

Form 3160-5
(June 2019)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021**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.

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well

☐ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

3a. Address

3b. Phone No. (include area code)

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

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

8. Well Name and No.

9. API Well No.

10. Field and Pool or Exploratory Area

11. Country or Parish, State

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		
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal		

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 recompleat 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 recompleat 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 detennined that the site is ready for final inspection.)

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)

Title

Signature

Date

THE SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

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

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)

Additional Information

Location of Well

0. SHL: NENW / 210 FNL / 1730 FWL / TWSP: 25S / RANGE: 29E / SECTION: 24 / LAT: 32.1221918 / LONG: -103.9409684 (TVD: 0 feet, MD: 0 feet)

PPP: NENW / 330 FNL / 2200 FWL / TWSP: 25S / RANGE: 29E / SECTION: 24 / LAT: 32.1218687 / LONG: -103.9394506 (TVD: 10625 feet, MD: 10724 feet)

BHL: SESW / 200 FSL / 2200 FWL / TWSP: 25S / RANGE: 29E / SECTION: 25 / LAT: 32.0941229 / LONG: -103.9393635 (TVD: 10738 feet, MD: 20777 feet)

CONFIDENTIAL

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 Road, 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, NM 87505

Form C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-015-47662	2 Pool Code 98220	3 Pool Name Purple Sage; Wolfcamp (Gas)
4 Property Code 329794	5 Property Name CABO WABO FEDERAL COM	6 Well Number 704H
7 OGRID No. 217955	8 Operator Name COG PRODUCTION LLC	9 Elevation 3161'

10 Surface Location

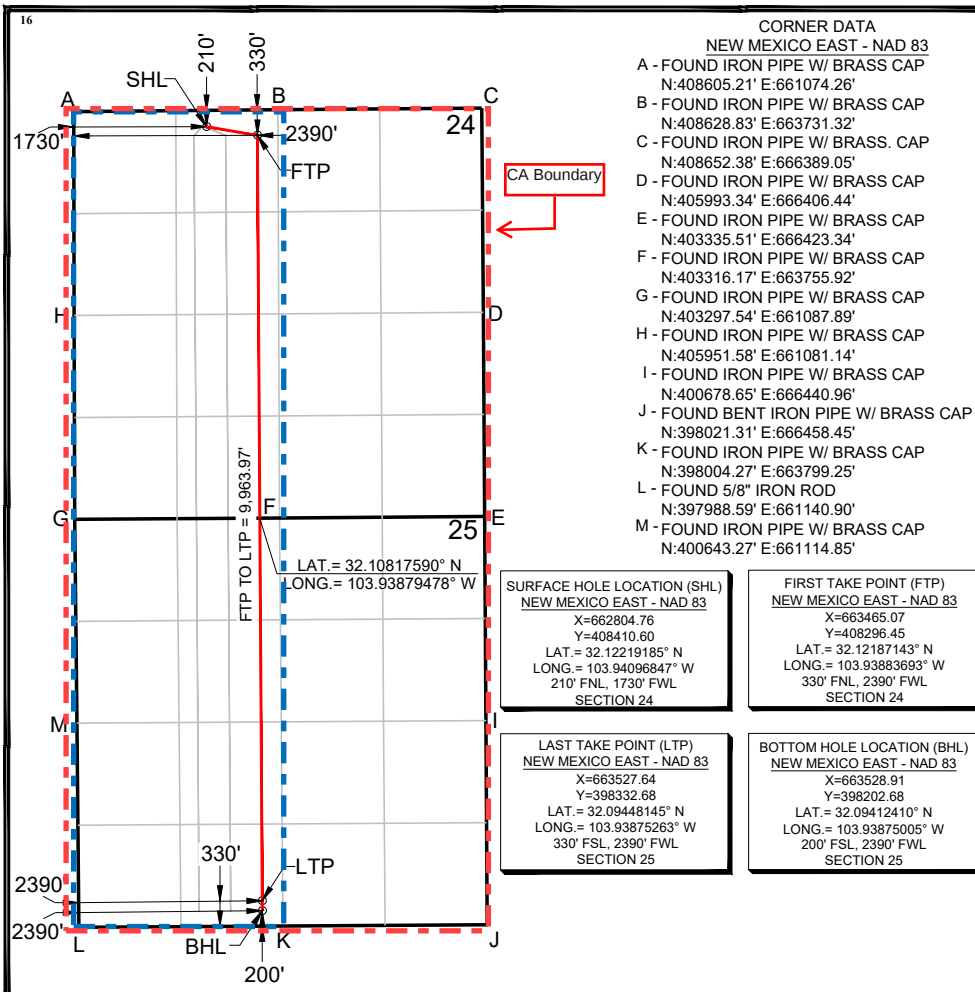
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	24	25-S	29-E		210'	NORTH	1730'	WEST	EDDY

11 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
N	25	25-S	29-E		200'	SOUTH	2390'	WEST	EDDY

12 Dedicated Acres 640	13 Joint or Infill	14 Consolidation Code	15 Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



17 OPERATOR CERTIFICATION

I hereby certify that the information contained 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 a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature Stan Wagner Date 10/11/2021

Printed Name Stan Wagner

E-mail Address _____

18 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.

Date of Survey _____
Signature and Seal of Professional Surveyor: _____

12177
8/16/2021
Certificate Number _____

ConocoPhillips - Cabo Wabo Fed Com #704H

1. Geologic Formations

TVD of target	10,565' EOL	Pilot hole depth	NA
MD at TD:	20,747'	Deepest expected fresh water:	53'

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface	Water	
Rustler	660	Water	
Top of Salt	1070	Salt	
Base of Salt	3123	Salt	
Lamar	3322	Salt Water	
Bell Canyon	3369	Salt Water	
Cherry Canyon	4273	Oil/Gas	
Brushy Canyon	5479	Oil/Gas	
Bone Spring Lime	7180	Oil/Gas	
1st Bone Spring Sand	8136	Oil/Gas	
2nd Bone Spring Sand	8747	Oil/Gas	
3rd Bone Spring Sand	10061	Oil/Gas	
Wolfcamp A	10535	Target	
Wolfcamp B	0	Not Penetrated	
Wolfcamp D	0	Not Penetrated	

2. Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Body	SF Joint
	From	To								
14.75"	0	1350	10.75"	45.5	N80	BTC	4.00	1.67	16.93	17.86
9.875"	0	8500	7.625"	29.7	HCL80	BTC	1.56	1.26	2.88	2.90
8.750"	8500	10100	7.625"	29.7	P110 RY	W 513	1.56	1.68	3.13	1.88
6.75"	0	9600	5.5"	20	P110	BTC	2.33	2.75	3.80	3.77
6.75"	9600	20,747	5.5"	20	P110	W441	1.62	2.18	3.03	2.47
BLM Minimum Safety Factor							1.125	1	1.6 Dry 1.8 Wet	1.6 Dry 1.8 Wet

Intermediate casing will be kept at least 1/3 full while running casing to mitigate collapse. Surface burst based on 0.7 frac gradient at the shoe with Gas Gradient 0.1 psi/ft to surface and
All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

The 5 1/2" talon casing will be run back 200' into the intermediate casing to ensure the coupling OD clearance is greater than .422" for the cement bond tie in.

ConocoPhillips - Cabo Wabo Fed Com #704H

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	Y
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary?	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

ConocoPhillips - Cabo Wabo Fed Com #704H

3. Cementing Program

Casing	# Sk	Wt. lb/ gal	Yld ft ³ / sack	H ₂ O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	644	13.5	1.75	9	12	Lead: Class C + 4% Gel + 1% CaCl ₂
	250	14.8	1.34	6.34	8	Tail: Class C + 2% CaCl ₂
Inter. Stage 1	770	10.3	3.3	22	24	Halliburton tunded light
	250	14.8	1.35	6.6	8	Tail: Class H
Prod	446	12.7	2	10.7	72	Lead: 50:50:10 H Blend
	1051	14.4	1.24	5.7	19	Tail: 50:50:2 Class H Blend

If losses are encountered in the intermediate section a DV/ECP tool will be run ~50' above the Lamar Lime top, cement will be adjusted accordingly if this contingency is necessary.

Volumes Subject to Observed Hole Conditions and/or Fluid Caliper Results

Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

Casing String	TOC	% Excess
Surface	0'	50%
1 st Intermediate	0'	50%
Production	9,600'	35% OH in Lateral (KOP to EOL)

ConocoPhillips - Cabo Wabo Fed Com #704H

4. Pressure Control Equipment

N	A variance is requested for the use of a diverter on the surface casing. See attached for schematic.
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BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	x	Tested to:
9-7/8"	13-5/8"	5M	Annular	x	2500psi
			Blind Ram	x	5000psi
			Pipe Ram	x	
			Double Ram	x	
			Other*		
6-3/4"	13-5/8"	10M	5M Annular	x	5000psi
			Blind Ram	x	10000psi
			Pipe Ram	x	
			Double Ram	x	
			Other*		

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

Y	Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.
Y	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.
N	Are anchors required by manufacturer?
Y	A multibowl wellhead is being used. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested.

ConocoPhillips - Cabo Wabo Fed Com #704H

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	Surf. Shoe	FW Gel	8.6 - 8.8	28-34	N/C
Surf csg	7-5/8" Int shoe	Brine Diesel Emulsion	8.4 - 9	28-34	N/C
7-5/8" Int shoe	Lateral TD	OBM	9.6 - 12.5	35-45	<20

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

What will be used to monitor the loss or gain of fluid?	PVT/Pason/Visual Monitoring
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6. Logging and Testing Procedures

Logging, Coring and Testing.	
Y	Will run GR/CNL from TD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.
Y	No Logs are planned based on well control or offset log information.
N	Drill stem test? If yes, explain.
N	Coring? If yes, explain.

Additional logs planned		Interval
N	Resistivity	Pilot Hole TD to ICP
N	Density	Pilot Hole TD to ICP
Y	CBL	Production casing (If cement not circulated to surface)
Y	Mud log	Intermediate shoe to TD
N	PEX	

ConocoPhillips - Cabo Wabo Fed Com #704H**7. Drilling Conditions**

Condition	Specify what type and where?
BH Pressure at deepest TVD	6870 psi at 10565' TVD
Abnormal Temperature	NO 165 Deg. F.

No abnormal pressure or temperature conditions are anticipated. Sufficient mud materials to maintain mud properties and weight increase requirements will be kept on location at all times.

Sufficient supplies of Paper/LCM for periodic sweeps to control seepage and losses will be maintained on location.

Hydrogen Sulfide (H ₂ S) monitors will be installed prior to drilling out the surface shoe. If H ₂ S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.	
N	H ₂ S is present
Y	H ₂ S Plan attached

8. Other Facets of Operation

Y	Is it a walking operation?
Y	Is casing pre-set?

x	H ₂ S Plan.
x	BOP & Choke Schematics.
x	Directional Plan

DELAWARE BASIN WEST

ATLAS PROSPECT (NM-E)

CABO WABO FEDERAL PROJECT (ATLAS 2529)

CABO WABO FED COM #704H

OWB

PWP1

Anticollision Report

19 May, 2020

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED 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:	PWP1	Offset TVD Reference:	Offset Datum

Reference	PWP1
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	Stations
Depth Range:	Unlimited
Results Limited by:	Maximum ellipse separation of 1,000.0 usft
Warning Levels Evaluated at:	2.00 Sigma
Error Model:	ISCWSA
Scan Method:	Closest Approach 3D
Error Surface:	Pedal Curve
Casing Method:	Not applied

Survey Tool Program		Date	5/19/2020		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	10,158.0	PWP1 (OWB)	Standard Keeper 104	Standard Wireline Keeper ver 1.0.4	
10,158.0	20,777.1	PWP1 (OWB)	MWD+IFR1+FDIR	OWSG MWD + IFR1 + FDIR Correction	

Summary		Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Site Name							
Offset Well - Wellbore - Design							
ATLAS							
CABO WABO 25 FED 1H - OWB - AWP							Out of range
CABO WABO 25 FED 1H - PILOT HOLE - PILOT HOLE							Out of range
CABO WABO 25 FEDERAL #3H - LATERAL 01 - AWP-L							Out of range
CABO WABO 25 FEDERAL #3H - OWB-PILOT HOLE -							Out of range
CABO WABO FEDERAL PROJECT (ATLAS 2529)							
CABO WABO FED COM #502H - OWB - PWP0							Out of range
CABO WABO FED COM #503H - OWB - PWP0		8,619.4	8,636.4	214.5	194.6	10.804	CC, ES
CABO WABO FED COM #503H - OWB - PWP0		8,700.0	8,709.1	216.1	195.9	10.696	SF
CABO WABO FED COM #504H - OWB - PWP0		2,500.0	2,492.0	421.7	414.3	57.174	CC, ES
CABO WABO FED COM #504H - OWB - PWP0		2,600.0	2,584.3	424.2	416.7	56.848	SF
CABO WABO FED COM #701H - OWB - PWP1							Out of range
CABO WABO FED COM #702H - OWB - PWP1							Out of range
CABO WABO FED COM #703H - OWB - PWP1		12,489.2	12,289.8	917.1	877.5	23.160	CC
CABO WABO FED COM #703H - OWB - PWP1		20,778.0	20,577.8	918.4	742.4	5.219	ES, SF
CABO WABO FED COM #705H - OWB - PWP1		2,500.0	2,500.0	30.0	23.1	4.350	CC, ES, SF
CABO WABO FED COM #706H - OWB - PWP1		2,500.0	2,499.0	60.0	53.1	8.694	CC, ES, SF
CABO WABO FED COM #802H - OWB - PWP0							Out of range
CABO WABO FED COM #803H - OWB - PWP0							Out of range
CABO WABO FED COM #804H - OWB - PWP0		10,171.7	10,191.2	109.7	64.6	2.431	CC, ES, SF
CABO WABO FED COM #805H - OWB - PWP0		2,500.0	2,495.0	377.7	365.1	29.834	CC, ES
CABO WABO FED COM #805H - OWB - PWP0		10,158.3	10,130.3	871.9	824.8	18.492	SF

Offset Design	CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #503H - OWB - PWP0										Offset Site Error:	3.0 usft
Survey Program:	0-Standard Keeper 104, 8559-MWD+IFR1+FDIR										Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Distance		Minimum Separation	Separation Factor	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)		
0.0	0.0	0.0	0.0	3.0	3.0	-120.88	-203.0	-339.5	395.7			
100.0	100.0	92.0	92.0	3.0	3.0	-120.88	-203.0	-339.5	395.6	389.6	6.00	65.926
200.0	200.0	192.0	192.0	3.0	3.0	-120.88	-203.0	-339.5	395.6	389.6	6.00	65.878
300.0	300.0	292.0	292.0	3.0	3.0	-120.88	-203.0	-339.5	395.6	389.6	6.01	65.769
400.0	400.0	392.0	392.0	3.0	3.0	-120.88	-203.0	-339.5	395.6	389.5	6.03	65.603

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

Concho Resources LLC

Anticollision Report

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Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED 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:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #503H - OWB - PWP0													Offset Site Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 8559-MWD+IFR1+FDIR													Offset Well Error:	3.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
500.0	500.0	492.0	492.0	3.1	3.1	-120.88	-203.0	-339.5	395.6	389.5	6.05	65.379		
600.0	600.0	592.0	592.0	3.1	3.1	-120.88	-203.0	-339.5	395.6	389.5	6.08	65.099		
700.0	700.0	692.0	692.0	3.1	3.1	-120.88	-203.0	-339.5	395.6	389.5	6.11	64.767		
800.0	800.0	792.0	792.0	3.2	3.1	-120.88	-203.0	-339.5	395.6	389.4	6.14	64.384		
900.0	900.0	892.0	892.0	3.2	3.2	-120.88	-203.0	-339.5	395.6	389.4	6.19	63.952		
1,000.0	1,000.0	992.0	992.0	3.2	3.2	-120.88	-203.0	-339.5	395.6	389.3	6.23	63.476		
1,100.0	1,100.0	1,092.0	1,092.0	3.3	3.3	-120.88	-203.0	-339.5	395.6	389.3	6.28	62.958		
1,200.0	1,200.0	1,192.0	1,192.0	3.4	3.3	-120.88	-203.0	-339.5	395.6	389.2	6.34	62.402		
1,300.0	1,300.0	1,292.0	1,292.0	3.4	3.4	-120.88	-203.0	-339.5	395.6	389.2	6.40	61.811		
1,400.0	1,400.0	1,392.0	1,392.0	3.5	3.5	-120.88	-203.0	-339.5	395.6	389.1	6.46	61.188		
1,500.0	1,500.0	1,492.0	1,492.0	3.5	3.5	-120.88	-203.0	-339.5	395.6	389.0	6.53	60.538		
1,600.0	1,600.0	1,592.0	1,592.0	3.6	3.6	-120.88	-203.0	-339.5	395.6	389.0	6.61	59.863		
1,700.0	1,700.0	1,692.0	1,692.0	3.7	3.7	-120.88	-203.0	-339.5	395.6	388.9	6.69	59.167		
1,800.0	1,800.0	1,792.0	1,792.0	3.8	3.8	-120.88	-203.0	-339.5	395.6	388.8	6.77	58.452		
1,900.0	1,900.0	1,892.0	1,892.0	3.9	3.8	-120.88	-203.0	-339.5	395.6	388.7	6.85	57.723		
2,000.0	2,000.0	1,992.0	1,992.0	3.9	3.9	-120.88	-203.0	-339.5	395.6	388.6	6.94	56.982		
2,100.0	2,100.0	2,092.0	2,092.0	4.0	4.0	-120.88	-203.0	-339.5	395.6	388.5	7.03	56.231		
2,200.0	2,200.0	2,192.0	2,192.0	4.1	4.1	-120.88	-203.0	-339.5	395.6	388.4	7.13	55.474		
2,300.0	2,300.0	2,292.0	2,292.0	4.2	4.2	-120.88	-203.0	-339.5	395.6	388.3	7.23	54.712		
2,400.0	2,400.0	2,392.0	2,392.0	4.3	4.3	-120.88	-203.0	-339.5	395.6	388.2	7.33	53.948		
2,500.0	2,500.0	2,492.0	2,492.0	4.4	4.4	-120.88	-203.0	-339.5	395.6	388.1	7.44	53.184		
2,600.0	2,600.0	2,606.6	2,606.6	4.5	4.5	159.18	-202.3	-337.7	395.5	387.9	7.57	52.240		
2,667.5	2,667.4	2,684.8	2,684.6	4.5	4.5	159.30	-200.7	-334.0	395.1	387.4	7.67	51.493		
2,700.0	2,699.8	2,722.4	2,722.2	4.5	4.5	159.36	-199.7	-331.6	394.5	386.8	7.72	51.093		
2,800.0	2,799.7	2,826.1	2,825.5	4.6	4.6	159.50	-196.2	-323.4	391.5	383.6	7.87	49.727		
2,900.0	2,899.5	2,926.1	2,925.1	4.6	4.7	159.63	-192.8	-315.3	388.3	380.3	8.03	48.377		
3,000.0	2,999.3	3,026.0	3,024.6	4.7	4.7	159.77	-189.4	-307.3	385.1	377.0	8.19	47.053		
3,100.0	3,099.2	3,125.9	3,124.2	4.7	4.8	159.91	-186.0	-299.3	382.0	373.6	8.35	45.758		
3,200.0	3,199.0	3,225.9	3,223.8	4.8	4.9	160.05	-182.6	-291.3	378.8	370.3	8.51	44.492		
3,300.0	3,298.8	3,325.8	3,323.3	4.8	4.9	160.19	-179.2	-283.3	375.6	367.0	8.68	43.257		
3,400.0	3,398.7	3,425.8	3,422.9	4.9	5.0	160.33	-175.8	-275.2	372.5	363.6	8.86	42.053		
3,500.0	3,498.5	3,525.7	3,522.5	5.0	5.1	160.48	-172.4	-267.2	369.3	360.3	9.03	40.881		
3,600.0	3,598.3	3,625.7	3,622.0	5.0	5.2	160.63	-168.9	-259.2	366.2	356.9	9.21	39.741		
3,700.0	3,698.1	3,725.6	3,721.6	5.1	5.3	160.78	-165.5	-251.2	363.0	353.6	9.40	38.634		
3,800.0	3,798.0	3,825.6	3,821.2	5.2	5.3	160.94	-162.1	-243.2	359.9	350.3	9.58	37.558		
3,900.0	3,897.8	3,925.5	3,920.7	5.2	5.4	161.10	-158.7	-235.2	356.7	346.9	9.77	36.514		
4,000.0	3,997.6	4,025.5	4,020.3	5.3	5.5	161.26	-155.3	-227.1	353.6	343.6	9.96	35.500		
4,100.0	4,097.5	4,125.4	4,119.9	5.4	5.6	161.42	-151.9	-219.1	350.4	340.3	10.15	34.518		
4,200.0	4,197.3	4,225.3	4,219.4	5.5	5.7	161.59	-148.5	-211.1	347.3	336.9	10.35	33.565		
4,300.0	4,297.1	4,325.3	4,319.0	5.6	5.8	161.76	-145.1	-203.1	344.1	333.6	10.54	32.641		
4,400.0	4,396.9	4,425.2	4,418.5	5.7	5.9	161.93	-141.7	-195.1	341.0	330.3	10.74	31.746		
4,500.0	4,496.8	4,525.2	4,518.1	5.7	6.0	162.11	-138.3	-187.0	337.9	326.9	10.94	30.879		
4,600.0	4,596.6	4,625.1	4,617.7	5.8	6.1	162.29	-134.9	-179.0	334.7	323.6	11.14	30.039		
4,700.0	4,696.4	4,725.1	4,717.2	5.9	6.2	162.47	-131.5	-171.0	331.6	320.3	11.35	29.225		
4,800.0	4,796.3	4,825.0	4,816.8	6.0	6.3	162.66	-128.1	-163.0	328.5	316.9	11.55	28.436		
4,900.0	4,896.1	4,925.0	4,916.4	6.1	6.4	162.85	-124.7	-155.0	325.4	313.6	11.76	27.671		
5,000.0	4,995.9	5,024.9	5,015.9	6.2	6.5	163.04	-121.3	-147.0	322.3	310.3	11.97	26.931		
5,100.0	5,095.7	5,124.9	5,115.5	6.3	6.6	163.24	-117.9	-138.9	319.1	307.0	12.18	26.213		
5,200.0	5,195.6	5,224.8	5,215.1	6.4	6.7	163.44	-114.5	-130.9	316.0	303.6	12.39	25.517		
5,300.0	5,295.4	5,324.7	5,314.6	6.5	6.8	163.65	-111.1	-122.9	312.9	300.3	12.60	24.843		
5,400.0	5,395.2	5,424.7	5,414.2	6.6	6.9	163.86	-107.7	-114.9	309.8	297.0	12.81	24.189		

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

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED 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:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #503H - OWB - PWP0												Offset Site Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 8559-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,500.0	5,495.1	5,524.6	5,513.8	6.7	7.0	164.07	-104.3	-106.9	306.7	293.7	13.02	23.556	
5,600.0	5,594.9	5,624.6	5,613.3	6.8	7.1	164.29	-100.9	-98.8	303.6	290.4	13.24	22.941	
5,700.0	5,694.7	5,724.5	5,712.9	6.9	7.2	164.51	-97.5	-90.8	300.6	287.1	13.45	22.345	
5,800.0	5,794.6	5,824.5	5,812.5	7.0	7.3	164.74	-94.1	-82.8	297.5	283.8	13.67	21.767	
5,900.0	5,894.4	5,924.4	5,912.0	7.1	7.4	164.97	-90.7	-74.8	294.4	280.5	13.88	21.206	
6,000.0	5,994.2	6,024.4	6,011.6	7.2	7.5	165.21	-87.3	-66.8	291.3	277.2	14.10	20.662	
6,100.0	6,094.0	6,124.3	6,111.2	7.3	7.6	165.45	-83.9	-58.8	288.3	273.9	14.32	20.134	
6,200.0	6,193.9	6,224.3	6,210.7	7.4	7.8	165.70	-80.5	-50.7	285.2	270.7	14.54	19.621	
6,300.0	6,293.7	6,324.2	6,310.3	7.5	7.9	165.95	-77.1	-42.7	282.1	267.4	14.75	19.123	
6,400.0	6,393.5	6,424.1	6,409.8	7.6	8.0	166.21	-73.6	-34.7	279.1	264.1	14.97	18.640	
6,500.0	6,493.4	6,524.1	6,509.4	7.7	8.1	166.47	-70.2	-26.7	276.1	260.9	15.19	18.170	
6,600.0	6,593.2	6,624.0	6,609.0	7.9	8.2	166.74	-66.8	-18.7	273.0	257.6	15.41	17.714	
6,700.0	6,693.0	6,724.0	6,708.5	8.0	8.3	167.02	-63.4	-10.6	270.0	254.4	15.63	17.271	
6,800.0	6,792.8	6,823.9	6,808.1	8.1	8.4	167.30	-60.0	-2.6	267.0	251.1	15.85	16.840	
6,900.0	6,892.7	6,923.9	6,907.7	8.2	8.6	167.59	-56.6	5.4	263.9	247.9	16.07	16.421	
7,000.0	6,992.5	7,023.8	7,007.2	8.3	8.7	167.88	-53.2	13.4	260.9	244.6	16.29	16.014	
7,100.0	7,092.3	7,123.8	7,106.8	8.4	8.8	168.18	-49.8	21.4	257.9	241.4	16.51	15.618	
7,200.0	7,192.2	7,223.7	7,206.4	8.5	8.9	168.49	-46.4	29.4	254.9	238.2	16.74	15.233	
7,300.0	7,292.0	7,323.7	7,305.9	8.6	9.0	168.81	-43.0	37.5	251.9	235.0	16.96	14.858	
7,400.0	7,391.8	7,423.6	7,405.5	8.8	9.1	169.13	-39.6	45.5	248.9	231.8	17.18	14.494	
7,500.0	7,491.6	7,523.5	7,505.1	8.9	9.3	169.47	-36.2	53.5	246.0	228.6	17.40	14.139	
7,600.0	7,591.5	7,623.5	7,604.6	9.0	9.4	169.81	-32.8	61.5	243.0	225.4	17.62	13.794	
7,700.0	7,691.3	7,723.4	7,704.2	9.1	9.5	170.15	-29.4	69.5	240.0	222.2	17.84	13.458	
7,800.0	7,791.1	7,823.4	7,803.8	9.2	9.6	170.51	-26.0	77.6	237.1	219.0	18.06	13.131	
7,900.0	7,891.0	7,923.3	7,903.3	9.3	9.7	170.88	-22.6	85.6	234.2	215.9	18.28	12.813	
8,000.0	7,990.8	8,023.3	8,002.9	9.4	9.8	171.25	-19.2	93.6	231.2	212.7	18.49	12.503	
8,100.0	8,090.6	8,123.2	8,102.5	9.6	10.0	171.64	-15.8	101.6	228.3	209.6	18.71	12.201	
8,200.0	8,190.5	8,223.2	8,202.0	9.7	10.1	172.03	-12.4	109.6	225.4	206.5	18.93	11.907	
8,300.0	8,290.3	8,323.1	8,301.6	9.8	10.2	172.44	-9.0	117.7	222.5	203.4	19.15	11.621	
8,400.0	8,390.1	8,423.1	8,401.2	9.9	10.3	172.85	-5.6	125.7	219.6	200.3	19.36	11.342	
8,500.0	8,489.9	8,523.0	8,500.7	10.0	10.4	173.28	-2.2	133.7	216.7	197.2	19.58	11.071	
8,600.0	8,589.8	8,618.5	8,595.8	10.1	10.5	172.82	-2.2	141.7	214.6	194.8	19.79	10.840	
8,619.4	8,609.1	8,636.4	8,613.5	10.2	10.5	172.32	-3.8	143.3	214.5	194.6	19.85	10.804 CC, ES	
8,700.0	8,689.6	8,709.1	8,684.8	10.3	10.5	168.82	-16.0	150.5	216.1	195.9	20.20	10.696 SF	
8,800.0	8,789.4	8,793.1	8,764.4	10.4	10.5	162.15	-41.1	159.7	224.4	203.5	20.84	10.764	
8,900.0	8,889.3	8,868.2	8,831.6	10.5	10.6	154.52	-73.1	168.6	243.5	221.7	21.76	11.190	
9,000.0	8,989.1	8,933.4	8,886.2	10.6	10.6	147.36	-107.9	176.6	275.8	252.8	22.96	12.012	
9,100.0	9,088.9	8,989.3	8,929.4	10.7	10.7	141.34	-142.5	183.7	321.1	296.7	24.33	13.195	
9,200.0	9,188.7	9,036.8	8,963.4	10.9	10.7	136.56	-175.2	189.8	377.4	351.7	25.70	14.682	
9,300.0	9,288.6	9,077.2	8,990.1	11.0	10.8	132.82	-205.1	195.1	442.4	415.4	26.97	16.403	
9,400.0	9,388.4	9,111.7	9,011.1	11.1	10.8	129.91	-232.1	199.5	514.1	486.0	28.10	18.295	
9,500.0	9,488.2	9,150.0	9,032.4	11.2	10.9	126.96	-263.5	204.5	591.0	562.1	28.94	20.422	
9,600.0	9,588.1	9,166.7	9,041.1	11.3	10.9	125.77	-277.6	206.6	671.6	641.6	29.98	22.403	
9,700.0	9,687.9	9,200.0	9,057.1	11.5	11.0	123.57	-306.5	210.8	755.5	724.9	30.62	24.677	
9,800.0	9,787.7	9,200.0	9,057.1	11.6	11.0	123.57	-306.5	210.8	841.6	810.0	31.56	26.667	
9,900.0	9,887.5	9,225.0	9,068.0	11.7	11.1	122.05	-328.8	214.0	929.5	897.4	32.12	28.941	

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

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED 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:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #504H - OWB - PWP0												Offset Site Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 8556-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	3.0	3.0	-118.81	-203.2	-369.5	421.8				
100.0	100.0	92.0	92.0	3.0	3.0	-118.81	-203.2	-369.5	421.7	415.7	6.00	70.277	
200.0	200.0	192.0	192.0	3.0	3.0	-118.81	-203.2	-369.5	421.7	415.7	6.00	70.228	
300.0	300.0	292.0	292.0	3.0	3.0	-118.81	-203.2	-369.5	421.7	415.7	6.01	70.118	
400.0	400.0	392.0	392.0	3.0	3.0	-118.81	-203.2	-369.5	421.7	415.7	6.03	69.949	
500.0	500.0	492.0	492.0	3.1	3.1	-118.81	-203.2	-369.5	421.7	415.6	6.05	69.722	
600.0	600.0	592.0	592.0	3.1	3.1	-118.81	-203.2	-369.5	421.7	415.6	6.07	69.438	
700.0	700.0	692.0	692.0	3.1	3.1	-118.81	-203.2	-369.5	421.7	415.6	6.10	69.100	
800.0	800.0	792.0	792.0	3.2	3.1	-118.81	-203.2	-369.5	421.7	415.5	6.14	68.710	
900.0	900.0	892.0	892.0	3.2	3.2	-118.81	-203.2	-369.5	421.7	415.5	6.18	68.270	
1,000.0	1,000.0	992.0	992.0	3.2	3.2	-118.81	-203.2	-369.5	421.7	415.5	6.22	67.785	
1,100.0	1,100.0	1,092.0	1,092.0	3.3	3.3	-118.81	-203.2	-369.5	421.7	415.4	6.27	67.256	
1,200.0	1,200.0	1,192.0	1,192.0	3.4	3.3	-118.81	-203.2	-369.5	421.7	415.4	6.32	66.688	
1,300.0	1,300.0	1,292.0	1,292.0	3.4	3.4	-118.81	-203.2	-369.5	421.7	415.3	6.38	66.083	
1,400.0	1,400.0	1,392.0	1,392.0	3.5	3.5	-118.81	-203.2	-369.5	421.7	415.2	6.44	65.445	
1,500.0	1,500.0	1,492.0	1,492.0	3.5	3.5	-118.81	-203.2	-369.5	421.7	415.2	6.51	64.778	
1,600.0	1,600.0	1,592.0	1,592.0	3.6	3.6	-118.81	-203.2	-369.5	421.7	415.1	6.58	64.084	
1,700.0	1,700.0	1,692.0	1,692.0	3.7	3.7	-118.81	-203.2	-369.5	421.7	415.0	6.65	63.368	
1,800.0	1,800.0	1,792.0	1,792.0	3.8	3.8	-118.81	-203.2	-369.5	421.7	415.0	6.73	62.632	
1,900.0	1,900.0	1,892.0	1,892.0	3.9	3.8	-118.81	-203.2	-369.5	421.7	414.9	6.81	61.880	
2,000.0	2,000.0	1,992.0	1,992.0	3.9	3.9	-118.81	-203.2	-369.5	421.7	414.8	6.90	61.115	
2,100.0	2,100.0	2,092.0	2,092.0	4.0	4.0	-118.81	-203.2	-369.5	421.7	414.7	6.99	60.338	
2,200.0	2,200.0	2,192.0	2,192.0	4.1	4.1	-118.81	-203.2	-369.5	421.7	414.6	7.08	59.554	
2,300.0	2,300.0	2,292.0	2,292.0	4.2	4.2	-118.81	-203.2	-369.5	421.7	414.5	7.18	58.763	
2,400.0	2,400.0	2,392.0	2,392.0	4.3	4.3	-118.81	-203.2	-369.5	421.7	414.4	7.27	57.969	
2,500.0	2,500.0	2,492.0	2,492.0	4.4	4.4	-118.81	-203.2	-369.5	421.7	414.3	7.38	57.174 CC, ES	
2,600.0	2,600.0	2,584.3	2,584.3	4.5	4.5	161.37	-202.7	-370.6	424.2	416.7	7.46	56.848 SF	
2,667.5	2,667.4	2,645.9	2,645.8	4.5	4.5	161.73	-201.8	-372.9	428.8	421.3	7.51	57.125	
2,700.0	2,699.8	2,675.4	2,675.3	4.5	4.5	161.97	-201.1	-374.4	431.8	424.2	7.53	57.376	
2,800.0	2,799.7	2,767.5	2,767.1	4.6	4.6	162.91	-198.3	-380.9	442.2	434.6	7.58	58.332	
2,900.0	2,899.5	2,866.5	2,865.7	4.6	4.6	163.97	-194.9	-388.8	453.4	445.7	7.64	59.327	
3,000.0	2,999.3	2,965.5	2,964.4	4.7	4.7	164.98	-191.4	-396.7	464.7	457.0	7.71	60.271	
3,100.0	3,099.2	3,064.5	3,063.0	4.7	4.8	165.95	-188.0	-404.6	476.2	468.4	7.79	61.157	
3,200.0	3,199.0	3,163.6	3,161.7	4.8	4.8	166.86	-184.6	-412.6	487.8	480.0	7.87	61.981	
3,300.0	3,298.8	3,262.6	3,260.3	4.8	4.9	167.74	-181.1	-420.5	499.6	491.6	7.96	62.745	
3,400.0	3,398.7	3,361.6	3,359.0	4.9	5.0	168.57	-177.7	-428.4	511.4	503.4	8.06	63.447	
3,500.0	3,498.5	3,460.6	3,457.6	5.0	5.0	169.37	-174.3	-436.3	523.4	515.2	8.17	64.089	
3,600.0	3,598.3	3,559.7	3,556.3	5.0	5.1	170.13	-170.8	-444.2	535.4	527.2	8.28	64.672	
3,700.0	3,698.1	3,658.7	3,654.9	5.1	5.2	170.86	-167.4	-452.1	547.6	539.2	8.40	65.197	
3,800.0	3,798.0	3,757.7	3,753.6	5.2	5.3	171.56	-164.0	-460.1	559.8	551.3	8.52	65.667	
3,900.0	3,897.8	3,856.7	3,852.2	5.2	5.4	172.22	-160.5	-468.0	572.1	563.4	8.66	66.085	
4,000.0	3,997.6	3,955.8	3,950.8	5.3	5.5	172.86	-157.1	-475.9	584.5	575.7	8.80	66.454	
4,100.0	4,097.5	4,054.8	4,049.5	5.4	5.5	173.47	-153.7	-483.8	596.9	588.0	8.94	66.776	
4,200.0	4,197.3	4,153.8	4,148.1	5.5	5.6	174.06	-150.2	-491.7	609.4	600.3	9.09	67.054	
4,300.0	4,297.1	4,252.8	4,246.8	5.6	5.7	174.62	-146.8	-499.7	622.0	612.8	9.24	67.292	
4,400.0	4,396.9	4,351.9	4,345.4	5.7	5.8	175.16	-143.4	-507.6	634.6	625.2	9.40	67.493	
4,500.0	4,496.8	4,450.9	4,444.1	5.7	5.9	175.69	-139.9	-515.5	647.3	637.7	9.57	67.659	
4,600.0	4,596.6	4,549.9	4,542.7	5.8	6.0	176.19	-136.5	-523.4	660.0	650.3	9.74	67.795	
4,700.0	4,696.4	4,648.9	4,641.4	5.9	6.1	176.67	-133.1	-531.3	672.8	662.9	9.91	67.901	
4,800.0	4,796.3	4,747.9	4,740.0	6.0	6.2	177.13	-129.7	-539.3	685.6	675.5	10.09	67.981	
4,900.0	4,896.1	4,847.0	4,838.7	6.1	6.3	177.58	-126.2	-547.2	698.5	688.2	10.27	68.038	

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

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED 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:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #504H - OWB - PWP0												Offset Site Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 8556-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.0	4,995.9	4,946.0	4,937.3	6.2	6.4	178.01	-122.8	-555.1	711.4	701.0	10.45	68.074	
5,100.0	5,095.7	5,045.0	5,036.0	6.3	6.5	178.42	-119.4	-563.0	724.3	713.7	10.64	68.090	
5,200.0	5,195.6	5,144.0	5,134.6	6.4	6.6	178.82	-115.9	-570.9	737.3	726.5	10.83	68.089	
5,300.0	5,295.4	5,243.1	5,233.3	6.5	6.7	179.21	-112.5	-578.8	750.3	739.3	11.02	68.072	
5,400.0	5,395.2	5,342.1	5,331.9	6.6	6.8	179.58	-109.1	-586.8	763.4	752.2	11.22	68.042	
5,500.0	5,495.1	5,441.1	5,430.6	6.7	6.9	179.94	-105.6	-594.7	776.5	765.0	11.42	68.000	
5,600.0	5,594.9	5,540.1	5,529.2	6.8	7.0	-179.71	-102.2	-602.6	789.6	778.0	11.62	67.947	
5,700.0	5,694.7	5,639.2	5,627.9	6.9	7.1	-179.37	-98.8	-610.5	802.7	790.9	11.82	67.884	
5,800.0	5,794.6	5,738.2	5,726.5	7.0	7.2	-179.04	-95.3	-618.4	815.9	803.8	12.03	67.812	
5,900.0	5,894.4	5,837.2	5,825.1	7.1	7.3	-178.73	-91.9	-626.4	829.1	816.8	12.24	67.734	
6,000.0	5,994.2	5,936.2	5,923.8	7.2	7.4	-178.42	-88.5	-634.3	842.3	829.8	12.45	67.648	
6,100.0	6,094.0	6,035.3	6,022.4	7.3	7.6	-178.12	-85.0	-642.2	855.5	842.8	12.66	67.558	
6,200.0	6,193.9	6,134.3	6,121.1	7.4	7.7	-177.84	-81.6	-650.1	868.8	855.9	12.88	67.462	
6,300.0	6,293.7	6,233.3	6,219.7	7.5	7.8	-177.56	-78.2	-658.0	882.0	868.9	13.09	67.362	
6,400.0	6,393.5	6,332.3	6,318.4	7.6	7.9	-177.28	-74.7	-666.0	895.3	882.0	13.31	67.258	
6,500.0	6,493.4	6,431.4	6,417.0	7.7	8.0	-177.02	-71.3	-673.9	908.7	895.1	13.53	67.152	
6,600.0	6,593.2	6,530.4	6,515.7	7.9	8.1	-176.77	-67.9	-681.8	922.0	908.2	13.75	67.043	
6,700.0	6,693.0	6,629.4	6,614.3	8.0	8.2	-176.52	-64.4	-689.7	935.3	921.4	13.97	66.932	
6,800.0	6,792.8	6,728.4	6,713.0	8.1	8.3	-176.28	-61.0	-697.6	948.7	934.5	14.20	66.819	
6,900.0	6,892.7	6,827.5	6,811.6	8.2	8.5	-176.04	-57.6	-705.6	962.1	947.7	14.42	66.705	
7,000.0	6,992.5	6,926.5	6,910.3	8.3	8.6	-175.81	-54.1	-713.5	975.5	960.8	14.65	66.589	
7,100.0	7,092.3	7,025.5	7,008.9	8.4	8.7	-175.59	-50.7	-721.4	988.9	974.0	14.88	66.473	

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

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED 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:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #703H - OWB - PWP1												Offset Site Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 10239-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
11,700.0	10,724.0	11,700.0	10,728.7	15.9	15.7	-91.13	-1,329.4	1,455.3	998.4	967.8	30.65	32.572	
11,800.0	10,724.1	11,773.2	10,728.7	16.4	16.1	-91.15	-1,401.3	1,441.7	979.3	947.6	31.73	30.863	
11,900.0	10,724.3	11,846.8	10,728.8	17.0	16.5	-91.16	-1,474.0	1,429.9	962.6	929.8	32.83	29.321	
12,000.0	10,724.5	11,921.1	10,728.9	17.7	17.0	-91.17	-1,547.5	1,419.9	948.5	914.6	33.95	27.936	
12,100.0	10,724.6	12,000.0	10,729.0	18.3	17.4	-91.18	-1,626.0	1,411.4	937.0	901.9	35.12	26.684	
12,200.0	10,724.8	12,071.0	10,729.0	19.0	17.9	-91.19	-1,696.7	1,405.5	928.1	891.8	36.25	25.605	
12,300.0	10,724.9	12,146.4	10,729.1	19.7	18.3	-91.19	-1,772.0	1,401.3	921.8	884.4	37.40	24.644	
12,400.0	10,725.1	12,222.1	10,729.2	20.3	18.8	-91.19	-1,847.7	1,399.0	918.1	879.6	38.56	23.808	
12,489.2	10,725.2	12,289.8	10,729.3	21.0	19.2	-91.19	-1,915.3	1,398.6	917.1	877.5	39.60	23.160 CC	
12,500.0	10,725.2	12,300.4	10,729.3	21.1	19.3	-91.19	-1,926.0	1,398.7	917.1	877.3	39.74	23.075	
12,600.0	10,725.4	12,400.4	10,729.4	21.8	19.9	-91.19	-2,026.0	1,399.3	917.1	876.0	41.13	22.299	
12,700.0	10,725.5	12,500.4	10,729.5	22.5	20.6	-91.19	-2,126.0	1,400.0	917.1	874.6	42.54	21.560	
12,800.0	10,725.7	12,600.4	10,729.6	23.2	21.2	-91.18	-2,226.0	1,400.6	917.1	873.2	43.97	20.858	
12,900.0	10,725.8	12,700.4	10,729.7	24.0	21.9	-91.18	-2,326.0	1,401.3	917.1	871.7	45.42	20.191	
13,000.0	10,726.0	12,800.4	10,729.8	24.8	22.6	-91.18	-2,426.0	1,401.9	917.2	870.3	46.89	19.558	
13,100.0	10,726.1	12,900.4	10,729.9	25.5	23.3	-91.17	-2,526.0	1,402.6	917.2	868.8	48.38	18.957	
13,200.0	10,726.3	13,000.4	10,730.0	26.3	24.0	-91.17	-2,626.0	1,403.2	917.2	867.3	49.89	18.386	
13,300.0	10,726.5	13,100.4	10,730.1	27.1	24.7	-91.17	-2,726.0	1,403.8	917.2	865.8	51.40	17.843	
13,400.0	10,726.6	13,200.4	10,730.2	27.8	25.5	-91.16	-2,826.0	1,404.5	917.2	864.3	52.93	17.328	
13,500.0	10,726.8	13,300.4	10,730.3	28.6	26.2	-91.16	-2,926.0	1,405.1	917.2	862.8	54.48	16.838	
13,600.0	10,726.9	13,400.4	10,730.4	29.4	27.0	-91.16	-3,026.0	1,405.8	917.3	861.2	56.03	16.371	
13,700.0	10,727.1	13,500.4	10,730.6	30.2	27.7	-91.15	-3,126.0	1,406.4	917.3	859.7	57.59	15.928	
13,800.0	10,727.2	13,600.4	10,730.7	31.0	28.5	-91.15	-3,225.9	1,407.1	917.3	858.1	59.16	15.505	
13,900.0	10,727.4	13,700.4	10,730.8	31.8	29.2	-91.15	-3,325.9	1,407.7	917.3	856.6	60.74	15.102	
14,000.0	10,727.5	13,800.4	10,730.9	32.6	30.0	-91.15	-3,425.9	1,408.4	917.3	855.0	62.33	14.718	
14,100.0	10,727.7	13,900.4	10,731.0	33.4	30.8	-91.14	-3,525.9	1,409.0	917.3	853.4	63.92	14.351	
14,200.0	10,727.8	14,000.4	10,731.1	34.2	31.6	-91.14	-3,625.9	1,409.7	917.4	851.8	65.52	14.000	
14,300.0	10,728.0	14,100.4	10,731.2	35.1	32.4	-91.14	-3,725.9	1,410.3	917.4	850.2	67.13	13.666	
14,400.0	10,728.2	14,200.4	10,731.3	35.9	33.1	-91.13	-3,825.9	1,410.9	917.4	848.6	68.74	13.345	
14,500.0	10,728.3	14,300.4	10,731.4	36.7	33.9	-91.13	-3,925.9	1,411.6	917.4	847.0	70.36	13.039	
14,600.0	10,728.5	14,400.4	10,731.5	37.5	34.7	-91.13	-4,025.9	1,412.2	917.4	845.4	71.98	12.745	
14,700.0	10,728.6	14,500.4	10,731.6	38.3	35.5	-91.12	-4,125.9	1,412.9	917.4	843.8	73.61	12.463	
14,800.0	10,728.8	14,600.4	10,731.7	39.1	36.3	-91.12	-4,225.9	1,413.5	917.4	842.2	75.24	12.193	
14,900.0	10,728.9	14,700.4	10,731.8	40.0	37.1	-91.12	-4,325.9	1,414.2	917.5	840.6	76.88	11.934	
15,000.0	10,729.1	14,800.4	10,731.9	40.8	37.9	-91.11	-4,425.9	1,414.8	917.5	839.0	78.52	11.685	
15,100.0	10,729.2	14,900.4	10,732.0	41.6	38.8	-91.11	-4,525.9	1,415.5	917.5	837.3	80.16	11.446	
15,200.0	10,729.4	15,000.4	10,732.1	42.5	39.6	-91.11	-4,625.9	1,416.1	917.5	835.7	81.81	11.215	
15,300.0	10,729.5	15,100.4	10,732.2	43.3	40.4	-91.10	-4,725.9	1,416.8	917.5	834.1	83.46	10.994	
15,400.0	10,729.7	15,200.4	10,732.3	44.1	41.2	-91.10	-4,825.9	1,417.4	917.5	832.4	85.11	10.781	
15,500.0	10,729.9	15,300.4	10,732.4	44.9	42.0	-91.10	-4,925.9	1,418.0	917.6	830.8	86.76	10.575	
15,600.0	10,730.0	15,400.4	10,732.6	45.8	42.8	-91.10	-5,025.9	1,418.7	917.6	829.1	88.42	10.377	
15,700.0	10,730.2	15,500.4	10,732.7	46.6	43.7	-91.09	-5,125.9	1,419.3	917.6	827.5	90.08	10.186	
15,800.0	10,730.3	15,600.4	10,732.8	47.5	44.5	-91.09	-5,225.9	1,420.0	917.6	825.9	91.74	10.002	
15,900.0	10,730.5	15,700.4	10,732.9	48.3	45.3	-91.09	-5,325.9	1,420.6	917.6	824.2	93.41	9.824	
16,000.0	10,730.6	15,800.4	10,733.0	49.1	46.1	-91.08	-5,425.9	1,421.3	917.6	822.6	95.08	9.652	
16,100.0	10,730.8	15,900.4	10,733.1	50.0	47.0	-91.08	-5,525.9	1,421.9	917.6	820.9	96.75	9.485	
16,200.0	10,730.9	16,000.4	10,733.2	50.8	47.8	-91.08	-5,625.9	1,422.6	917.7	819.2	98.42	9.324	
16,300.0	10,731.1	16,100.4	10,733.3	51.6	48.6	-91.07	-5,725.9	1,423.2	917.7	817.6	100.09	9.169	
16,400.0	10,731.2	16,200.4	10,733.4	52.5	49.4	-91.07	-5,825.9	1,423.9	917.7	815.9	101.76	9.018	
16,500.0	10,731.4	16,300.4	10,733.5	53.3	50.3	-91.07	-5,925.9	1,424.5	917.7	814.3	103.44	8.872	
16,600.0	10,731.6	16,400.4	10,733.6	54.2	51.1	-91.06	-6,025.9	1,425.1	917.7	812.6	105.12	8.731	

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

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED 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:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #703H - OWB - PWP1												Offset Site Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 10239-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
16,700.0	10,731.7	16,500.4	10,733.7	55.0	51.9	-91.06	-6,125.9	1,425.8	917.7	810.9	106.79	8.594	
16,800.0	10,731.9	16,600.4	10,733.8	55.9	52.8	-91.06	-6,225.9	1,426.4	917.8	809.3	108.48	8.461	
16,900.0	10,732.0	16,700.4	10,733.9	56.7	53.6	-91.06	-6,325.9	1,427.1	917.8	807.6	110.16	8.332	
17,000.0	10,732.2	16,800.4	10,734.0	57.5	54.4	-91.05	-6,425.9	1,427.7	917.8	806.0	111.84	8.206	
17,100.0	10,732.3	16,900.4	10,734.1	58.4	55.3	-91.05	-6,525.9	1,428.4	917.8	804.3	113.52	8.085	
17,200.0	10,732.5	17,000.4	10,734.2	59.2	56.1	-91.05	-6,625.9	1,429.0	917.8	802.6	115.21	7.967	
17,300.0	10,732.6	17,100.4	10,734.3	60.1	57.0	-91.04	-6,725.9	1,429.7	917.8	800.9	116.90	7.852	
17,400.0	10,732.8	17,200.4	10,734.4	60.9	57.8	-91.04	-6,825.9	1,430.3	917.9	799.3	118.58	7.740	
17,500.0	10,732.9	17,300.4	10,734.6	61.8	58.6	-91.04	-6,925.9	1,431.0	917.9	797.6	120.27	7.632	
17,600.0	10,733.1	17,400.4	10,734.7	62.6	59.5	-91.03	-7,025.9	1,431.6	917.9	795.9	121.96	7.526	
17,700.0	10,733.3	17,500.4	10,734.8	63.5	60.3	-91.03	-7,125.9	1,432.3	917.9	794.3	123.65	7.423	
17,800.0	10,733.4	17,600.4	10,734.9	64.3	61.2	-91.03	-7,225.9	1,432.9	917.9	792.6	125.34	7.323	
17,900.0	10,733.6	17,700.4	10,735.0	65.2	62.0	-91.02	-7,325.9	1,433.5	917.9	790.9	127.03	7.226	
18,000.0	10,733.7	17,800.4	10,735.1	66.0	62.8	-91.02	-7,425.9	1,434.2	917.9	789.2	128.73	7.131	
18,100.0	10,733.9	17,900.4	10,735.2	66.9	63.7	-91.02	-7,525.9	1,434.8	918.0	787.5	130.42	7.039	
18,200.0	10,734.0	18,000.4	10,735.3	67.7	64.5	-91.02	-7,625.9	1,435.5	918.0	785.9	132.11	6.948	
18,300.0	10,734.2	18,100.4	10,735.4	68.6	65.4	-91.01	-7,725.9	1,436.1	918.0	784.2	133.81	6.860	
18,400.0	10,734.3	18,200.4	10,735.5	69.4	66.2	-91.01	-7,825.9	1,436.8	918.0	782.5	135.51	6.775	
18,500.0	10,734.5	18,300.4	10,735.6	70.3	67.1	-91.01	-7,925.8	1,437.4	918.0	780.8	137.20	6.691	
18,600.0	10,734.6	18,400.4	10,735.7	71.1	67.9	-91.00	-8,025.8	1,438.1	918.0	779.1	138.90	6.609	
18,700.0	10,734.8	18,500.4	10,735.8	72.0	68.8	-91.00	-8,125.8	1,438.7	918.1	777.5	140.60	6.530	
18,800.0	10,734.9	18,600.4	10,735.9	72.8	69.6	-91.00	-8,225.8	1,439.4	918.1	775.8	142.30	6.452	
18,900.0	10,735.1	18,700.4	10,736.0	73.7	70.4	-90.99	-8,325.8	1,440.0	918.1	774.1	144.00	6.376	
19,000.0	10,735.3	18,800.4	10,736.1	74.5	71.3	-90.99	-8,425.8	1,440.6	918.1	772.4	145.69	6.302	
19,100.0	10,735.4	18,900.4	10,736.2	75.4	72.1	-90.99	-8,525.8	1,441.3	918.1	770.7	147.40	6.229	
19,200.0	10,735.6	19,000.4	10,736.3	76.2	73.0	-90.98	-8,625.8	1,441.9	918.1	769.0	149.10	6.158	
19,300.0	10,735.7	19,100.4	10,736.4	77.1	73.8	-90.98	-8,725.8	1,442.6	918.2	767.4	150.80	6.089	
19,400.0	10,735.9	19,200.4	10,736.6	77.9	74.7	-90.98	-8,825.8	1,443.2	918.2	765.7	152.50	6.021	
19,500.0	10,736.0	19,300.4	10,736.7	78.8	75.5	-90.98	-8,925.8	1,443.9	918.2	764.0	154.20	5.954	
19,600.0	10,736.2	19,400.4	10,736.8	79.6	76.4	-90.97	-9,025.8	1,444.5	918.2	762.3	155.90	5.890	
19,700.0	10,736.3	19,500.4	10,736.9	80.5	77.2	-90.97	-9,125.8	1,445.2	918.2	760.6	157.61	5.826	
19,800.0	10,736.5	19,600.4	10,737.0	81.3	78.1	-90.97	-9,225.8	1,445.8	918.2	758.9	159.31	5.764	
19,900.0	10,736.6	19,700.4	10,737.1	82.2	78.9	-90.96	-9,325.8	1,446.5	918.3	757.2	161.01	5.703	
20,000.0	10,736.8	19,800.4	10,737.2	83.0	79.8	-90.96	-9,425.8	1,447.1	918.3	755.5	162.72	5.643	
20,100.0	10,737.0	19,900.4	10,737.3	83.9	80.6	-90.96	-9,525.8	1,447.7	918.3	753.9	164.42	5.585	
20,200.0	10,737.1	20,000.4	10,737.4	84.7	81.5	-90.95	-9,625.8	1,448.4	918.3	752.2	166.13	5.528	
20,300.0	10,737.3	20,100.4	10,737.5	85.6	82.3	-90.95	-9,725.8	1,449.0	918.3	750.5	167.83	5.472	
20,400.0	10,737.4	20,200.4	10,737.6	86.4	83.2	-90.95	-9,825.8	1,449.7	918.3	748.8	169.54	5.417	
20,500.0	10,737.6	20,300.4	10,737.7	87.3	84.0	-90.94	-9,925.8	1,450.3	918.3	747.1	171.25	5.363	
20,600.0	10,737.7	20,400.4	10,737.8	88.2	84.9	-90.94	-10,025.8	1,451.0	918.4	745.4	172.95	5.310	
20,700.0	10,737.9	20,500.4	10,737.9	89.0	85.7	-90.94	-10,125.8	1,451.6	918.4	743.7	174.66	5.258	
20,777.1	10,738.0	20,577.5	10,738.0	89.7	86.4	-90.94	-10,202.9	1,452.1	918.4	742.4	175.97	5.219	
20,778.0	10,738.0	20,577.8	10,738.0	89.7	86.4	-90.94	-10,203.2	1,452.1	918.4	742.4	175.98	5.219 ES, SF	

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

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED 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:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #705H - OWB - PWP1												Offset Site Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 10039-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	3.0	3.0	-90.55	-0.3	-30.0	30.0				
100.0	100.0	100.0	100.0	3.0	3.0	-90.55	-0.3	-30.0	30.0	24.0	6.00	5.000	
200.0	200.0	200.0	200.0	3.0	3.0	-90.55	-0.3	-30.0	30.0	24.0	6.00	4.998	
300.0	300.0	300.0	300.0	3.0	3.0	-90.55	-0.3	-30.0	30.0	24.0	6.01	4.993	
400.0	400.0	400.0	400.0	3.0	3.0	-90.55	-0.3	-30.0	30.0	24.0	6.02	4.985	
500.0	500.0	500.0	500.0	3.1	3.1	-90.55	-0.3	-30.0	30.0	24.0	6.03	4.975	
600.0	600.0	600.0	600.0	3.1	3.1	-90.55	-0.3	-30.0	30.0	24.0	6.05	4.962	
700.0	700.0	700.0	700.0	3.1	3.1	-90.55	-0.3	-30.0	30.0	23.9	6.07	4.946	
800.0	800.0	800.0	800.0	3.2	3.2	-90.55	-0.3	-30.0	30.0	23.9	6.09	4.928	
900.0	900.0	900.0	900.0	3.2	3.2	-90.55	-0.3	-30.0	30.0	23.9	6.11	4.908	
1,000.0	1,000.0	1,000.0	1,000.0	3.2	3.2	-90.55	-0.3	-30.0	30.0	23.9	6.14	4.886	
1,100.0	1,100.0	1,100.0	1,100.0	3.3	3.3	-90.55	-0.3	-30.0	30.0	23.8	6.17	4.861	
1,200.0	1,200.0	1,200.0	1,200.0	3.4	3.4	-90.55	-0.3	-30.0	30.0	23.8	6.21	4.834	
1,300.0	1,300.0	1,300.0	1,300.0	3.4	3.4	-90.55	-0.3	-30.0	30.0	23.8	6.24	4.805	
1,400.0	1,400.0	1,400.0	1,400.0	3.5	3.5	-90.55	-0.3	-30.0	30.0	23.7	6.28	4.775	
1,500.0	1,500.0	1,500.0	1,500.0	3.5	3.5	-90.55	-0.3	-30.0	30.0	23.7	6.33	4.742	
1,600.0	1,600.0	1,600.0	1,600.0	3.6	3.6	-90.55	-0.3	-30.0	30.0	23.6	6.37	4.708	
1,700.0	1,700.0	1,700.0	1,700.0	3.7	3.7	-90.55	-0.3	-30.0	30.0	23.6	6.42	4.673	
1,800.0	1,800.0	1,800.0	1,800.0	3.8	3.8	-90.55	-0.3	-30.0	30.0	23.5	6.47	4.636	
1,900.0	1,900.0	1,900.0	1,900.0	3.9	3.9	-90.55	-0.3	-30.0	30.0	23.5	6.53	4.598	
2,000.0	2,000.0	2,000.0	2,000.0	3.9	3.9	-90.55	-0.3	-30.0	30.0	23.4	6.58	4.559	
2,100.0	2,100.0	2,100.0	2,100.0	4.0	4.0	-90.55	-0.3	-30.0	30.0	23.4	6.64	4.518	
2,200.0	2,200.0	2,200.0	2,200.0	4.1	4.1	-90.55	-0.3	-30.0	30.0	23.3	6.70	4.477	
2,300.0	2,300.0	2,300.0	2,300.0	4.2	4.2	-90.55	-0.3	-30.0	30.0	23.2	6.76	4.435	
2,400.0	2,400.0	2,400.0	2,400.0	4.3	4.3	-90.55	-0.3	-30.0	30.0	23.2	6.83	4.393	
2,500.0	2,500.0	2,500.0	2,500.0	4.4	4.4	-90.55	-0.3	-30.0	30.0	23.1	6.90	4.350 CC, ES, SF	
2,600.0	2,600.0	2,600.0	2,600.0	4.5	4.5	-171.07	-0.3	-30.0	31.7	24.8	6.97	4.552	
2,667.5	2,667.4	2,667.4	2,667.4	4.5	4.6	-171.86	-0.3	-30.0	34.8	27.8	7.02	4.960	
2,700.0	2,699.8	2,699.8	2,699.8	4.5	4.6	-172.28	-0.3	-30.0	36.7	29.7	7.05	5.207	
2,800.0	2,799.7	2,799.7	2,799.7	4.6	4.7	-173.34	-0.3	-30.0	42.5	35.4	7.14	5.952	
2,900.0	2,899.5	2,899.5	2,899.5	4.6	4.8	-174.14	-0.3	-30.0	48.3	41.1	7.24	6.673	
3,000.0	2,999.3	2,999.3	2,999.3	4.7	4.9	-174.77	-0.3	-30.0	54.1	46.8	7.35	7.369	
3,100.0	3,099.2	3,099.2	3,099.2	4.7	5.0	-175.28	-0.3	-30.0	60.0	52.5	7.46	8.042	
3,200.0	3,199.0	3,199.0	3,199.0	4.8	5.1	-175.70	-0.3	-30.0	65.8	58.2	7.57	8.690	
3,300.0	3,298.8	3,298.8	3,298.8	4.8	5.2	-176.05	-0.3	-30.0	71.6	63.9	7.69	9.314	
3,400.0	3,398.7	3,398.7	3,398.7	4.9	5.3	-176.35	-0.3	-30.0	77.5	69.6	7.81	9.915	
3,500.0	3,498.5	3,498.5	3,498.5	5.0	5.4	-176.60	-0.3	-30.0	83.3	75.3	7.94	10.493	
3,600.0	3,598.3	3,598.3	3,598.3	5.0	5.5	-176.83	-0.3	-30.0	89.1	81.1	8.07	11.049	
3,700.0	3,698.1	3,698.1	3,698.1	5.1	5.7	-177.02	-0.3	-30.0	95.0	86.8	8.20	11.582	
3,800.0	3,798.0	3,798.0	3,798.0	5.2	5.8	-177.20	-0.3	-30.0	100.8	92.5	8.33	12.094	
3,900.0	3,897.8	3,897.8	3,897.8	5.2	5.9	-177.35	-0.3	-30.0	106.6	98.2	8.47	12.586	
4,000.0	3,997.6	3,997.6	3,997.6	5.3	6.0	-177.49	-0.3	-30.0	112.5	103.9	8.61	13.059	
4,100.0	4,097.5	4,097.5	4,097.5	5.4	6.1	-177.61	-0.3	-30.0	118.3	109.5	8.76	13.512	
4,200.0	4,197.3	4,197.3	4,197.3	5.5	6.2	-177.72	-0.3	-30.0	124.1	115.2	8.90	13.947	
4,300.0	4,297.1	4,297.1	4,297.1	5.6	6.3	-177.83	-0.3	-30.0	130.0	120.9	9.05	14.364	
4,400.0	4,396.9	4,396.9	4,396.9	5.7	6.5	-177.92	-0.3	-30.0	135.8	126.6	9.20	14.765	
4,500.0	4,496.8	4,496.8	4,496.8	5.7	6.6	-178.00	-0.3	-30.0	141.7	132.3	9.35	15.149	
4,600.0	4,596.6	4,596.6	4,596.6	5.8	6.7	-178.08	-0.3	-30.0	147.5	138.0	9.50	15.518	
4,700.0	4,696.4	4,696.4	4,696.4	5.9	6.8	-178.16	-0.3	-30.0	153.3	143.7	9.66	15.873	
4,800.0	4,796.3	4,796.3	4,796.3	6.0	6.9	-178.22	-0.3	-30.0	159.2	149.4	9.82	16.213	
4,900.0	4,896.1	4,896.1	4,896.1	6.1	7.0	-178.29	-0.3	-30.0	165.0	155.0	9.98	16.540	

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

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED 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:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #705H - OWB - PWP1													Offset Site Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 10039-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		
5,000.0	4,995.9	4,995.9	4,995.9	6.2	7.2	-178.35	-0.3	-30.0	170.9	160.7	10.14	16.854		
5,100.0	5,095.7	5,095.7	5,095.7	6.3	7.3	-178.40	-0.3	-30.0	176.7	166.4	10.30	17.156		
5,200.0	5,195.6	5,195.6	5,195.6	6.4	7.4	-178.45	-0.3	-30.0	182.5	172.1	10.46	17.446		
5,300.0	5,295.4	5,295.4	5,295.4	6.5	7.5	-178.50	-0.3	-30.0	188.4	177.8	10.63	17.725		
5,400.0	5,395.2	5,395.2	5,395.2	6.6	7.6	-178.54	-0.3	-30.0	194.2	183.4	10.79	17.993		
5,500.0	5,495.1	5,495.1	5,495.1	6.7	7.8	-178.59	-0.3	-30.0	200.1	189.1	10.96	18.251		
5,600.0	5,594.9	5,588.5	5,588.5	6.8	7.8	-178.63	-0.5	-31.3	207.4	196.2	11.13	18.634		
5,700.0	5,694.7	5,681.1	5,681.0	6.9	7.9	-178.69	-1.2	-35.6	217.9	206.6	11.30	19.283		
5,800.0	5,794.6	5,777.5	5,777.1	7.0	7.9	-178.75	-2.4	-42.6	231.0	219.6	11.47	20.151		
5,900.0	5,894.4	5,876.6	5,875.9	7.1	7.9	-178.80	-3.7	-50.0	244.4	232.8	11.62	21.029		
6,000.0	5,994.2	5,975.7	5,974.7	7.2	7.9	-178.86	-4.9	-57.4	257.8	246.0	11.78	21.878		
6,100.0	6,094.0	6,074.8	6,073.6	7.3	8.0	-178.90	-6.2	-64.8	271.1	259.2	11.95	22.698		
6,200.0	6,193.9	6,173.9	6,172.4	7.4	8.0	-178.94	-7.4	-72.1	284.5	272.4	12.11	23.490		
6,300.0	6,293.7	6,273.0	6,271.2	7.5	8.0	-178.98	-8.7	-79.5	297.9	285.6	12.28	24.256		
6,400.0	6,393.5	6,372.1	6,370.0	7.6	8.1	-179.02	-9.9	-86.9	311.2	298.8	12.45	24.994		
6,500.0	6,493.4	6,471.2	6,468.8	7.7	8.1	-179.05	-11.2	-94.3	324.6	312.0	12.63	25.707		
6,600.0	6,593.2	6,570.3	6,567.6	7.9	8.1	-179.08	-12.5	-101.7	338.0	325.2	12.80	26.395		
6,700.0	6,693.0	6,669.4	6,666.5	8.0	8.2	-179.10	-13.7	-109.0	351.4	338.4	12.99	27.058		
6,800.0	6,792.8	6,768.5	6,765.3	8.1	8.2	-179.13	-15.0	-116.4	364.7	351.6	13.17	27.698		
6,900.0	6,892.7	6,867.6	6,864.1	8.2	8.3	-179.15	-16.2	-123.8	378.1	364.7	13.35	28.315		
7,000.0	6,992.5	6,966.7	6,962.9	8.3	8.3	-179.17	-17.5	-131.2	391.5	377.9	13.54	28.910		
7,100.0	7,092.3	7,065.8	7,061.7	8.4	8.4	-179.20	-18.7	-138.6	404.8	391.1	13.73	29.483		
7,200.0	7,192.2	7,164.9	7,160.6	8.5	8.4	-179.21	-20.0	-146.0	418.2	404.3	13.92	30.036		
7,300.0	7,292.0	7,264.0	7,259.4	8.6	8.5	-179.23	-21.2	-153.3	431.6	417.4	14.12	30.569		
7,400.0	7,391.8	7,363.1	7,358.2	8.8	8.5	-179.25	-22.5	-160.7	444.9	430.6	14.31	31.083		
7,500.0	7,491.6	7,462.2	7,457.0	8.9	8.6	-179.26	-23.7	-168.1	458.3	443.8	14.51	31.578		
7,600.0	7,591.5	7,561.3	7,555.8	9.0	8.7	-179.28	-25.0	-175.5	471.7	457.0	14.71	32.056		
7,700.0	7,691.3	7,660.4	7,654.7	9.1	8.7	-179.29	-26.2	-182.9	485.0	470.1	14.92	32.517		
7,800.0	7,791.1	7,759.5	7,753.5	9.2	8.8	-179.31	-27.5	-190.3	498.4	483.3	15.12	32.961		
7,900.0	7,891.0	7,858.6	7,852.3	9.3	8.8	-179.32	-28.7	-197.6	511.8	496.5	15.33	33.389		
8,000.0	7,990.8	7,957.7	7,951.1	9.4	8.9	-179.33	-30.0	-205.0	525.2	509.6	15.54	33.802		
8,100.0	8,090.6	8,056.8	8,049.9	9.6	9.0	-179.34	-31.2	-212.4	538.5	522.8	15.75	34.201		
8,200.0	8,190.5	8,155.9	8,148.8	9.7	9.0	-179.35	-32.5	-219.8	551.9	535.9	15.96	34.586		
8,300.0	8,290.3	8,255.0	8,247.6	9.8	9.1	-179.36	-33.7	-227.2	565.3	549.1	16.17	34.957		
8,400.0	8,390.1	8,354.1	8,346.4	9.9	9.2	-179.37	-35.0	-234.6	578.6	562.2	16.38	35.316		
8,500.0	8,489.9	8,453.2	8,445.2	10.0	9.3	-179.38	-36.3	-241.9	592.0	575.4	16.60	35.662		
8,600.0	8,589.8	8,552.3	8,544.0	10.1	9.3	-179.39	-37.5	-249.3	605.4	588.5	16.82	35.996		
8,700.0	8,689.6	8,651.4	8,642.8	10.3	9.4	-179.40	-38.8	-256.7	618.7	601.7	17.04	36.318		
8,800.0	8,789.4	8,750.5	8,741.7	10.4	9.5	-179.41	-40.0	-264.1	632.1	614.9	17.26	36.630		
8,900.0	8,889.3	8,849.6	8,840.5	10.5	9.6	-179.42	-41.3	-271.5	645.5	628.0	17.48	36.931		
9,000.0	8,989.1	8,948.7	8,939.3	10.6	9.6	-179.43	-42.5	-278.8	658.8	641.1	17.70	37.223		
9,100.0	9,088.9	9,047.9	9,038.1	10.7	9.7	-179.43	-43.8	-286.2	672.2	654.3	17.92	37.504		
9,200.0	9,188.7	9,147.0	9,136.9	10.9	9.8	-179.44	-45.0	-293.6	685.6	667.4	18.15	37.776		
9,300.0	9,288.6	9,246.1	9,235.8	11.0	9.9	-179.45	-46.3	-301.0	699.0	680.6	18.37	38.039		
9,400.0	9,388.4	9,345.2	9,334.6	11.1	10.0	-179.45	-47.5	-308.4	712.3	693.7	18.60	38.294		
9,500.0	9,488.2	9,444.3	9,433.4	11.2	10.1	-179.46	-48.8	-315.8	725.7	706.9	18.83	38.540		
9,600.0	9,588.1	9,543.4	9,532.2	11.3	10.1	-179.46	-50.0	-323.1	739.1	720.0	19.06	38.779		
9,700.0	9,687.9	9,642.5	9,631.0	11.5	10.2	-179.47	-51.3	-330.5	752.4	733.1	19.29	39.010		
9,800.0	9,787.7	9,741.6	9,729.9	11.6	10.3	-179.48	-52.5	-337.9	765.8	746.3	19.52	39.233		
9,900.0	9,887.5	9,840.7	9,828.7	11.7	10.4	-179.48	-53.8	-345.3	779.2	759.4	19.75	39.450		
10,000.0	9,987.4	9,939.8	9,927.5	11.8	10.5	-179.49	-55.0	-352.7	792.5	772.6	19.98	39.660		

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

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED 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:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #705H - OWB - PWP1													Offset Site Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 10039-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		
10,100.0	10,087.2	10,038.9	10,026.3	12.0	10.6	-179.49	-56.3	-360.1	805.9	785.7	20.20	39.894		
10,158.3	10,145.4	10,096.6	10,083.9	12.0	10.6	-179.49	-57.0	-364.4	813.7	793.4	20.31	40.071		
10,200.0	10,187.0	10,138.0	10,125.1	12.0	10.6	122.96	-57.5	-367.4	819.0	798.7	20.32	40.309		
10,250.0	10,236.6	10,180.9	10,167.9	12.0	10.6	101.23	-58.8	-370.6	824.9	804.6	20.36	40.514		
10,300.0	10,285.6	10,221.6	10,208.3	12.0	10.7	93.69	-62.9	-373.6	830.6	810.2	20.42	40.672		
10,350.0	10,333.5	10,262.5	10,248.5	12.0	10.7	89.99	-69.8	-376.6	836.1	815.6	20.49	40.802		
10,400.0	10,380.1	10,300.0	10,284.8	12.0	10.7	87.78	-78.7	-379.2	841.4	820.8	20.59	40.866		
10,450.0	10,424.9	10,345.3	10,327.8	12.1	10.7	86.45	-92.6	-382.4	846.3	825.7	20.65	40.985		
10,500.0	10,467.6	10,387.3	10,366.6	12.1	10.7	85.55	-108.5	-385.2	851.0	830.3	20.74	41.038		
10,550.0	10,507.9	10,429.7	10,404.5	12.1	10.7	84.97	-127.4	-387.9	855.5	834.6	20.83	41.068		
10,600.0	10,545.5	10,472.7	10,441.3	12.2	10.8	84.62	-149.3	-390.5	859.5	838.6	20.93	41.070		
10,650.0	10,580.1	10,516.2	10,476.8	12.2	10.8	84.46	-174.2	-393.0	863.3	842.3	21.03	41.041		
10,700.0	10,611.5	10,560.3	10,510.9	12.3	10.9	84.45	-202.2	-395.4	866.7	845.6	21.15	40.975		
10,750.0	10,639.3	10,605.2	10,543.1	12.4	10.9	84.57	-233.3	-397.6	869.8	848.5	21.28	40.865		
10,800.0	10,663.4	10,650.0	10,572.8	12.5	11.0	84.79	-266.8	-399.6	872.4	851.0	21.44	40.699		
10,850.0	10,683.6	10,697.2	10,601.2	12.6	11.0	85.14	-304.4	-401.5	874.7	853.1	21.61	40.475		
10,900.0	10,699.8	10,744.5	10,626.4	12.7	11.1	85.58	-344.4	-403.1	876.7	854.8	21.82	40.181		
10,950.0	10,711.7	10,792.7	10,648.7	12.8	11.2	86.11	-387.1	-404.5	878.2	856.1	22.06	39.814		
11,000.0	10,719.5	10,842.0	10,667.7	12.9	11.3	86.72	-432.6	-405.6	879.3	857.0	22.33	39.372		
11,050.0	10,722.8	10,892.4	10,683.0	13.1	11.4	87.42	-480.5	-406.5	880.0	857.4	22.65	38.858		
11,063.0	10,723.0	10,905.7	10,686.3	13.1	11.4	87.61	-493.4	-406.6	880.2	857.4	22.74	38.714		
11,100.0	10,723.1	10,944.1	10,694.3	13.2	11.5	88.13	-531.0	-407.0	880.5	857.5	23.00	38.278		
11,200.0	10,723.2	11,051.1	10,703.0	13.5	11.7	88.69	-637.5	-407.0	880.8	857.0	23.82	36.971		
11,300.0	10,723.4	11,151.1	10,703.1	13.9	12.0	88.68	-737.5	-406.3	880.8	856.1	24.72	35.630		
11,400.0	10,723.5	11,251.1	10,703.2	14.3	12.3	88.68	-837.5	-405.7	880.8	855.1	25.70	34.271		
11,500.0	10,723.7	11,351.1	10,703.3	14.8	12.7	88.68	-937.5	-405.1	880.8	854.1	26.76	32.919		
11,600.0	10,723.8	11,451.1	10,703.4	15.3	13.2	88.67	-1,037.5	-404.4	880.8	853.0	27.88	31.593		
11,700.0	10,724.0	11,551.1	10,703.5	15.9	13.7	88.67	-1,137.5	-403.8	880.8	851.8	29.06	30.308		
11,800.0	10,724.1	11,651.1	10,703.6	16.4	14.3	88.67	-1,237.5	-403.2	880.8	850.5	30.30	29.074		
11,900.0	10,724.3	11,751.1	10,703.7	17.0	14.9	88.66	-1,337.5	-402.5	880.8	849.3	31.58	27.895		
12,000.0	10,724.5	11,851.1	10,703.8	17.7	15.5	88.66	-1,437.5	-401.9	880.8	847.9	32.90	26.775		
12,100.0	10,724.6	11,951.1	10,703.9	18.3	16.2	88.66	-1,537.5	-401.3	880.8	846.6	34.25	25.714		
12,200.0	10,724.8	12,051.1	10,704.1	19.0	16.9	88.65	-1,637.5	-400.6	880.8	845.2	35.64	24.713		
12,300.0	10,724.9	12,151.1	10,704.2	19.7	17.6	88.65	-1,737.5	-400.0	880.8	843.8	37.06	23.768		
12,400.0	10,725.1	12,251.1	10,704.3	20.3	18.3	88.65	-1,837.5	-399.4	880.8	842.3	38.50	22.878		
12,500.0	10,725.2	12,351.1	10,704.4	21.1	19.1	88.64	-1,937.5	-398.8	880.8	840.9	39.96	22.040		
12,600.0	10,725.4	12,451.1	10,704.5	21.8	19.8	88.64	-2,037.5	-398.1	880.8	839.4	41.45	21.251		
12,700.0	10,725.5	12,551.1	10,704.6	22.5	20.6	88.64	-2,137.5	-397.5	880.8	837.9	42.95	20.508		
12,800.0	10,725.7	12,651.1	10,704.7	23.2	21.3	88.63	-2,237.5	-396.9	880.8	836.4	44.47	19.808		
12,900.0	10,725.8	12,751.1	10,704.8	24.0	22.1	88.63	-2,337.5	-396.2	880.8	834.8	46.00	19.148		
13,000.0	10,726.0	12,851.1	10,704.9	24.8	22.9	88.63	-2,437.5	-395.6	880.8	833.3	47.55	18.526		
13,100.0	10,726.1	12,951.1	10,705.0	25.5	23.7	88.62	-2,537.5	-395.0	880.8	831.7	49.10	17.938		
13,200.0	10,726.3	13,051.1	10,705.1	26.3	24.5	88.62	-2,637.5	-394.3	880.8	830.2	50.67	17.383		
13,300.0	10,726.5	13,151.1	10,705.2	27.1	25.2	88.62	-2,737.5	-393.7	880.8	828.6	52.25	16.858		
13,400.0	10,726.6	13,251.1	10,705.3	27.8	26.0	88.61	-2,837.5	-393.1	880.8	827.0	53.84	16.361		
13,500.0	10,726.8	13,351.1	10,705.4	28.6	26.9	88.61	-2,937.5	-392.5	880.8	825.4	55.43	15.891		
13,600.0	10,726.9	13,451.1	10,705.5	29.4	27.7	88.61	-3,037.5	-391.8	880.8	823.8	57.03	15.444		
13,700.0	10,727.1	13,551.1	10,705.6	30.2	28.5	88.60	-3,137.5	-391.2	880.8	822.2	58.64	15.020		
13,800.0	10,727.2	13,651.1	10,705.7	31.0	29.3	88.60	-3,237.5	-390.6	880.8	820.6	60.26	14.618		
13,900.0	10,727.4	13,751.1	10,705.8	31.8	30.1	88.60	-3,337.5	-389.9	880.8	818.9	61.88	14.235		
14,000.0	10,727.5	13,851.1	10,705.9	32.6	30.9	88.59	-3,437.5	-389.3	880.8	817.3	63.51	13.870		

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

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED 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:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #705H - OWB - PWP1													Offset Site Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 10039-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		
14,100.0	10,727.7	13,951.1	10,706.0	33.4	31.7	88.59	-3,537.5	-388.7	880.8	815.7	65.14	13.522		
14,200.0	10,727.8	14,051.1	10,706.1	34.2	32.6	88.59	-3,637.5	-388.0	880.8	814.1	66.77	13.191		
14,300.0	10,728.0	14,151.1	10,706.3	35.1	33.4	88.59	-3,737.5	-387.4	880.8	812.4	68.42	12.875		
14,400.0	10,728.2	14,251.1	10,706.4	35.9	34.2	88.58	-3,837.5	-386.8	880.8	810.8	70.06	12.572		
14,500.0	10,728.3	14,351.1	10,706.5	36.7	35.1	88.58	-3,937.5	-386.1	880.8	809.1	71.71	12.283		
14,600.0	10,728.5	14,451.1	10,706.6	37.5	35.9	88.58	-4,037.4	-385.5	880.8	807.5	73.36	12.007		
14,700.0	10,728.6	14,551.1	10,706.7	38.3	36.7	88.57	-4,137.4	-384.9	880.8	805.8	75.02	11.742		
14,800.0	10,728.8	14,651.1	10,706.8	39.1	37.6	88.57	-4,237.4	-384.3	880.8	804.2	76.67	11.488		
14,900.0	10,728.9	14,751.1	10,706.9	40.0	38.4	88.57	-4,337.4	-383.6	880.8	802.5	78.33	11.244		
15,000.0	10,729.1	14,851.1	10,707.0	40.8	39.2	88.56	-4,437.4	-383.0	880.8	800.8	80.00	11.011		
15,100.0	10,729.2	14,951.1	10,707.1	41.6	40.1	88.56	-4,537.4	-382.4	880.8	799.2	81.66	10.786		
15,200.0	10,729.4	15,051.1	10,707.2	42.5	40.9	88.56	-4,637.4	-381.7	880.8	797.5	83.33	10.570		
15,300.0	10,729.5	15,151.1	10,707.3	43.3	41.7	88.55	-4,737.4	-381.1	880.8	795.8	85.00	10.362		
15,400.0	10,729.7	15,251.1	10,707.4	44.1	42.6	88.55	-4,837.4	-380.5	880.8	794.1	86.68	10.162		
15,500.0	10,729.9	15,351.1	10,707.5	44.9	43.4	88.55	-4,937.4	-379.8	880.8	792.5	88.35	9.970		
15,600.0	10,730.0	15,451.1	10,707.6	45.8	44.3	88.54	-5,037.4	-379.2	880.8	790.8	90.03	9.784		
15,700.0	10,730.2	15,551.1	10,707.7	46.6	45.1	88.54	-5,137.4	-378.6	880.8	789.1	91.71	9.605		
15,800.0	10,730.3	15,651.1	10,707.8	47.5	46.0	88.54	-5,237.4	-377.9	880.8	787.4	93.39	9.432		
15,900.0	10,730.5	15,751.1	10,707.9	48.3	46.8	88.53	-5,337.4	-377.3	880.8	785.8	95.07	9.265		
16,000.0	10,730.6	15,851.1	10,708.0	49.1	47.6	88.53	-5,437.4	-376.7	880.8	784.1	96.75	9.104		
16,100.0	10,730.8	15,951.1	10,708.1	50.0	48.5	88.53	-5,537.4	-376.1	880.8	782.4	98.44	8.948		
16,200.0	10,730.9	16,051.1	10,708.2	50.8	49.3	88.52	-5,637.4	-375.4	880.8	780.7	100.12	8.798		
16,300.0	10,731.1	16,151.1	10,708.3	51.6	50.2	88.52	-5,737.4	-374.8	880.8	779.0	101.81	8.652		
16,400.0	10,731.2	16,251.1	10,708.5	52.5	51.0	88.52	-5,837.4	-374.2	880.8	777.3	103.50	8.511		
16,500.0	10,731.4	16,351.1	10,708.6	53.3	51.9	88.51	-5,937.4	-373.5	880.8	775.6	105.19	8.374		
16,600.0	10,731.6	16,451.1	10,708.7	54.2	52.7	88.51	-6,037.4	-372.9	880.8	773.9	106.88	8.241		
16,700.0	10,731.7	16,551.1	10,708.8	55.0	53.6	88.51	-6,137.4	-372.3	880.8	772.3	108.57	8.113		
16,800.0	10,731.9	16,651.1	10,708.9	55.9	54.4	88.50	-6,237.4	-371.6	880.8	770.6	110.26	7.988		
16,900.0	10,732.0	16,751.1	10,709.0	56.7	55.3	88.50	-6,337.4	-371.0	880.8	768.9	111.95	7.868		
17,000.0	10,732.2	16,851.1	10,709.1	57.5	56.1	88.50	-6,437.4	-370.4	880.8	767.2	113.65	7.750		
17,100.0	10,732.3	16,951.1	10,709.2	58.4	57.0	88.49	-6,537.4	-369.8	880.8	765.5	115.34	7.636		
17,200.0	10,732.5	17,051.1	10,709.3	59.2	57.8	88.49	-6,637.4	-369.1	880.8	763.8	117.04	7.526		
17,300.0	10,732.6	17,151.1	10,709.4	60.1	58.7	88.49	-6,737.4	-368.5	880.8	762.1	118.74	7.418		
17,400.0	10,732.8	17,251.1	10,709.5	60.9	59.5	88.49	-6,837.4	-367.9	880.8	760.4	120.44	7.314		
17,500.0	10,732.9	17,351.1	10,709.6	61.8	60.4	88.48	-6,937.4	-367.2	880.8	758.7	122.13	7.212		
17,600.0	10,733.1	17,451.1	10,709.7	62.6	61.2	88.48	-7,037.4	-366.6	880.8	757.0	123.83	7.113		
17,700.0	10,733.3	17,551.1	10,709.8	63.5	62.1	88.48	-7,137.4	-366.0	880.8	755.3	125.53	7.017		
17,800.0	10,733.4	17,651.1	10,709.9	64.3	62.9	88.47	-7,237.4	-365.3	880.8	753.6	127.23	6.923		
17,900.0	10,733.6	17,751.1	10,710.0	65.2	63.8	88.47	-7,337.4	-364.7	880.8	751.9	128.94	6.831		
18,000.0	10,733.7	17,851.1	10,710.1	66.0	64.6	88.47	-7,437.4	-364.1	880.8	750.2	130.64	6.742		
18,100.0	10,733.9	17,951.1	10,710.2	66.9	65.5	88.46	-7,537.4	-363.4	880.8	748.5	132.34	6.656		
18,200.0	10,734.0	18,051.1	10,710.3	67.7	66.4	88.46	-7,637.4	-362.8	880.8	746.8	134.04	6.571		
18,300.0	10,734.2	18,151.1	10,710.4	68.6	67.2	88.46	-7,737.4	-362.2	880.8	745.1	135.75	6.489		
18,400.0	10,734.3	18,251.1	10,710.5	69.4	68.1	88.45	-7,837.4	-361.6	880.8	743.4	137.45	6.408		
18,500.0	10,734.5	18,351.1	10,710.7	70.3	68.9	88.45	-7,937.4	-360.9	880.8	741.7	139.15	6.330		
18,600.0	10,734.6	18,451.1	10,710.8	71.1	69.8	88.45	-8,037.4	-360.3	880.8	740.0	140.86	6.253		
18,700.0	10,734.8	18,551.1	10,710.9	72.0	70.6	88.44	-8,137.4	-359.7	880.8	738.2	142.56	6.178		
18,800.0	10,734.9	18,651.1	10,711.0	72.8	71.5	88.44	-8,237.4	-359.0	880.8	736.5	144.27	6.105		
18,900.0	10,735.1	18,751.1	10,711.1	73.7	72.3	88.44	-8,337.4	-358.4	880.8	734.8	145.98	6.034		
19,000.0	10,735.3	18,851.1	10,711.2	74.5	73.2	88.43	-8,437.4	-357.8	880.8	733.1	147.68	5.964		
19,100.0	10,735.4	18,951.1	10,711.3	75.4	74.0	88.43	-8,537.4	-357.1	880.8	731.4	149.39	5.896		

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

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED 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:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #705H - OWB - PWP1												Offset Site Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 10039-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	
19,200.0	10,735.6	19,051.1	10,711.4	76.2	74.9	88.43	-8,637.4	-356.5	880.8	729.7	151.10	5.829	
19,300.0	10,735.7	19,151.1	10,711.5	77.1	75.8	88.42	-8,737.4	-355.9	880.8	728.0	152.81	5.764	
19,400.0	10,735.9	19,251.1	10,711.6	77.9	76.6	88.42	-8,837.3	-355.3	880.8	726.3	154.51	5.701	
19,500.0	10,736.0	19,351.1	10,711.7	78.8	77.5	88.42	-8,937.3	-354.6	880.8	724.6	156.22	5.638	
19,600.0	10,736.2	19,451.1	10,711.8	79.6	78.3	88.41	-9,037.3	-354.0	880.8	722.9	157.93	5.577	
19,700.0	10,736.3	19,551.1	10,711.9	80.5	79.2	88.41	-9,137.3	-353.4	880.8	721.2	159.64	5.517	
19,800.0	10,736.5	19,651.1	10,712.0	81.3	80.0	88.41	-9,237.3	-352.7	880.8	719.5	161.35	5.459	
19,900.0	10,736.6	19,751.1	10,712.1	82.2	80.9	88.40	-9,337.3	-352.1	880.8	717.8	163.06	5.402	
20,000.0	10,736.8	19,851.1	10,712.2	83.0	81.8	88.40	-9,437.3	-351.5	880.8	716.0	164.77	5.346	
20,100.0	10,737.0	19,951.1	10,712.3	83.9	82.6	88.40	-9,537.3	-350.8	880.8	714.3	166.48	5.291	
20,200.0	10,737.1	20,051.1	10,712.4	84.7	83.5	88.39	-9,637.3	-350.2	880.8	712.6	168.19	5.237	
20,300.0	10,737.3	20,151.1	10,712.5	85.6	84.3	88.39	-9,737.3	-349.6	880.8	710.9	169.90	5.184	
20,400.0	10,737.4	20,251.1	10,712.6	86.4	85.2	88.39	-9,837.3	-348.9	880.8	709.2	171.61	5.133	
20,500.0	10,737.6	20,351.1	10,712.7	87.3	86.0	88.38	-9,937.3	-348.3	880.8	707.5	173.32	5.082	
20,600.0	10,737.7	20,451.1	10,712.9	88.2	86.9	88.38	-10,037.3	-347.7	880.8	705.8	175.04	5.032	
20,700.0	10,737.9	20,551.1	10,713.0	89.0	87.8	88.38	-10,137.3	-347.1	880.8	704.1	176.75	4.983	
20,777.1	10,738.0	20,628.2	10,713.0	89.7	88.4	88.38	-10,214.4	-346.6	880.8	702.7	178.07	4.947	
20,777.2	10,738.0	20,628.3	10,713.0	89.7	88.4	88.38	-10,214.5	-346.6	880.8	702.7	178.07	4.947	
20,778.0	10,738.0	20,628.4	10,713.0	89.7	88.4	88.38	-10,214.6	-346.6	880.8	702.7	178.07	4.946	

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

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED 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:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #706H - OWB - PWP1												Offset Site Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 10098-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	3.0	3.0	-90.51	-0.5	-60.0	60.0				
100.0	100.0	99.0	99.0	3.0	3.0	-90.51	-0.5	-60.0	60.0	54.0	6.00	9.993	
200.0	200.0	199.0	199.0	3.0	3.0	-90.51	-0.5	-60.0	60.0	54.0	6.00	9.989	
300.0	300.0	299.0	299.0	3.0	3.0	-90.51	-0.5	-60.0	60.0	54.0	6.01	9.979	
400.0	400.0	399.0	399.0	3.0	3.0	-90.51	-0.5	-60.0	60.0	53.9	6.02	9.963	
500.0	500.0	499.0	499.0	3.1	3.1	-90.51	-0.5	-60.0	60.0	53.9	6.03	9.943	
600.0	600.0	599.0	599.0	3.1	3.1	-90.51	-0.5	-60.0	60.0	53.9	6.05	9.917	
700.0	700.0	699.0	699.0	3.1	3.1	-90.51	-0.5	-60.0	60.0	53.9	6.07	9.886	
800.0	800.0	799.0	799.0	3.2	3.2	-90.51	-0.5	-60.0	60.0	53.9	6.09	9.850	
900.0	900.0	899.0	899.0	3.2	3.2	-90.51	-0.5	-60.0	60.0	53.8	6.11	9.810	
1,000.0	1,000.0	999.0	999.0	3.2	3.2	-90.51	-0.5	-60.0	60.0	53.8	6.14	9.765	
1,100.0	1,100.0	1,099.0	1,099.0	3.3	3.3	-90.51	-0.5	-60.0	60.0	53.8	6.17	9.715	
1,200.0	1,200.0	1,199.0	1,199.0	3.4	3.4	-90.51	-0.5	-60.0	60.0	53.8	6.21	9.662	
1,300.0	1,300.0	1,299.0	1,299.0	3.4	3.4	-90.51	-0.5	-60.0	60.0	53.7	6.24	9.604	
1,400.0	1,400.0	1,399.0	1,399.0	3.5	3.5	-90.51	-0.5	-60.0	60.0	53.7	6.28	9.543	
1,500.0	1,500.0	1,499.0	1,499.0	3.5	3.5	-90.51	-0.5	-60.0	60.0	53.6	6.33	9.478	
1,600.0	1,600.0	1,599.0	1,599.0	3.6	3.6	-90.51	-0.5	-60.0	60.0	53.6	6.37	9.411	
1,700.0	1,700.0	1,699.0	1,699.0	3.7	3.7	-90.51	-0.5	-60.0	60.0	53.5	6.42	9.340	
1,800.0	1,800.0	1,799.0	1,799.0	3.8	3.8	-90.51	-0.5	-60.0	60.0	53.5	6.47	9.266	
1,900.0	1,900.0	1,899.0	1,899.0	3.9	3.9	-90.51	-0.5	-60.0	60.0	53.4	6.52	9.190	
2,000.0	2,000.0	1,999.0	1,999.0	3.9	3.9	-90.51	-0.5	-60.0	60.0	53.4	6.58	9.112	
2,100.0	2,100.0	2,099.0	2,099.0	4.0	4.0	-90.51	-0.5	-60.0	60.0	53.3	6.64	9.031	
2,200.0	2,200.0	2,199.0	2,199.0	4.1	4.1	-90.51	-0.5	-60.0	60.0	53.3	6.70	8.949	
2,300.0	2,300.0	2,299.0	2,299.0	4.2	4.2	-90.51	-0.5	-60.0	60.0	53.2	6.76	8.865	
2,400.0	2,400.0	2,399.0	2,399.0	4.3	4.3	-90.51	-0.5	-60.0	60.0	53.1	6.83	8.780	
2,500.0	2,500.0	2,499.0	2,499.0	4.4	4.4	-90.51	-0.5	-60.0	60.0	53.1	6.90	8.694 CC, ES, SF	
2,600.0	2,600.0	2,596.9	2,596.9	4.5	4.5	-170.95	-0.8	-61.6	63.3	56.4	6.97	9.092	
2,667.5	2,667.4	2,662.6	2,662.5	4.5	4.5	-171.65	-1.2	-64.5	69.5	62.5	7.02	9.900	
2,700.0	2,699.8	2,694.1	2,693.9	4.5	4.5	-172.04	-1.5	-66.5	73.4	66.3	7.04	10.415	
2,800.0	2,799.7	2,791.3	2,790.8	4.6	4.5	-173.15	-2.7	-74.4	87.4	80.2	7.13	12.247	
2,900.0	2,899.5	2,890.2	2,889.3	4.6	4.5	-174.00	-4.0	-83.3	102.1	94.9	7.23	14.121	
3,000.0	2,999.3	2,989.1	2,987.8	4.7	4.6	-174.63	-5.3	-92.1	116.9	109.6	7.34	15.931	
3,100.0	3,099.2	3,088.0	3,086.3	4.7	4.6	-175.13	-6.6	-100.9	131.7	124.2	7.45	17.675	
3,200.0	3,199.0	3,186.9	3,184.8	4.8	4.6	-175.52	-7.9	-109.8	146.5	138.9	7.57	19.351	
3,300.0	3,298.8	3,285.8	3,283.3	4.8	4.7	-175.84	-9.2	-118.6	161.3	153.6	7.70	20.958	
3,400.0	3,398.7	3,384.7	3,381.8	4.9	4.7	-176.11	-10.5	-127.4	176.1	168.3	7.83	22.496	
3,500.0	3,498.5	3,483.6	3,480.3	5.0	4.8	-176.33	-11.8	-136.3	190.9	183.0	7.97	23.966	
3,600.0	3,598.3	3,582.5	3,578.7	5.0	4.8	-176.52	-13.1	-145.1	205.8	197.6	8.11	25.369	
3,700.0	3,698.1	3,681.4	3,677.2	5.1	4.9	-176.69	-14.4	-153.9	220.6	212.3	8.26	26.706	
3,800.0	3,798.0	3,780.2	3,775.7	5.2	4.9	-176.84	-15.7	-162.8	235.4	227.0	8.41	27.979	
3,900.0	3,897.8	3,879.1	3,874.2	5.2	5.0	-176.97	-17.0	-171.6	250.2	241.6	8.57	29.189	
4,000.0	3,997.6	3,978.0	3,972.7	5.3	5.1	-177.08	-18.3	-180.4	265.0	256.3	8.74	30.340	
4,100.0	4,097.5	4,076.9	4,071.2	5.4	5.1	-177.18	-19.6	-189.3	279.9	271.0	8.90	31.434	
4,200.0	4,197.3	4,175.8	4,169.7	5.5	5.2	-177.27	-20.9	-198.1	294.7	285.6	9.08	32.472	
4,300.0	4,297.1	4,274.7	4,268.2	5.6	5.3	-177.36	-22.2	-206.9	309.5	300.3	9.25	33.457	
4,400.0	4,396.9	4,373.6	4,366.7	5.7	5.3	-177.43	-23.5	-215.8	324.3	314.9	9.43	34.392	
4,500.0	4,496.8	4,472.5	4,465.2	5.7	5.4	-177.50	-24.8	-224.6	339.2	329.6	9.61	35.280	
4,600.0	4,596.6	4,571.4	4,563.6	5.8	5.5	-177.56	-26.1	-233.4	354.0	344.2	9.80	36.122	
4,700.0	4,696.4	4,670.3	4,662.1	5.9	5.6	-177.62	-27.4	-242.3	368.8	358.8	9.99	36.920	
4,800.0	4,796.3	4,769.2	4,760.6	6.0	5.7	-177.68	-28.7	-251.1	383.6	373.5	10.18	37.678	
4,900.0	4,896.1	4,868.1	4,859.1	6.1	5.7	-177.73	-30.0	-259.9	398.5	388.1	10.38	38.398	

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

Concho Resources LLC

Anticollision Report

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Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
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Reference Well:	CABO WABO FED 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:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #706H - OWB - PWP1													Offset Site Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 10098-MWD+IFR1+FDIR													Offset Well Error:	3.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
5,000.0	4,995.9	4,967.0	4,957.6	6.2	5.8	-177.77	-31.3	-268.8	413.3	402.7	10.58	39.081		
5,100.0	5,095.7	5,065.9	5,056.1	6.3	5.9	-177.81	-32.6	-277.6	428.1	417.4	10.78	39.729		
5,200.0	5,195.6	5,164.8	5,154.6	6.4	6.0	-177.85	-33.8	-286.4	443.0	432.0	10.98	40.345		
5,300.0	5,295.4	5,263.7	5,253.1	6.5	6.1	-177.89	-35.1	-295.3	457.8	446.6	11.18	40.930		
5,400.0	5,395.2	5,362.6	5,351.6	6.6	6.2	-177.93	-36.4	-304.1	472.6	461.2	11.39	41.486		
5,500.0	5,495.1	5,461.4	5,450.1	6.7	6.3	-177.96	-37.7	-312.9	487.4	475.8	11.60	42.015		
5,600.0	5,594.9	5,560.3	5,548.5	6.8	6.4	-177.99	-39.0	-321.8	502.3	490.5	11.81	42.518		
5,700.0	5,694.7	5,659.2	5,647.0	6.9	6.5	-178.02	-40.3	-330.6	517.1	505.1	12.03	42.996		
5,800.0	5,794.6	5,758.1	5,745.5	7.0	6.6	-178.05	-41.6	-339.4	531.9	519.7	12.24	43.452		
5,900.0	5,894.4	5,857.0	5,844.0	7.1	6.7	-178.07	-42.9	-348.3	546.8	534.3	12.46	43.885		
6,000.0	5,994.2	5,955.9	5,942.5	7.2	6.8	-178.10	-44.2	-357.1	561.6	548.9	12.68	44.299		
6,100.0	6,094.0	6,054.8	6,041.0	7.3	6.9	-178.12	-45.5	-365.9	576.4	563.5	12.90	44.693		
6,200.0	6,193.9	6,153.7	6,139.5	7.4	7.0	-178.14	-46.8	-374.8	591.3	578.1	13.12	45.069		
6,300.0	6,293.7	6,252.6	6,238.0	7.5	7.1	-178.16	-48.1	-383.6	606.1	592.7	13.34	45.427		
6,400.0	6,393.5	6,351.5	6,336.5	7.6	7.2	-178.18	-49.4	-392.4	620.9	607.3	13.57	45.770		
6,500.0	6,493.4	6,450.4	6,435.0	7.7	7.3	-178.20	-50.7	-401.3	635.7	622.0	13.79	46.096		
6,600.0	6,593.2	6,549.3	6,533.4	7.9	7.4	-178.22	-52.0	-410.1	650.6	636.6	14.02	46.409		
6,700.0	6,693.0	6,648.2	6,631.9	8.0	7.5	-178.24	-53.3	-418.9	665.4	651.2	14.25	46.707		
6,800.0	6,792.8	6,747.1	6,730.4	8.1	7.6	-178.26	-54.6	-427.8	680.2	665.8	14.48	46.993		
6,900.0	6,892.7	6,846.0	6,828.9	8.2	7.7	-178.27	-55.9	-436.6	695.1	680.4	14.71	47.266		
7,000.0	6,992.5	6,944.9	6,927.4	8.3	7.8	-178.29	-57.2	-445.4	709.9	695.0	14.94	47.528		
7,100.0	7,092.3	7,043.7	7,025.9	8.4	7.9	-178.30	-58.5	-454.3	724.7	709.6	15.17	47.778		
7,200.0	7,192.2	7,142.6	7,124.4	8.5	8.0	-178.32	-59.8	-463.1	739.6	724.2	15.40	48.018		
7,300.0	7,292.0	7,241.5	7,222.9	8.6	8.1	-178.33	-61.1	-472.0	754.4	738.8	15.64	48.248		
7,400.0	7,391.8	7,340.4	7,321.4	8.8	8.2	-178.34	-62.4	-480.8	769.2	753.4	15.87	48.469		
7,500.0	7,491.6	7,439.3	7,419.9	8.9	8.3	-178.36	-63.7	-489.6	784.1	767.9	16.11	48.681		
7,600.0	7,591.5	7,538.2	7,518.3	9.0	8.5	-178.37	-65.0	-498.5	798.9	782.5	16.34	48.884		
7,700.0	7,691.3	7,637.1	7,616.8	9.1	8.6	-178.38	-66.3	-507.3	813.7	797.1	16.58	49.079		
7,800.0	7,791.1	7,736.0	7,715.3	9.2	8.7	-178.39	-67.6	-516.1	828.5	811.7	16.82	49.266		
7,900.0	7,891.0	7,834.9	7,813.8	9.3	8.8	-178.40	-68.9	-525.0	843.4	826.3	17.06	49.446		
8,000.0	7,990.8	7,933.8	7,912.3	9.4	8.9	-178.41	-70.2	-533.8	858.2	840.9	17.30	49.619		
8,100.0	8,090.6	8,032.7	8,010.8	9.6	9.0	-178.42	-71.5	-542.6	873.0	855.5	17.54	49.785		
8,200.0	8,190.5	8,131.6	8,109.3	9.7	9.1	-178.43	-72.8	-551.5	887.9	870.1	17.78	49.945		
8,300.0	8,290.3	8,230.5	8,207.8	9.8	9.3	-178.44	-74.1	-560.3	902.7	884.7	18.02	50.099		
8,400.0	8,390.1	8,329.4	8,306.3	9.9	9.4	-178.45	-75.4	-569.1	917.5	899.3	18.26	50.247		
8,500.0	8,489.9	8,428.3	8,404.8	10.0	9.5	-178.46	-76.7	-578.0	932.4	913.9	18.50	50.390		
8,600.0	8,589.8	8,527.2	8,503.2	10.1	9.6	-178.47	-78.0	-586.8	947.2	928.4	18.75	50.527		
8,700.0	8,689.6	8,626.1	8,601.7	10.3	9.7	-178.48	-79.3	-595.6	962.0	943.0	18.99	50.660		
8,800.0	8,789.4	8,724.9	8,700.2	10.4	9.8	-178.48	-80.6	-604.5	976.9	957.6	19.23	50.787		
8,900.0	8,889.3	8,823.8	8,798.7	10.5	9.9	-178.49	-81.9	-613.3	991.7	972.2	19.48	50.911		

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

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED 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:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #804H - OWB - PWP0												Offset Site Error: 3.0 usft	
Survey Program: 0-MWD+IFR1+FDIR												Offset Well Error: 3.0 usft	
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.0	0.0	0.0	0.0	3.0	3.0	-90.51	-2.8	-310.0	310.0				
100.0	100.0	96.0	96.0	3.0	3.0	-90.51	-2.8	-310.0	310.0	304.0	6.00	51.645	
200.0	200.0	196.0	196.0	3.0	3.0	-90.51	-2.8	-310.0	310.0	304.0	6.04	51.342	
300.0	300.0	296.0	296.0	3.0	3.1	-90.51	-2.8	-310.0	310.0	303.9	6.12	50.681	
400.0	400.0	396.0	396.0	3.0	3.2	-90.51	-2.8	-310.0	310.0	303.8	6.24	49.717	
500.0	500.0	496.0	496.0	3.1	3.4	-90.51	-2.8	-310.0	310.0	303.6	6.39	48.514	
600.0	600.0	596.0	596.0	3.1	3.6	-90.51	-2.8	-310.0	310.0	303.4	6.58	47.140	
700.0	700.0	696.0	696.0	3.1	3.8	-90.51	-2.8	-310.0	310.0	303.2	6.79	45.656	
800.0	800.0	796.0	796.0	3.2	4.0	-90.51	-2.8	-310.0	310.0	303.0	7.03	44.116	
900.0	900.0	896.0	896.0	3.2	4.2	-90.51	-2.8	-310.0	310.0	302.7	7.28	42.559	
1,000.0	1,000.0	996.0	996.0	3.2	4.5	-90.51	-2.8	-310.0	310.0	302.4	7.56	41.017	
1,100.0	1,100.0	1,096.0	1,096.0	3.3	4.8	-90.51	-2.8	-310.0	310.0	302.2	7.85	39.510	
1,200.0	1,200.0	1,196.0	1,196.0	3.4	5.0	-90.51	-2.8	-310.0	310.0	301.9	8.15	38.052	
1,300.0	1,300.0	1,296.0	1,296.0	3.4	5.3	-90.51	-2.8	-310.0	310.0	301.5	8.46	36.653	
1,400.0	1,400.0	1,396.0	1,396.0	3.5	5.6	-90.51	-2.8	-310.0	310.0	301.2	8.78	35.317	
1,500.0	1,500.0	1,496.0	1,496.0	3.5	5.9	-90.51	-2.8	-310.0	310.0	300.9	9.11	34.045	
1,600.0	1,600.0	1,596.0	1,596.0	3.6	6.3	-90.51	-2.8	-310.0	310.0	300.6	9.44	32.837	
1,700.0	1,700.0	1,696.0	1,696.0	3.7	6.6	-90.51	-2.8	-310.0	310.0	300.2	9.78	31.692	
1,800.0	1,800.0	1,796.0	1,796.0	3.8	6.9	-90.51	-2.8	-310.0	310.0	299.9	10.13	30.608	
1,900.0	1,900.0	1,896.0	1,896.0	3.9	7.2	-90.51	-2.8	-310.0	310.0	299.5	10.48	29.582	
2,000.0	2,000.0	1,996.0	1,996.0	3.9	7.5	-90.51	-2.8	-310.0	310.0	299.2	10.83	28.612	
2,100.0	2,100.0	2,096.0	2,096.0	4.0	7.9	-90.51	-2.8	-310.0	310.0	298.8	11.19	27.693	
2,200.0	2,200.0	2,196.0	2,196.0	4.1	8.2	-90.51	-2.8	-310.0	310.0	298.4	11.56	26.823	
2,300.0	2,300.0	2,296.0	2,296.0	4.2	8.5	-90.51	-2.8	-310.0	310.0	298.1	11.92	25.999	
2,400.0	2,400.0	2,396.0	2,396.0	4.3	8.9	-90.51	-2.8	-310.0	310.0	297.7	12.29	25.218	
2,500.0	2,500.0	2,496.0	2,496.0	4.4	9.2	-90.51	-2.8	-310.0	310.0	297.3	12.67	24.477	
2,600.0	2,600.0	2,607.3	2,607.3	4.5	9.6	-170.49	-2.3	-308.0	310.0	296.9	13.07	23.724	
2,667.5	2,667.4	2,682.8	2,682.7	4.5	9.8	-170.45	-1.5	-304.3	309.7	296.4	13.33	23.240	
2,700.0	2,699.8	2,719.1	2,718.9	4.5	10.0	-170.41	-0.9	-301.8	309.4	295.9	13.45	22.998	
2,800.0	2,799.7	2,823.3	2,822.7	4.6	10.3	-170.23	1.2	-292.9	306.6	292.7	13.83	22.168	
2,900.0	2,899.5	2,923.3	2,922.2	4.6	10.6	-170.04	3.2	-284.1	303.5	289.3	14.21	21.362	
3,000.0	2,999.3	3,023.2	3,021.8	4.7	11.0	-169.85	5.2	-275.3	300.5	285.9	14.59	20.590	
3,100.0	3,099.2	3,123.2	3,121.3	4.7	11.3	-169.65	7.2	-266.5	297.4	282.4	14.98	19.852	
3,200.0	3,199.0	3,223.1	3,220.8	4.8	11.6	-169.45	9.3	-257.7	294.4	279.0	15.37	19.145	
3,300.0	3,298.8	3,323.0	3,320.4	4.8	12.0	-169.24	11.3	-248.9	291.3	275.5	15.77	18.469	
3,400.0	3,398.7	3,423.0	3,419.9	4.9	12.3	-169.03	13.3	-240.1	288.3	272.1	16.17	17.822	
3,500.0	3,498.5	3,522.9	3,519.5	5.0	12.7	-168.82	15.3	-231.3	285.2	268.6	16.58	17.203	
3,600.0	3,598.3	3,622.9	3,619.0	5.0	13.0	-168.60	17.4	-222.5	282.2	265.2	16.99	16.610	
3,700.0	3,698.1	3,722.8	3,718.5	5.1	13.4	-168.38	19.4	-213.7	279.2	261.8	17.40	16.042	
3,800.0	3,798.0	3,822.8	3,818.1	5.2	13.7	-168.15	21.4	-204.9	276.1	258.3	17.82	15.498	
3,900.0	3,897.8	3,922.7	3,917.6	5.2	14.1	-167.91	23.5	-196.1	273.1	254.9	18.24	14.976	
4,000.0	3,997.6	4,022.7	4,017.2	5.3	14.4	-167.68	25.5	-187.3	270.1	251.4	18.66	14.476	
4,100.0	4,097.5	4,122.6	4,116.7	5.4	14.8	-167.43	27.5	-178.5	267.1	248.0	19.08	13.997	
4,200.0	4,197.3	4,222.6	4,216.2	5.5	15.1	-167.18	29.5	-169.8	264.1	244.6	19.51	13.537	
4,300.0	4,297.1	4,322.5	4,315.8	5.6	15.5	-166.93	31.6	-161.0	261.1	241.2	19.94	13.096	
4,400.0	4,396.9	4,422.5	4,415.3	5.7	15.8	-166.66	33.6	-152.2	258.1	237.7	20.37	12.672	
4,500.0	4,496.8	4,522.4	4,514.9	5.7	16.2	-166.40	35.6	-143.4	255.1	234.3	20.80	12.265	
4,600.0	4,596.6	4,622.4	4,614.4	5.8	16.5	-166.12	37.6	-134.6	252.1	230.9	21.23	11.874	
4,700.0	4,696.4	4,722.3	4,713.9	5.9	16.9	-165.84	39.7	-125.8	249.1	227.5	21.67	11.498	
4,800.0	4,796.3	4,822.3	4,813.5	6.0	17.2	-165.55	41.7	-117.0	246.2	224.1	22.10	11.137	
4,900.0	4,896.1	4,922.2	4,913.0	6.1	17.6	-165.26	43.7	-108.2	243.2	220.7	22.54	10.789	

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

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED 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:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #804H - OWB - PWP0													Offset Site Error:	3.0 usft
Survey Program: 0-MWD+IFR1+FDIR													Offset Well Error:	3.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.0	4,995.9	5,022.2	5,012.6	6.2	17.9	-164.96		45.8	-99.4	240.2	217.3	22.98	10.454	
5,100.0	5,095.7	5,122.1	5,112.1	6.3	18.3	-164.65		47.8	-90.6	237.3	213.9	23.42	10.132	
5,200.0	5,195.6	5,222.1	5,211.6	6.4	18.6	-164.33		49.8	-81.8	234.3	210.5	23.86	9.821	
5,300.0	5,295.4	5,322.0	5,311.2	6.5	19.0	-164.01		51.8	-73.0	231.4	207.1	24.30	9.521	
5,400.0	5,395.2	5,422.0	5,410.7	6.6	19.3	-163.68		53.9	-64.2	228.5	203.7	24.75	9.233	
5,500.0	5,495.1	5,521.9	5,510.3	6.7	19.7	-163.33		55.9	-55.4	225.6	200.4	25.19	8.954	
5,600.0	5,594.9	5,621.9	5,609.8	6.8	20.1	-162.98		57.9	-46.6	222.6	197.0	25.63	8.686	
5,700.0	5,694.7	5,721.8	5,709.3	6.9	20.4	-162.62		60.0	-37.8	219.7	193.7	26.08	8.426	
5,800.0	5,794.6	5,821.8	5,808.9	7.0	20.8	-162.25		62.0	-29.0	216.8	190.3	26.52	8.176	
5,900.0	5,894.4	5,921.7	5,908.4	7.1	21.1	-161.87		64.0	-20.2	214.0	187.0	26.97	7.934	
6,000.0	5,994.2	6,021.6	6,008.0	7.2	21.5	-161.48		66.0	-11.4	211.1	183.7	27.41	7.700	
6,100.0	6,094.0	6,121.6	6,107.5	7.3	21.8	-161.08		68.1	-2.6	208.2	180.4	27.86	7.474	
6,200.0	6,193.9	6,221.5	6,207.0	7.4	22.2	-160.67		70.1	6.2	205.4	177.0	28.30	7.256	
6,300.0	6,293.7	6,321.5	6,306.6	7.5	22.6	-160.25		72.1	15.0	202.5	173.8	28.75	7.044	
6,400.0	6,393.5	6,421.4	6,406.1	7.6	22.9	-159.81		74.1	23.8	199.7	170.5	29.19	6.840	
6,500.0	6,493.4	6,521.4	6,505.7	7.7	23.3	-159.36		76.2	32.6	196.8	167.2	29.64	6.642	
6,600.0	6,593.2	6,621.3	6,605.2	7.9	23.6	-158.90		78.2	41.4	194.0	164.0	30.08	6.450	
6,700.0	6,693.0	6,721.3	6,704.7	8.0	24.0	-158.43		80.2	50.2	191.2	160.7	30.53	6.265	
6,800.0	6,792.8	6,821.2	6,804.3	8.1	24.3	-157.94		82.3	59.0	188.5	157.5	30.97	6.085	
6,900.0	6,892.7	6,921.2	6,903.8	8.2	24.7	-157.43		84.3	67.8	185.7	154.3	31.41	5.911	
7,000.0	6,992.5	7,021.1	7,003.3	8.3	25.1	-156.92		86.3	76.6	182.9	151.1	31.85	5.743	
7,100.0	7,092.3	7,121.1	7,102.9	8.4	25.4	-156.38		88.3	85.4	180.2	147.9	32.30	5.579	
7,200.0	7,192.2	7,221.0	7,202.4	8.5	25.8	-155.83		90.4	94.2	177.5	144.7	32.74	5.421	
7,300.0	7,292.0	7,321.0	7,302.0	8.6	26.1	-155.26		92.4	103.0	174.8	141.6	33.18	5.267	
7,400.0	7,391.8	7,420.9	7,401.5	8.8	26.5	-154.68		94.4	111.8	172.1	138.5	33.62	5.119	
7,500.0	7,491.6	7,520.9	7,501.0	8.9	26.9	-154.07		96.5	120.6	169.4	135.3	34.05	4.974	
7,600.0	7,591.5	7,620.8	7,600.6	9.0	27.2	-153.45		98.5	129.4	166.7	132.3	34.49	4.834	
7,700.0	7,691.3	7,720.8	7,700.1	9.1	27.6	-152.80		100.5	138.2	164.1	129.2	34.93	4.699	
7,800.0	7,791.1	7,820.7	7,799.7	9.2	27.9	-152.14		102.5	147.0	161.5	126.1	35.36	4.567	
7,900.0	7,891.0	7,920.7	7,899.2	9.3	28.3	-151.45		104.6	155.8	158.9	123.1	35.80	4.440	
8,000.0	7,990.8	8,020.6	7,998.7	9.4	28.7	-150.74		106.6	164.6	156.4	120.1	36.23	4.316	
8,100.0	8,090.6	8,120.6	8,098.3	9.6	29.0	-150.01		108.6	173.4	153.8	117.2	36.66	4.196	
8,200.0	8,190.5	8,220.5	8,197.8	9.7	29.4	-149.26		110.6	182.2	151.3	114.2	37.09	4.080	
8,300.0	8,290.3	8,320.5	8,297.4	9.8	29.7	-148.47		112.7	191.0	148.8	111.3	37.51	3.967	
8,400.0	8,390.1	8,420.4	8,396.9	9.9	30.1	-147.66		114.7	199.8	146.4	108.4	37.94	3.858	
8,500.0	8,489.9	8,520.3	8,496.4	10.0	30.5	-146.83		116.7	208.6	143.9	105.6	38.36	3.752	
8,600.0	8,589.8	8,620.3	8,596.0	10.1	30.8	-145.96		118.8	217.4	141.5	102.8	38.78	3.650	
8,700.0	8,689.6	8,720.2	8,695.5	10.3	31.2	-145.07		120.8	226.2	139.2	100.0	39.20	3.550	
8,800.0	8,789.4	8,820.2	8,795.1	10.4	31.5	-144.14		122.8	235.0	136.9	97.2	39.62	3.454	
8,900.0	8,889.3	8,920.1	8,894.6	10.5	31.9	-143.19		124.8	243.8	134.6	94.5	40.03	3.361	
9,000.0	8,989.1	9,020.1	8,994.1	10.6	32.3	-142.20		126.9	252.6	132.3	91.9	40.45	3.271	
9,100.0	9,088.9	9,120.0	9,093.7	10.7	32.6	-141.18		128.9	261.4	130.1	89.2	40.86	3.184	
9,200.0	9,188.7	9,220.0	9,193.2	10.9	33.0	-140.12		130.9	270.2	127.9	86.7	41.27	3.100	
9,300.0	9,288.6	9,319.9	9,292.8	11.0	33.3	-139.02		132.9	279.0	125.8	84.1	41.68	3.019	
9,400.0	9,388.4	9,419.9	9,392.3	11.1	33.7	-137.89		135.0	287.8	123.7	81.7	42.08	2.941	
9,500.0	9,488.2	9,519.8	9,491.8	11.2	34.1	-136.72		137.0	296.6	121.7	79.2	42.49	2.865	
9,600.0	9,588.1	9,619.8	9,591.4	11.3	34.4	-135.52		139.0	305.4	119.7	76.9	42.89	2.792	
9,700.0	9,687.9	9,719.7	9,690.9	11.5	34.8	-134.27		141.1	314.2	117.8	74.5	43.29	2.722	
9,800.0	9,787.7	9,819.7	9,790.5	11.6	35.2	-132.98		143.1	323.0	116.0	72.3	43.69	2.654	
9,900.0	9,887.5	9,919.6	9,890.0	11.7	35.5	-131.65		145.1	331.8	114.2	70.1	44.09	2.590	
10,000.0	9,987.4	10,019.6	9,989.5	11.8	35.9	-130.28		147.1	340.6	112.4	67.9	44.49	2.527	

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

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED 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:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #804H - OWB - PWP0													Offset Site Error:	3.0 usft
Survey Program: 0-MWD+IFR1+FDIR													Offset Well Error:	3.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,100.0	10,087.2	10,119.5	10,089.1	12.0	36.2	-128.86		149.2	349.4	110.8	65.9	44.89	2.468	
10,158.3	10,145.4	10,177.8	10,147.1	12.0	36.5	-128.02		150.4	354.5	109.8	64.7	45.09	2.436	
10,171.7	10,158.8	10,191.2	10,160.4	12.0	36.5	-150.63		150.6	355.7	109.7	64.6	45.13	2.431	CC, ES, SF
10,200.0	10,187.0	10,219.4	10,188.6	12.0	36.6	176.02		151.2	358.1	110.2	65.0	45.19	2.439	
10,250.0	10,236.6	10,269.0	10,237.9	12.0	36.8	157.18		152.2	362.5	113.6	68.3	45.28	2.508	
10,300.0	10,285.6	10,317.8	10,286.5	12.0	37.0	153.39		153.2	366.8	120.5	75.1	45.37	2.656	
10,350.0	10,333.5	10,365.5	10,334.1	12.0	37.1	153.79		154.2	371.0	131.4	85.9	45.49	2.889	
10,400.0	10,380.1	10,411.8	10,380.1	12.0	37.3	155.64		155.1	375.1	146.6	100.9	45.68	3.209	
10,450.0	10,424.9	10,456.2	10,424.4	12.1	37.5	157.84		156.0	379.0	166.1	120.2	45.92	3.618	
10,500.0	10,467.6	10,498.4	10,466.4	12.1	37.6	159.90		156.9	382.7	190.0	143.8	46.20	4.112	
10,550.0	10,507.9	10,538.2	10,506.1	12.1	37.8	161.62		157.7	386.2	217.9	171.4	46.50	4.686	
10,600.0	10,545.5	10,575.2	10,542.9	12.2	37.9	162.92		158.4	389.5	249.6	202.8	46.80	5.335	
10,650.0	10,580.1	10,609.1	10,576.7	12.2	38.0	163.76		159.1	392.5	284.8	237.8	47.08	6.050	
10,700.0	10,611.5	10,639.7	10,607.1	12.3	38.1	164.11		159.7	395.1	323.2	275.8	47.35	6.825	
10,750.0	10,639.3	10,666.7	10,634.1	12.4	38.2	163.91		160.3	397.5	364.2	316.6	47.59	7.654	
10,800.0	10,663.4	10,690.0	10,657.2	12.5	38.3	163.02		160.7	399.6	407.7	359.9	47.80	8.529	
10,850.0	10,683.6	10,709.3	10,676.5	12.6	38.4	161.12		161.1	401.3	453.2	405.2	47.99	9.443	
10,900.0	10,699.8	10,724.6	10,691.7	12.7	38.4	157.51		161.4	402.6	500.3	452.1	48.14	10.391	
10,950.0	10,711.7	10,735.6	10,702.6	12.8	38.5	150.45		161.7	403.6	548.6	500.3	48.27	11.366	
11,000.0	10,719.5	10,742.4	10,709.4	12.9	38.5	134.79		161.8	404.2	597.8	549.4	48.36	12.362	
11,050.0	10,722.8	10,744.8	10,711.8	13.1	38.5	97.67		161.9	404.4	647.5	599.0	48.42	13.372	
11,063.0	10,723.0	10,744.7	10,711.7	13.1	38.5	84.38		161.9	404.4	660.4	612.0	48.43	13.637	
11,100.0	10,723.1	10,744.0	10,711.0	13.2	38.5	83.80		161.8	404.3	697.2	648.8	48.45	14.389	
11,200.0	10,723.2	12,022.1	11,435.0	13.5	41.4	179.98		-631.9	473.4	715.8	669.8	46.01	15.559	
11,300.0	10,723.4	12,122.1	11,435.0	13.9	41.6	179.98		-731.9	474.1	715.6	669.2	46.39	15.427	
11,400.0	10,723.5	12,222.1	11,435.0	14.3	41.7	179.98		-831.9	474.7	715.5	668.7	46.82	15.282	
11,500.0	10,723.7	12,322.1	11,435.0	14.8	41.9	179.98		-931.9	475.3	715.3	668.0	47.30	15.124	
11,600.0	10,723.8	12,422.1	11,435.0	15.3	42.1	179.98		-1,031.9	475.9	715.2	667.3	47.82	14.954	
11,700.0	10,724.0	12,522.1	11,435.0	15.9	42.3	179.98		-1,131.9	476.6	715.0	666.6	48.39	14.775	
11,800.0	10,724.1	12,622.1	11,435.0	16.4	42.5	179.98		-1,231.9	477.2	714.9	665.8	49.01	14.586	
11,900.0	10,724.3	12,722.1	11,435.0	17.0	42.8	179.98		-1,331.9	477.8	714.7	665.0	49.67	14.390	
12,000.0	10,724.5	12,822.1	11,435.0	17.7	43.0	179.98		-1,431.9	478.5	714.5	664.2	50.37	14.187	
12,100.0	10,724.6	12,922.1	11,435.0	18.3	43.3	179.98		-1,531.9	479.1	714.4	663.3	51.10	13.980	
12,200.0	10,724.8	13,022.1	11,435.0	19.0	43.6	179.98		-1,631.9	479.7	714.2	662.4	51.88	13.768	
12,300.0	10,724.9	13,122.1	11,435.0	19.7	43.9	179.98		-1,731.9	480.4	714.1	661.4	52.69	13.554	
12,400.0	10,725.1	13,222.1	11,435.0	20.3	44.2	179.99		-1,831.9	481.0	713.9	660.4	53.53	13.337	
12,500.0	10,725.2	13,322.1	11,435.0	21.1	44.5	179.99		-1,931.9	481.6	713.8	659.4	54.40	13.120	
12,600.0	10,725.4	13,422.1	11,435.0	21.8	44.8	179.99		-2,031.9	482.3	713.6	658.3	55.31	12.902	
12,700.0	10,725.5	13,522.1	11,435.0	22.5	45.2	179.99		-2,131.9	482.9	713.5	657.2	56.25	12.685	
12,800.0	10,725.7	13,622.1	11,435.0	23.2	45.6	179.99		-2,231.9	483.5	713.3	656.1	57.21	12.468	
12,900.0	10,725.8	13,722.1	11,435.0	24.0	45.9	179.99		-2,331.9	484.2	713.2	655.0	58.20	12.254	
13,000.0	10,726.0	13,822.1	11,435.0	24.8	46.3	179.99		-2,431.9	484.8	713.0	653.8	59.21	12.041	
13,100.0	10,726.1	13,922.1	11,435.0	25.5	46.7	179.99		-2,531.9	485.4	712.9	652.6	60.25	11.831	
13,200.0	10,726.3	14,022.1	11,435.0	26.3	47.1	179.99		-2,631.9	486.0	712.7	651.4	61.31	11.624	
13,300.0	10,726.5	14,122.1	11,435.0	27.1	47.6	179.99		-2,731.9	486.7	712.5	650.1	62.40	11.419	
13,400.0	10,726.6	14,222.1	11,435.0	27.8	48.0	179.99		-2,831.9	487.3	712.4	648.9	63.50	11.219	
13,500.0	10,726.8	14,322.1	11,435.0	28.6	48.5	179.99		-2,931.9	487.9	712.2	647.6	64.62	11.021	
13,600.0	10,726.9	14,422.1	11,435.0	29.4	48.9	179.99		-3,031.9	488.6	712.1	646.3	65.76	10.828	
13,700.0	10,727.1	14,522.1	11,435.0	30.2	49.4	179.99		-3,131.9	489.2	711.9	645.0	66.92	10.638	
13,800.0	10,727.2	14,622.1	11,435.0	31.0	49.9	179.99		-3,231.9	489.8	711.8	643.7	68.10	10.452	
13,900.0	10,727.4	14,722.1	11,435.0	31.8	50.4	179.99		-3,331.9	490.5	711.6	642.3	69.29	10.271	

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

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED 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:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #804H - OWB - PWP0												Offset Site Error:	3.0 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	
14,000.0	10,727.5	14,822.1	11,435.0	32.6	50.9	179.99	-3,431.9	491.1	711.5	641.0	70.49	10.093	
14,100.0	10,727.7	14,922.1	11,435.0	33.4	51.4	179.99	-3,531.9	491.7	711.3	639.6	71.71	9.919	
14,200.0	10,727.8	15,022.1	11,435.0	34.2	51.9	179.99	-3,631.9	492.4	711.2	638.2	72.94	9.749	
14,300.0	10,728.0	15,122.1	11,435.0	35.1	52.4	179.99	-3,731.9	493.0	711.0	636.8	74.19	9.584	
14,400.0	10,728.2	15,222.1	11,435.0	35.9	53.0	179.99	-3,831.9	493.6	710.8	635.4	75.45	9.422	
14,500.0	10,728.3	15,322.1	11,435.0	36.7	53.5	179.99	-3,931.9	494.3	710.7	634.0	76.71	9.264	
14,600.0	10,728.5	15,422.1	11,435.0	37.5	54.1	179.99	-4,031.9	494.9	710.5	632.5	77.99	9.110	
14,700.0	10,728.6	15,522.1	11,435.0	38.3	54.6	179.99	-4,131.9	495.5	710.4	631.1	79.28	8.960	
14,800.0	10,728.8	15,622.1	11,435.0	39.1	55.2	179.99	-4,231.9	496.1	710.2	629.6	80.58	8.813	
14,900.0	10,728.9	15,722.1	11,435.0	40.0	55.8	179.99	-4,331.9	496.8	710.1	628.2	81.89	8.671	
15,000.0	10,729.1	15,822.1	11,435.0	40.8	56.4	179.99	-4,431.9	497.4	709.9	626.7	83.21	8.531	
15,100.0	10,729.2	15,922.1	11,435.0	41.6	57.0	179.99	-4,531.9	498.0	709.8	625.2	84.54	8.396	
15,200.0	10,729.4	16,022.1	11,435.0	42.5	57.6	179.99	-4,631.9	498.7	709.6	623.7	85.87	8.263	
15,300.0	10,729.5	16,122.1	11,435.0	43.3	58.2	179.99	-4,731.9	499.3	709.5	622.2	87.22	8.134	
15,400.0	10,729.7	16,222.1	11,435.0	44.1	58.8	179.99	-4,831.9	499.9	709.3	620.7	88.57	8.009	
15,500.0	10,729.9	16,322.1	11,435.0	44.9	59.4	179.99	-4,931.9	500.6	709.1	619.2	89.93	7.886	
15,600.0	10,730.0	16,422.1	11,435.0	45.8	60.0	179.99	-5,031.9	501.2	709.0	617.7	91.29	7.766	
15,700.0	10,730.2	16,522.1	11,435.0	46.6	60.6	179.99	-5,131.9	501.8	708.8	616.2	92.66	7.650	
15,800.0	10,730.3	16,622.1	11,435.0	47.5	61.3	179.99	-5,231.8	502.5	708.7	614.6	94.04	7.536	
15,900.0	10,730.5	16,722.1	11,435.0	48.3	61.9	179.99	-5,331.8	503.1	708.5	613.1	95.42	7.425	
16,000.0	10,730.6	16,822.1	11,435.0	49.1	62.6	179.99	-5,431.8	503.7	708.4	611.6	96.81	7.317	
16,100.0	10,730.8	16,922.1	11,435.0	50.0	63.2	179.99	-5,531.8	504.4	708.2	610.0	98.20	7.212	
16,200.0	10,730.9	17,022.1	11,435.0	50.8	63.9	179.99	-5,631.8	505.0	708.1	608.5	99.60	7.109	
16,300.0	10,731.1	17,122.1	11,435.0	51.6	64.5	179.99	-5,731.8	505.6	707.9	606.9	101.01	7.008	
16,400.0	10,731.2	17,222.1	11,435.0	52.5	65.2	179.99	-5,831.8	506.2	707.8	605.3	102.42	6.911	
16,500.0	10,731.4	17,322.1	11,435.0	53.3	65.9	179.99	-5,931.8	506.9	707.6	603.8	103.83	6.815	
16,600.0	10,731.6	17,422.1	11,435.0	54.2	66.5	179.99	-6,031.8	507.5	707.4	602.2	105.25	6.722	
16,700.0	10,731.7	17,522.1	11,435.0	55.0	67.2	179.99	-6,131.8	508.1	707.3	600.6	106.67	6.631	
16,800.0	10,731.9	17,622.1	11,435.0	55.9	67.9	179.99	-6,231.8	508.8	707.1	599.0	108.10	6.542	
16,900.0	10,732.0	17,722.1	11,435.0	56.7	68.6	179.99	-6,331.8	509.4	707.0	597.5	109.53	6.455	
17,000.0	10,732.2	17,822.1	11,435.0	57.5	69.3	179.99	-6,431.8	510.0	706.8	595.9	110.96	6.370	
17,100.0	10,732.3	17,922.1	11,435.0	58.4	70.0	179.99	-6,531.8	510.7	706.7	594.3	112.40	6.287	
17,200.0	10,732.5	18,022.1	11,435.0	59.2	70.7	179.99	-6,631.8	511.3	706.5	592.7	113.84	6.206	
17,300.0	10,732.6	18,122.1	11,435.0	60.1	71.4	179.99	-6,731.8	511.9	706.4	591.1	115.29	6.127	
17,400.0	10,732.8	18,222.1	11,435.0	60.9	72.1	179.99	-6,831.8	512.6	706.2	589.5	116.73	6.050	
17,500.0	10,732.9	18,322.1	11,435.0	61.8	72.8	179.99	-6,931.8	513.2	706.1	587.9	118.18	5.974	
17,600.0	10,733.1	18,422.1	11,435.0	62.6	73.5	179.99	-7,031.8	513.8	705.9	586.3	119.64	5.900	
17,700.0	10,733.3	18,522.1	11,435.0	63.5	74.2	179.99	-7,131.8	514.4	705.7	584.7	121.09	5.828	
17,800.0	10,733.4	18,622.1	11,435.0	64.3	75.0	179.99	-7,231.8	515.1	705.6	583.0	122.55	5.757	
17,900.0	10,733.6	18,722.1	11,435.0	65.2	75.7	179.99	-7,331.8	515.7	705.4	581.4	124.02	5.688	
18,000.0	10,733.7	18,822.1	11,435.0	66.0	76.4	179.99	-7,431.8	516.3	705.3	579.8	125.48	5.621	
18,100.0	10,733.9	18,922.1	11,435.0	66.9	77.1	180.00	-7,531.8	517.0	705.1	578.2	126.95	5.554	
18,200.0	10,734.0	19,022.1	11,435.0	67.7	77.9	180.00	-7,631.8	517.6	705.0	576.6	128.42	5.490	
18,300.0	10,734.2	19,122.1	11,435.0	68.6	78.6	180.00	-7,731.8	518.2	704.8	574.9	129.89	5.426	
18,400.0	10,734.3	19,222.1	11,435.0	69.4	79.3	180.00	-7,831.8	518.9	704.7	573.3	131.36	5.364	
18,500.0	10,734.5	19,322.1	11,435.0	70.3	80.1	180.00	-7,931.8	519.5	704.5	571.7	132.84	5.303	
18,600.0	10,734.6	19,422.1	11,435.0	71.1	80.8	180.00	-8,031.8	520.1	704.4	570.0	134.32	5.244	
18,700.0	10,734.8	19,522.1	11,435.0	72.0	81.6	180.00	-8,131.8	520.8	704.2	568.4	135.80	5.186	
18,800.0	10,734.9	19,622.1	11,435.0	72.8	82.3	180.00	-8,231.8	521.4	704.1	566.8	137.28	5.128	
18,900.0	10,735.1	19,722.1	11,435.0	73.7	83.0	180.00	-8,331.8	522.0	703.9	565.1	138.77	5.072	
19,000.0	10,735.3	19,822.1	11,435.0	74.5	83.8	180.00	-8,431.8	522.7	703.7	563.5	140.25	5.018	

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

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED 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:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #804H - OWB - PWP0													Offset Site Error:	3.0 usft
Survey Program: 0-MWD+IFR1+FDIR													Offset Well Error:	3.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
19,100.0	10,735.4	19,922.1	11,435.0	75.4	84.5	180.00	-8,531.8	523.3	703.6	561.8	141.74	4.964		
19,200.0	10,735.6	20,022.1	11,435.0	76.2	85.3	180.00	-8,631.8	523.9	703.4	560.2	143.23	4.911		
19,300.0	10,735.7	20,122.1	11,435.0	77.1	86.1	180.00	-8,731.8	524.5	703.3	558.6	144.72	4.859		
19,400.0	10,735.9	20,222.1	11,435.0	77.9	86.8	180.00	-8,831.8	525.2	703.1	556.9	146.22	4.809		
19,500.0	10,736.0	20,322.1	11,435.0	78.8	87.6	180.00	-8,931.8	525.8	703.0	555.3	147.71	4.759		
19,600.0	10,736.2	20,422.1	11,435.0	79.6	88.3	180.00	-9,031.8	526.4	702.8	553.6	149.21	4.710		
19,700.0	10,736.3	20,522.1	11,435.0	80.5	89.1	180.00	-9,131.8	527.1	702.7	552.0	150.71	4.662		
19,800.0	10,736.5	20,622.1	11,435.0	81.3	89.9	180.00	-9,231.8	527.7	702.5	550.3	152.21	4.616		
19,900.0	10,736.6	20,722.1	11,435.0	82.2	90.6	180.00	-9,331.8	528.3	702.4	548.6	153.71	4.569		
20,000.0	10,736.8	20,822.1	11,435.0	83.0	91.4	180.00	-9,431.8	529.0	702.2	547.0	155.21	4.524		
20,100.0	10,737.0	20,922.1	11,435.0	83.9	92.2	180.00	-9,531.8	529.6	702.0	545.3	156.71	4.480		
20,200.0	10,737.1	21,022.1	11,435.0	84.7	92.9	180.00	-9,631.8	530.2	701.9	543.7	158.22	4.436		
20,300.0	10,737.3	21,122.1	11,435.0	85.6	93.7	180.00	-9,731.8	530.9	701.7	542.0	159.72	4.393		
20,400.0	10,737.4	21,222.1	11,435.0	86.4	94.5	180.00	-9,831.8	531.5	701.6	540.4	161.23	4.351		
20,500.0	10,737.6	21,322.1	11,435.0	87.3	95.3	180.00	-9,931.7	532.1	701.4	538.7	162.74	4.310		
20,600.0	10,737.7	21,422.1	11,435.0	88.2	96.1	180.00	-10,031.7	532.8	701.3	537.0	164.25	4.270		
20,700.0	10,737.9	21,522.1	11,435.0	89.0	96.8	180.00	-10,131.7	533.4	701.1	535.4	165.76	4.230		
20,777.1	10,738.0	21,599.1	11,435.0	89.7	97.4	180.00	-10,208.8	533.9	701.0	534.1	166.92	4.200		
20,778.0	10,738.0	21,599.1	11,435.0	89.7	97.4	-180.00	-10,208.8	533.9	701.0	534.1	166.91	4.200		

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

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED 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:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #805H - OWB - PWP0												Offset Site Error:	3.0 usft
Survey Program: 0-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	3.0	3.0	-89.84	1.1	-377.7	377.8				
100.0	100.0	95.0	95.0	3.0	3.0	-89.84	1.1	-377.7	377.7	371.7	6.00	62.931	
200.0	200.0	195.0	195.0	3.0	3.0	-89.84	1.1	-377.7	377.7	371.7	6.04	62.566	
300.0	300.0	295.0	295.0	3.0	3.1	-89.84	1.1	-377.7	377.7	371.6	6.12	61.765	
400.0	400.0	395.0	395.0	3.0	3.2	-89.84	1.1	-377.7	377.7	371.5	6.23	60.594	
500.0	500.0	495.0	495.0	3.1	3.4	-89.84	1.1	-377.7	377.7	371.4	6.39	59.131	
600.0	600.0	595.0	595.0	3.1	3.6	-89.84	1.1	-377.7	377.7	371.2	6.57	57.458	
700.0	700.0	695.0	695.0	3.1	3.8	-89.84	1.1	-377.7	377.7	371.0	6.79	55.651	
800.0	800.0	795.0	795.0	3.2	4.0	-89.84	1.1	-377.7	377.7	370.7	7.02	53.774	
900.0	900.0	895.0	895.0	3.2	4.2	-89.84	1.1	-377.7	377.7	370.5	7.28	51.877	
1,000.0	1,000.0	995.0	995.0	3.2	4.5	-89.84	1.1	-377.7	377.7	370.2	7.56	49.997	
1,100.0	1,100.0	1,095.0	1,095.0	3.3	4.8	-89.84	1.1	-377.7	377.7	369.9	7.84	48.161	
1,200.0	1,200.0	1,195.0	1,195.0	3.4	5.0	-89.84	1.1	-377.7	377.7	369.6	8.14	46.384	
1,300.0	1,300.0	1,295.0	1,295.0	3.4	5.3	-89.84	1.1	-377.7	377.7	369.3	8.45	44.678	
1,400.0	1,400.0	1,395.0	1,395.0	3.5	5.6	-89.84	1.1	-377.7	377.7	369.0	8.77	43.049	
1,500.0	1,500.0	1,495.0	1,495.0	3.5	5.9	-89.84	1.1	-377.7	377.7	368.6	9.10	41.498	
1,600.0	1,600.0	1,595.0	1,595.0	3.6	6.3	-89.84	1.1	-377.7	377.7	368.3	9.44	40.026	
1,700.0	1,700.0	1,695.0	1,695.0	3.7	6.6	-89.84	1.1	-377.7	377.7	368.0	9.78	38.630	
1,800.0	1,800.0	1,795.0	1,795.0	3.8	6.9	-89.84	1.1	-377.7	377.7	367.6	10.12	37.309	
1,900.0	1,900.0	1,895.0	1,895.0	3.9	7.2	-89.84	1.1	-377.7	377.7	367.3	10.48	36.058	
2,000.0	2,000.0	1,995.0	1,995.0	3.9	7.5	-89.84	1.1	-377.7	377.7	366.9	10.83	34.875	
2,100.0	2,100.0	2,095.0	2,095.0	4.0	7.9	-89.84	1.1	-377.7	377.7	366.6	11.19	33.754	
2,200.0	2,200.0	2,195.0	2,195.0	4.1	8.2	-89.84	1.1	-377.7	377.7	366.2	11.55	32.694	
2,300.0	2,300.0	2,295.0	2,295.0	4.2	8.5	-89.84	1.1	-377.7	377.7	365.8	11.92	31.689	
2,400.0	2,400.0	2,395.0	2,395.0	4.3	8.9	-89.84	1.1	-377.7	377.7	365.5	12.29	30.737	
2,500.0	2,500.0	2,495.0	2,495.0	4.4	9.2	-89.84	1.1	-377.7	377.7	365.1	12.66	29.834 CC, ES	
2,600.0	2,600.0	2,595.0	2,595.0	4.5	9.6	-169.88	1.1	-377.7	379.5	366.4	13.04	29.108	
2,667.5	2,667.4	2,662.4	2,662.4	4.5	9.8	-169.95	1.1	-377.7	382.6	369.3	13.29	28.781	
2,700.0	2,699.8	2,694.8	2,694.8	4.5	9.9	-170.00	1.1	-377.7	384.4	371.0	13.42	28.654	
2,800.0	2,799.7	2,794.7	2,794.7	4.6	10.2	-170.15	1.1	-377.7	390.2	376.4	13.80	28.271	
2,900.0	2,899.5	2,894.5	2,894.5	4.6	10.6	-170.29	1.1	-377.7	395.9	381.8	14.19	27.898	
3,000.0	2,999.3	2,994.3	2,994.3	4.7	10.9	-170.43	1.1	-377.7	401.7	387.1	14.59	27.535	
3,100.0	3,099.2	3,094.2	3,094.2	4.7	11.3	-170.57	1.1	-377.7	407.5	392.5	14.99	27.183	
3,200.0	3,199.0	3,194.0	3,194.0	4.8	11.6	-170.70	1.1	-377.7	413.2	397.8	15.40	26.841	
3,300.0	3,298.8	3,293.8	3,293.8	4.8	12.0	-170.83	1.1	-377.7	419.0	403.2	15.81	26.509	
3,400.0	3,398.7	3,393.7	3,393.7	4.9	12.3	-170.96	1.1	-377.7	424.8	408.6	16.22	26.187	
3,500.0	3,498.5	3,493.5	3,493.5	5.0	12.7	-171.08	1.1	-377.7	430.5	413.9	16.64	25.876	
3,600.0	3,598.3	3,593.3	3,593.3	5.0	13.0	-171.20	1.1	-377.7	436.3	419.3	17.06	25.574	
3,700.0	3,698.1	3,693.1	3,693.1	5.1	13.3	-171.31	1.1	-377.7	442.1	424.6	17.49	25.282	
3,800.0	3,798.0	3,793.0	3,793.0	5.2	13.7	-171.43	1.1	-377.7	447.9	430.0	17.92	25.000	
3,900.0	3,897.8	3,892.8	3,892.8	5.2	14.0	-171.54	1.1	-377.7	453.7	435.3	18.35	24.726	
4,000.0	3,997.6	3,992.6	3,992.6	5.3	14.4	-171.64	1.1	-377.7	459.4	440.7	18.78	24.462	
4,100.0	4,097.5	4,092.5	4,092.5	5.4	14.7	-171.75	1.1	-377.7	465.2	446.0	19.22	24.206	
4,200.0	4,197.3	4,192.3	4,192.3	5.5	15.1	-171.85	1.1	-377.7	471.0	451.3	19.66	23.959	
4,300.0	4,297.1	4,292.1	4,292.1	5.6	15.4	-171.95	1.1	-377.7	476.8	456.7	20.10	23.719	
4,400.0	4,396.9	4,391.9	4,391.9	5.7	15.8	-172.05	1.1	-377.7	482.6	462.0	20.55	23.488	
4,500.0	4,496.8	4,491.8	4,491.8	5.7	16.1	-172.14	1.1	-377.7	488.4	467.4	20.99	23.264	
4,600.0	4,596.6	4,591.6	4,591.6	5.8	16.5	-172.23	1.1	-377.7	494.2	472.7	21.44	23.047	
4,700.0	4,696.4	4,691.4	4,691.4	5.9	16.9	-172.33	1.1	-377.7	499.9	478.1	21.89	22.837	
4,800.0	4,796.3	4,791.3	4,791.3	6.0	17.2	-172.41	1.1	-377.7	505.7	483.4	22.34	22.634	
4,900.0	4,896.1	4,891.1	4,891.1	6.1	17.6	-172.50	1.1	-377.7	511.5	488.7	22.80	22.437	

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

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED 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:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #805H - OWB - PWP0													Offset Site Error:	3.0 usft
Survey Program: 0-MWD+IFR1+FDIR													Offset Well Error:	3.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.0	4,995.9	4,990.9	4,990.9	6.2	17.9	-172.58		1.1	-377.7	517.3	494.1	23.25	22.247	
5,100.0	5,095.7	5,090.7	5,090.7	6.3	18.3	-172.67		1.1	-377.7	523.1	499.4	23.71	22.063	
5,200.0	5,195.6	5,190.6	5,190.6	6.4	18.6	-172.75		1.1	-377.7	528.9	504.7	24.17	21.884	
5,300.0	5,295.4	5,290.4	5,290.4	6.5	19.0	-172.83		1.1	-377.7	534.7	510.1	24.63	21.711	
5,400.0	5,395.2	5,390.2	5,390.2	6.6	19.3	-172.90		1.1	-377.7	540.5	515.4	25.09	21.544	
5,500.0	5,495.1	5,490.1	5,490.1	6.7	19.7	-172.98		1.1	-377.7	546.3	520.8	25.55	21.381	
5,600.0	5,594.9	5,584.6	5,584.6	6.8	20.0	-172.93		2.2	-378.2	552.5	526.5	25.99	21.258	
5,700.0	5,694.7	5,683.8	5,683.7	6.9	20.4	-172.69		5.2	-379.4	559.4	533.0	26.44	21.156	
5,800.0	5,794.6	5,783.5	5,783.4	7.0	20.7	-172.45		8.3	-380.6	566.3	539.4	26.89	21.056	
5,900.0	5,894.4	5,883.2	5,883.1	7.1	21.1	-172.22		11.3	-381.8	573.2	545.8	27.35	20.958	
6,000.0	5,994.2	5,983.0	5,982.8	7.2	21.4	-171.99		14.3	-383.1	580.1	552.3	27.80	20.864	
6,100.0	6,094.0	6,082.7	6,082.4	7.3	21.8	-171.77		17.3	-384.3	587.0	558.7	28.26	20.772	
6,200.0	6,193.9	6,182.4	6,182.1	7.4	22.1	-171.56		20.4	-385.5	593.9	565.2	28.71	20.683	
6,300.0	6,293.7	6,282.2	6,281.8	7.5	22.5	-171.35		23.4	-386.7	600.8	571.6	29.17	20.596	
6,400.0	6,393.5	6,381.9	6,381.5	7.6	22.8	-171.14		26.4	-387.9	607.7	578.1	29.63	20.512	
6,500.0	6,493.4	6,481.7	6,481.2	7.7	23.2	-170.94		29.4	-389.1	614.6	584.6	30.09	20.430	
6,600.0	6,593.2	6,581.4	6,580.8	7.9	23.5	-170.74		32.4	-390.4	621.6	591.0	30.54	20.351	
6,700.0	6,693.0	6,681.1	6,680.5	8.0	23.9	-170.55		35.5	-391.6	628.5	597.5	31.00	20.273	
6,800.0	6,792.8	6,780.9	6,780.2	8.1	24.2	-170.36		38.5	-392.8	635.5	604.0	31.46	20.198	
6,900.0	6,892.7	6,880.6	6,879.9	8.2	24.6	-170.18		41.5	-394.0	642.5	610.5	31.92	20.124	
7,000.0	6,992.5	6,980.3	6,979.6	8.3	25.0	-170.00		44.5	-395.2	649.4	617.0	32.39	20.053	
7,100.0	7,092.3	7,080.1	7,079.3	8.4	25.3	-169.82		47.6	-396.4	656.4	623.6	32.85	19.983	
7,200.0	7,192.2	7,179.8	7,178.9	8.5	25.7	-169.65		50.6	-397.7	663.4	630.1	33.31	19.915	
7,300.0	7,292.0	7,279.5	7,278.6	8.6	26.0	-169.48		53.6	-398.9	670.4	636.6	33.77	19.849	
7,400.0	7,391.8	7,379.3	7,378.3	8.8	26.4	-169.32		56.6	-400.1	677.4	643.1	34.24	19.785	
7,500.0	7,491.6	7,479.0	7,478.0	8.9	26.7	-169.15		59.7	-401.3	684.4	649.7	34.70	19.722	
7,600.0	7,591.5	7,578.8	7,577.7	9.0	27.1	-169.00		62.7	-402.5	691.4	656.2	35.16	19.661	
7,700.0	7,691.3	7,678.5	7,677.4	9.1	27.4	-168.84		65.7	-403.8	698.4	662.7	35.63	19.601	
7,800.0	7,791.1	7,778.2	7,777.0	9.2	27.8	-168.69		68.7	-405.0	705.4	669.3	36.09	19.543	
7,900.0	7,891.0	7,878.0	7,876.7	9.3	28.1	-168.54		71.8	-406.2	712.4	675.8	36.56	19.486	
8,000.0	7,990.8	7,977.7	7,976.4	9.4	28.5	-168.39		74.8	-407.4	719.4	682.4	37.03	19.430	
8,100.0	8,090.6	8,077.4	8,076.1	9.6	28.9	-168.25		77.8	-408.6	726.5	689.0	37.49	19.376	
8,200.0	8,190.5	8,177.2	8,175.8	9.7	29.2	-168.11		80.8	-409.8	733.5	695.5	37.96	19.323	
8,300.0	8,290.3	8,276.9	8,275.5	9.8	29.6	-167.97		83.9	-411.1	740.5	702.1	38.43	19.271	
8,400.0	8,390.1	8,376.6	8,375.1	9.9	29.9	-167.83		86.9	-412.3	747.6	708.7	38.90	19.220	
8,500.0	8,489.9	8,476.4	8,474.8	10.0	30.3	-167.70		89.9	-413.5	754.6	715.2	39.36	19.171	
8,600.0	8,589.8	8,576.1	8,574.5	10.1	30.6	-167.57		92.9	-414.7	761.7	721.8	39.83	19.122	
8,700.0	8,689.6	8,675.9	8,674.2	10.3	31.0	-167.44		96.0	-415.9	768.7	728.4	40.30	19.075	
8,800.0	8,789.4	8,775.6	8,773.9	10.4	31.3	-167.32		99.0	-417.1	775.8	735.0	40.77	19.028	
8,900.0	8,889.3	8,875.3	8,873.6	10.5	31.7	-167.19		102.0	-418.4	782.8	741.6	41.24	18.983	
9,000.0	8,989.1	8,975.1	8,973.2	10.6	32.1	-167.07		105.0	-419.6	789.9	748.2	41.71	18.939	
9,100.0	9,088.9	9,074.8	9,072.9	10.7	32.4	-166.95		108.1	-420.8	797.0	754.8	42.18	18.895	
9,200.0	9,188.7	9,174.5	9,172.6	10.9	32.8	-166.83		111.1	-422.0	804.0	761.4	42.65	18.853	
9,300.0	9,288.6	9,274.3	9,272.3	11.0	33.1	-166.72		114.1	-423.2	811.1	768.0	43.12	18.811	
9,400.0	9,388.4	9,374.0	9,372.0	11.1	33.5	-166.61		117.1	-424.4	818.2	774.6	43.59	18.770	
9,500.0	9,488.2	9,473.7	9,471.7	11.2	33.8	-166.49		120.2	-425.7	825.3	781.2	44.06	18.730	
9,600.0	9,588.1	9,573.5	9,571.3	11.3	34.2	-166.39		123.2	-426.9	832.3	787.8	44.53	18.691	
9,700.0	9,687.9	9,673.2	9,671.0	11.5	34.6	-166.28		126.2	-428.1	839.4	794.4	45.00	18.652	
9,800.0	9,787.7	9,773.0	9,770.7	11.6	34.9	-166.17		129.2	-429.3	846.5	801.0	45.48	18.615	
9,900.0	9,887.5	9,872.7	9,870.4	11.7	35.3	-166.07		132.3	-430.5	853.6	807.7	45.95	18.578	
10,000.0	9,987.4	9,972.4	9,970.1	11.8	35.6	-165.97		135.3	-431.7	860.7	814.3	46.42	18.542	

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

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED 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:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design		CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #805H - OWB - PWP0											Offset Site Error:	3.0 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		
10,100.0	10,087.2	10,072.2	10,069.8	12.0	36.0	-165.87	138.3	-433.0	867.8	820.9	46.89	18.506	18.492 SF	
10,158.3	10,145.4	10,130.3	10,127.9	12.0	36.2	-165.81	140.1	-433.7	871.9	824.8	47.15	18.500		
10,200.0	10,187.0	10,171.8	10,169.4	12.0	36.3	136.91	141.3	-434.2	875.0	827.7	47.30	18.500		
10,250.0	10,236.6	10,221.2	10,218.7	12.0	36.5	115.50	142.8	-434.8	879.1	831.6	47.46	18.523		
10,300.0	10,285.6	10,269.8	10,267.3	12.0	36.7	108.43	144.3	-435.4	883.5	835.9	47.61	18.559		
10,350.0	10,333.5	10,317.3	10,314.8	12.0	36.9	105.33	145.7	-435.9	888.5	840.8	47.74	18.612		
10,400.0	10,380.1	10,363.3	10,360.7	12.0	37.0	103.83	147.1	-436.5	894.2	846.3	47.86	18.685	18.782	
10,450.0	10,424.9	10,407.3	10,404.7	12.1	37.2	103.13	148.5	-437.0	900.8	852.8	47.96	18.782		
10,500.0	10,467.6	10,449.2	10,446.6	12.1	37.3	102.86	149.7	-437.6	908.6	860.5	48.06	18.906		
10,550.0	10,507.9	10,488.6	10,486.0	12.1	37.5	102.77	150.9	-438.0	917.7	869.5	48.14	19.063		
10,600.0	10,545.5	10,525.1	10,522.5	12.2	37.6	102.72	152.0	-438.5	928.4	880.2	48.21	19.256		
10,650.0	10,580.1	10,558.6	10,555.9	12.2	37.7	102.59	153.1	-438.9	940.9	892.6	48.28	19.489		19.763
10,700.0	10,611.5	10,588.7	10,586.0	12.3	37.8	102.27	154.0	-439.3	955.4	907.1	48.34	20.081		
10,750.0	10,639.3	10,615.2	10,612.5	12.4	37.9	101.67	154.8	-439.6	972.0	923.6	48.40	20.081		
10,800.0	10,663.4	10,638.0	10,635.3	12.5	38.0	100.73	155.5	-439.9	990.8	942.3	48.47	20.443		

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

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED 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:	PWP1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB=27' @ 3188.0usft (Nabors 893)

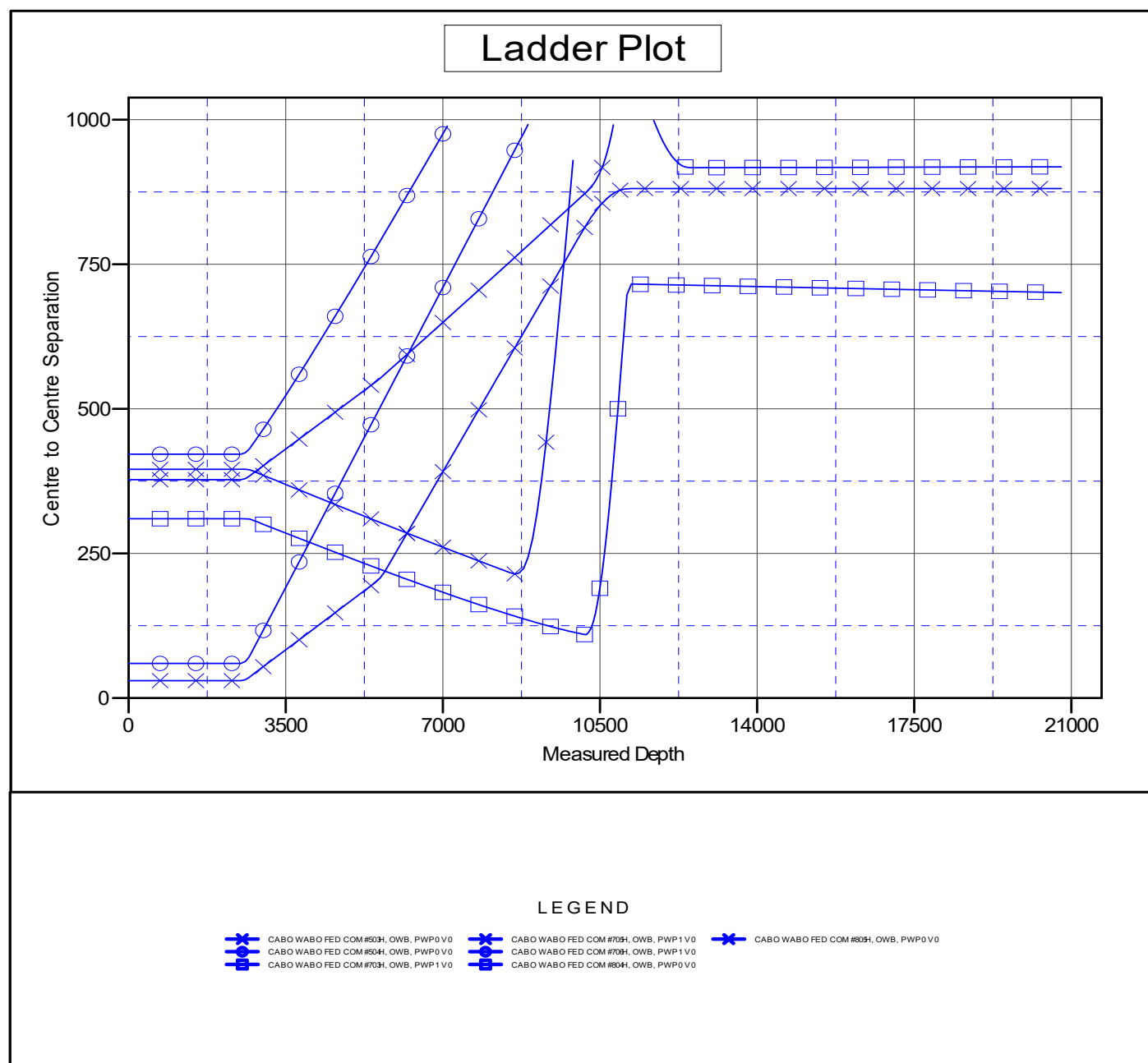
Offset Depths are relative to Offset Datum

Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: CABO WABO FED COM #704H

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

Grid Convergence at Surface is: 0.21°



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

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED 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:	PWP1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB=27' @ 3188.0usft (Nabors 893)

Offset Depths are relative to Offset Datum

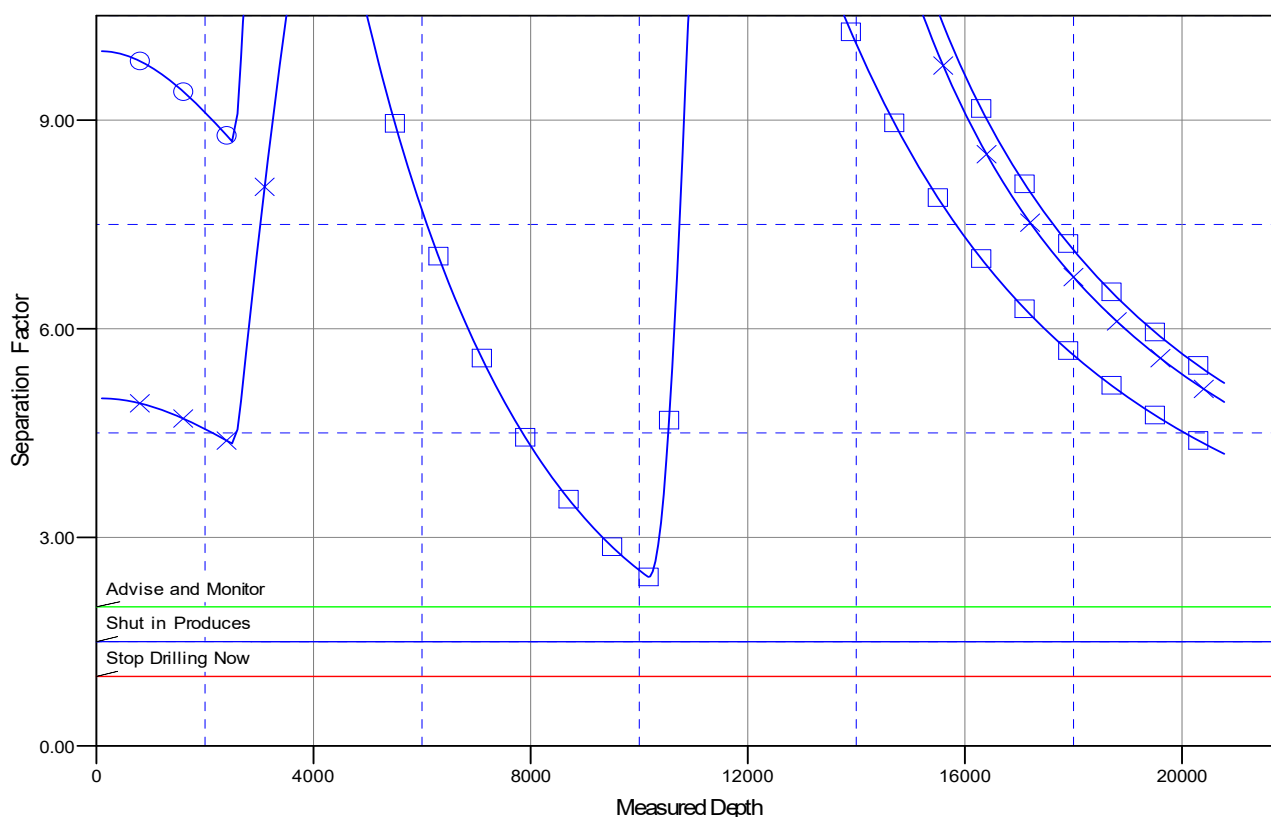
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: CABO WABO FED COM #704H

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

Grid Convergence at Surface is: 0.21°

Separation Factor Plot



LEGEND

CABO WABO FED COM #503H, OWB, PWP0 V0	CABO WABO FED COM #703H, OWB, PWP1 V0	CABO WABO FED COM #804H, OWB, PWP0 V0
CABO WABO FED COM #504H, OWB, PWP0 V0	CABO WABO FED COM #704H, OWB, PWP1 V0	
CABO WABO FED COM #703H, OWB, PWP1 V0	CABO WABO FED COM #804H, OWB, PWP0 V0	

DELAWARE BASIN WEST

ATLAS PROSPECT (NM-E)

CABO WABO FEDERAL PROJECT (ATLAS 2529)

CABO WABO FED COM #704H

OWB

Plan: PWP1

Standard Survey Report

19 May, 2020

Concho Resources LLC

Survey Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Well:	CABO WABO FED COM #704H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP1	Database:	edm

Project	ATLAS PROSPECT (NM-E)		
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	CABO WABO FED COM #704H			
Well Position	+N/-S	0.0 usft	Northing:	408,352.44 usfi
	+E/-W	0.0 usft	Easting:	621,619.81 usfi
Position Uncertainty		3.0 usft	Wellhead Elevation:	usfi
			Latitude:	32° 7' 19.444 N
			Longitude:	103° 56' 25.745 W
			Ground Level:	3,161.0 usfi

Wellbore	OWB
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	5/19/2020	6.83	59.79	47,508.66076978

Design	PWP1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	10,738.0	0.0	0.0	177.01

Survey Tool Program	Date	5/19/2020		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	10,158.0	PWP1 (OWB)	Standard Keeper 104	Standard Wireline Keeper ver 1.0.4
10,158.0	20,777.1	PWP1 (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

Concho Resources LLC

Survey Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Well:	CABO WABO FED COM #704H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP1	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)
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
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
Start Build 2.00									
2,600.0	2.00	80.00	2,600.0	0.3	1.7	-0.2	2.00	2.00	0.00
2,667.5	3.35	80.00	2,667.4	0.9	4.8	-0.6	2.00	2.00	0.00
Start 7490.8 hold at 2667.5 MD									
2,700.0	3.35	80.00	2,699.8	1.2	6.7	-0.8	0.00	0.00	0.00
2,800.0	3.35	80.00	2,799.7	2.2	12.4	-1.5	0.00	0.00	0.00
2,900.0	3.35	80.00	2,899.5	3.2	18.2	-2.3	0.00	0.00	0.00
3,000.0	3.35	80.00	2,999.3	4.2	24.0	-3.0	0.00	0.00	0.00
3,100.0	3.35	80.00	3,099.2	5.2	29.7	-3.7	0.00	0.00	0.00
3,200.0	3.35	80.00	3,199.0	6.3	35.5	-4.4	0.00	0.00	0.00
3,300.0	3.35	80.00	3,298.8	7.3	41.2	-5.1	0.00	0.00	0.00
3,400.0	3.35	80.00	3,398.7	8.3	47.0	-5.8	0.00	0.00	0.00
3,500.0	3.35	80.00	3,498.5	9.3	52.7	-6.5	0.00	0.00	0.00
3,600.0	3.35	80.00	3,598.3	10.3	58.5	-7.2	0.00	0.00	0.00
3,700.0	3.35	80.00	3,698.1	11.3	64.2	-8.0	0.00	0.00	0.00
3,800.0	3.35	80.00	3,798.0	12.3	70.0	-8.7	0.00	0.00	0.00
3,900.0	3.35	80.00	3,897.8	13.4	75.7	-9.4	0.00	0.00	0.00
4,000.0	3.35	80.00	3,997.6	14.4	81.5	-10.1	0.00	0.00	0.00
4,100.0	3.35	80.00	4,097.5	15.4	87.3	-10.8	0.00	0.00	0.00
4,200.0	3.35	80.00	4,197.3	16.4	93.0	-11.5	0.00	0.00	0.00
4,300.0	3.35	80.00	4,297.1	17.4	98.8	-12.2	0.00	0.00	0.00
4,400.0	3.35	80.00	4,396.9	18.4	104.5	-12.9	0.00	0.00	0.00
4,500.0	3.35	80.00	4,496.8	19.4	110.3	-13.7	0.00	0.00	0.00
4,600.0	3.35	80.00	4,596.6	20.5	116.0	-14.4	0.00	0.00	0.00
4,700.0	3.35	80.00	4,696.4	21.5	121.8	-15.1	0.00	0.00	0.00
4,800.0	3.35	80.00	4,796.3	22.5	127.5	-15.8	0.00	0.00	0.00
4,900.0	3.35	80.00	4,896.1	23.5	133.3	-16.5	0.00	0.00	0.00
5,000.0	3.35	80.00	4,995.9	24.5	139.1	-17.2	0.00	0.00	0.00
5,100.0	3.35	80.00	5,095.7	25.5	144.8	-17.9	0.00	0.00	0.00
5,200.0	3.35	80.00	5,195.6	26.5	150.6	-18.6	0.00	0.00	0.00
5,300.0	3.35	80.00	5,295.4	27.6	156.3	-19.4	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Well:	CABO WABO FED COM #704H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP1	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)
5,400.0	3.35	80.00	5,395.2	28.6	162.1	-20.1	0.00	0.00	0.00
5,500.0	3.35	80.00	5,495.1	29.6	167.8	-20.8	0.00	0.00	0.00
5,600.0	3.35	80.00	5,594.9	30.6	173.6	-21.5	0.00	0.00	0.00
5,700.0	3.35	80.00	5,694.7	31.6	179.3	-22.2	0.00	0.00	0.00
5,800.0	3.35	80.00	5,794.6	32.6	185.1	-22.9	0.00	0.00	0.00
5,900.0	3.35	80.00	5,894.4	33.7	190.8	-23.6	0.00	0.00	0.00
6,000.0	3.35	80.00	5,994.2	34.7	196.6	-24.4	0.00	0.00	0.00
6,100.0	3.35	80.00	6,094.0	35.7	202.4	-25.1	0.00	0.00	0.00
6,200.0	3.35	80.00	6,193.9	36.7	208.1	-25.8	0.00	0.00	0.00
6,300.0	3.35	80.00	6,293.7	37.7	213.9	-26.5	0.00	0.00	0.00
6,400.0	3.35	80.00	6,393.5	38.7	219.6	-27.2	0.00	0.00	0.00
6,500.0	3.35	80.00	6,493.4	39.7	225.4	-27.9	0.00	0.00	0.00
6,600.0	3.35	80.00	6,593.2	40.8	231.1	-28.6	0.00	0.00	0.00
6,700.0	3.35	80.00	6,693.0	41.8	236.9	-29.3	0.00	0.00	0.00
6,800.0	3.35	80.00	6,792.8	42.8	242.6	-30.1	0.00	0.00	0.00
6,900.0	3.35	80.00	6,892.7	43.8	248.4	-30.8	0.00	0.00	0.00
7,000.0	3.35	80.00	6,992.5	44.8	254.1	-31.5	0.00	0.00	0.00
7,100.0	3.35	80.00	7,092.3	45.8	259.9	-32.2	0.00	0.00	0.00
7,200.0	3.35	80.00	7,192.2	46.8	265.7	-32.9	0.00	0.00	0.00
7,300.0	3.35	80.00	7,292.0	47.9	271.4	-33.6	0.00	0.00	0.00
7,400.0	3.35	80.00	7,391.8	48.9	277.2	-34.3	0.00	0.00	0.00
7,500.0	3.35	80.00	7,491.6	49.9	282.9	-35.0	0.00	0.00	0.00
7,600.0	3.35	80.00	7,591.5	50.9	288.7	-35.8	0.00	0.00	0.00
7,700.0	3.35	80.00	7,691.3	51.9	294.4	-36.5	0.00	0.00	0.00
7,800.0	3.35	80.00	7,791.1	52.9	300.2	-37.2	0.00	0.00	0.00
7,900.0	3.35	80.00	7,891.0	53.9	305.9	-37.9	0.00	0.00	0.00
8,000.0	3.35	80.00	7,990.8	55.0	311.7	-38.6	0.00	0.00	0.00
8,100.0	3.35	80.00	8,090.6	56.0	317.4	-39.3	0.00	0.00	0.00
8,200.0	3.35	80.00	8,190.5	57.0	323.2	-40.0	0.00	0.00	0.00
8,300.0	3.35	80.00	8,290.3	58.0	329.0	-40.7	0.00	0.00	0.00
8,400.0	3.35	80.00	8,390.1	59.0	334.7	-41.5	0.00	0.00	0.00
8,500.0	3.35	80.00	8,489.9	60.0	340.5	-42.2	0.00	0.00	0.00
8,600.0	3.35	80.00	8,589.8	61.0	346.2	-42.9	0.00	0.00	0.00
8,700.0	3.35	80.00	8,689.6	62.1	352.0	-43.6	0.00	0.00	0.00
8,800.0	3.35	80.00	8,789.4	63.1	357.7	-44.3	0.00	0.00	0.00
8,900.0	3.35	80.00	8,889.3	64.1	363.5	-45.0	0.00	0.00	0.00
9,000.0	3.35	80.00	8,989.1	65.1	369.2	-45.7	0.00	0.00	0.00
9,100.0	3.35	80.00	9,088.9	66.1	375.0	-46.4	0.00	0.00	0.00
9,200.0	3.35	80.00	9,188.7	67.1	380.7	-47.2	0.00	0.00	0.00
9,300.0	3.35	80.00	9,288.6	68.2	386.5	-47.9	0.00	0.00	0.00
9,400.0	3.35	80.00	9,388.4	69.2	392.3	-48.6	0.00	0.00	0.00
9,500.0	3.35	80.00	9,488.2	70.2	398.0	-49.3	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Well:	CABO WABO FED COM #704H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP1	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)
9,600.0	3.35	80.00	9,588.1	71.2	403.8	-50.0	0.00	0.00	0.00
9,700.0	3.35	80.00	9,687.9	72.2	409.5	-50.7	0.00	0.00	0.00
9,800.0	3.35	80.00	9,787.7	73.2	415.3	-51.4	0.00	0.00	0.00
9,900.0	3.35	80.00	9,887.5	74.2	421.0	-52.2	0.00	0.00	0.00
10,000.0	3.35	80.00	9,987.4	75.3	426.8	-52.9	0.00	0.00	0.00
10,100.0	3.35	80.00	10,087.2	76.3	432.5	-53.6	0.00	0.00	0.00
10,158.3	3.35	80.00	10,145.4	76.9	435.9	-54.0	0.00	0.00	0.00
Start DLS 10.00 TFO 99.63									
10,200.0	4.89	137.24	10,187.0	75.8	438.3	-52.8	10.00	3.70	137.25
10,300.0	14.00	166.26	10,285.6	60.9	444.1	-37.6	10.00	9.11	29.02
10,400.0	23.83	172.14	10,380.1	29.0	449.7	-5.5	10.00	9.83	5.88
10,500.0	33.75	174.69	10,467.6	-18.8	455.1	42.5	10.00	9.93	2.55
10,600.0	43.71	176.18	10,545.5	-81.1	460.0	105.0	10.00	9.96	1.49
10,700.0	53.68	177.21	10,611.5	-156.0	464.2	180.0	10.00	9.97	1.03
10,800.0	63.66	178.01	10,663.4	-241.2	467.8	265.3	10.00	9.98	0.79
10,900.0	73.64	178.67	10,699.8	-334.2	470.4	358.3	10.00	9.98	0.67
11,000.0	83.62	179.28	10,719.5	-432.1	472.2	456.2	10.00	9.98	0.60
11,063.0	89.91	179.64	10,723.0	-495.0	472.8	519.0	10.00	9.98	0.58
Start 9714.1 hold at 11063.0 MD									
11,100.0	89.91	179.64	10,723.1	-531.9	473.0	555.9	0.00	0.00	0.00
11,200.0	89.91	179.64	10,723.2	-631.9	473.6	655.8	0.00	0.00	0.00
11,300.0	89.91	179.64	10,723.4	-731.9	474.3	755.7	0.00	0.00	0.00
11,400.0	89.91	179.64	10,723.5	-831.9	474.9	855.6	0.00	0.00	0.00
11,500.0	89.91	179.64	10,723.7	-931.9	475.5	955.5	0.00	0.00	0.00
11,600.0	89.91	179.64	10,723.8	-1,031.9	476.2	1,055.4	0.00	0.00	0.00
11,700.0	89.91	179.64	10,724.0	-1,131.9	476.8	1,155.3	0.00	0.00	0.00
11,800.0	89.91	179.64	10,724.1	-1,231.9	477.4	1,255.2	0.00	0.00	0.00
11,900.0	89.91	179.64	10,724.3	-1,331.9	478.0	1,355.1	0.00	0.00	0.00
12,000.0	89.91	179.64	10,724.5	-1,431.9	478.7	1,455.0	0.00	0.00	0.00
12,100.0	89.91	179.64	10,724.6	-1,531.9	479.3	1,554.9	0.00	0.00	0.00
12,200.0	89.91	179.64	10,724.8	-1,631.9	479.9	1,654.8	0.00	0.00	0.00
12,300.0	89.91	179.64	10,724.9	-1,731.9	480.6	1,754.7	0.00	0.00	0.00
12,400.0	89.91	179.64	10,725.1	-1,831.9	481.2	1,854.5	0.00	0.00	0.00
12,500.0	89.91	179.64	10,725.2	-1,931.9	481.8	1,954.4	0.00	0.00	0.00
12,600.0	89.91	179.64	10,725.4	-2,031.9	482.4	2,054.3	0.00	0.00	0.00
12,700.0	89.91	179.64	10,725.5	-2,131.9	483.1	2,154.2	0.00	0.00	0.00
12,800.0	89.91	179.64	10,725.7	-2,231.9	483.7	2,254.1	0.00	0.00	0.00
12,900.0	89.91	179.64	10,725.8	-2,331.9	484.3	2,354.0	0.00	0.00	0.00
13,000.0	89.91	179.64	10,726.0	-2,431.9	485.0	2,453.9	0.00	0.00	0.00
13,100.0	89.91	179.64	10,726.1	-2,531.9	485.6	2,553.8	0.00	0.00	0.00
13,200.0	89.91	179.64	10,726.3	-2,631.9	486.2	2,653.7	0.00	0.00	0.00
13,300.0	89.91	179.64	10,726.5	-2,731.9	486.8	2,753.6	0.00	0.00	0.00
13,400.0	89.91	179.64	10,726.6	-2,831.9	487.5	2,853.5	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Well:	CABO WABO FED COM #704H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP1	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)	
13,500.0	89.91	179.64	10,726.8	-2,931.9	488.1	2,953.4	0.00	0.00	0.00	
13,600.0	89.91	179.64	10,726.9	-3,031.9	488.7	3,053.3	0.00	0.00	0.00	
13,700.0	89.91	179.64	10,727.1	-3,131.9	489.4	3,153.2	0.00	0.00	0.00	
13,800.0	89.91	179.64	10,727.2	-3,231.9	490.0	3,253.1	0.00	0.00	0.00	
13,900.0	89.91	179.64	10,727.4	-3,331.9	490.6	3,353.0	0.00	0.00	0.00	
14,000.0	89.91	179.64	10,727.5	-3,431.9	491.2	3,452.9	0.00	0.00	0.00	
14,100.0	89.91	179.64	10,727.7	-3,531.9	491.9	3,552.8	0.00	0.00	0.00	
14,200.0	89.91	179.64	10,727.8	-3,631.9	492.5	3,652.6	0.00	0.00	0.00	
14,300.0	89.91	179.64	10,728.0	-3,731.9	493.1	3,752.5	0.00	0.00	0.00	
14,400.0	89.91	179.64	10,728.2	-3,831.9	493.8	3,852.4	0.00	0.00	0.00	
14,500.0	89.91	179.64	10,728.3	-3,931.9	494.4	3,952.3	0.00	0.00	0.00	
14,600.0	89.91	179.64	10,728.5	-4,031.9	495.0	4,052.2	0.00	0.00	0.00	
14,700.0	89.91	179.64	10,728.6	-4,131.9	495.6	4,152.1	0.00	0.00	0.00	
14,800.0	89.91	179.64	10,728.8	-4,231.9	496.3	4,252.0	0.00	0.00	0.00	
14,900.0	89.91	179.64	10,728.9	-4,331.9	496.9	4,351.9	0.00	0.00	0.00	
15,000.0	89.91	179.64	10,729.1	-4,431.9	497.5	4,451.8	0.00	0.00	0.00	
15,100.0	89.91	179.64	10,729.2	-4,531.9	498.2	4,551.7	0.00	0.00	0.00	
15,200.0	89.91	179.64	10,729.4	-4,631.9	498.8	4,651.6	0.00	0.00	0.00	
15,300.0	89.91	179.64	10,729.5	-4,731.9	499.4	4,751.5	0.00	0.00	0.00	
15,400.0	89.91	179.64	10,729.7	-4,831.9	500.1	4,851.4	0.00	0.00	0.00	
15,500.0	89.91	179.64	10,729.9	-4,931.9	500.7	4,951.3	0.00	0.00	0.00	
15,600.0	89.91	179.64	10,730.0	-5,031.9	501.3	5,051.2	0.00	0.00	0.00	
15,700.0	89.91	179.64	10,730.2	-5,131.8	501.9	5,151.1	0.00	0.00	0.00	
15,800.0	89.91	179.64	10,730.3	-5,231.8	502.6	5,251.0	0.00	0.00	0.00	
15,900.0	89.91	179.64	10,730.5	-5,331.8	503.2	5,350.8	0.00	0.00	0.00	
16,000.0	89.91	179.64	10,730.6	-5,431.8	503.8	5,450.7	0.00	0.00	0.00	
16,100.0	89.91	179.64	10,730.8	-5,531.8	504.5	5,550.6	0.00	0.00	0.00	
16,200.0	89.91	179.64	10,730.9	-5,631.8	505.1	5,650.5	0.00	0.00	0.00	
16,300.0	89.91	179.64	10,731.1	-5,731.8	505.7	5,750.4	0.00	0.00	0.00	
16,400.0	89.91	179.64	10,731.2	-5,831.8	506.3	5,850.3	0.00	0.00	0.00	
16,500.0	89.91	179.64	10,731.4	-5,931.8	507.0	5,950.2	0.00	0.00	0.00	
16,600.0	89.91	179.64	10,731.6	-6,031.8	507.6	6,050.1	0.00	0.00	0.00	
16,700.0	89.91	179.64	10,731.7	-6,131.8	508.2	6,150.0	0.00	0.00	0.00	
16,800.0	89.91	179.64	10,731.9	-6,231.8	508.9	6,249.9	0.00	0.00	0.00	
16,900.0	89.91	179.64	10,732.0	-6,331.8	509.5	6,349.8	0.00	0.00	0.00	
17,000.0	89.91	179.64	10,732.2	-6,431.8	510.1	6,449.7	0.00	0.00	0.00	
17,100.0	89.91	179.64	10,732.3	-6,531.8	510.7	6,549.6	0.00	0.00	0.00	
17,200.0	89.91	179.64	10,732.5	-6,631.8	511.4	6,649.5	0.00	0.00	0.00	
17,300.0	89.91	179.64	10,732.6	-6,731.8	512.0	6,749.4	0.00	0.00	0.00	
17,400.0	89.91	179.64	10,732.8	-6,831.8	512.6	6,849.3	0.00	0.00	0.00	
17,500.0	89.91	179.64	10,732.9	-6,931.8	513.3	6,949.2	0.00	0.00	0.00	
17,600.0	89.91	179.64	10,733.1	-7,031.8	513.9	7,049.1	0.00	0.00	0.00	

Concho Resources LLC

Survey Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Well:	CABO WABO FED COM #704H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP1	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)
17,700.0	89.91	179.64	10,733.3	-7,131.8	514.5	7,148.9	0.00	0.00	0.00
17,800.0	89.91	179.64	10,733.4	-7,231.8	515.1	7,248.8	0.00	0.00	0.00
17,900.0	89.91	179.64	10,733.6	-7,331.8	515.8	7,348.7	0.00	0.00	0.00
18,000.0	89.91	179.64	10,733.7	-7,431.8	516.4	7,448.6	0.00	0.00	0.00
18,100.0	89.91	179.64	10,733.9	-7,531.8	517.0	7,548.5	0.00	0.00	0.00
18,200.0	89.91	179.64	10,734.0	-7,631.8	517.7	7,648.4	0.00	0.00	0.00
18,300.0	89.91	179.64	10,734.2	-7,731.8	518.3	7,748.3	0.00	0.00	0.00
18,400.0	89.91	179.64	10,734.3	-7,831.8	518.9	7,848.2	0.00	0.00	0.00
18,500.0	89.91	179.64	10,734.5	-7,931.8	519.5	7,948.1	0.00	0.00	0.00
18,600.0	89.91	179.64	10,734.6	-8,031.8	520.2	8,048.0	0.00	0.00	0.00
18,700.0	89.91	179.64	10,734.8	-8,131.8	520.8	8,147.9	0.00	0.00	0.00
18,800.0	89.91	179.64	10,734.9	-8,231.8	521.4	8,247.8	0.00	0.00	0.00
18,900.0	89.91	179.64	10,735.1	-8,331.8	522.1	8,347.7	0.00	0.00	0.00
19,000.0	89.91	179.64	10,735.3	-8,431.8	522.7	8,447.6	0.00	0.00	0.00
19,100.0	89.91	179.64	10,735.4	-8,531.8	523.3	8,547.5	0.00	0.00	0.00
19,200.0	89.91	179.64	10,735.6	-8,631.8	524.0	8,647.4	0.00	0.00	0.00
19,300.0	89.91	179.64	10,735.7	-8,731.8	524.6	8,747.3	0.00	0.00	0.00
19,400.0	89.91	179.64	10,735.9	-8,831.8	525.2	8,847.1	0.00	0.00	0.00
19,500.0	89.91	179.64	10,736.0	-8,931.8	525.8	8,947.0	0.00	0.00	0.00
19,600.0	89.91	179.64	10,736.2	-9,031.8	526.5	9,046.9	0.00	0.00	0.00
19,700.0	89.91	179.64	10,736.3	-9,131.8	527.1	9,146.8	0.00	0.00	0.00
19,800.0	89.91	179.64	10,736.5	-9,231.8	527.7	9,246.7	0.00	0.00	0.00
19,900.0	89.91	179.64	10,736.6	-9,331.8	528.4	9,346.6	0.00	0.00	0.00
20,000.0	89.91	179.64	10,736.8	-9,431.8	529.0	9,446.5	0.00	0.00	0.00
20,100.0	89.91	179.64	10,737.0	-9,531.8	529.6	9,546.4	0.00	0.00	0.00
20,200.0	89.91	179.64	10,737.1	-9,631.8	530.2	9,646.3	0.00	0.00	0.00
20,300.0	89.91	179.64	10,737.3	-9,731.8	530.9	9,746.2	0.00	0.00	0.00
20,400.0	89.91	179.64	10,737.4	-9,831.8	531.5	9,846.1	0.00	0.00	0.00
20,500.0	89.91	179.64	10,737.6	-9,931.7	532.1	9,946.0	0.00	0.00	0.00
20,600.0	89.91	179.64	10,737.7	-10,031.7	532.8	10,045.9	0.00	0.00	0.00
20,700.0	89.91	179.64	10,737.9	-10,131.7	533.4	10,145.8	0.00	0.00	0.00
20,777.1	89.91	179.64	10,738.0	-10,208.8	533.9	10,222.8	0.00	0.00	0.00
TD at 20777.1									

Concho Resources LLC

Survey Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Well:	CABO WABO FED COM #704H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP1	Database:	edm

Design Targets

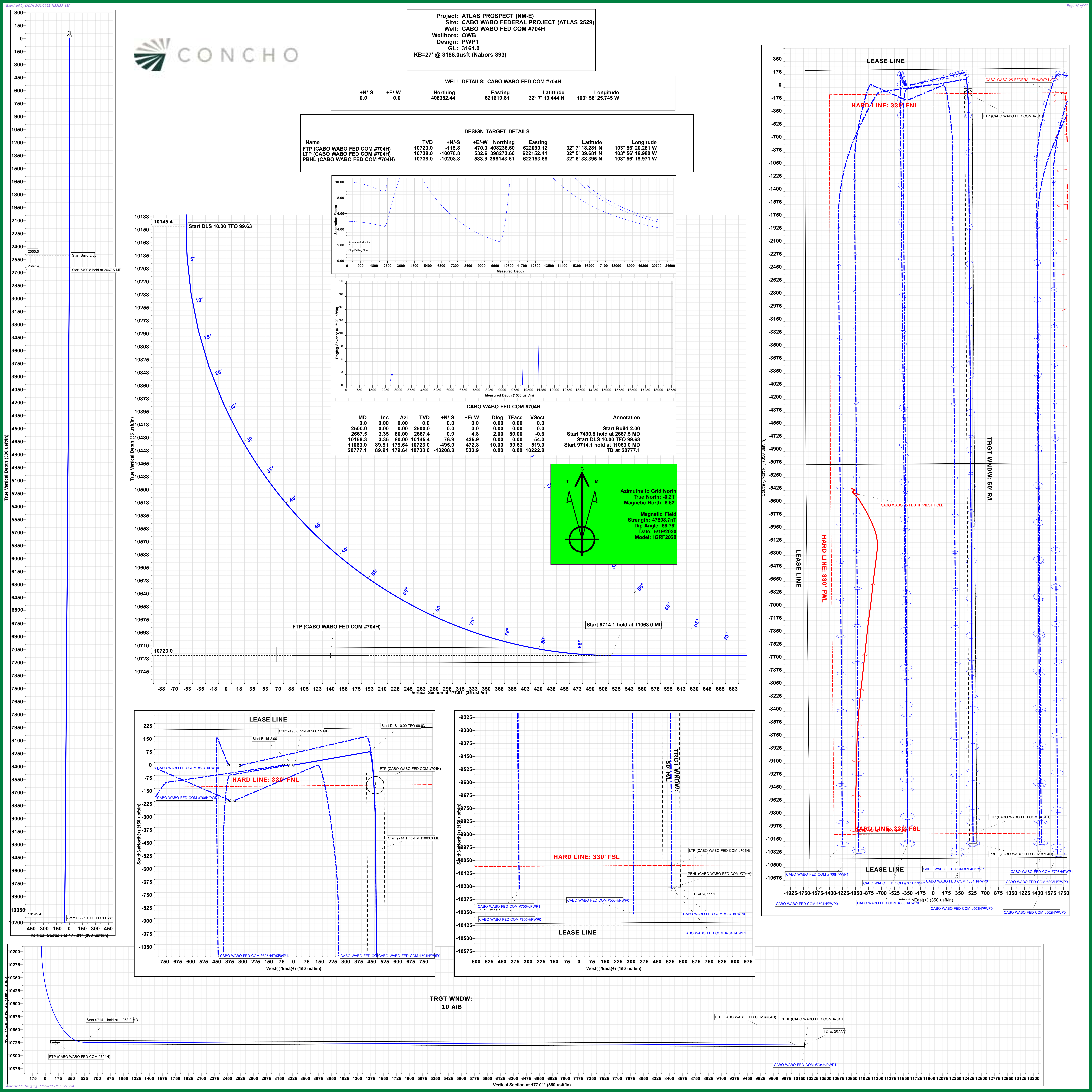
Target Name

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
FTP (CABO WABO FI - plan misses target center by 114.7usft at 10724.0usft MD (10625.3 TVD, -175.6 N, 465.2 E) - Circle (radius 50.0)	0.00	0.00	10,723.0	-115.8	470.3	408,236.60	622,090.12	32° 7' 18.281 N	103° 56' 20.281 W
PBHL (CABO WABO - plan hits target center - Rectangle (sides W100.0 H10,163.0 D20.0)	-0.09	359.64	10,738.0	-10,208.8	533.9	398,143.61	622,153.68	32° 5' 38.395 N	103° 56' 19.971 W
LTP (CABO WABO FE - plan misses target center by 0.5usft at 20647.1usft MD (10737.8 TVD, -10078.8 N, 533.1 E) - Point	0.00	0.00	10,738.0	-10,078.8	532.6	398,273.60	622,152.41	32° 5' 39.681 N	103° 56' 19.980 W

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2500	2500	0	0	Start Build 2.00
2668	2667	1	5	Start 7490.8 hold at 2667.5 MD
10,158	10,145	77	436	Start DLS 10.00 TFO 99.63
11,063	10,723	-495	473	Start 9714.1 hold at 11063.0 MD
20,777	10,738	-10,209	534	TD at 20777.1

Checked By: _____ Approved By: _____ Date: _____



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) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

COMMENTS

Action 82876

COMMENTS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 82876
	Action Type: [C-103] NOI Change of Plans (C-103A)

COMMENTS

Created By	Comment	Comment Date
kpickford	KP Geo review 2/23/2022	2/23/2022

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CONDITIONS

Action 82876

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	Action Number: 82876
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CONDITIONS

Created By	Condition	Condition Date
kpickford	Adhere to previous NMOCD Conditions of Approval	2/23/2022