLDOG	MD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	GUNNER 8 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:	PWP3	Offset TVD Reference:	Offset Datum

Offset Design BULLDOG - GUNNER 8 FED COM 604H - OWB - PWP3												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 12241-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	
22,400.0	12,821.5	22,544.6	12,821.4	85.3	87.3	-90.51	-9,777.2	-217.7	650.1	477.5	172.51	3.768	
22,500.0	12,822.0	22,644.6	12,821.9	86.1	88.2	-90.51	-9,877.2	-216.9	650.1	475.8	174.22	3.731	
22,600.0	12,822.5	22,744.6	12,822.4	87.0	89.0	-90.52	-9,977.2	-216.0	650.1	474.1	175.92	3.695	
22,700.0	12,823.0	22,844.6	12,822.9	87.8	89.9	-90.52	-10,077.2	-215.2	650.1	472.4	177.63	3.660	
22,800.0	12,823.4	22,944.6	12,823.4	88.7	90.7	-90.52	-10,177.2	-214.3	650.0	470.7	179.34	3.625	
22,900.0	12,823.9	23,044.6	12,823.9	89.5	91.6	-90.52	-10,277.2	-213.5	650.0	469.0	181.04	3.591	
22,917.4	12,824.0	23,062.1	12,824.0	89.7	91.7	-90.52	-10,294.6	-213.3	650.0	468.7	181.34	3.585 SF	

Concho Resources LLC

Anticollision Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well GUNNER 8 FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Reference Site:	BULLDOG	MD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	GUNNER 8 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:	PWP3	Offset TVD Reference:	Offset Datum

Offset Design BULLDOG - GUNNER 8 FED COM 6H - OWB - ACTUAL WELLPLAN												Offset Site Error:	0.0 usft
Survey Program: 398-MWD												Offset Well Error:	3.0 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
9,100.0	9,087.3	19,640.0	9,768.7	10.2	170.3	-169.68	-127.6	346.4	937.3	794.0	143.32	6.540	
9,200.0	9,186.9	19,640.0	9,768.7	10.3	170.3	-169.68	-127.6	346.4	875.6	725.9	149.72	5.848	
9,300.0	9,286.5	19,640.0	9,768.7	10.4	170.3	-169.68	-127.6	346.4	821.5	665.1	156.34	5.254	
9,400.0	9,386.1	19,640.0	9,768.7	10.5	170.3	-169.68	-127.6	346.4	776.5	613.7	162.78	4.770	
9,500.0	9,485.8	19,640.0	9,768.7	10.5	170.3	-169.68	-127.6	346.4	742.4	573.9	168.48	4.406	
9,600.0	9,585.4	19,640.0	9,768.7	10.6	170.3	-169.68	-127.6	346.4	720.6	547.7	172.89	4.168	
9,700.0	9,685.0	19,640.0	9,768.7	10.7	170.3	-169.68	-127.6	346.4	712.3	536.8	175.53	4.058	
9,709.3	9,694.3	19,640.0	9,768.7	10.7	170.3	-169.68	-127.6	346.4	712.2	536.6	175.68	4.054	CC, ES, SF
9,800.0	9,784.7	19,640.0	9,768.7	10.8	170.3	-169.68	-127.6	346.4	718.0	541.8	176.21	4.075	
9,900.0	9,884.3	19,640.0	9,768.7	10.9	170.3	-169.68	-127.6	346.4	737.3	562.3	174.99	4.214	
10,000.0	9,983.9	19,640.0	9,768.7	11.0	170.3	-169.68	-127.6	346.4	769.3	597.1	172.18	4.468	
10,100.0	10,083.5	19,640.0	9,768.7	11.1	170.3	-169.68	-127.6	346.4	812.4	644.1	168.26	4.828	
10,200.0	10,183.2	19,640.0	9,768.7	11.2	170.3	-169.68	-127.6	346.4	864.9	701.2	163.72	5.283	
10,300.0	10,282.8	19,640.0	9,768.7	11.3	170.3	-169.68	-127.6	346.4	925.3	766.3	159.00	5.820	
10,400.0	10,382.4	19,640.0	9,768.7	11.4	170.3	-169.68	-127.6	346.4	992.1	837.8	154.38	6.427	

Concho Resources LLC

Anticollision Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well GUNNER 8 FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Reference Site:	BULLDOG	MD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	GUNNER 8 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:	PWP3	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-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 Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,600.0	12,549.4	12,666.7	12,621.2	13.6	44.8	76.23	-28.1	-1,620.6	994.5	937.1	57.40	17.326	
12,650.0	12,587.8	12,727.9	12,662.4	13.6	44.9	77.90	-73.4	-1,620.2	980.4	922.8	57.56	17.032	
12,700.0	12,623.4	12,786.9	12,696.3	13.7	45.0	79.37	-121.5	-1,619.8	965.3	907.6	57.69	16.734	
12,750.0	12,655.8	12,843.4	12,723.0	13.7	45.1	80.70	-171.4	-1,619.3	949.5	891.7	57.78	16.434	
12,800.0	12,684.7	12,897.6	12,742.9	13.8	45.2	81.91	-221.7	-1,618.9	933.1	875.3	57.84	16.132	
12,850.0	12,710.0	12,949.5	12,756.4	13.9	45.2	83.03	-271.8	-1,618.5	916.3	858.5	57.89	15.829	
12,900.0	12,731.5	12,999.4	12,764.3	14.0	45.3	84.08	-321.0	-1,618.1	899.4	841.4	57.93	15.526	
12,950.0	12,749.0	13,047.3	12,767.0	14.1	45.3	85.04	-368.9	-1,617.7	882.4	824.4	57.96	15.222	
13,000.0	12,762.3	13,092.6	12,767.1	14.2	45.3	86.09	-414.2	-1,617.3	865.5	807.4	58.03	14.913	
13,050.0	12,771.4	13,138.9	12,767.3	14.3	45.3	87.33	-460.5	-1,616.9	848.8	790.7	58.15	14.597	
13,100.0	12,776.2	13,185.9	12,767.5	14.4	45.4	88.78	-507.5	-1,616.5	832.4	774.1	58.30	14.277	
13,127.7	12,777.0	13,212.1	12,767.7	14.5	45.4	89.68	-533.6	-1,616.3	823.4	765.0	58.40	14.099	
13,200.0	12,777.4	13,280.8	12,767.9	14.7	45.4	89.68	-602.3	-1,615.7	800.8	742.1	58.69	13.644	
13,300.0	12,777.9	13,376.7	12,768.4	15.0	45.5	89.68	-698.2	-1,614.9	772.5	713.4	59.15	13.060	
13,400.0	12,778.3	13,473.5	12,768.8	15.4	45.6	89.68	-795.1	-1,614.0	747.6	687.9	59.66	12.530	
13,500.0	12,778.8	13,571.2	12,769.2	15.8	45.7	89.68	-892.7	-1,613.2	726.0	665.8	60.23	12.054	
13,600.0	12,779.3	13,669.5	12,769.6	16.2	45.9	89.67	-991.0	-1,612.4	707.9	647.1	60.85	11.634	
13,700.0	12,779.8	13,768.4	12,770.0	16.6	46.0	89.67	-1,090.0	-1,611.5	693.2	631.7	61.51	11.270	
13,800.0	12,780.3	13,867.8	12,770.4	17.1	46.2	89.68	-1,189.3	-1,610.7	682.0	619.8	62.22	10.962	
13,900.0	12,780.7	13,967.5	12,770.9	17.6	46.4	89.68	-1,289.0	-1,609.9	674.3	611.3	62.96	10.710	
14,000.0	12,781.2	14,067.4	12,771.3	18.1	46.6	89.68	-1,388.9	-1,609.0	670.0	606.3	63.74	10.512	
14,072.0	12,781.6	14,139.3	12,771.6	18.5	46.7	89.68	-1,460.9	-1,608.4	669.1	604.8	64.32	10.402 CC	
14,072.3	12,781.6	14,139.6	12,771.6	18.5	46.7	89.68	-1,461.2	-1,608.4	669.1	604.8	64.33	10.402	
14,100.0	12,781.7	14,167.4	12,771.7	18.7	46.8	89.68	-1,488.9	-1,608.2	669.1	604.6	64.56	10.365	
14,200.0	12,782.2	14,267.4	12,772.1	19.2	47.0	89.68	-1,588.9	-1,607.3	669.1	603.7	65.41	10.231	
14,300.0	12,782.7	14,367.4	12,772.5	19.8	47.3	89.67	-1,688.9	-1,606.5	669.2	602.9	66.29	10.094	
14,400.0	12,783.1	14,467.4	12,773.0	20.4	47.5	89.67	-1,788.9	-1,605.6	669.2	602.0	67.20	9.957	
14,500.0	12,783.6	14,567.4	12,773.4	21.0	47.8	89.66	-1,888.9	-1,604.8	669.2	601.0	68.15	9.819	
14,600.0	12,784.1	14,667.4	12,773.8	21.7	48.1	89.66	-1,988.9	-1,603.9	669.2	600.1	69.12	9.681	
14,700.0	12,784.6	14,767.4	12,774.2	22.3	48.4	89.65	-2,088.9	-1,603.1	669.2	599.1	70.12	9.544	
14,800.0	12,785.1	14,867.4	12,774.7	23.0	48.7	89.65	-2,188.9	-1,602.2	669.2	598.1	71.14	9.407	
14,900.0	12,785.5	14,967.4	12,775.1	23.7	49.0	89.64	-2,288.9	-1,601.4	669.2	597.0	72.19	9.270	
15,000.0	12,786.0	15,067.4	12,775.5	24.4	49.3	89.64	-2,388.9	-1,600.5	669.2	596.0	73.26	9.135	
15,100.0	12,786.5	15,167.4	12,775.9	25.1	49.7	89.63	-2,488.8	-1,599.7	669.2	594.9	74.35	9.001	
15,200.0	12,787.0	15,267.4	12,776.4	25.8	50.0	89.63	-2,588.8	-1,598.8	669.3	593.8	75.46	8.869	
15,300.0	12,787.5	15,367.4	12,776.8	26.5	50.4	89.62	-2,688.8	-1,598.0	669.3	592.7	76.59	8.738	
15,400.0	12,787.9	15,467.4	12,777.2	27.3	50.8	89.62	-2,788.8	-1,597.1	669.3	591.5	77.74	8.609	
15,500.0	12,788.4	15,567.4	12,777.6	28.0	51.2	89.61	-2,888.8	-1,596.3	669.3	590.4	78.90	8.482	
15,600.0	12,788.9	15,667.4	12,778.0	28.8	51.6	89.61	-2,988.8	-1,595.4	669.3	589.2	80.08	8.357	
15,700.0	12,789.4	15,767.4	12,778.5	29.6	52.0	89.61	-3,088.8	-1,594.6	669.3	588.0	81.28	8.234	
15,800.0	12,789.9	15,867.4	12,778.9	30.3	52.5	89.60	-3,188.8	-1,593.7	669.3	586.8	82.50	8.113	
15,900.0	12,790.3	15,967.4	12,779.3	31.1	52.9	89.60	-3,288.8	-1,592.9	669.3	585.6	83.73	7.994	
16,000.0	12,790.8	16,067.4	12,779.7	31.9	53.4	89.59	-3,388.8	-1,592.0	669.3	584.4	84.97	7.877	
16,100.0	12,791.3	16,167.4	12,780.2	32.7	53.8	89.59	-3,488.8	-1,591.2	669.3	583.1	86.23	7.763	
16,200.0	12,791.8	16,267.4	12,780.6	33.4	54.3	89.58	-3,588.8	-1,590.3	669.4	581.9	87.50	7.650	
16,300.0	12,792.3	16,367.4	12,781.0	34.2	54.8	89.58	-3,688.8	-1,589.5	669.4	580.6	88.78	7.540	
16,400.0	12,792.7	16,467.4	12,781.4	35.0	55.3	89.57	-3,788.8	-1,588.6	669.4	579.3	90.07	7.431	
16,500.0	12,793.2	16,567.4	12,781.9	35.8	55.8	89.57	-3,888.8	-1,587.8	669.4	578.0	91.38	7.325	
16,600.0	12,793.7	16,667.4	12,782.3	36.6	56.3	89.56	-3,988.8	-1,586.9	669.4	576.7	92.70	7.221	
16,700.0	12,794.2	16,767.4	12,782.7	37.4	56.8	89.56	-4,088.8	-1,586.1	669.4	575.4	94.03	7.119	
16,800.0	12,794.7	16,867.4	12,783.1	38.2	57.3	89.55	-4,188.8	-1,585.2	669.4	574.1	95.37	7.019	
16,900.0	12,795.1	16,967.4	12,783.5	39.1	57.8	89.55	-4,288.8	-1,584.4	669.4	572.7	96.72	6.921	

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 GUNNER 8 FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Reference Site:	BULLDOG	MD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	GUNNER 8 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:	PWP3	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-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 Toelface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
17,000.0	12,795.6	17,067.4	12,784.0	39.9	58.4	89.54	-4,388.8	-1,583.5	669.4	571.4	98.08	6.826	
17,100.0	12,796.1	17,167.4	12,784.4	40.7	58.9	89.54	-4,488.8	-1,582.7	669.5	570.0	99.45	6.732	
17,200.0	12,796.6	17,267.4	12,784.8	41.5	59.5	89.53	-4,588.8	-1,581.8	669.5	568.6	100.83	6.640	
17,300.0	12,797.1	17,367.4	12,785.2	42.3	60.1	89.53	-4,688.7	-1,581.0	669.5	567.3	102.21	6.550	
17,400.0	12,797.5	17,467.4	12,785.7	43.1	60.6	89.52	-4,788.7	-1,580.1	669.5	565.9	103.61	6.462	
17,500.0	12,798.0	17,567.4	12,786.1	44.0	61.2	89.52	-4,888.7	-1,579.3	669.5	564.5	105.01	6.375	
17,600.0	12,798.5	17,667.4	12,786.5	44.8	61.8	89.51	-4,988.7	-1,578.4	669.5	563.1	106.43	6.291	
17,700.0	12,799.0	17,767.4	12,786.9	45.6	62.4	89.51	-5,088.7	-1,577.6	669.5	561.7	107.85	6.208	
17,800.0	12,799.5	17,867.4	12,787.4	46.4	63.0	89.50	-5,188.7	-1,576.7	669.5	560.3	109.27	6.127	
17,900.0	12,799.9	17,967.4	12,787.8	47.3	63.6	89.50	-5,288.7	-1,575.9	669.5	558.8	110.71	6.048	
18,000.0	12,800.4	18,067.4	12,788.2	48.1	64.2	89.49	-5,388.7	-1,575.0	669.5	557.4	112.15	5.970	
18,100.0	12,800.9	18,167.4	12,788.6	48.9	64.8	89.49	-5,488.7	-1,574.2	669.6	556.0	113.60	5.894	
18,200.0	12,801.4	18,267.4	12,789.0	49.8	65.4	89.48	-5,588.7	-1,573.3	669.6	554.5	115.06	5.820	
18,300.0	12,801.9	18,367.4	12,789.5	50.6	66.0	89.48	-5,688.7	-1,572.5	669.6	553.1	116.52	5.747	
18,400.0	12,802.3	18,467.4	12,789.9	51.4	66.7	89.47	-5,788.7	-1,571.6	669.6	551.6	117.98	5.675	
18,500.0	12,802.8	18,567.4	12,790.3	52.3	67.3	89.47	-5,888.7	-1,570.8	669.6	550.1	119.46	5.605	
18,600.0	12,803.3	18,667.4	12,790.7	53.1	68.0	89.46	-5,988.7	-1,570.0	669.6	548.7	120.94	5.537	
18,700.0	12,803.8	18,767.4	12,791.2	53.9	68.6	89.46	-6,088.7	-1,569.1	669.6	547.2	122.42	5.470	
18,800.0	12,804.2	18,867.4	12,791.6	54.8	69.3	89.46	-6,188.7	-1,568.3	669.6	545.7	123.92	5.404	
18,900.0	12,804.7	18,967.4	12,792.0	55.6	69.9	89.45	-6,288.7	-1,567.4	669.6	544.2	125.41	5.340	
19,000.0	12,805.2	19,067.4	12,792.4	56.4	70.6	89.45	-6,388.7	-1,566.6	669.7	542.7	126.91	5.276	
19,100.0	12,805.7	19,167.4	12,792.9	57.3	71.2	89.44	-6,488.7	-1,565.7	669.7	541.2	128.42	5.215	
19,200.0	12,806.2	19,267.4	12,793.3	58.1	71.9	89.44	-6,588.7	-1,564.9	669.7	539.7	129.93	5.154	
19,300.0	12,806.6	19,367.4	12,793.7	59.0	72.6	89.43	-6,688.7	-1,564.0	669.7	538.2	131.45	5.095	
19,400.0	12,807.1	19,467.4	12,794.1	59.8	73.3	89.43	-6,788.7	-1,563.2	669.7	536.7	132.97	5.037	
19,500.0	12,807.6	19,567.4	12,794.5	60.6	73.9	89.42	-6,888.7	-1,562.3	669.7	535.2	134.49	4.980	
19,600.0	12,808.1	19,667.4	12,795.0	61.5	74.6	89.42	-6,988.6	-1,561.5	669.7	533.7	136.02	4.924	
19,700.0	12,808.6	19,767.4	12,795.4	62.3	75.3	89.41	-7,088.6	-1,560.6	669.7	532.2	137.55	4.869	
19,800.0	12,809.0	19,867.4	12,795.8	63.2	76.0	89.41	-7,188.6	-1,559.8	669.7	530.6	139.09	4.815	
19,900.0	12,809.5	19,967.4	12,796.2	64.0	76.7	89.40	-7,288.6	-1,558.9	669.7	529.1	140.63	4.762	
20,000.0	12,810.0	20,067.4	12,796.7	64.9	77.4	89.40	-7,388.6	-1,558.1	669.8	527.6	142.18	4.711	
20,100.0	12,810.5	20,167.4	12,797.1	65.7	78.1	89.39	-7,488.6	-1,557.2	669.8	526.0	143.73	4.660	
20,200.0	12,811.0	20,267.4	12,797.5	66.6	78.8	89.39	-7,588.6	-1,556.4	669.8	524.5	145.28	4.610	
20,300.0	12,811.4	20,367.4	12,797.9	67.4	79.5	89.38	-7,688.6	-1,555.5	669.8	523.0	146.84	4.562	
20,400.0	12,811.9	20,467.4	12,798.4	68.3	80.2	89.38	-7,788.6	-1,554.7	669.8	521.4	148.39	4.514	
20,500.0	12,812.4	20,567.4	12,798.8	69.1	80.9	89.37	-7,888.6	-1,553.8	669.8	519.9	149.96	4.467	
20,600.0	12,812.9	20,667.4	12,799.2	69.9	81.6	89.37	-7,988.6	-1,553.0	669.8	518.3	151.52	4.421	
20,700.0	12,813.4	20,767.4	12,799.6	70.8	82.4	89.36	-8,088.6	-1,552.1	669.8	516.7	153.09	4.375	
20,800.0	12,813.8	20,867.4	12,800.0	71.6	83.1	89.36	-8,188.6	-1,551.3	669.8	515.2	154.66	4.331	
20,900.0	12,814.3	20,967.4	12,800.5	72.5	83.8	89.35	-8,288.6	-1,550.4	669.9	513.6	156.24	4.287	
21,000.0	12,814.8	21,067.4	12,800.9	73.3	84.5	89.35	-8,388.6	-1,549.6	669.9	512.0	157.82	4.245	
21,100.0	12,815.3	21,167.4	12,801.3	74.2	85.3	89.34	-8,488.6	-1,548.7	669.9	510.5	159.40	4.203	
21,200.0	12,815.8	21,267.4	12,801.7	75.0	86.0	89.34	-8,588.6	-1,547.9	669.9	508.9	160.98	4.161	
21,300.0	12,816.2	21,367.4	12,802.2	75.9	86.7	89.33	-8,688.6	-1,547.0	669.9	507.3	162.57	4.121	
21,400.0	12,816.7	21,467.4	12,802.6	76.7	87.5	89.33	-8,788.6	-1,546.2	669.9	505.8	164.16	4.081	
21,500.0	12,817.2	21,567.4	12,803.0	77.6	88.2	89.32	-8,888.6	-1,545.3	669.9	504.2	165.75	4.042	
21,600.0	12,817.7	21,667.4	12,803.4	78.4	89.0	89.32	-8,988.6	-1,544.5	669.9	502.6	167.34	4.003	
21,700.0	12,818.2	21,767.4	12,803.9	79.3	89.7	89.32	-9,088.6	-1,543.6	669.9	501.0	168.94	3.966	
21,800.0	12,818.6	21,867.4	12,804.3	80.1	90.4	89.31	-9,188.5	-1,542.8	670.0	499.4	170.54	3.928	
21,900.0	12,819.1	21,967.4	12,804.7	81.0	91.2	89.31	-9,288.5	-1,541.9	670.0	497.8	172.14	3.892	
22,000.0	12,819.6	22,067.4	12,805.1	81.8	91.9	89.30	-9,388.5	-1,541.1	670.0	496.2	173.74	3.856	
22,100.0	12,820.1	22,167.4	12,805.5	82.7	92.7	89.30	-9,488.5	-1,540.2	670.0	494.6	175.35	3.821	

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 GUNNER 8 FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Reference Site:	BULLDOG	MD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	GUNNER 8 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:	PWP3	Offset TVD Reference:	Offset Datum

Offset Design													BULLDOG - GUNNER 8 FED COM 705H - OWB - PWP3		Offset Site Error:		0.0 usft
Survey Program: 0-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 +N/-S (usft)	Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor					
22,200.0	12,820.6	22,267.4	12,806.0	83.6	93.5	89.29	-9,588.5	-1,539.4	670.0	493.0	176.95	3.786					
22,300.0	12,821.0	22,367.4	12,806.4	84.4	94.2	89.29	-9,688.5	-1,538.5	670.0	491.4	178.56	3.752					
22,400.0	12,821.5	22,467.4	12,806.8	85.3	95.0	89.28	-9,788.5	-1,537.7	670.0	489.8	180.18	3.719					
22,500.0	12,822.0	22,567.4	12,807.2	86.1	95.7	89.28	-9,888.5	-1,536.8	670.0	488.2	181.79	3.686					
22,600.0	12,822.5	22,667.4	12,807.7	87.0	96.5	89.27	-9,988.5	-1,536.0	670.0	486.6	183.40	3.653					
22,700.0	12,823.0	22,767.4	12,808.1	87.8	97.2	89.27	-10,088.5	-1,535.1	670.1	485.0	185.02	3.621					
22,800.0	12,823.4	22,867.4	12,808.5	88.7	98.0	89.26	-10,188.5	-1,534.3	670.1	483.4	186.64	3.590					
22,900.0	12,823.9	22,967.4	12,808.9	89.5	98.8	89.26	-10,288.5	-1,533.4	670.1	481.8	188.26	3.559					
22,900.8	12,823.9	22,968.1	12,808.9	89.5	98.8	89.26	-10,289.3	-1,533.4	670.1	481.8	188.27	3.559					
22,917.4	12,824.0	22,984.0	12,809.0	89.7	98.9	89.26	-10,305.1	-1,533.3	670.1	481.5	188.54	3.554 ES, SF					

Concho Resources LLC

Anticollision Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well GUNNER 8 FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Reference Site:	BULLDOG	MD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	GUNNER 8 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:	PWP3	Offset TVD Reference:	Offset Datum

Offset Design BULLDOG - GUNNER 8 FEDERAL COM #9H - OWB - ACTUAL WELLPATH												Offset Site Error:	0.0 usft
Survey Program: 100- VES GyroFlex, 9207-MWD												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 +N/-S (usft)	Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,200.0	9,186.9	19,727.0	9,827.3	10.3	166.7	-11.21	-128.9	-1,014.0	947.7	799.9	147.73	6.415	
9,300.0	9,286.5	19,727.0	9,827.3	10.4	166.7	-11.21	-128.9	-1,014.0	879.0	726.1	152.90	5.749	
9,400.0	9,386.1	19,727.0	9,827.3	10.5	166.7	-11.21	-128.9	-1,014.0	816.8	658.6	158.18	5.164	
9,500.0	9,485.8	19,727.0	9,827.3	10.5	166.7	-11.21	-128.9	-1,014.0	762.7	599.5	163.23	4.673	
9,600.0	9,585.4	19,727.0	9,827.3	10.6	166.7	-11.21	-128.9	-1,014.0	718.5	551.0	167.55	4.288	
9,700.0	9,685.0	19,727.0	9,827.3	10.7	166.7	-11.21	-128.9	-1,014.0	686.2	515.6	170.54	4.024	
9,800.0	9,784.7	19,727.0	9,827.3	10.8	166.7	-11.21	-128.9	-1,014.0	667.4	495.7	171.72	3.887	
9,877.2	9,861.6	19,727.0	9,827.3	10.9	166.7	-11.21	-128.9	-1,014.0	662.9	491.7	171.23	3.872	CC, ES, SF
9,900.0	9,884.3	19,727.0	9,827.3	10.9	166.7	-11.21	-128.9	-1,014.0	663.3	492.5	170.85	3.882	
10,000.0	9,983.9	19,727.0	9,827.3	11.0	166.7	-11.21	-128.9	-1,014.0	674.2	506.2	168.00	4.013	
10,100.0	10,083.5	19,727.0	9,827.3	11.1	166.7	-11.21	-128.9	-1,014.0	699.4	535.9	163.48	4.278	
10,200.0	10,183.2	19,727.0	9,827.3	11.2	166.7	-11.21	-128.9	-1,014.0	737.3	579.5	157.84	4.672	
10,300.0	10,282.8	19,727.0	9,827.3	11.3	166.7	-11.21	-128.9	-1,014.0	786.3	634.6	151.71	5.183	
10,400.0	10,382.4	19,727.0	9,827.3	11.4	166.7	-11.21	-128.9	-1,014.0	844.3	698.6	145.64	5.797	
10,500.0	10,482.1	19,727.0	9,827.3	11.5	166.7	-11.21	-128.9	-1,014.0	909.6	769.6	139.99	6.497	
10,600.0	10,581.7	19,727.0	9,827.3	11.7	166.7	-11.21	-128.9	-1,014.0	980.8	845.8	134.96	7.267	

Concho Resources LLC

Anticollision Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well GUNNER 8 FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Reference Site:	BULLDOG	MD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	GUNNER 8 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:	PWP3	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-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 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	0.4	0.4	3.0	3.0	89.62	0.4	60.0	60.0				
100.0	100.0	100.4	100.4	3.0	3.0	89.62	0.4	60.0	60.0	54.0	6.00	9.995	
200.0	200.0	200.4	200.4	3.0	3.0	89.62	0.4	60.0	60.0	54.0	6.04	9.931	
300.0	300.0	300.4	300.4	3.0	3.1	89.62	0.4	60.0	60.0	53.9	6.12	9.799	
400.0	400.0	400.4	400.4	3.0	3.2	89.62	0.4	60.0	60.0	53.8	6.24	9.610	
500.0	500.0	500.4	500.4	3.1	3.4	89.62	0.4	60.0	60.0	53.6	6.40	9.374	
600.0	600.0	600.4	600.4	3.1	3.6	89.62	0.4	60.0	60.0	53.4	6.59	9.107	
700.0	700.0	700.4	700.4	3.1	3.8	89.62	0.4	60.0	60.0	53.2	6.80	8.819	
800.0	800.0	800.4	800.4	3.2	4.0	89.62	0.4	60.0	60.0	53.0	7.04	8.520	
900.0	900.0	900.4	900.4	3.2	4.2	89.62	0.4	60.0	60.0	52.7	7.30	8.219	
1,000.0	1,000.0	1,000.4	1,000.4	3.2	4.5	89.62	0.4	60.0	60.0	52.4	7.58	7.921	
1,100.0	1,100.0	1,100.4	1,100.4	3.3	4.8	89.62	0.4	60.0	60.0	52.1	7.86	7.630	
1,200.0	1,200.0	1,200.4	1,200.4	3.4	5.1	89.62	0.4	60.0	60.0	51.8	8.17	7.348	
1,300.0	1,300.0	1,300.4	1,300.4	3.4	5.4	89.62	0.4	60.0	60.0	51.5	8.48	7.078	
1,400.0	1,400.0	1,400.4	1,400.4	3.5	5.7	89.62	0.4	60.0	60.0	51.2	8.80	6.820	
1,500.0	1,500.0	1,500.4	1,500.4	3.5	6.0	89.62	0.4	60.0	60.0	50.9	9.13	6.575	
1,600.0	1,600.0	1,600.4	1,600.4	3.6	6.3	89.62	0.4	60.0	60.0	50.5	9.46	6.342	
1,700.0	1,700.0	1,700.4	1,700.4	3.7	6.6	89.62	0.4	60.0	60.0	50.2	9.80	6.121	
1,800.0	1,800.0	1,800.4	1,800.4	3.8	6.9	89.62	0.4	60.0	60.0	49.9	10.15	5.912	
1,900.0	1,900.0	1,900.4	1,900.4	3.9	7.2	89.62	0.4	60.0	60.0	49.5	10.50	5.714	
2,000.0	2,000.0	2,000.4	2,000.4	3.9	7.6	89.62	0.4	60.0	60.0	49.1	10.86	5.527	
2,100.0	2,100.0	2,100.4	2,100.4	4.0	7.9	89.62	0.4	60.0	60.0	48.8	11.22	5.350	
2,200.0	2,200.0	2,200.4	2,200.4	4.1	8.2	89.62	0.4	60.0	60.0	48.4	11.58	5.182	
2,300.0	2,300.0	2,300.4	2,300.4	4.2	8.6	89.62	0.4	60.0	60.0	48.1	11.95	5.023	
2,400.0	2,400.0	2,400.4	2,400.4	4.3	8.9	89.62	0.4	60.0	60.0	47.7	12.31	4.872	
2,500.0	2,500.0	2,500.4	2,500.4	4.4	9.2	89.62	0.4	60.0	60.0	47.3	12.69	4.729	
2,600.0	2,600.0	2,600.4	2,600.4	4.5	9.6	89.62	0.4	60.0	60.0	46.9	13.06	4.594	
2,700.0	2,700.0	2,700.4	2,700.4	4.6	9.9	89.62	0.4	60.0	60.0	46.6	13.44	4.465	
2,800.0	2,800.0	2,800.4	2,800.4	4.7	10.3	89.62	0.4	60.0	60.0	46.2	13.82	4.342	
2,900.0	2,900.0	2,900.4	2,900.4	4.8	10.6	89.62	0.4	60.0	60.0	45.8	14.20	4.226	
3,000.0	3,000.0	3,000.4	3,000.4	4.9	10.9	89.62	0.4	60.0	60.0	45.4	14.58	4.115	
3,100.0	3,100.0	3,100.4	3,100.4	5.0	11.3	89.62	0.4	60.0	60.0	45.0	14.97	4.009	
3,200.0	3,200.0	3,200.4	3,200.4	5.1	11.6	89.62	0.4	60.0	60.0	44.6	15.35	3.908	
3,300.0	3,300.0	3,300.4	3,300.4	5.2	12.0	89.62	0.4	60.0	60.0	44.3	15.74	3.811	
3,400.0	3,400.0	3,400.4	3,400.4	5.3	12.3	89.62	0.4	60.0	60.0	43.9	16.13	3.719	
3,500.0	3,500.0	3,500.4	3,500.4	5.4	12.7	89.62	0.4	60.0	60.0	43.5	16.52	3.631	
3,600.0	3,600.0	3,600.4	3,600.4	5.5	13.0	89.62	0.4	60.0	60.0	43.1	16.92	3.547	
3,700.0	3,700.0	3,700.4	3,700.4	5.7	13.4	89.62	0.4	60.0	60.0	42.7	17.31	3.466	
3,800.0	3,800.0	3,800.4	3,800.4	5.8	13.7	89.62	0.4	60.0	60.0	42.3	17.71	3.389	
3,900.0	3,900.0	3,900.4	3,900.4	5.9	14.1	89.62	0.4	60.0	60.0	41.9	18.10	3.315	
4,000.0	4,000.0	4,000.4	4,000.4	6.0	14.4	89.62	0.4	60.0	60.0	41.5	18.50	3.244	
4,100.0	4,100.0	4,100.4	4,100.4	6.1	14.8	89.62	0.4	60.0	60.0	41.1	18.90	3.175	
4,200.0	4,200.0	4,200.4	4,200.4	6.2	15.1	89.62	0.4	60.0	60.0	40.7	19.30	3.109	
4,300.0	4,300.0	4,300.4	4,300.4	6.3	15.5	89.62	0.4	60.0	60.0	40.3	19.70	3.046	
4,400.0	4,400.0	4,400.4	4,400.4	6.5	15.8	89.62	0.4	60.0	60.0	39.9	20.10	2.985	
4,500.0	4,500.0	4,500.4	4,500.4	6.6	16.2	89.62	0.4	60.0	60.0	39.5	20.50	2.927	
4,600.0	4,600.0	4,600.4	4,600.4	6.7	16.5	89.62	0.4	60.0	60.0	39.1	20.90	2.871	
4,700.0	4,700.0	4,700.4	4,700.4	6.8	16.9	89.62	0.4	60.0	60.0	38.7	21.31	2.816	
4,800.0	4,800.0	4,800.4	4,800.4	6.9	17.2	89.62	0.4	60.0	60.0	38.3	21.71	2.764	
4,900.0	4,900.0	4,900.4	4,900.4	7.0	17.6	89.62	0.4	60.0	60.0	37.9	22.12	2.713	
5,000.0	5,000.0	5,000.4	5,000.4	7.2	18.0	89.62	0.4	60.0	60.0	37.5	22.52	2.664	
5,100.0	5,100.0	5,100.4	5,100.4	7.3	18.3	89.62	0.4	60.0	60.0	37.1	22.93	2.617	

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 GUNNER 8 FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Reference Site:	BULLDOG	MD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	GUNNER 8 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:	PWP3	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis			Distance						
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	Warning
5,200.0	5,200.0	5,200.4	5,200.4	7.4	18.7	89.62	0.4	60.0	60.0	36.7	23.33	2.571	
5,300.0	5,300.0	5,300.4	5,300.4	7.5	19.0	89.62	0.4	60.0	60.0	36.3	23.74	2.527	
5,400.0	5,400.0	5,400.4	5,400.4	7.6	19.4	89.62	0.4	60.0	60.0	35.9	24.15	2.484	
5,416.5	5,416.5	5,416.9	5,416.9	7.7	19.4	89.62	0.4	60.0	60.0	35.8	24.22	2.478 CC	
5,500.0	5,500.0	5,500.0	5,500.0	7.8	19.7	89.62	0.4	60.0	60.0	35.4	24.56	2.443 ES, SF	
5,600.0	5,600.0	5,598.5	5,598.5	7.8	20.1	178.81	1.3	61.4	63.2	38.3	24.95	2.533	
5,700.0	5,699.8	5,697.3	5,697.2	7.9	20.4	177.04	3.7	65.2	72.4	47.0	25.35	2.856	
5,746.9	5,746.6	5,743.8	5,743.6	7.9	20.6	176.35	4.9	67.2	78.0	52.5	25.54	3.055	
5,800.0	5,799.5	5,796.5	5,796.3	7.9	20.8	175.71	6.3	69.3	84.8	59.1	25.75	3.295	
5,900.0	5,899.1	5,895.7	5,895.3	8.0	21.1	174.74	8.9	73.4	97.7	71.6	26.15	3.737	
6,000.0	5,998.8	5,994.8	5,994.3	8.0	21.4	174.00	11.5	77.5	110.6	84.1	26.55	4.166	
6,100.0	6,098.4	6,094.0	6,093.4	8.0	21.8	173.42	14.0	81.6	123.5	96.6	26.95	4.582	
6,200.0	6,198.0	6,193.1	6,192.4	8.1	22.1	172.94	16.6	85.6	136.4	109.1	27.36	4.987	
6,300.0	6,297.6	6,292.3	6,291.4	8.1	22.5	172.55	19.2	89.7	149.3	121.6	27.76	5.380	
6,400.0	6,397.3	6,391.4	6,390.5	8.2	22.8	172.22	21.8	93.8	162.3	134.1	28.17	5.761	
6,500.0	6,496.9	6,490.6	6,489.5	8.2	23.2	171.94	24.4	97.9	175.2	146.6	28.57	6.132	
6,600.0	6,596.5	6,589.7	6,588.6	8.3	23.5	171.70	26.9	102.0	188.1	159.2	28.98	6.491	
6,700.0	6,696.2	6,688.9	6,687.6	8.4	23.9	171.49	29.5	106.0	201.1	171.7	29.39	6.841	
6,800.0	6,795.8	6,788.1	6,786.6	8.4	24.2	171.30	32.1	110.1	214.0	184.2	29.81	7.180	
6,900.0	6,895.4	6,887.2	6,885.7	8.5	24.6	171.14	34.7	114.2	227.0	196.7	30.22	7.510	
7,000.0	6,995.0	6,986.4	6,984.7	8.5	24.9	170.99	37.3	118.3	239.9	209.3	30.64	7.830	
7,100.0	7,094.7	7,085.5	7,083.8	8.6	25.3	170.86	39.8	122.4	252.9	221.8	31.06	8.141	
7,200.0	7,194.3	7,184.7	7,182.8	8.7	25.6	170.74	42.4	126.4	265.8	234.3	31.48	8.443	
7,300.0	7,293.9	7,283.8	7,281.8	8.7	26.0	170.63	45.0	130.5	278.8	246.8	31.91	8.737	
7,400.0	7,393.6	7,383.0	7,380.9	8.8	26.3	170.53	47.6	134.6	291.7	259.4	32.33	9.022	
7,500.0	7,493.2	7,482.2	7,479.9	8.9	26.7	170.44	50.2	138.7	304.7	271.9	32.76	9.300	
7,600.0	7,592.8	7,581.3	7,579.0	8.9	27.0	170.36	52.7	142.7	317.6	284.4	33.19	9.570	
7,700.0	7,692.4	7,680.5	7,678.0	9.0	27.4	170.28	55.3	146.8	330.6	296.9	33.62	9.832	
7,800.0	7,792.1	7,779.6	7,777.0	9.1	27.7	170.21	57.9	150.9	343.5	309.5	34.05	10.088	
7,900.0	7,891.7	7,878.8	7,876.1	9.2	28.1	170.15	60.5	155.0	356.5	322.0	34.49	10.336	
8,000.0	7,991.3	7,977.9	7,975.1	9.2	28.4	170.09	63.1	159.1	369.4	334.5	34.92	10.578	
8,100.0	8,091.0	8,077.1	8,074.2	9.3	28.8	170.03	65.6	163.1	382.4	347.0	35.36	10.813	
8,200.0	8,190.6	8,176.3	8,173.2	9.4	29.1	169.98	68.2	167.2	395.3	359.5	35.80	11.042	
8,300.0	8,290.2	8,275.4	8,272.2	9.5	29.5	169.93	70.8	171.3	408.3	372.0	36.24	11.266	
8,400.0	8,389.8	8,374.6	8,371.3	9.6	29.8	169.88	73.4	175.4	421.2	384.5	36.68	11.483	
8,500.0	8,489.5	8,473.7	8,470.3	9.6	30.2	169.84	76.0	179.5	434.2	397.1	37.13	11.695	
8,600.0	8,589.1	8,572.9	8,569.4	9.7	30.5	169.80	78.5	183.5	447.1	409.6	37.57	11.901	
8,700.0	8,688.7	8,672.0	8,668.4	9.8	30.9	169.76	81.1	187.6	460.1	422.1	38.02	12.102	
8,800.0	8,788.4	8,771.2	8,767.4	9.9	31.2	169.72	83.7	191.7	473.1	434.6	38.47	12.298	
8,900.0	8,888.0	8,870.4	8,866.5	10.0	31.6	169.69	86.3	195.8	486.0	447.1	38.91	12.489	
9,000.0	8,987.6	8,969.5	8,965.5	10.1	31.9	169.65	88.9	199.8	499.0	459.6	39.36	12.675	
9,100.0	9,087.3	9,068.7	9,064.5	10.2	32.3	169.62	91.4	203.9	511.9	472.1	39.82	12.857	
9,200.0	9,186.9	9,167.8	9,163.6	10.3	32.6	169.59	94.0	208.0	524.9	484.6	40.27	13.035	
9,300.0	9,286.5	9,267.0	9,262.6	10.4	33.0	169.56	96.6	212.1	537.8	497.1	40.72	13.208	
9,400.0	9,386.1	9,366.1	9,361.7	10.5	33.3	169.54	99.2	216.2	550.8	509.6	41.18	13.376	
9,500.0	9,485.8	9,465.3	9,460.7	10.5	33.7	169.51	101.8	220.2	563.7	522.1	41.63	13.541	
9,600.0	9,585.4	9,564.5	9,559.7	10.6	34.0	169.49	104.3	224.3	576.7	534.6	42.09	13.702	
9,700.0	9,685.0	9,663.6	9,658.8	10.7	34.4	169.46	106.9	228.4	589.7	547.1	42.55	13.859	
9,800.0	9,784.7	9,762.8	9,757.8	10.8	34.7	169.44	109.5	232.5	602.6	559.6	43.00	14.013	
9,900.0	9,884.3	9,861.9	9,856.9	10.9	35.1	169.42	112.1	236.6	615.6	572.1	43.46	14.163	
10,000.0	9,983.9	9,961.1	9,955.9	11.0	35.4	169.40	114.7	240.6	628.5	584.6	43.92	14.310	
10,100.0	10,083.5	10,060.2	10,054.9	11.1	35.8	169.38	117.2	244.7	641.5	597.1	44.38	14.453	

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 GUNNER 8 FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Reference Site:	BULLDOG	MD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	GUNNER 8 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:	PWP3	Offset TVD Reference:	Offset Datum

Offset Design BULLDOG - GUNNER 8 FEDERAL COM 703H - OWB - PWP3													Offset Site Error:	0.0 usft
Survey Program: 0-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		
10,200.0	10,183.2	10,159.4	10,154.0	11.2	36.1	169.36	119.8	248.8	654.4	609.6	44.85	14.593		
10,300.0	10,282.8	10,258.5	10,253.0	11.3	36.5	169.34	122.4	252.9	667.4	622.1	45.31	14.730		
10,400.0	10,382.4	10,357.7	10,352.1	11.4	36.9	169.32	125.0	256.9	680.4	634.6	45.77	14.864		
10,500.0	10,482.1	10,456.9	10,451.1	11.5	37.2	169.31	127.6	261.0	693.3	647.1	46.24	14.995		
10,600.0	10,581.7	10,556.0	10,550.1	11.7	37.6	169.29	130.1	265.1	706.3	659.6	46.70	15.123		
10,700.0	10,681.3	10,655.2	10,649.2	11.8	37.9	169.27	132.7	269.2	719.2	672.1	47.17	15.248		
10,800.0	10,780.9	10,754.3	10,748.2	11.9	38.3	169.26	135.3	273.3	732.2	684.6	47.63	15.371		
10,900.0	10,880.6	10,853.5	10,847.3	12.0	38.6	169.24	137.9	277.3	745.1	697.0	48.10	15.491		
11,000.0	10,980.2	10,952.6	10,946.3	12.1	39.0	169.23	140.5	281.4	758.1	709.5	48.57	15.609		
11,100.0	11,079.8	11,051.8	11,045.3	12.2	39.3	169.22	143.0	285.5	771.1	722.0	49.04	15.724		
11,200.0	11,179.5	11,151.0	11,144.4	12.3	39.7	169.20	145.6	289.6	784.0	734.5	49.51	15.837		
11,300.0	11,279.1	11,250.1	11,243.4	12.4	40.0	169.19	148.2	293.7	797.0	747.0	49.98	15.947		
11,400.0	11,378.7	11,349.3	11,342.5	12.5	40.4	169.18	150.8	297.7	809.9	759.5	50.45	16.055		
11,500.0	11,478.3	11,448.4	11,441.5	12.6	40.7	169.17	153.4	301.8	822.9	772.0	50.92	16.161		
11,600.0	11,578.0	11,547.6	11,540.5	12.7	41.1	169.15	156.0	305.9	835.8	784.5	51.39	16.265		
11,700.0	11,677.6	11,646.7	11,639.6	12.8	41.4	169.14	158.5	310.0	848.8	796.9	51.86	16.367		
11,800.0	11,777.2	11,745.9	11,738.6	13.0	41.8	169.13	161.1	314.0	861.8	809.4	52.33	16.467		
11,900.0	11,876.9	11,845.1	11,837.6	13.1	42.2	169.12	163.7	318.1	874.7	821.9	52.81	16.565		
12,000.0	11,976.5	11,944.2	11,936.7	13.2	42.5	169.11	166.3	322.2	887.7	834.4	53.28	16.660		
12,100.0	12,076.1	12,043.4	12,035.7	13.3	42.9	169.10	168.9	326.3	900.6	846.9	53.75	16.755		
12,200.0	12,175.7	12,142.5	12,134.8	13.4	43.2	169.09	171.4	330.4	913.6	859.4	54.23	16.847		
12,245.9	12,221.5	12,188.1	12,180.2	13.5	43.4	169.09	172.6	332.2	919.5	865.1	54.45	16.889		
12,250.0	12,225.6	12,192.1	12,184.3	13.5	43.4	173.49	172.7	332.4	920.1	865.4	54.68	16.828		
12,300.0	12,275.2	12,255.9	12,248.0	13.5	43.6	-152.66	172.3	335.0	927.5	872.7	54.81	16.922		
12,350.0	12,324.4	12,325.5	12,317.0	13.5	43.8	-139.32	163.9	338.0	936.0	881.0	54.94	17.037		
12,400.0	12,372.6	12,394.8	12,384.2	13.5	44.1	-132.33	147.3	340.9	945.3	890.3	55.09	17.161		
12,450.0	12,419.6	12,463.2	12,448.1	13.5	44.3	-127.64	123.1	343.7	955.6	900.4	55.26	17.292		
12,500.0	12,464.9	12,530.5	12,507.6	13.6	44.4	-123.94	92.0	346.5	966.8	911.3	55.46	17.431		
12,550.0	12,508.3	12,596.4	12,562.1	13.6	44.6	-120.71	55.0	349.0	978.8	923.1	55.68	17.578		
12,600.0	12,549.4	12,660.8	12,610.7	13.6	44.7	-117.71	13.0	351.4	991.6	935.6	55.91	17.735		

Concho Resources LLC

Anticollision Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well GUNNER 8 FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Reference Site:	BULLDOG	MD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	GUNNER 8 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:	PWP3	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB=26' @ 3365.3usft (McVAY 8)

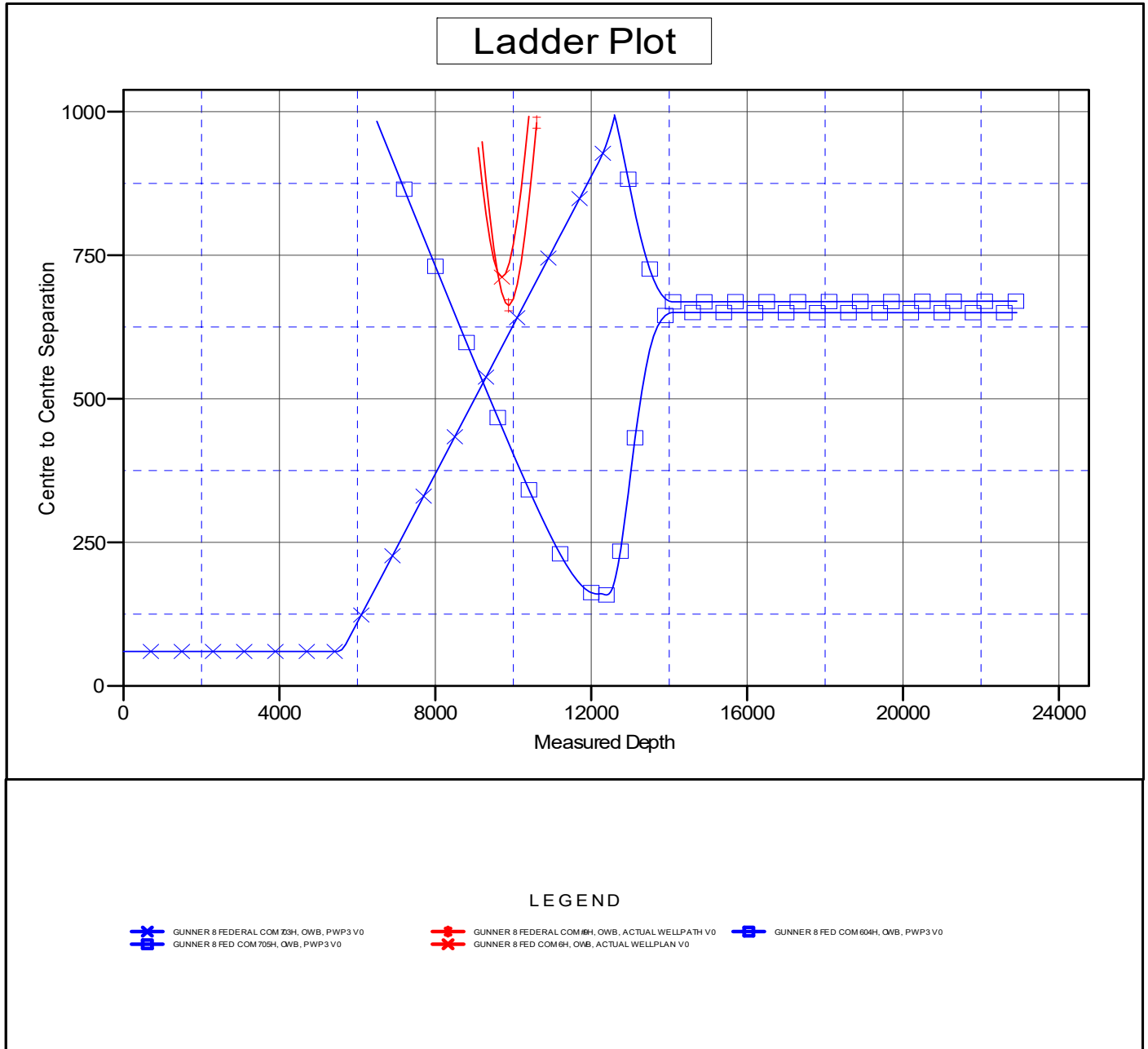
Offset Depths are relative to Offset Datum

Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: GUNNER 8 FEDERAL COM 704H

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

Grid Convergence at Surface is: 0.45°



Concho Resources LLC

Anticollision Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well GUNNER 8 FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Reference Site:	BULLDOG	MD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	GUNNER 8 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:	PWP3	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB=26' @ 3365.3usft (McVAY 8)

Offset Depths are relative to Offset Datum

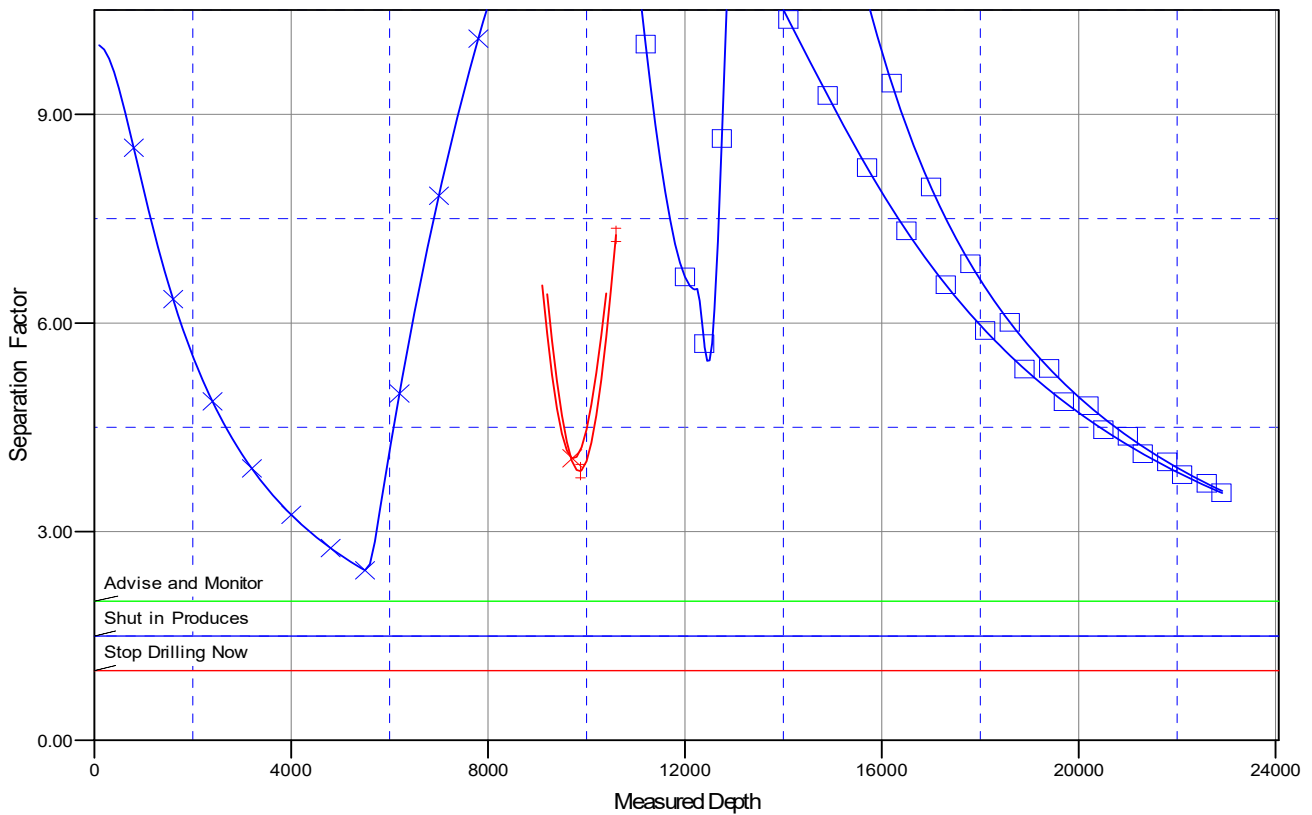
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: GUNNER 8 FEDERAL COM 704H

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

Grid Convergence at Surface is: 0.45°

Separation Factor Plot



LEGEND

GUNNER 8 FEDERAL COM 704H, OWB, PWP3 V0
 GUNNER 8 FEDERAL COM 704H, OWB, PWP3 V0

GUNNER 8 FEDERAL COM 604H, OWB, ACTUAL WELLPATH V0
 GUNNER 8 FEDERAL COM 604H, OWB, ACTUAL WELLPLAN V0

GUNNER 8 FEDERAL COM 604H, OWB, PWP3 V0

NORTHERN DELAWARE BASIN

LEA COUNTY, NM

BULLDOG

GUNNER 8 FEDERAL COM 704H

OWB

Plan: PWP3

Standard Survey Report

31 March, 2020

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well GUNNER 8 FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Site:	BULLDOG	MD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Well:	GUNNER 8 FEDERAL COM 704H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP3	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	GUNNER 8 FEDERAL COM 704H				
Well Position	+N/-S	0.0 usft	Northing:	393,478.20 usft	Latitude: 32° 4' 44.419 N
	+E/-W	0.0 usft	Easting:	760,060.20 usft	Longitude: 103° 29' 37.347 W
Position Uncertainty		3.0 usft	Wellhead Elevation:	usft	Ground Level: 3,339.3 usft

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	3/31/2020	6.60	59.90	47,574.47044138

Design	PWP3				
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.0	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	184.79	

Survey Tool Program	Date	3/31/2020			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	12,246.0	PWP3 (OWB)	Standard Keeper 104	Standard Wireline Keeper ver 1.0.4	
12,246.0	22,917.4	PWP3 (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 GUNNER 8 FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Site:	BULLDOG	MD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Well:	GUNNER 8 FEDERAL COM 704H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP3	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	270.00	5,600.0	0.0	-1.7	0.1	2.00	2.00	0.00

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well GUNNER 8 FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Site:	BULLDOG	MD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Well:	GUNNER 8 FEDERAL COM 704H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP3	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)
5,700.0	4.00	270.00	5,699.8	0.0	-7.0	0.6	2.00	2.00	0.00
5,746.9	4.94	270.00	5,746.6	0.0	-10.6	0.9	2.00	2.00	0.00
Start 6499.0 hold at 5746.9 MD									
5,800.0	4.94	270.00	5,799.5	0.0	-15.2	1.3	0.00	0.00	0.00
5,900.0	4.94	270.00	5,899.1	0.0	-23.8	2.0	0.00	0.00	0.00
6,000.0	4.94	270.00	5,998.8	0.0	-32.4	2.7	0.00	0.00	0.00
6,100.0	4.94	270.00	6,098.4	0.0	-41.0	3.4	0.00	0.00	0.00
6,200.0	4.94	270.00	6,198.0	0.0	-49.6	4.1	0.00	0.00	0.00
6,300.0	4.94	270.00	6,297.6	0.0	-58.2	4.9	0.00	0.00	0.00
6,400.0	4.94	270.00	6,397.3	0.0	-66.8	5.6	0.00	0.00	0.00
6,500.0	4.94	270.00	6,496.9	0.0	-75.5	6.3	0.00	0.00	0.00
6,600.0	4.94	270.00	6,596.5	0.0	-84.1	7.0	0.00	0.00	0.00
6,700.0	4.94	270.00	6,696.2	0.0	-92.7	7.7	0.00	0.00	0.00
6,800.0	4.94	270.00	6,795.8	0.0	-101.3	8.5	0.00	0.00	0.00
6,900.0	4.94	270.00	6,895.4	0.0	-109.9	9.2	0.00	0.00	0.00
7,000.0	4.94	270.00	6,995.0	0.0	-118.5	9.9	0.00	0.00	0.00
7,100.0	4.94	270.00	7,094.7	0.0	-127.1	10.6	0.00	0.00	0.00
7,200.0	4.94	270.00	7,194.3	0.0	-135.7	11.3	0.00	0.00	0.00
7,300.0	4.94	270.00	7,293.9	0.0	-144.3	12.1	0.00	0.00	0.00
7,400.0	4.94	270.00	7,393.6	0.0	-152.9	12.8	0.00	0.00	0.00
7,500.0	4.94	270.00	7,493.2	0.0	-161.5	13.5	0.00	0.00	0.00
7,600.0	4.94	270.00	7,592.8	0.0	-170.1	14.2	0.00	0.00	0.00
7,700.0	4.94	270.00	7,692.4	0.0	-178.7	14.9	0.00	0.00	0.00
7,800.0	4.94	270.00	7,792.1	0.0	-187.3	15.6	0.00	0.00	0.00
7,900.0	4.94	270.00	7,891.7	0.0	-195.9	16.4	0.00	0.00	0.00
8,000.0	4.94	270.00	7,991.3	0.0	-204.6	17.1	0.00	0.00	0.00
8,100.0	4.94	270.00	8,091.0	0.0	-213.2	17.8	0.00	0.00	0.00
8,200.0	4.94	270.00	8,190.6	0.0	-221.8	18.5	0.00	0.00	0.00
8,300.0	4.94	270.00	8,290.2	0.0	-230.4	19.2	0.00	0.00	0.00
8,400.0	4.94	270.00	8,389.8	0.0	-239.0	20.0	0.00	0.00	0.00
8,500.0	4.94	270.00	8,489.5	0.0	-247.6	20.7	0.00	0.00	0.00
8,600.0	4.94	270.00	8,589.1	0.0	-256.2	21.4	0.00	0.00	0.00
8,700.0	4.94	270.00	8,688.7	0.0	-264.8	22.1	0.00	0.00	0.00
8,800.0	4.94	270.00	8,788.4	0.0	-273.4	22.8	0.00	0.00	0.00
8,900.0	4.94	270.00	8,888.0	0.0	-282.0	23.6	0.00	0.00	0.00
9,000.0	4.94	270.00	8,987.6	0.0	-290.6	24.3	0.00	0.00	0.00
9,100.0	4.94	270.00	9,087.3	0.0	-299.2	25.0	0.00	0.00	0.00
9,200.0	4.94	270.00	9,186.9	0.0	-307.8	25.7	0.00	0.00	0.00
9,300.0	4.94	270.00	9,286.5	0.0	-316.4	26.4	0.00	0.00	0.00
9,400.0	4.94	270.00	9,386.1	0.0	-325.1	27.1	0.00	0.00	0.00
9,500.0	4.94	270.00	9,485.8	0.0	-333.7	27.9	0.00	0.00	0.00
9,600.0	4.94	270.00	9,585.4	0.0	-342.3	28.6	0.00	0.00	0.00
9,700.0	4.94	270.00	9,685.0	0.0	-350.9	29.3	0.00	0.00	0.00
9,800.0	4.94	270.00	9,784.7	0.0	-359.5	30.0	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well GUNNER 8 FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Site:	BULLDOG	MD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Well:	GUNNER 8 FEDERAL COM 704H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP3	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	4.94	270.00	9,884.3	0.0	-368.1	30.7	0.00	0.00	0.00
10,000.0	4.94	270.00	9,983.9	0.0	-376.7	31.5	0.00	0.00	0.00
10,100.0	4.94	270.00	10,083.5	0.0	-385.3	32.2	0.00	0.00	0.00
10,200.0	4.94	270.00	10,183.2	0.0	-393.9	32.9	0.00	0.00	0.00
10,300.0	4.94	270.00	10,282.8	0.0	-402.5	33.6	0.00	0.00	0.00
10,400.0	4.94	270.00	10,382.4	0.0	-411.1	34.3	0.00	0.00	0.00
10,500.0	4.94	270.00	10,482.1	0.0	-419.7	35.1	0.00	0.00	0.00
10,600.0	4.94	270.00	10,581.7	0.0	-428.3	35.8	0.00	0.00	0.00
10,700.0	4.94	270.00	10,681.3	0.0	-436.9	36.5	0.00	0.00	0.00
10,800.0	4.94	270.00	10,780.9	0.0	-445.6	37.2	0.00	0.00	0.00
10,900.0	4.94	270.00	10,880.6	0.0	-454.2	37.9	0.00	0.00	0.00
11,000.0	4.94	270.00	10,980.2	0.0	-462.8	38.7	0.00	0.00	0.00
11,100.0	4.94	270.00	11,079.8	0.0	-471.4	39.4	0.00	0.00	0.00
11,200.0	4.94	270.00	11,179.5	0.0	-480.0	40.1	0.00	0.00	0.00
11,300.0	4.94	270.00	11,279.1	0.0	-488.6	40.8	0.00	0.00	0.00
11,400.0	4.94	270.00	11,378.7	0.0	-497.2	41.5	0.00	0.00	0.00
11,500.0	4.94	270.00	11,478.3	0.0	-505.8	42.2	0.00	0.00	0.00
11,600.0	4.94	270.00	11,578.0	0.0	-514.4	43.0	0.00	0.00	0.00
11,700.0	4.94	270.00	11,677.6	0.0	-523.0	43.7	0.00	0.00	0.00
11,800.0	4.94	270.00	11,777.2	0.0	-531.6	44.4	0.00	0.00	0.00
11,900.0	4.94	270.00	11,876.9	0.0	-540.2	45.1	0.00	0.00	0.00
12,000.0	4.94	270.00	11,976.5	0.0	-548.8	45.8	0.00	0.00	0.00
12,100.0	4.94	270.00	12,076.1	0.0	-557.4	46.6	0.00	0.00	0.00
12,200.0	4.94	270.00	12,175.7	0.0	-566.0	47.3	0.00	0.00	0.00
12,245.9	4.94	270.00	12,221.5	0.0	-570.0	47.6	0.00	0.00	0.00
Start DLS 10.00 TFO -71.69									
12,300.0	8.39	232.16	12,275.2	-2.4	-575.4	50.5	10.00	6.38	-69.97
12,400.0	17.58	213.37	12,372.6	-19.5	-589.5	68.7	10.00	9.19	-18.79
12,500.0	27.34	207.50	12,464.9	-52.6	-608.5	103.3	10.00	9.76	-5.87
12,600.0	37.22	204.57	12,549.4	-100.6	-631.7	153.0	10.00	9.88	-2.93
12,700.0	47.14	202.74	12,623.4	-162.1	-658.6	216.5	10.00	9.92	-1.83
12,800.0	57.09	201.42	12,684.7	-235.1	-688.1	291.8	10.00	9.95	-1.32
12,900.0	67.04	200.37	12,731.5	-317.6	-719.6	376.6	10.00	9.96	-1.05
13,000.0	77.01	199.46	12,762.3	-406.9	-751.9	468.3	10.00	9.96	-0.91
13,100.0	86.97	198.63	12,776.2	-500.4	-784.2	564.1	10.00	9.97	-0.84
13,127.7	89.73	198.40	12,777.0	-526.6	-792.9	591.0	10.00	9.97	-0.82
Start DLS 2.00 TFO -90.06									
13,200.0	89.73	196.95	12,777.4	-595.5	-814.9	661.5	2.00	0.00	-2.00
13,300.0	89.73	194.95	12,777.9	-691.7	-842.4	759.6	2.00	0.00	-2.00
13,400.0	89.73	192.95	12,778.3	-788.7	-866.5	858.3	2.00	0.00	-2.00
13,500.0	89.72	190.95	12,778.8	-886.5	-887.2	957.5	2.00	0.00	-2.00
13,600.0	89.72	188.95	12,779.3	-985.0	-904.5	1,057.1	2.00	0.00	-2.00
13,700.0	89.72	186.95	12,779.8	-1,084.1	-918.3	1,157.0	2.00	0.00	-2.00

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well GUNNER 8 FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Site:	BULLDOG	MD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Well:	GUNNER 8 FEDERAL COM 704H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP3	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)
13,800.0	89.72	184.95	12,780.3	-1,183.5	-928.7	1,256.9	2.00	0.00	-2.00
13,900.0	89.72	182.95	12,780.7	-1,283.3	-935.6	1,356.9	2.00	0.00	-2.00
14,000.0	89.72	180.95	12,781.2	-1,383.2	-939.0	1,456.8	2.00	0.00	-2.00
14,072.3	89.73	179.51	12,781.6	-1,455.5	-939.3	1,528.8	2.00	0.00	-2.00
Start 8845.2 hold at 14072.3 MD									
14,100.0	89.73	179.51	12,781.7	-1,483.2	-939.1	1,556.4	0.00	0.00	0.00
14,200.0	89.73	179.51	12,782.2	-1,583.2	-938.2	1,656.0	0.00	0.00	0.00
14,300.0	89.73	179.51	12,782.7	-1,683.2	-937.3	1,755.6	0.00	0.00	0.00
14,400.0	89.73	179.51	12,783.1	-1,783.2	-936.5	1,855.2	0.00	0.00	0.00
14,500.0	89.73	179.51	12,783.6	-1,883.2	-935.6	1,954.7	0.00	0.00	0.00
14,600.0	89.73	179.51	12,784.1	-1,983.2	-934.8	2,054.3	0.00	0.00	0.00
14,700.0	89.73	179.51	12,784.6	-2,083.2	-933.9	2,153.9	0.00	0.00	0.00
14,800.0	89.73	179.51	12,785.1	-2,183.2	-933.0	2,253.5	0.00	0.00	0.00
14,900.0	89.73	179.51	12,785.5	-2,283.2	-932.2	2,353.0	0.00	0.00	0.00
15,000.0	89.73	179.51	12,786.0	-2,383.2	-931.3	2,452.6	0.00	0.00	0.00
15,100.0	89.73	179.51	12,786.5	-2,483.1	-930.5	2,552.2	0.00	0.00	0.00
15,200.0	89.73	179.51	12,787.0	-2,583.1	-929.6	2,651.8	0.00	0.00	0.00
15,300.0	89.73	179.51	12,787.5	-2,683.1	-928.7	2,751.3	0.00	0.00	0.00
15,400.0	89.73	179.51	12,787.9	-2,783.1	-927.9	2,850.9	0.00	0.00	0.00
15,500.0	89.73	179.51	12,788.4	-2,883.1	-927.0	2,950.5	0.00	0.00	0.00
15,600.0	89.73	179.51	12,788.9	-2,983.1	-926.2	3,050.1	0.00	0.00	0.00
15,700.0	89.73	179.51	12,789.4	-3,083.1	-925.3	3,149.6	0.00	0.00	0.00
15,800.0	89.73	179.51	12,789.9	-3,183.1	-924.5	3,249.2	0.00	0.00	0.00
15,900.0	89.73	179.51	12,790.3	-3,283.1	-923.6	3,348.8	0.00	0.00	0.00
16,000.0	89.73	179.51	12,790.8	-3,383.1	-922.7	3,448.4	0.00	0.00	0.00
16,100.0	89.73	179.51	12,791.3	-3,483.1	-921.9	3,547.9	0.00	0.00	0.00
16,200.0	89.73	179.51	12,791.8	-3,583.1	-921.0	3,647.5	0.00	0.00	0.00
16,300.0	89.73	179.51	12,792.3	-3,683.1	-920.2	3,747.1	0.00	0.00	0.00
16,400.0	89.73	179.51	12,792.7	-3,783.1	-919.3	3,846.6	0.00	0.00	0.00
16,500.0	89.73	179.51	12,793.2	-3,883.1	-918.4	3,946.2	0.00	0.00	0.00
16,600.0	89.73	179.51	12,793.7	-3,983.1	-917.6	4,045.8	0.00	0.00	0.00
16,700.0	89.73	179.51	12,794.2	-4,083.1	-916.7	4,145.4	0.00	0.00	0.00
16,800.0	89.73	179.51	12,794.7	-4,183.1	-915.9	4,244.9	0.00	0.00	0.00
16,900.0	89.73	179.51	12,795.1	-4,283.1	-915.0	4,344.5	0.00	0.00	0.00
17,000.0	89.73	179.51	12,795.6	-4,383.1	-914.1	4,444.1	0.00	0.00	0.00
17,100.0	89.73	179.51	12,796.1	-4,483.1	-913.3	4,543.7	0.00	0.00	0.00
17,200.0	89.73	179.51	12,796.6	-4,583.0	-912.4	4,643.2	0.00	0.00	0.00
17,300.0	89.73	179.51	12,797.1	-4,683.0	-911.6	4,742.8	0.00	0.00	0.00
17,400.0	89.73	179.51	12,797.5	-4,783.0	-910.7	4,842.4	0.00	0.00	0.00
17,500.0	89.73	179.51	12,798.0	-4,883.0	-909.8	4,942.0	0.00	0.00	0.00
17,600.0	89.73	179.51	12,798.5	-4,983.0	-909.0	5,041.5	0.00	0.00	0.00
17,700.0	89.73	179.51	12,799.0	-5,083.0	-908.1	5,141.1	0.00	0.00	0.00
17,800.0	89.73	179.51	12,799.5	-5,183.0	-907.3	5,240.7	0.00	0.00	0.00
17,900.0	89.73	179.51	12,799.9	-5,283.0	-906.4	5,340.3	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well GUNNER 8 FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Site:	BULLDOG	MD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Well:	GUNNER 8 FEDERAL COM 704H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP3	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)
18,000.0	89.73	179.51	12,800.4	-5,383.0	-905.5	5,439.8	0.00	0.00	0.00
18,100.0	89.73	179.51	12,800.9	-5,483.0	-904.7	5,539.4	0.00	0.00	0.00
18,200.0	89.73	179.51	12,801.4	-5,583.0	-903.8	5,639.0	0.00	0.00	0.00
18,300.0	89.73	179.51	12,801.9	-5,683.0	-903.0	5,738.6	0.00	0.00	0.00
18,400.0	89.73	179.51	12,802.3	-5,783.0	-902.1	5,838.1	0.00	0.00	0.00
18,500.0	89.73	179.51	12,802.8	-5,883.0	-901.3	5,937.7	0.00	0.00	0.00
18,600.0	89.73	179.51	12,803.3	-5,983.0	-900.4	6,037.3	0.00	0.00	0.00
18,700.0	89.73	179.51	12,803.8	-6,083.0	-899.5	6,136.9	0.00	0.00	0.00
18,800.0	89.73	179.51	12,804.2	-6,183.0	-898.7	6,236.4	0.00	0.00	0.00
18,900.0	89.73	179.51	12,804.7	-6,283.0	-897.8	6,336.0	0.00	0.00	0.00
19,000.0	89.73	179.51	12,805.2	-6,383.0	-897.0	6,435.6	0.00	0.00	0.00
19,100.0	89.73	179.51	12,805.7	-6,483.0	-896.1	6,535.1	0.00	0.00	0.00
19,200.0	89.73	179.51	12,806.2	-6,583.0	-895.2	6,634.7	0.00	0.00	0.00
19,300.0	89.73	179.51	12,806.6	-6,682.9	-894.4	6,734.3	0.00	0.00	0.00
19,400.0	89.73	179.51	12,807.1	-6,782.9	-893.5	6,833.9	0.00	0.00	0.00
19,500.0	89.73	179.51	12,807.6	-6,882.9	-892.7	6,933.4	0.00	0.00	0.00
19,600.0	89.73	179.51	12,808.1	-6,982.9	-891.8	7,033.0	0.00	0.00	0.00
19,700.0	89.73	179.51	12,808.6	-7,082.9	-890.9	7,132.6	0.00	0.00	0.00
19,800.0	89.73	179.51	12,809.0	-7,182.9	-890.1	7,232.2	0.00	0.00	0.00
19,900.0	89.73	179.51	12,809.5	-7,282.9	-889.2	7,331.7	0.00	0.00	0.00
20,000.0	89.73	179.51	12,810.0	-7,382.9	-888.4	7,431.3	0.00	0.00	0.00
20,100.0	89.73	179.51	12,810.5	-7,482.9	-887.5	7,530.9	0.00	0.00	0.00
20,200.0	89.73	179.51	12,811.0	-7,582.9	-886.6	7,630.5	0.00	0.00	0.00
20,300.0	89.73	179.51	12,811.4	-7,682.9	-885.8	7,730.0	0.00	0.00	0.00
20,400.0	89.73	179.51	12,811.9	-7,782.9	-884.9	7,829.6	0.00	0.00	0.00
20,500.0	89.73	179.51	12,812.4	-7,882.9	-884.1	7,929.2	0.00	0.00	0.00
20,600.0	89.73	179.51	12,812.9	-7,982.9	-883.2	8,028.8	0.00	0.00	0.00
20,700.0	89.73	179.51	12,813.4	-8,082.9	-882.4	8,128.3	0.00	0.00	0.00
20,800.0	89.73	179.51	12,813.8	-8,182.9	-881.5	8,227.9	0.00	0.00	0.00
20,900.0	89.73	179.51	12,814.3	-8,282.9	-880.6	8,327.5	0.00	0.00	0.00
21,000.0	89.73	179.51	12,814.8	-8,382.9	-879.8	8,427.1	0.00	0.00	0.00
21,100.0	89.73	179.51	12,815.3	-8,482.9	-878.9	8,526.6	0.00	0.00	0.00
21,200.0	89.73	179.51	12,815.8	-8,582.9	-878.1	8,626.2	0.00	0.00	0.00
21,300.0	89.73	179.51	12,816.2	-8,682.8	-877.2	8,725.8	0.00	0.00	0.00
21,400.0	89.73	179.51	12,816.7	-8,782.8	-876.3	8,825.3	0.00	0.00	0.00
21,500.0	89.73	179.51	12,817.2	-8,882.8	-875.5	8,924.9	0.00	0.00	0.00
21,600.0	89.73	179.51	12,817.7	-8,982.8	-874.6	9,024.5	0.00	0.00	0.00
21,700.0	89.73	179.51	12,818.2	-9,082.8	-873.8	9,124.1	0.00	0.00	0.00
21,800.0	89.73	179.51	12,818.6	-9,182.8	-872.9	9,223.6	0.00	0.00	0.00
21,900.0	89.73	179.51	12,819.1	-9,282.8	-872.0	9,323.2	0.00	0.00	0.00
22,000.0	89.73	179.51	12,819.6	-9,382.8	-871.2	9,422.8	0.00	0.00	0.00
22,100.0	89.73	179.51	12,820.1	-9,482.8	-870.3	9,522.4	0.00	0.00	0.00
22,200.0	89.73	179.51	12,820.6	-9,582.8	-869.5	9,621.9	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	NORTHERN DELAWARE BASIN	Local Co-ordinate Reference:	Well GUNNER 8 FEDERAL COM 704H
Project:	LEA COUNTY, NM	TVD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Site:	BULLDOG	MD Reference:	KB=26' @ 3365.3usft (McVAY 8)
Well:	GUNNER 8 FEDERAL COM 704H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP3	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)
22,300.0	89.73	179.51	12,821.0	-9,682.8	-868.6	9,721.5	0.00	0.00	0.00
22,400.0	89.73	179.51	12,821.5	-9,782.8	-867.7	9,821.1	0.00	0.00	0.00
22,500.0	89.73	179.51	12,822.0	-9,882.8	-866.9	9,920.7	0.00	0.00	0.00
22,600.0	89.73	179.51	12,822.5	-9,982.8	-866.0	10,020.2	0.00	0.00	0.00
22,700.0	89.73	179.51	12,823.0	-10,082.8	-865.2	10,119.8	0.00	0.00	0.00
22,800.0	89.73	179.51	12,823.4	-10,182.8	-864.3	10,219.4	0.00	0.00	0.00
22,900.0	89.73	179.51	12,823.9	-10,282.8	-863.4	10,319.0	0.00	0.00	0.00
22,917.4	89.73	179.51	12,824.0	-10,300.2	-863.3	10,336.3	0.00	0.00	0.00
TD at 22917.4									

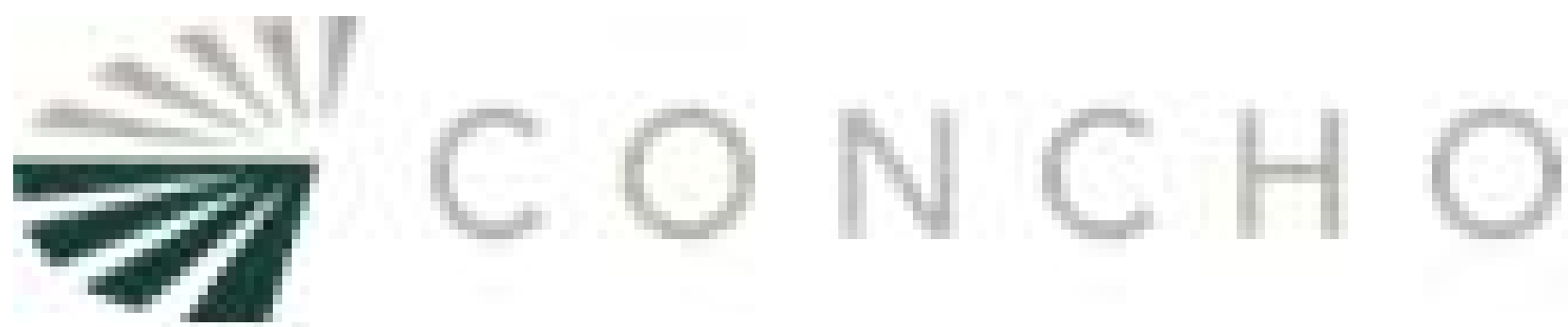
Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
FTP (GUNNER 8 FEC	0.00	0.00	12,777.0	110.8	-951.0	393,589.00	759,109.20	32° 4' 45.588 N	103° 29' 48.389 W
- plan misses target center by 428.5usft at 12700.0usft MD (12623.4 TVD, -162.1 N, -658.6 E)									
- Circle (radius 50.0)									
LTP (GUNNER 8 FED	0.00	0.00	12,824.0	-10,250.2	-863.7	383,228.00	759,196.50	32° 3' 3.053 N	103° 29' 48.308 W
- plan misses target center by 0.2usft at 22867.4usft MD (12823.8 TVD, -10250.2 N, -863.7 E)									
- Point									
PBHL (GUNNER 8 FE	-0.27	359.51	12,824.0	-10,300.2	-863.3	383,178.00	759,196.90	32° 3' 2.559 N	103° 29' 48.308 W
- plan hits target center									
- Rectangle (sides W100.0 H10,413.0 D20.0)									

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
5500	5500	0	0	Start Build 2.00
5747	5747	0	-11	Start 6499.0 hold at 5746.9 MD
12,246	12,222	0	-570	Start DLS 10.00 TFO -71.69
13,128	12,777	-527	-793	Start DLS 2.00 TFO -90.06
14,072	12,782	-1455	-939	Start 8845.2 hold at 14072.3 MD
22,917	12,824	-10,300	-863	TD at 22917.4

Checked By: _____ Approved By: _____ Date: _____



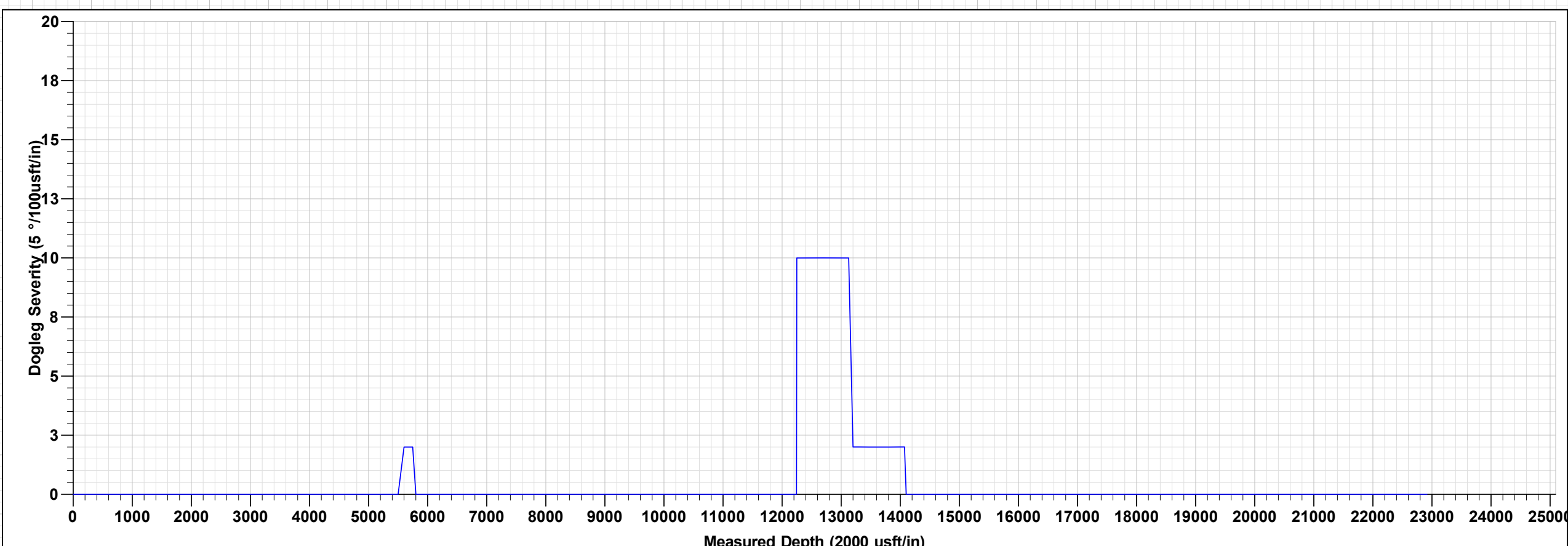
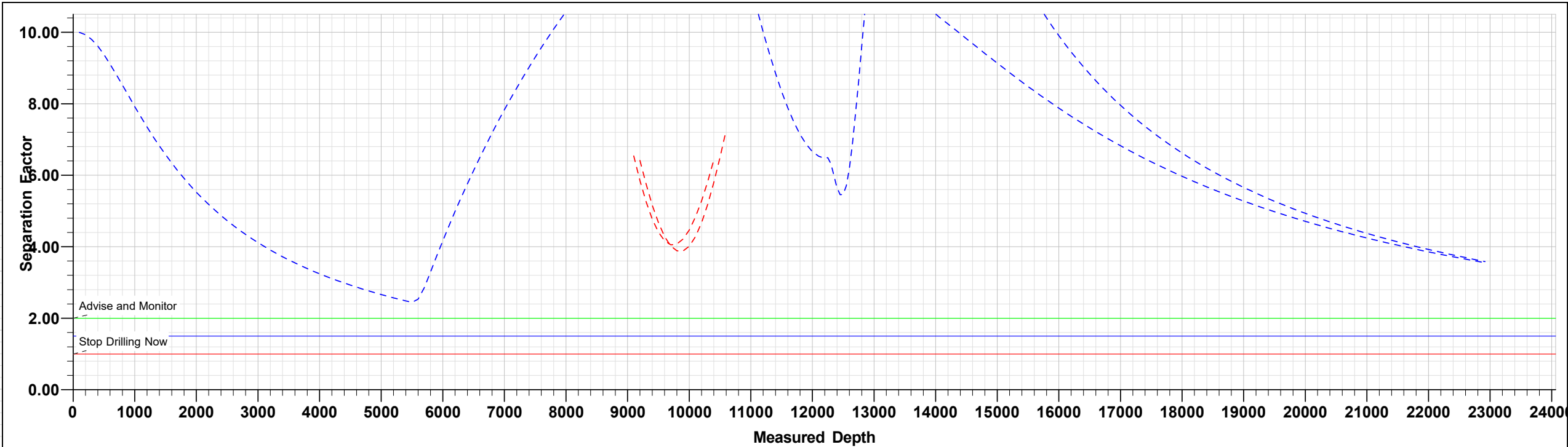
Project: LEA COUNTY, NM
Site: BULLDOG
Well: GUNNER 8 FEDERAL COM 704H
Wellbore: OWB
Design: PWP3
GL: 3339.3
KB=26' @ 3365.3usft (McVAY 8)

WELL DETAILS: GUNNER 8 FEDERAL COM 704H

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	393478.20	760060.20	32° 4' 44.419 N	103° 29' 37.347 W

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
FTP (GUNNER 8 FED COM 704H)	12777.0	110.8	-951.0	393589.00	759109.20	32° 4' 45.588 N	103° 29' 48.390 W
LTP (GUNNER 8 FED COM 704H)	12824.0	-10250.2	-863.7	383228.00	759196.50	32° 3' 3.053 N	103° 29' 48.308 W
PBHL (GUNNER 8 FED COM 704H)	12824.0	-10300.2	-863.3	383178.00	759196.90	32° 3' 2.559 N	103° 29' 48.308 W



GUNNER 8 FEDERAL COM 704H									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
5500.0	0.00	0.00	5500.0	0.0	0.0	0.00	0.00	0.0	Start Build 2.00
5746.9	4.94	270.00	5746.6	0.0	-10.6	2.00	270.00	0.9	Start 6499.0 hold at 5746.9 MD
12245.9	4.94	270.00	12221.5	0.0	-570.0	0.00	0.00	47.6	Start DLS 10.00 TFO -71.69
13127.7	89.73	198.40	12777.0	-526.6	-792.9	10.00	-71.69	591.0	Start DLS 2.00 TFO -90.06
14072.3	89.73	179.51	12781.6	-1455.5	-939.3	2.00	-90.06	1528.8	Start 8845.2 hold at 14072.3 MD
22917.4	89.73	179.51	12824.0	-10300.2	-863.3	0.00	0.00	10336.3	TD at 22917.4

