

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.

SUBMIT IN TRIPLICATE - Other instructions on page 2		5. Lease Serial No.
1. Type of Well ☐ Oil Well ☐ Gas Well ☐ Other		6. If Indian, Allottee or Tribe Name
2. Name of Operator		7. If Unit of CA/Agreement, Name and/or No.
3a. Address	3b. Phone No. (include area code)	8. Well Name and No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description)		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	
	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity	
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other	
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon		
☐ Final Abandonment Notice	☐ 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 / 1670 FWL / TWSP: 25S / RANGE: 29E / SECTION: 24 / LAT: 32.122191 / LONG: -103.9411621 (TVD: 0 feet, MD: 0 feet)

PPP: NWNE / 330 FNL / 440 FWL / TWSP: 25S / RANGE: 29E / SECTION: 24 / LAT: 32.1218432 / LONG: -103.9451357 (TVD: 10616 feet, MD: 10769 feet)

BHL: SWSW / 200 FSL / 440 FWL / TWSP: 25S / RANGE: 29E / SECTION: 25 / LAT: 32.0941119 / LONG: -103.9450469 (TVD: 10687 feet, MD: 20693 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 30-015-47660		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 706H
7 OGRID No. 217955		8 Operator Name COG PRODUCTION LLC			9 Elevation 3160'

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	1670'	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	1566'	WEST	EDDY

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
640			

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.

	CORNER DATA NEW MEXICO EAST - NAD 83 A - FOUND IRON PIPE W/ BRASS CAP N:408605.21' E:661074.26' B - FOUND IRON PIPE W/ BRASS CAP N:408628.83' E:663731.32' C - FOUND IRON PIPE W/ BRASS. CAP N:408652.38' E:666389.05' D - FOUND IRON PIPE W/ BRASS CAP N:405993.34' E:666406.44' E - FOUND IRON PIPE W/ BRASS CAP N:403335.51' E:666423.34' F - FOUND IRON PIPE W/ BRASS CAP N:403316.17' E:663755.92' G - FOUND IRON PIPE W/ BRASS CAP N:403297.54' E:661087.89' H - FOUND IRON PIPE W/ BRASS CAP N:405951.58' E:661081.14' I - FOUND IRON PIPE W/ BRASS CAP N:400678.65' E:666440.96' J - FOUND BENT IRON PIPE W/ BRASS CAP N:398021.31' E:666458.45' K - FOUND IRON PIPE W/ BRASS CAP N:398004.27' E:663799.25' L - FOUND 5/8" IRON ROD N:397988.59' E:661140.90' M - FOUND IRON PIPE W/ BRASS CAP N:400643.27' E:661114.85'	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. <i>Stan Wagner</i> 10/11/2021 Signature Date Stan Wagner Printed Name E-mail Address	
	SURFACE HOLE LOCATION (SHL) NEW MEXICO EAST - NAD 83 X=662744.79 Y=408410.08 LAT.= 32.12219100° N LONG.= 103.94145605° W 210' FNL, 1670' FWL SECTION 24	FIRST TAKE POINT (FTP) NEW MEXICO EAST - NAD 83 X=662641.09 Y=408289.13 LAT.= 32.12185956° N LONG.= 103.94149859° W 330' FNL, 1566' FWL SECTION 24	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. MARK J. MURRAY NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR 12177 8/16/2021
	LAST TAKE POINT (LTP) NEW MEXICO EAST - NAD 83 X=662703.65 Y=398327.81 LAT.= 32.09447635° N LONG.= 103.94141350° W 330' FSL, 1566' FWL SECTION 25	BOTTOM HOLE LOCATION (BHL) NEW MEXICO EAST - NAD 83 X=662704.92 Y=398197.82 LAT.= 32.09411900° N LONG.= 103.94141091° W 200' FSL, 1566' FWL SECTION 25	Date of Survey Signature and Seal of Professional Surveyor: Certificate Number

ConocoPhillips - Cabo Wabo Fed Com #705H

1. Geologic Formations

TVD of target	10,685' EOL	Pilot hole depth	NA
MD at TD:	20,716'	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	1.24	2.88	2.90
8.750"	8500	10100	7.625"	29.7	P110 RY	W 513	1.56	1.66	3.13	1.88
6.75"	0	9600	5.5"	20	P110	BTC	2.33	2.75	3.80	3.77
6.75"	9600	20,716	5.5"	20	P110	W441	1.60	2.15	3.00	2.44
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 #705H

	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 #705H

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
	1048	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 #705H

4. Pressure Control Equipment

N	A variance is requested for the use of a diverter on the surface casing. See attached for schematic.
---	---

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 #705H

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
---	-----------------------------

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 #705H**7. Drilling Conditions**

Condition	Specify what type and where?
BH Pressure at deepest TVD	6950 psi at 10685' 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 (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S 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	H2S is present
Y	H2S Plan attached

8. Other Facets of Operation

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

x	H2S 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 #706H

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 #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #706H	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	10,164.0	PWP1 (OWB)	Standard Keeper 104	Standard Wireline Keeper ver 1.0.4	
10,164.0	20,693.3	PWP1 (OWB)	MWD+IFR1+FDIR	OWSG MWD + IFR1 + FDIR Correction	

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
ATLAS						
CABO WABO 24 FED 5H - OWB - AWP	8,000.0	12,448.0	546.4	459.6	6.295	SF
CABO WABO 24 FED 5H - OWB - AWP	8,025.5	12,448.0	545.8	459.2	6.301	CC, ES
CABO WABO 25 FED 1H - OWB - AWP						Out of range
CABO WABO 25 FED 1H - PILOT HOLE - PILOT HOLE	15,986.9	10,150.0	509.5	444.6	7.854	CC, ES
CABO WABO 25 FED 1H - PILOT HOLE - PILOT HOLE	16,000.0	10,150.0	509.7	444.7	7.846	SF
PATRON 23 FED #4H - LATERAL 01 - AWP-LAT 01						Out of range
CABO WABO FEDERAL PROJECT (ATLAS 2529)						
CABO WABO 24 FED COM #5H - OWB - ACTUAL WEL	8,000.0	12,448.0	546.6	460.5	6.352	SF
CABO WABO 24 FED COM #5H - OWB - ACTUAL WEL	8,026.0	12,448.0	546.0	460.1	6.358	CC, ES
CABO WABO FED COM #503H - OWB - PWP0	4,468.9	4,462.7	120.1	109.6	11.392	CC, ES, SF
CABO WABO FED COM #504H - OWB - PWP0	7,947.3	7,916.3	263.5	245.9	14.992	CC
CABO WABO FED COM #504H - OWB - PWP0	8,700.0	8,673.8	264.8	245.2	13.562	SF
CABO WABO FED COM #504H - OWB - PWP0	8,798.2	8,771.3	263.7	244.3	13.604	ES
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						Out of range
CABO WABO FED COM #704H - OWB - PWP1	2,416.3	2,417.3	60.0	53.1	8.765	CC
CABO WABO FED COM #704H - OWB - PWP1	2,500.0	2,500.0	60.0	53.1	8.695	ES, SF
CABO WABO FED COM #705H - OWB - PWP1	2,500.0	2,501.0	30.0	23.1	4.344	CC, ES, SF
CABO WABO FED COM #804H - OWB - PWP0	3,994.7	3,991.6	44.1	24.8	2.288	CC, ES
CABO WABO FED COM #804H - OWB - PWP0	4,000.0	3,996.7	44.1	24.8	2.288	SF
CABO WABO FED COM #805H - OWB - PWP0	5,889.7	5,870.8	62.3	34.8	2.265	CC
CABO WABO FED COM #805H - OWB - PWP0	5,900.0	5,881.0	62.3	34.8	2.262	ES, SF

Offset Design	ATLAS - CABO WABO 24 FED 5H - OWB - AWP										Offset Site Error:	0.0 usft
Survey Program:	100-Standard Keeper 104, 7290-MWD										Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Distance		Minimum Separation		Warning				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)	Factor
7,200.0	7,181.5	12,448.0	7,868.4	8.6	79.2	-1.39	-163.1	-1,017.7	989.7	921.3	68.41	14.466
7,300.0	7,281.1	12,448.0	7,868.4	8.7	79.2	-1.39	-163.1	-1,017.7	907.9	837.2	70.72	12.838

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 #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #706H	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 ATLAS - CABO WABO 24 FED 5H - OWB - AWP												Offset Site Error:	0.0 usft
Survey Program: 100-Standard Keeper 104, 7290-MWD												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,400.0	7,380.7	12,448.0	7,868.4	8.8	79.2	-1.39	-163.1	-1,017.7	830.2	756.9	73.33	11.321	
7,500.0	7,480.3	12,448.0	7,868.4	8.9	79.2	-1.39	-163.1	-1,017.7	757.7	681.5	76.21	9.942	
7,600.0	7,579.9	12,448.0	7,868.4	9.0	79.2	-1.39	-163.1	-1,017.7	692.1	612.8	79.27	8.731	
7,700.0	7,679.5	12,448.0	7,868.4	9.1	79.2	-1.39	-163.1	-1,017.7	635.5	553.2	82.29	7.723	
7,800.0	7,779.1	12,448.0	7,868.4	9.3	79.2	-1.39	-163.1	-1,017.7	590.6	505.7	84.88	6.958	
7,900.0	7,878.6	12,448.0	7,868.4	9.4	79.2	-1.39	-163.1	-1,017.7	560.1	473.5	86.53	6.472	
8,000.0	7,978.2	12,448.0	7,868.4	9.5	79.2	-1.39	-163.1	-1,017.7	546.4	459.6	86.80	6.295 SF	
8,025.5	8,003.7	12,448.0	7,868.4	9.5	79.2	-1.39	-163.1	-1,017.7	545.8	459.2	86.62	6.301 CC, ES	
8,100.0	8,077.8	12,448.0	7,868.4	9.6	79.2	-1.39	-163.1	-1,017.7	550.9	465.4	85.53	6.441	
8,200.0	8,177.4	12,448.0	7,868.4	9.7	79.2	-1.39	-163.1	-1,017.7	573.0	490.1	82.96	6.908	
8,300.0	8,277.0	12,448.0	7,868.4	9.8	79.2	-1.39	-163.1	-1,017.7	610.9	531.3	79.63	7.673	
8,400.0	8,376.6	12,448.0	7,868.4	9.9	79.2	-1.39	-163.1	-1,017.7	661.9	585.8	76.09	8.699	
8,500.0	8,476.2	12,448.0	7,868.4	10.0	79.2	-1.39	-163.1	-1,017.7	723.2	650.5	72.76	9.940	
8,600.0	8,575.8	12,448.0	7,868.4	10.1	79.2	-1.39	-163.1	-1,017.7	792.4	722.6	69.85	11.345	
8,700.0	8,675.4	12,448.0	7,868.4	10.3	79.2	-1.39	-163.1	-1,017.7	867.7	800.2	67.42	12.870	
8,800.0	8,775.0	12,448.0	7,868.4	10.4	79.2	-1.39	-163.1	-1,017.7	947.5	882.0	65.45	14.477	

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 #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #706H	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 ATLAS - CABO WABO 25 FED 1H - PILOT HOLE - PILOT HOLE													Offset Site Error:	0.0 usft
Survey Program: 100-Standard Keeper 104													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		
15,200.0	10,681.3	10,150.0	10,147.6	41.7	9.4	-29.01	-5,511.1	-948.6	937.4	899.8	37.65	24.899		
15,300.0	10,681.4	10,150.0	10,147.6	42.5	9.4	-29.01	-5,511.1	-948.6	855.2	814.9	40.31	21.215		
15,400.0	10,681.5	10,150.0	10,147.6	43.3	9.4	-29.01	-5,511.1	-948.6	777.2	733.7	43.47	17.877		
15,500.0	10,681.6	10,150.0	10,147.6	44.2	9.4	-29.01	-5,511.1	-948.6	704.7	657.5	47.17	14.939		
15,600.0	10,681.7	10,150.0	10,147.6	45.0	9.4	-29.01	-5,511.1	-948.6	639.7	588.4	51.36	12.455		
15,700.0	10,681.8	10,150.0	10,147.6	45.8	9.4	-29.01	-5,511.1	-948.6	584.7	528.9	55.83	10.473		
15,800.0	10,681.9	10,150.0	10,147.6	46.6	9.4	-29.01	-5,511.1	-948.6	542.7	482.6	60.09	9.031		
15,900.0	10,682.1	10,150.0	10,147.6	47.4	9.4	-29.01	-5,511.1	-948.6	516.8	453.5	63.39	8.154		
15,986.9	10,682.1	10,150.0	10,147.6	48.2	9.4	-29.01	-5,511.1	-948.6	509.5	444.6	64.87	7.854 CC, ES		
16,000.0	10,682.2	10,150.0	10,147.6	48.3	9.4	-29.01	-5,511.1	-948.6	509.7	444.7	64.96	7.846 SF		
16,100.0	10,682.3	10,150.0	10,147.6	49.1	9.4	-29.01	-5,511.1	-948.6	521.9	457.4	64.47	8.095		
16,200.0	10,682.4	10,150.0	10,147.6	49.9	9.4	-29.01	-5,511.1	-948.6	552.3	490.0	62.26	8.871		
16,300.0	10,682.5	10,150.0	10,147.6	50.8	9.4	-29.01	-5,511.1	-948.6	598.0	539.0	59.04	10.130		
16,400.0	10,682.6	10,150.0	10,147.6	51.6	9.4	-29.01	-5,511.1	-948.6	655.9	600.4	55.50	11.819		
16,500.0	10,682.7	10,150.0	10,147.6	52.4	9.4	-29.01	-5,511.1	-948.6	723.1	671.0	52.10	13.879		
16,600.0	10,682.8	10,150.0	10,147.6	53.3	9.4	-29.01	-5,511.1	-948.6	797.2	748.1	49.05	16.252		
16,700.0	10,682.9	10,150.0	10,147.6	54.1	9.4	-29.01	-5,511.1	-948.6	876.4	830.0	46.41	18.883		
16,800.0	10,683.0	10,150.0	10,147.6	54.9	9.4	-29.01	-5,511.1	-948.6	959.6	915.4	44.17	21.722		

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 #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #706H	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 24 FED COM #5H - OWB - ACTUA													Offset Site Error:	3.0 usft
Survey Program: 100- VES GyroFlex, 7290-MWD													Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
7,200.0	7,181.5	12,448.0	7,868.4	8.1	79.0	-1.44	-163.7	-1,017.8	990.2	922.1	68.11	14.537		
7,300.0	7,281.1	12,448.0	7,868.4	8.2	79.0	-1.44	-163.7	-1,017.8	908.4	838.0	70.38	12.907		
7,400.0	7,380.7	12,448.0	7,868.4	8.3	79.0	-1.44	-163.7	-1,017.8	830.7	757.7	72.94	11.389		
7,500.0	7,480.3	12,448.0	7,868.4	8.4	79.0	-1.44	-163.7	-1,017.8	758.2	682.4	75.76	10.007		
7,600.0	7,579.9	12,448.0	7,868.4	8.5	79.0	-1.44	-163.7	-1,017.8	692.5	613.8	78.75	8.794		
7,700.0	7,679.5	12,448.0	7,868.4	8.6	79.0	-1.44	-163.7	-1,017.8	635.9	554.2	81.68	7.785		
7,800.0	7,779.1	12,448.0	7,868.4	8.8	79.0	-1.44	-163.7	-1,017.8	590.9	506.7	84.19	7.018		
7,900.0	7,878.6	12,448.0	7,868.4	8.9	79.0	-1.44	-163.7	-1,017.8	560.3	474.5	85.79	6.531		
8,000.0	7,978.2	12,448.0	7,868.4	9.0	79.0	-1.44	-163.7	-1,017.8	546.6	460.5	86.04	6.352 SF		
8,026.0	8,004.2	12,448.0	7,868.4	9.0	79.0	-1.44	-163.7	-1,017.8	546.0	460.1	85.87	6.358 CC, ES		
8,100.0	8,077.8	12,448.0	7,868.4	9.1	79.0	-1.44	-163.7	-1,017.8	550.9	466.1	84.82	6.495		
8,200.0	8,177.4	12,448.0	7,868.4	9.2	79.0	-1.44	-163.7	-1,017.8	573.0	490.6	82.35	6.958		
8,300.0	8,277.0	12,448.0	7,868.4	9.3	79.0	-1.44	-163.7	-1,017.8	610.8	531.7	79.13	7.719		
8,400.0	8,376.6	12,448.0	7,868.4	9.4	79.0	-1.44	-163.7	-1,017.8	661.7	586.0	75.70	8.742		
8,500.0	8,476.2	12,448.0	7,868.4	9.6	79.0	-1.44	-163.7	-1,017.8	723.0	650.5	72.45	9.979		
8,600.0	8,575.8	12,448.0	7,868.4	9.7	79.0	-1.44	-163.7	-1,017.8	792.1	722.5	69.60	11.381		
8,700.0	8,675.4	12,448.0	7,868.4	9.8	79.0	-1.44	-163.7	-1,017.8	867.3	800.1	67.22	12.903		
8,800.0	8,775.0	12,448.0	7,868.4	9.9	79.0	-1.44	-163.7	-1,017.8	947.1	881.8	65.29	14.507		

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 #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #706H	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
0.0	0.0	0.0	0.0	3.0	3.0	-125.92	-202.5	-279.5	345.3				
100.0	100.0	93.0	93.0	3.0	3.0	-125.92	-202.5	-279.5	345.2	339.2	6.00	57.526	
200.0	200.0	193.0	193.0	3.0	3.0	-125.92	-202.5	-279.5	345.2	339.2	6.01	57.479	
300.0	300.0	293.0	293.0	3.0	3.0	-125.92	-202.5	-279.5	345.2	339.2	6.02	57.372	
400.0	400.0	393.0	393.0	3.0	3.0	-125.92	-202.5	-279.5	345.2	339.1	6.03	57.209	
500.0	500.0	493.0	493.0	3.1	3.1	-125.92	-202.5	-279.5	345.2	339.1	6.06	56.989	
600.0	600.0	593.0	593.0	3.1	3.1	-125.92	-202.5	-279.5	345.2	339.1	6.09	56.716	
700.0	700.0	693.0	693.0	3.1	3.1	-125.92	-202.5	-279.5	345.2	339.1	6.12	56.392	
800.0	800.0	793.0	793.0	3.2	3.1	-125.92	-202.5	-279.5	345.2	339.0	6.16	56.019	
900.0	900.0	893.0	893.0	3.2	3.2	-125.92	-202.5	-279.5	345.2	339.0	6.21	55.600	
1,000.0	1,000.0	993.0	993.0	3.2	3.2	-125.92	-202.5	-279.5	345.2	338.9	6.26	55.138	
1,100.0	1,100.0	1,093.0	1,093.0	3.3	3.3	-125.92	-202.5	-279.5	345.2	338.9	6.32	54.638	
1,200.0	1,200.0	1,193.0	1,193.0	3.4	3.3	-125.92	-202.5	-279.5	345.2	338.8	6.38	54.102	
1,300.0	1,300.0	1,293.0	1,293.0	3.4	3.4	-125.92	-202.5	-279.5	345.2	338.7	6.45	53.534	
1,400.0	1,400.0	1,393.0	1,393.0	3.5	3.5	-125.92	-202.5	-279.5	345.2	338.7	6.52	52.938	
1,500.0	1,500.0	1,493.0	1,493.0	3.5	3.5	-125.92	-202.5	-279.5	345.2	338.6	6.60	52.317	
1,600.0	1,600.0	1,593.0	1,593.0	3.6	3.6	-125.92	-202.5	-279.5	345.2	338.5	6.68	51.675	
1,700.0	1,700.0	1,693.0	1,693.0	3.7	3.7	-125.92	-202.5	-279.5	345.2	338.4	6.77	51.015	
1,800.0	1,800.0	1,793.0	1,793.0	3.8	3.8	-125.92	-202.5	-279.5	345.2	338.3	6.86	50.341	
1,900.0	1,900.0	1,893.0	1,893.0	3.9	3.8	-125.92	-202.5	-279.5	345.2	338.2	6.95	49.654	
2,000.0	2,000.0	1,993.0	1,993.0	3.9	3.9	-125.92	-202.5	-279.5	345.2	338.1	7.05	48.959	
2,100.0	2,100.0	2,093.0	2,093.0	4.0	4.0	-125.92	-202.5	-279.5	345.2	338.0	7.15	48.258	
2,200.0	2,200.0	2,193.0	2,193.0	4.1	4.1	-125.92	-202.5	-279.5	345.2	337.9	7.26	47.552	
2,300.0	2,300.0	2,293.0	2,293.0	4.2	4.2	-125.92	-202.5	-279.5	345.2	337.8	7.37	46.845	
2,400.0	2,400.0	2,393.0	2,393.0	4.3	4.3	-125.92	-202.5	-279.5	345.2	337.7	7.48	46.139	
2,500.0	2,500.0	2,493.0	2,493.0	4.4	4.4	-125.92	-202.5	-279.5	345.2	337.6	7.60	45.434	
2,600.0	2,600.0	2,605.2	2,605.2	4.5	4.5	-27.81	-201.7	-277.8	342.0	334.3	7.70	44.388	
2,700.0	2,699.8	2,717.5	2,717.3	4.5	4.5	-28.63	-199.3	-271.9	331.9	324.1	7.81	42.520	
2,759.0	2,758.7	2,779.4	2,778.9	4.5	4.6	-29.37	-197.2	-267.2	322.9	315.1	7.87	41.016	
2,800.0	2,799.5	2,819.7	2,819.1	4.5	4.6	-29.85	-195.9	-263.9	316.3	308.4	7.92	39.919	
2,900.0	2,899.1	2,918.2	2,917.2	4.5	4.7	-31.14	-192.5	-256.0	300.1	292.1	8.05	37.278	
3,000.0	2,998.7	3,016.6	3,015.3	4.6	4.7	-32.57	-189.2	-248.1	284.2	276.0	8.19	34.700	
3,100.0	3,098.3	3,115.1	3,113.4	4.6	4.8	-34.17	-185.8	-240.2	268.4	260.0	8.34	32.194	
3,200.0	3,197.8	3,213.5	3,211.4	4.6	4.9	-35.96	-182.5	-232.3	252.8	244.3	8.49	29.767	
3,300.0	3,297.4	3,312.0	3,309.5	4.7	4.9	-37.99	-179.1	-224.4	237.5	228.9	8.66	27.430	
3,400.0	3,397.0	3,410.4	3,407.6	4.7	5.0	-40.29	-175.8	-216.5	222.6	213.8	8.84	25.190	
3,500.0	3,496.6	3,508.9	3,505.7	4.8	5.1	-42.91	-172.4	-208.6	208.1	199.0	9.02	23.059	
3,600.0	3,596.2	3,607.3	3,603.7	4.8	5.2	-45.91	-169.0	-200.7	194.0	184.8	9.22	21.048	
3,700.0	3,695.8	3,705.8	3,701.8	4.9	5.2	-49.37	-165.7	-192.8	180.6	171.1	9.42	19.169	
3,800.0	3,795.4	3,804.2	3,799.9	4.9	5.3	-53.36	-162.3	-184.9	167.9	158.3	9.63	17.439	
3,900.0	3,895.0	3,902.7	3,898.0	5.0	5.4	-57.96	-159.0	-177.0	156.1	146.3	9.84	15.876	
4,000.0	3,994.6	4,001.1	3,996.0	5.1	5.5	-63.25	-155.6	-169.1	145.6	135.5	10.04	14.503	
4,100.0	4,094.2	4,099.6	4,094.1	5.1	5.6	-69.29	-152.3	-161.2	136.4	126.2	10.22	13.347	
4,200.0	4,193.8	4,198.0	4,192.2	5.2	5.7	-76.10	-148.9	-153.3	129.1	118.7	10.38	12.437	
4,300.0	4,293.4	4,296.5	4,290.3	5.3	5.8	-83.58	-145.6	-145.4	123.7	113.3	10.49	11.800	
4,400.0	4,392.9	4,394.9	4,388.4	5.4	5.9	-91.56	-142.2	-137.5	120.8	110.2	10.54	11.456	
4,468.9	4,461.5	4,462.7	4,455.9	5.4	5.9	-97.21	-139.9	-132.1	120.1	109.6	10.55	11.392 CC, ES, SF	
4,500.0	4,492.5	4,493.4	4,486.4	5.4	5.9	-99.78	-138.9	-129.6	120.3	109.7	10.54	11.410	
4,600.0	4,592.1	4,591.8	4,584.5	5.5	6.0	-107.88	-135.5	-121.7	122.3	111.8	10.51	11.643	
4,700.0	4,691.7	4,690.3	4,682.6	5.6	6.1	-115.58	-132.2	-113.8	126.8	116.3	10.46	12.118	
4,800.0	4,791.3	4,788.7	4,780.7	5.7	6.2	-122.65	-128.8	-105.9	133.4	123.0	10.44	12.780	

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 #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #706H	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	
4,900.0	4,890.9	4,887.2	4,878.7	5.8	6.3	-128.99	-125.5	-98.0	141.9	131.5	10.46	13.574		
5,000.0	4,990.5	4,985.6	4,976.8	5.9	6.4	-134.56	-122.1	-90.1	152.0	141.5	10.52	14.452		
5,100.0	5,090.1	5,084.1	5,074.9	5.9	6.5	-139.41	-118.8	-82.2	163.3	152.7	10.62	15.378		
5,200.0	5,189.7	5,182.5	5,173.0	6.0	6.6	-143.62	-115.4	-74.3	175.7	164.9	10.76	16.329		
5,300.0	5,289.3	5,281.0	5,271.0	6.1	6.7	-147.27	-112.0	-66.5	188.9	177.9	10.92	17.289		
5,400.0	5,388.9	5,379.4	5,369.1	6.2	6.8	-150.43	-108.7	-58.6	202.7	191.6	11.11	18.248		
5,500.0	5,488.5	5,477.9	5,467.2	6.3	6.9	-153.19	-105.3	-50.7	217.1	205.8	11.31	19.200		
5,600.0	5,588.0	5,576.3	5,565.3	6.4	7.1	-155.61	-102.0	-42.8	231.9	220.4	11.51	20.138		
5,700.0	5,687.6	5,674.8	5,663.3	6.5	7.2	-157.73	-98.6	-34.9	247.0	235.3	11.73	21.061		
5,800.0	5,787.2	5,773.2	5,761.4	6.6	7.3	-159.61	-95.3	-27.0	262.5	250.5	11.95	21.966		
5,900.0	5,886.8	5,871.7	5,859.5	6.7	7.4	-161.28	-91.9	-19.1	278.2	266.0	12.17	22.851		
6,000.0	5,986.4	5,970.1	5,957.6	6.8	7.5	-162.77	-88.6	-11.2	294.1	281.7	12.40	23.716		
6,100.0	6,086.0	6,068.6	6,055.7	6.9	7.6	-164.10	-85.2	-3.3	310.2	297.6	12.63	24.559		
6,200.0	6,185.6	6,167.0	6,153.7	7.0	7.7	-165.31	-81.9	4.6	326.4	313.6	12.86	25.380		
6,300.0	6,285.2	6,265.5	6,251.8	7.1	7.8	-166.40	-78.5	12.5	342.8	329.7	13.09	26.179		
6,400.0	6,384.8	6,364.0	6,349.9	7.2	7.9	-167.39	-75.2	20.4	359.3	345.9	13.33	26.957		
6,500.0	6,484.4	6,462.4	6,448.0	7.3	8.0	-168.30	-71.8	28.3	375.8	362.3	13.56	27.713		
6,600.0	6,584.0	6,560.9	6,546.0	7.4	8.1	-169.12	-68.5	36.2	392.5	378.7	13.80	28.447		
6,700.0	6,683.6	6,659.3	6,644.1	7.5	8.3	-169.89	-65.1	44.1	409.2	395.2	14.03	29.161		
6,800.0	6,783.1	6,757.8	6,742.2	7.6	8.4	-170.59	-61.8	52.0	426.0	411.7	14.27	29.853		
6,900.0	6,882.7	6,856.2	6,840.3	7.7	8.5	-171.24	-58.4	59.9	442.8	428.3	14.51	30.526		
7,000.0	6,982.3	6,954.7	6,938.3	7.9	8.6	-171.84	-55.1	67.8	459.7	445.0	14.74	31.179		
7,100.0	7,081.9	7,053.1	7,036.4	8.0	8.7	-172.39	-51.7	75.7	476.7	461.7	14.98	31.813		
7,200.0	7,181.5	7,151.6	7,134.5	8.1	8.8	-172.91	-48.3	83.6	493.7	478.4	15.22	32.429		
7,300.0	7,281.1	7,250.0	7,232.6	8.2	8.9	-173.40	-45.0	91.5	510.7	495.2	15.46	33.027		
7,400.0	7,380.7	7,348.5	7,330.6	8.3	9.0	-173.85	-41.6	99.4	527.7	512.0	15.70	33.607		
7,500.0	7,480.3	7,446.9	7,428.7	8.4	9.2	-174.28	-38.3	107.3	544.8	528.9	15.94	34.171		
7,600.0	7,579.9	7,545.4	7,526.8	8.5	9.3	-174.68	-34.9	115.2	561.9	545.8	16.19	34.718		
7,700.0	7,679.5	7,643.8	7,624.9	8.6	9.4	-175.06	-31.6	123.1	579.1	562.7	16.43	35.250		
7,800.0	7,779.1	7,742.3	7,723.0	8.8	9.5	-175.41	-28.2	131.0	596.2	579.6	16.67	35.766		
7,900.0	7,878.6	7,840.7	7,821.0	8.9	9.6	-175.75	-24.9	138.9	613.4	596.5	16.91	36.268		
8,000.0	7,978.2	7,939.2	7,919.1	9.0	9.7	-176.06	-21.5	146.8	630.6	613.5	17.16	36.755		
8,100.0	8,077.8	8,037.6	8,017.2	9.1	9.9	-176.36	-18.2	154.7	647.8	630.4	17.40	37.229		
8,200.0	8,177.4	8,136.1	8,115.3	9.2	10.0	-176.65	-14.8	162.6	665.1	647.4	17.65	37.689		
8,300.0	8,277.0	8,234.5	8,213.3	9.3	10.1	-176.92	-11.5	170.5	682.3	664.4	17.89	38.137		
8,400.0	8,376.6	8,333.0	8,311.4	9.4	10.2	-177.17	-8.1	178.4	699.6	681.5	18.14	38.572		
8,500.0	8,476.2	8,431.4	8,409.5	9.6	10.3	-177.42	-4.8	186.3	716.9	698.5	18.38	38.995		
8,600.0	8,575.8	8,529.9	8,507.6	9.7	10.5	-177.65	-1.4	194.2	734.2	715.5	18.63	39.407		
8,700.0	8,675.4	8,628.9	8,606.1	9.8	10.5	-177.52	-2.6	202.6	751.4	732.6	18.81	39.944		
8,800.0	8,775.0	8,724.9	8,700.0	9.9	10.5	-176.22	-19.2	212.1	768.9	749.9	18.94	40.590		
8,900.0	8,874.6	8,813.0	8,782.6	10.0	10.6	-174.06	-48.1	222.0	787.4	768.3	19.11	41.206		
9,000.0	8,974.2	8,890.6	8,850.8	10.2	10.6	-171.48	-83.8	231.3	808.7	789.4	19.36	41.778		
9,100.0	9,073.7	8,957.1	8,904.9	10.3	10.7	-168.83	-121.6	239.6	834.2	814.5	19.74	42.266		
9,200.0	9,173.3	9,013.4	8,947.0	10.4	10.7	-166.33	-158.2	246.8	865.1	844.8	20.29	42.642		
9,300.0	9,272.9	9,060.7	8,979.4	10.5	10.8	-164.08	-192.1	252.9	901.9	880.9	21.01	42.926		
9,400.0	9,372.5	9,100.0	9,004.1	10.6	10.8	-162.12	-222.3	258.0	944.9	923.0	21.88	43.174		
9,500.0	9,472.1	9,134.2	9,023.9	10.8	10.9	-160.37	-249.8	262.4	993.8	971.0	22.86	43.479		

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 #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #706H	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	-123.22	-202.7	-309.5	370.1				
100.0	100.0	93.0	93.0	3.0	3.0	-123.22	-202.7	-309.5	370.0	364.0	6.00	61.661	
200.0	200.0	193.0	193.0	3.0	3.0	-123.22	-202.7	-309.5	370.0	364.0	6.01	61.613	
300.0	300.0	293.0	293.0	3.0	3.0	-123.22	-202.7	-309.5	370.0	364.0	6.02	61.506	
400.0	400.0	393.0	393.0	3.0	3.0	-123.22	-202.7	-309.5	370.0	364.0	6.03	61.341	
500.0	500.0	493.0	493.0	3.1	3.1	-123.22	-202.7	-309.5	370.0	363.9	6.05	61.120	
600.0	600.0	593.0	593.0	3.1	3.1	-123.22	-202.7	-309.5	370.0	363.9	6.08	60.844	
700.0	700.0	693.0	693.0	3.1	3.1	-123.22	-202.7	-309.5	370.0	363.9	6.11	60.517	
800.0	800.0	793.0	793.0	3.2	3.1	-123.22	-202.7	-309.5	370.0	363.8	6.15	60.139	
900.0	900.0	893.0	893.0	3.2	3.2	-123.22	-202.7	-309.5	370.0	363.8	6.20	59.715	
1,000.0	1,000.0	993.0	993.0	3.2	3.2	-123.22	-202.7	-309.5	370.0	363.7	6.24	59.247	
1,100.0	1,100.0	1,093.0	1,093.0	3.3	3.3	-123.22	-202.7	-309.5	370.0	363.7	6.30	58.739	
1,200.0	1,200.0	1,193.0	1,193.0	3.4	3.3	-123.22	-202.7	-309.5	370.0	363.6	6.36	58.193	
1,300.0	1,300.0	1,293.0	1,293.0	3.4	3.4	-123.22	-202.7	-309.5	370.0	363.6	6.42	57.615	
1,400.0	1,400.0	1,393.0	1,393.0	3.5	3.5	-123.22	-202.7	-309.5	370.0	363.5	6.49	57.006	
1,500.0	1,500.0	1,493.0	1,493.0	3.5	3.5	-123.22	-202.7	-309.5	370.0	363.4	6.56	56.372	
1,600.0	1,600.0	1,593.0	1,593.0	3.6	3.6	-123.22	-202.7	-309.5	370.0	363.3	6.64	55.714	
1,700.0	1,700.0	1,693.0	1,693.0	3.7	3.7	-123.22	-202.7	-309.5	370.0	363.3	6.72	55.037	
1,800.0	1,800.0	1,793.0	1,793.0	3.8	3.8	-123.22	-202.7	-309.5	370.0	363.2	6.81	54.343	
1,900.0	1,900.0	1,893.0	1,893.0	3.9	3.8	-123.22	-202.7	-309.5	370.0	363.1	6.90	53.636	
2,000.0	2,000.0	1,993.0	1,993.0	3.9	3.9	-123.22	-202.7	-309.5	370.0	363.0	6.99	52.919	
2,100.0	2,100.0	2,093.0	2,093.0	4.0	4.0	-123.22	-202.7	-309.5	370.0	362.9	7.09	52.193	
2,200.0	2,200.0	2,193.0	2,193.0	4.1	4.1	-123.22	-202.7	-309.5	370.0	362.8	7.19	51.463	
2,300.0	2,300.0	2,293.0	2,293.0	4.2	4.2	-123.22	-202.7	-309.5	370.0	362.7	7.29	50.729	
2,400.0	2,400.0	2,393.0	2,393.0	4.3	4.3	-123.22	-202.7	-309.5	370.0	362.6	7.40	49.994	
2,500.0	2,500.0	2,493.0	2,493.0	4.4	4.4	-123.22	-202.7	-309.5	370.0	362.5	7.51	49.260	
2,600.0	2,600.0	2,586.8	2,586.8	4.5	4.5	-24.79	-202.2	-310.7	369.2	361.6	7.57	48.787	
2,700.0	2,699.8	2,680.2	2,680.0	4.5	4.5	-24.56	-200.4	-314.7	367.0	359.4	7.57	48.498	
2,759.0	2,758.7	2,735.2	2,734.9	4.5	4.5	-24.35	-198.9	-318.4	365.1	357.5	7.56	48.259	
2,800.0	2,799.5	2,775.1	2,774.7	4.5	4.6	-24.13	-197.5	-321.5	363.7	356.1	7.56	48.077	
2,900.0	2,899.1	2,875.0	2,874.2	4.5	4.6	-23.57	-194.0	-329.5	360.3	352.8	7.57	47.607	
3,000.0	2,998.7	2,974.9	2,973.7	4.6	4.7	-23.00	-190.6	-337.5	357.0	349.4	7.58	47.099	
3,100.0	3,098.3	3,074.7	3,073.2	4.6	4.8	-22.42	-187.1	-345.5	353.8	346.2	7.60	46.547	
3,200.0	3,197.8	3,174.6	3,172.7	4.6	4.8	-21.82	-183.6	-353.5	350.5	342.9	7.63	45.953	
3,300.0	3,297.4	3,274.5	3,272.2	4.7	4.9	-21.22	-180.2	-361.5	347.3	339.7	7.66	45.318	
3,400.0	3,397.0	3,374.4	3,371.7	4.7	5.0	-20.61	-176.7	-369.5	344.2	336.5	7.71	44.644	
3,500.0	3,496.6	3,474.3	3,471.2	4.8	5.1	-19.98	-173.3	-377.4	341.1	333.3	7.76	43.933	
3,600.0	3,596.2	3,574.1	3,570.7	4.8	5.1	-19.34	-169.8	-385.4	338.0	330.2	7.83	43.187	
3,700.0	3,695.8	3,674.0	3,670.2	4.9	5.2	-18.69	-166.3	-393.4	335.0	327.1	7.90	42.410	
3,800.0	3,795.4	3,773.9	3,769.7	4.9	5.3	-18.03	-162.9	-401.4	332.0	324.0	7.98	41.604	
3,900.0	3,895.0	3,873.8	3,869.2	5.0	5.4	-17.36	-159.4	-409.4	329.1	321.0	8.07	40.774	
4,000.0	3,994.6	3,973.7	3,968.7	5.1	5.5	-16.67	-156.0	-417.4	326.2	318.0	8.17	39.923	
4,100.0	4,094.2	4,073.6	4,068.2	5.1	5.6	-15.98	-152.5	-425.4	323.3	315.0	8.28	39.054	
4,200.0	4,193.8	4,173.4	4,167.7	5.2	5.7	-15.27	-149.0	-433.4	320.5	312.1	8.40	38.171	
4,300.0	4,293.4	4,273.3	4,267.2	5.3	5.7	-14.55	-145.6	-441.3	317.8	309.2	8.52	37.279	
4,400.0	4,392.9	4,373.2	4,366.7	5.4	5.8	-13.81	-142.1	-449.3	315.1	306.4	8.66	36.381	
4,500.0	4,492.5	4,473.1	4,466.2	5.4	5.9	-13.07	-138.6	-457.3	312.4	303.6	8.81	35.480	
4,600.0	4,592.1	4,573.0	4,565.7	5.5	6.0	-12.31	-135.2	-465.3	309.8	300.9	8.96	34.580	
4,700.0	4,691.7	4,672.8	4,665.2	5.6	6.1	-11.54	-131.7	-473.3	307.3	298.2	9.12	33.685	
4,800.0	4,791.3	4,772.7	4,764.7	5.7	6.2	-10.75	-128.3	-481.3	304.8	295.5	9.29	32.798	
4,900.0	4,890.9	4,872.6	4,864.2	5.8	6.3	-9.95	-124.8	-489.3	302.4	292.9	9.47	31.920	

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 #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #706H	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
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
5,000.0	4,990.5	4,972.5	4,963.7	5.9	6.4	-9.14	-121.3	-497.3	300.1	290.4	9.66	31.055		
5,100.0	5,090.1	5,072.4	5,063.2	5.9	6.5	-8.32	-117.9	-505.2	297.8	287.9	9.86	30.205		
5,200.0	5,189.7	5,172.3	5,162.7	6.0	6.6	-7.49	-114.4	-513.2	295.5	285.5	10.06	29.371		
5,300.0	5,289.3	5,272.1	5,262.2	6.1	6.7	-6.64	-111.0	-521.2	293.3	283.1	10.27	28.556		
5,400.0	5,388.9	5,372.0	5,361.7	6.2	6.8	-5.78	-107.5	-529.2	291.2	280.7	10.49	27.761		
5,500.0	5,488.5	5,471.9	5,461.2	6.3	6.9	-4.91	-104.0	-537.2	289.2	278.5	10.72	26.987		
5,600.0	5,588.0	5,571.8	5,560.7	6.4	7.1	-4.02	-100.6	-545.2	287.2	276.3	10.95	26.235		
5,700.0	5,687.6	5,671.7	5,660.2	6.5	7.2	-3.13	-97.1	-553.2	285.3	274.1	11.19	25.506		
5,800.0	5,787.2	5,771.5	5,759.7	6.6	7.3	-2.22	-93.6	-561.2	283.5	272.1	11.43	24.800		
5,900.0	5,886.8	5,871.4	5,859.2	6.7	7.4	-1.30	-90.2	-569.1	281.7	270.0	11.68	24.117		
6,000.0	5,986.4	5,971.3	5,958.7	6.8	7.5	-0.37	-86.7	-577.1	280.0	268.1	11.94	23.459		
6,100.0	6,086.0	6,071.2	6,058.2	6.9	7.6	0.57	-83.3	-585.1	278.4	266.2	12.20	22.824		
6,200.0	6,185.6	6,171.1	6,157.7	7.0	7.7	1.53	-79.8	-593.1	276.9	264.4	12.47	22.213		
6,300.0	6,285.2	6,270.9	6,257.2	7.1	7.8	2.49	-76.3	-601.1	275.4	262.7	12.74	21.627		
6,400.0	6,384.8	6,370.8	6,356.7	7.2	7.9	3.46	-72.9	-609.1	274.1	261.1	13.01	21.063		
6,500.0	6,484.4	6,470.7	6,456.2	7.3	8.0	4.45	-69.4	-617.1	272.8	259.5	13.29	20.523		
6,600.0	6,584.0	6,570.6	6,555.7	7.4	8.2	5.44	-66.0	-625.1	271.5	258.0	13.57	20.006		
6,700.0	6,683.6	6,670.5	6,655.2	7.5	8.3	6.44	-62.5	-633.0	270.4	256.6	13.86	19.511		
6,800.0	6,783.1	6,770.4	6,754.7	7.6	8.4	7.45	-59.0	-641.0	269.4	255.2	14.15	19.038		
6,900.0	6,882.7	6,870.2	6,854.2	7.7	8.5	8.46	-55.6	-649.0	268.4	254.0	14.44	18.586		
7,000.0	6,982.3	6,970.1	6,953.7	7.9	8.6	9.48	-52.1	-657.0	267.5	252.8	14.73	18.155		
7,100.0	7,081.9	7,070.0	7,053.2	8.0	8.7	10.51	-48.6	-665.0	266.7	251.7	15.03	17.744		
7,200.0	7,181.5	7,169.9	7,152.7	8.1	8.8	11.55	-45.2	-673.0	266.0	250.7	15.33	17.353		
7,300.0	7,281.1	7,269.8	7,252.2	8.2	9.0	12.59	-41.7	-681.0	265.4	249.8	15.63	16.981		
7,400.0	7,380.7	7,369.6	7,351.7	8.3	9.1	13.63	-38.3	-688.9	264.8	248.9	15.93	16.628		
7,500.0	7,480.3	7,469.5	7,451.2	8.4	9.2	14.68	-34.8	-696.9	264.4	248.2	16.23	16.292		
7,600.0	7,579.9	7,569.4	7,550.7	8.5	9.3	15.73	-31.3	-704.9	264.0	247.5	16.53	15.973		
7,700.0	7,679.5	7,669.3	7,650.2	8.6	9.4	16.79	-27.9	-712.9	263.8	246.9	16.83	15.671		
7,800.0	7,779.1	7,769.2	7,749.8	8.8	9.6	17.84	-24.4	-720.9	263.6	246.5	17.13	15.385		
7,900.0	7,878.6	7,869.0	7,849.3	8.9	9.7	18.90	-21.0	-728.9	263.5	246.1	17.43	15.115		
7,947.3	7,925.8	7,916.3	7,896.4	8.9	9.7	19.40	-19.3	-732.7	263.5	245.9	17.58	14.992 CC		
8,000.0	7,978.2	7,968.9	7,948.8	9.0	9.8	19.96	-17.5	-736.9	263.5	245.8	17.73	14.859		
8,100.0	8,077.8	8,068.8	8,048.3	9.1	9.9	21.02	-14.0	-744.9	263.6	245.6	18.03	14.618		
8,200.0	8,177.4	8,168.7	8,147.8	9.2	10.0	22.07	-10.6	-752.8	263.8	245.5	18.33	14.390		
8,300.0	8,277.0	8,268.6	8,247.3	9.3	10.2	23.13	-7.1	-760.8	264.1	245.4	18.63	14.175		
8,400.0	8,376.6	8,368.5	8,346.8	9.4	10.3	24.18	-3.6	-768.8	264.4	245.5	18.92	13.973		
8,500.0	8,476.2	8,468.3	8,446.3	9.6	10.4	25.23	-0.2	-776.8	264.9	245.7	19.22	13.784		
8,600.0	8,575.8	8,568.9	8,546.4	9.7	10.5	26.25	3.2	-784.9	265.4	245.9	19.46	13.639		
8,700.0	8,675.4	8,673.8	8,650.3	9.8	10.5	24.79	-4.9	-795.6	264.8	245.2	19.52	13.562 SF		
8,798.2	8,773.2	8,771.3	8,743.8	9.9	10.5	19.74	-28.9	-808.6	263.7	244.3	19.38	13.604 ES		
8,800.0	8,775.0	8,773.0	8,745.4	9.9	10.5	19.62	-29.5	-808.8	263.7	244.3	19.38	13.607		
8,900.0	8,874.6	8,861.8	8,825.4	10.0	10.6	12.03	-65.0	-823.0	266.8	247.6	19.14	13.940		
9,000.0	8,974.2	8,938.2	8,889.0	10.2	10.6	3.73	-105.0	-836.6	279.5	260.3	19.28	14.496		
9,100.0	9,073.7	9,000.0	8,936.0	10.3	10.7	-3.67	-143.4	-848.4	306.0	285.6	20.41	14.992		
9,200.0	9,173.3	9,050.0	8,970.7	10.4	10.8	-9.72	-178.0	-858.4	347.0	324.6	22.33	15.539		
9,300.0	9,272.9	9,100.0	9,002.1	10.5	10.8	-15.56	-215.4	-868.7	400.5	376.3	24.14	16.593		
9,400.0	9,372.5	9,137.9	9,023.6	10.6	10.9	-19.73	-245.5	-876.7	464.0	438.1	25.96	17.872		
9,500.0	9,472.1	9,169.2	9,039.9	10.8	11.0	-22.98	-271.5	-883.3	535.1	507.6	27.54	19.430		
9,600.0	9,571.7	9,200.0	9,054.3	10.9	11.0	-25.96	-297.9	-889.9	611.9	583.1	28.79	21.255		
9,700.0	9,671.3	9,218.6	9,062.4	11.0	11.1	-27.65	-314.2	-893.9	692.8	662.9	29.98	23.114		
9,800.0	9,770.9	9,250.0	9,074.7	11.1	11.1	-30.34	-342.2	-900.6	777.2	746.5	30.78	25.253		

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 #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #706H	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
Reference	Offset	Semi Major Axis		Distance										
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
9,900.0	9,870.5	9,250.0	9,074.7	11.3	11.1	-30.34	-342.2	-900.6	863.8	832.0	31.80	27.162		
10,000.0	9,970.1	9,270.3	9,081.9	11.4	11.2	-31.97	-360.7	-905.0	952.3	919.9	32.48	29.325		

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #706H	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 #704H - OWB - PWP1													Offset Site Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 10158-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	1.0	1.0	3.0	3.0	89.49	0.5	60.0	60.0					
100.0	100.0	101.0	101.0	3.0	3.0	89.49	0.5	60.0	60.0	54.0	6.00	9.993		
200.0	200.0	201.0	201.0	3.0	3.0	89.49	0.5	60.0	60.0	54.0	6.00	9.989		
300.0	300.0	301.0	301.0	3.0	3.0	89.49	0.5	60.0	60.0	54.0	6.01	9.979		
400.0	400.0	401.0	401.0	3.0	3.0	89.49	0.5	60.0	60.0	53.9	6.02	9.963		
500.0	500.0	501.0	501.0	3.1	3.1	89.49	0.5	60.0	60.0	53.9	6.03	9.942		
600.0	600.0	601.0	601.0	3.1	3.1	89.49	0.5	60.0	60.0	53.9	6.05	9.917		
700.0	700.0	701.0	701.0	3.1	3.1	89.49	0.5	60.0	60.0	53.9	6.07	9.886		
800.0	800.0	801.0	801.0	3.2	3.2	89.49	0.5	60.0	60.0	53.9	6.09	9.850		
900.0	900.0	901.0	901.0	3.2	3.2	89.49	0.5	60.0	60.0	53.8	6.11	9.809		
1,000.0	1,000.0	1,001.0	1,001.0	3.2	3.2	89.49	0.5	60.0	60.0	53.8	6.14	9.764		
1,100.0	1,100.0	1,101.0	1,101.0	3.3	3.3	89.49	0.5	60.0	60.0	53.8	6.17	9.715		
1,200.0	1,200.0	1,201.0	1,201.0	3.4	3.4	89.49	0.5	60.0	60.0	53.8	6.21	9.661		
1,300.0	1,300.0	1,301.0	1,301.0	3.4	3.4	89.49	0.5	60.0	60.0	53.7	6.24	9.604		
1,400.0	1,400.0	1,401.0	1,401.0	3.5	3.5	89.49	0.5	60.0	60.0	53.7	6.28	9.542		
1,500.0	1,500.0	1,501.0	1,501.0	3.5	3.5	89.49	0.5	60.0	60.0	53.6	6.33	9.478		
1,600.0	1,600.0	1,601.0	1,601.0	3.6	3.6	89.49	0.5	60.0	60.0	53.6	6.37	9.410		
1,700.0	1,700.0	1,701.0	1,701.0	3.7	3.7	89.49	0.5	60.0	60.0	53.5	6.42	9.339		
1,800.0	1,800.0	1,801.0	1,801.0	3.8	3.8	89.49	0.5	60.0	60.0	53.5	6.47	9.265		
1,900.0	1,900.0	1,901.0	1,901.0	3.9	3.9	89.49	0.5	60.0	60.0	53.4	6.53	9.189		
2,000.0	2,000.0	2,001.0	2,001.0	3.9	3.9	89.49	0.5	60.0	60.0	53.4	6.58	9.111		
2,100.0	2,100.0	2,101.0	2,101.0	4.0	4.0	89.49	0.5	60.0	60.0	53.3	6.64	9.030		
2,200.0	2,200.0	2,201.0	2,201.0	4.1	4.1	89.49	0.5	60.0	60.0	53.3	6.70	8.948		
2,300.0	2,300.0	2,301.0	2,301.0	4.2	4.2	89.49	0.5	60.0	60.0	53.2	6.76	8.864		
2,400.0	2,400.0	2,401.0	2,401.0	4.3	4.3	89.49	0.5	60.0	60.0	53.1	6.83	8.779		
2,416.3	2,416.3	2,417.3	2,417.3	4.3	4.3	89.49	0.5	60.0	60.0	53.1	6.84	8.765 CC		
2,500.0	2,500.0	2,500.0	2,500.0	4.4	4.4	89.49	0.5	60.0	60.0	53.1	6.90	8.695 ES, SF		
2,600.0	2,600.0	2,598.8	2,598.8	4.5	4.5	-172.59	0.8	61.6	63.4	56.4	6.97	9.101		
2,700.0	2,699.8	2,696.7	2,696.6	4.5	4.5	-173.69	1.7	66.5	73.5	66.5	7.05	10.437		
2,759.0	2,758.7	2,755.2	2,754.9	4.5	4.5	-174.37	2.3	69.8	81.6	74.5	7.10	11.500		
2,800.0	2,799.5	2,795.7	2,795.4	4.5	4.5	-174.81	2.7	72.2	87.7	80.5	7.14	12.286		
2,900.0	2,899.1	2,894.6	2,894.1	4.5	4.6	-175.65	3.7	77.9	102.5	95.2	7.24	14.159		
3,000.0	2,998.7	2,993.5	2,992.8	4.6	4.6	-176.28	4.7	83.5	117.2	109.9	7.34	15.969		
3,100.0	3,098.3	3,092.4	3,091.6	4.6	4.7	-176.77	5.7	89.2	132.0	124.6	7.45	17.711		
3,200.0	3,197.8	3,191.3	3,190.3	4.6	4.8	-177.16	6.7	94.9	146.8	139.3	7.57	19.386		
3,300.0	3,297.4	3,290.2	3,289.0	4.7	4.8	-177.48	7.7	100.6	161.6	153.9	7.70	20.993		
3,400.0	3,397.0	3,389.1	3,387.7	4.7	4.9	-177.75	8.7	106.3	176.4	168.6	7.83	22.530		
3,500.0	3,496.6	3,488.0	3,486.5	4.8	4.9	-177.97	9.7	112.0	191.3	183.3	7.97	23.999		
3,600.0	3,596.2	3,586.9	3,585.2	4.8	5.0	-178.16	10.7	117.7	206.1	198.0	8.11	25.401		
3,700.0	3,695.8	3,685.8	3,683.9	4.9	5.1	-178.33	11.7	123.4	220.9	212.6	8.26	26.737		
3,800.0	3,795.4	3,784.6	3,782.6	4.9	5.2	-178.47	12.7	129.1	235.7	227.3	8.42	28.009		
3,900.0	3,895.0	3,883.5	3,881.4	5.0	5.2	-178.60	13.7	134.8	250.5	242.0	8.57	29.219		
4,000.0	3,994.6	3,982.4	3,980.1	5.1	5.3	-178.72	14.7	140.5	265.4	256.6	8.74	30.369		
4,100.0	4,094.2	4,081.3	4,078.8	5.1	5.4	-178.82	15.7	146.1	280.2	271.3	8.91	31.462		
4,200.0	4,193.8	4,180.2	4,177.5	5.2	5.5	-178.91	16.7	151.8	295.0	285.9	9.08	32.499		
4,300.0	4,293.4	4,279.1	4,276.3	5.3	5.6	-178.99	17.7	157.5	309.8	300.6	9.25	33.484		
4,400.0	4,392.9	4,378.0	4,375.0	5.4	5.6	-179.07	18.7	163.2	324.7	315.2	9.43	34.418		
4,500.0	4,492.5	4,476.9	4,473.7	5.4	5.7	-179.14	19.7	168.9	339.5	329.9	9.62	35.304		
4,600.0	4,592.1	4,575.8	4,572.4	5.5	5.8	-179.20	20.7	174.6	354.3	344.5	9.80	36.145		
4,700.0	4,691.7	4,674.7	4,671.2	5.6	5.9	-179.26	21.7	180.3	369.1	359.2	9.99	36.943		
4,800.0	4,791.3	4,773.6	4,769.9	5.7	6.0	-179.31	22.8	186.0	384.0	373.8	10.18	37.701		

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 #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #706H	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 #704H - OWB - PWP1													Offset Site Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 10158-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	
4,900.0	4,890.9	4,872.5	4,868.6	5.8	6.1	-179.36	23.8	191.7	398.8	388.4	10.38	38.419		
5,000.0	4,990.5	4,971.4	4,967.3	5.9	6.2	-179.41	24.8	197.4	413.6	403.1	10.58	39.101		
5,100.0	5,090.1	5,070.3	5,066.1	5.9	6.3	-179.45	25.8	203.1	428.5	417.7	10.78	39.749		
5,200.0	5,189.7	5,169.2	5,164.8	6.0	6.4	-179.49	26.8	208.7	443.3	432.3	10.98	40.363		
5,300.0	5,289.3	5,268.1	5,263.5	6.1	6.5	-179.53	27.8	214.4	458.1	446.9	11.19	40.948		
5,400.0	5,388.9	5,366.9	5,362.2	6.2	6.6	-179.56	28.8	220.1	472.9	461.6	11.40	41.503		
5,500.0	5,488.5	5,465.8	5,461.0	6.3	6.7	-179.59	29.8	225.8	487.8	476.2	11.61	42.031		
5,600.0	5,588.0	5,564.7	5,559.7	6.4	6.8	-179.63	30.8	231.5	502.6	490.8	11.82	42.533		
5,700.0	5,687.6	5,663.6	5,658.4	6.5	6.9	-179.65	31.8	237.2	517.4	505.4	12.03	43.010		
5,800.0	5,787.2	5,762.5	5,757.1	6.6	7.0	-179.68	32.8	242.9	532.3	520.0	12.25	43.465		
5,900.0	5,886.8	5,861.4	5,855.9	6.7	7.1	-179.71	33.8	248.6	547.1	534.6	12.46	43.898		
6,000.0	5,986.4	5,960.3	5,954.6	6.8	7.2	-179.73	34.8	254.3	561.9	549.2	12.68	44.311		
6,100.0	6,086.0	6,059.2	6,053.3	6.9	7.3	-179.76	35.8	260.0	576.8	563.9	12.90	44.704		
6,200.0	6,185.6	6,158.1	6,152.0	7.0	7.4	-179.78	36.8	265.7	591.6	578.5	13.12	45.079		
6,300.0	6,285.2	6,257.0	6,250.8	7.1	7.5	-179.80	37.8	271.3	606.4	593.1	13.35	45.437		
6,400.0	6,384.8	6,355.9	6,349.5	7.2	7.6	-179.82	38.8	277.0	621.2	607.7	13.57	45.779		
6,500.0	6,484.4	6,454.8	6,448.2	7.3	7.7	-179.84	39.8	282.7	636.1	622.3	13.80	46.105		
6,600.0	6,584.0	6,553.7	6,546.9	7.4	7.8	-179.86	40.8	288.4	650.9	636.9	14.02	46.416		
6,700.0	6,683.6	6,652.6	6,645.7	7.5	7.9	-179.87	41.8	294.1	665.7	651.5	14.25	46.714		
6,800.0	6,783.1	6,751.5	6,744.4	7.6	8.0	-179.89	42.8	299.8	680.6	666.1	14.48	46.999		
6,900.0	6,882.7	6,850.4	6,843.1	7.7	8.1	-179.91	43.8	305.5	695.4	680.7	14.71	47.272		
7,000.0	6,982.3	6,949.3	6,941.8	7.9	8.2	-179.92	44.8	311.2	710.2	695.3	14.94	47.533		
7,100.0	7,081.9	7,048.1	7,040.6	8.0	8.4	-179.94	45.8	316.9	725.1	709.9	15.17	47.783		
7,200.0	7,181.5	7,147.0	7,139.3	8.1	8.5	-179.95	46.8	322.6	739.9	724.5	15.41	48.022		
7,300.0	7,281.1	7,245.9	7,238.0	8.2	8.6	-179.97	47.8	328.3	754.7	739.1	15.64	48.252		
7,400.0	7,380.7	7,344.8	7,336.7	8.3	8.7	-179.98	48.8	333.9	769.5	753.7	15.88	48.472		
7,500.0	7,480.3	7,443.7	7,435.5	8.4	8.8	-179.99	49.8	339.6	784.4	768.3	16.11	48.683		
7,600.0	7,579.9	7,542.6	7,534.2	8.5	8.9	180.00	50.8	345.3	799.2	782.9	16.35	48.885		
7,700.0	7,679.5	7,641.5	7,632.9	8.6	9.0	179.99	51.9	351.0	814.0	797.5	16.59	49.080		
7,800.0	7,779.1	7,740.4	7,731.6	8.8	9.1	179.97	52.9	356.7	828.9	812.0	16.82	49.267		
7,900.0	7,878.6	7,839.3	7,830.4	8.9	9.3	179.96	53.9	362.4	843.7	826.6	17.06	49.446		
8,000.0	7,978.2	7,938.2	7,929.1	9.0	9.4	179.95	54.9	368.1	858.5	841.2	17.30	49.618		
8,100.0	8,077.8	8,037.1	8,027.8	9.1	9.5	179.94	55.9	373.8	873.4	855.8	17.54	49.784		
8,200.0	8,177.4	8,136.0	8,126.5	9.2	9.6	179.93	56.9	379.5	888.2	870.4	17.78	49.944		
8,300.0	8,277.0	8,234.9	8,225.3	9.3	9.7	179.92	57.9	385.2	903.0	885.0	18.03	50.097		
8,400.0	8,376.6	8,333.8	8,324.0	9.4	9.8	179.91	58.9	390.9	917.9	899.6	18.27	50.245		
8,500.0	8,476.2	8,432.7	8,422.7	9.6	9.9	179.91	59.9	396.6	932.7	914.2	18.51	50.387		
8,600.0	8,575.8	8,531.6	8,521.4	9.7	10.1	179.90	60.9	402.2	947.5	928.8	18.75	50.524		
8,700.0	8,675.4	8,630.5	8,620.2	9.8	10.2	179.89	61.9	407.9	962.4	943.4	19.00	50.656		
8,800.0	8,775.0	8,729.3	8,718.9	9.9	10.3	179.88	62.9	413.6	977.2	957.9	19.24	50.783		
8,900.0	8,874.6	8,828.2	8,817.6	10.0	10.4	179.87	63.9	419.3	992.0	972.5	19.49	50.906		

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 #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #706H	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	1.0	1.0	3.0	3.0	89.54	0.2	30.0	30.0				
100.0	100.0	101.0	101.0	3.0	3.0	89.54	0.2	30.0	30.0	24.0	6.00	4.993	
200.0	200.0	201.0	201.0	3.0	3.0	89.54	0.2	30.0	30.0	24.0	6.00	4.991	
300.0	300.0	301.0	301.0	3.0	3.0	89.54	0.2	30.0	30.0	24.0	6.01	4.986	
400.0	400.0	401.0	401.0	3.0	3.0	89.54	0.2	30.0	30.0	23.9	6.02	4.978	
500.0	500.0	501.0	501.0	3.1	3.1	89.54	0.2	30.0	30.0	23.9	6.03	4.968	
600.0	600.0	601.0	601.0	3.1	3.1	89.54	0.2	30.0	30.0	23.9	6.05	4.955	
700.0	700.0	701.0	701.0	3.1	3.1	89.54	0.2	30.0	30.0	23.9	6.07	4.940	
800.0	800.0	801.0	801.0	3.2	3.2	89.54	0.2	30.0	30.0	23.9	6.09	4.922	
900.0	900.0	901.0	901.0	3.2	3.2	89.54	0.2	30.0	30.0	23.8	6.11	4.901	
1,000.0	1,000.0	1,001.0	1,001.0	3.2	3.2	89.54	0.2	30.0	30.0	23.8	6.14	4.879	
1,100.0	1,100.0	1,101.0	1,101.0	3.3	3.3	89.54	0.2	30.0	30.0	23.8	6.17	4.854	
1,200.0	1,200.0	1,201.0	1,201.0	3.4	3.4	89.54	0.2	30.0	30.0	23.8	6.21	4.827	
1,300.0	1,300.0	1,301.0	1,301.0	3.4	3.4	89.54	0.2	30.0	30.0	23.7	6.24	4.799	
1,400.0	1,400.0	1,401.0	1,401.0	3.5	3.5	89.54	0.2	30.0	30.0	23.7	6.28	4.768	
1,500.0	1,500.0	1,501.0	1,501.0	3.5	3.5	89.54	0.2	30.0	30.0	23.6	6.33	4.736	
1,600.0	1,600.0	1,601.0	1,601.0	3.6	3.6	89.54	0.2	30.0	30.0	23.6	6.37	4.702	
1,700.0	1,700.0	1,701.0	1,701.0	3.7	3.7	89.54	0.2	30.0	30.0	23.5	6.42	4.666	
1,800.0	1,800.0	1,801.0	1,801.0	3.8	3.8	89.54	0.2	30.0	30.0	23.5	6.47	4.630	
1,900.0	1,900.0	1,901.0	1,901.0	3.9	3.9	89.54	0.2	30.0	30.0	23.4	6.53	4.591	
2,000.0	2,000.0	2,001.0	2,001.0	3.9	3.9	89.54	0.2	30.0	30.0	23.4	6.58	4.552	
2,100.0	2,100.0	2,101.0	2,101.0	4.0	4.0	89.54	0.2	30.0	30.0	23.3	6.64	4.512	
2,200.0	2,200.0	2,201.0	2,201.0	4.1	4.1	89.54	0.2	30.0	30.0	23.3	6.70	4.471	
2,300.0	2,300.0	2,301.0	2,301.0	4.2	4.2	89.54	0.2	30.0	30.0	23.2	6.76	4.429	
2,400.0	2,400.0	2,401.0	2,401.0	4.3	4.3	89.54	0.2	30.0	30.0	23.1	6.83	4.387	
2,500.0	2,500.0	2,501.0	2,501.0	4.4	4.4	89.54	0.2	30.0	30.0	23.1	6.90	4.344 CC, ES, SF	
2,600.0	2,600.0	2,601.0	2,601.0	4.5	4.5	-172.52	0.2	30.0	31.7	24.7	6.97	4.548	
2,700.0	2,699.8	2,700.8	2,700.8	4.5	4.6	-173.57	0.2	30.0	36.9	29.8	7.04	5.238	
2,759.0	2,758.7	2,759.7	2,759.7	4.5	4.7	-174.29	0.2	30.0	41.6	34.5	7.09	5.867	
2,800.0	2,799.5	2,800.5	2,800.5	4.5	4.7	-174.75	0.2	30.0	45.3	38.1	7.12	6.358	
2,900.0	2,899.1	2,900.1	2,900.1	4.5	4.8	-175.62	0.2	30.0	54.3	47.1	7.20	7.536	
3,000.0	2,998.7	2,999.7	2,999.7	4.6	4.9	-176.25	0.2	30.0	63.3	56.0	7.29	8.684	
3,100.0	3,098.3	3,099.3	3,099.3	4.6	5.0	-176.72	0.2	30.0	72.3	64.9	7.37	9.801	
3,200.0	3,197.8	3,198.8	3,198.8	4.6	5.1	-177.08	0.2	30.0	81.3	73.8	7.47	10.886	
3,300.0	3,297.4	3,298.4	3,298.4	4.7	5.2	-177.37	0.2	30.0	90.3	82.8	7.57	11.938	
3,400.0	3,397.0	3,398.0	3,398.0	4.7	5.3	-177.61	0.2	30.0	99.3	91.7	7.67	12.957	
3,500.0	3,496.6	3,497.6	3,497.6	4.8	5.4	-177.81	0.2	30.0	108.4	100.6	7.77	13.943	
3,600.0	3,596.2	3,597.2	3,597.2	4.8	5.5	-177.98	0.2	30.0	117.4	109.5	7.88	14.895	
3,700.0	3,695.8	3,696.8	3,696.8	4.9	5.7	-178.12	0.2	30.0	126.4	118.4	7.99	15.814	
3,800.0	3,795.4	3,796.4	3,796.4	4.9	5.8	-178.25	0.2	30.0	135.4	127.3	8.11	16.701	
3,900.0	3,895.0	3,896.0	3,896.0	5.0	5.9	-178.36	0.2	30.0	144.5	136.2	8.23	17.555	
4,000.0	3,994.6	3,995.6	3,995.6	5.1	6.0	-178.45	0.2	30.0	153.5	145.1	8.35	18.377	
4,100.0	4,094.2	4,095.2	4,095.2	5.1	6.1	-178.54	0.2	30.0	162.5	154.0	8.48	19.168	
4,200.0	4,193.8	4,194.8	4,194.8	5.2	6.2	-178.62	0.2	30.0	171.5	162.9	8.61	19.930	
4,300.0	4,293.4	4,294.4	4,294.4	5.3	6.3	-178.69	0.2	30.0	180.6	171.8	8.74	20.662	
4,400.0	4,392.9	4,393.9	4,393.9	5.4	6.4	-178.75	0.2	30.0	189.6	180.7	8.87	21.366	
4,500.0	4,492.5	4,493.5	4,493.5	5.4	6.6	-178.81	0.2	30.0	198.6	189.6	9.01	22.042	
4,600.0	4,592.1	4,593.1	4,593.1	5.5	6.7	-178.86	0.2	30.0	207.6	198.5	9.15	22.692	
4,700.0	4,691.7	4,692.7	4,692.7	5.6	6.8	-178.91	0.2	30.0	216.7	207.4	9.29	23.316	
4,800.0	4,791.3	4,792.3	4,792.3	5.7	6.9	-178.95	0.2	30.0	225.7	216.3	9.44	23.916	
4,900.0	4,890.9	4,891.9	4,891.9	5.8	7.0	-178.99	0.2	30.0	234.7	225.1	9.58	24.493	

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 #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #706H	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
5,000.0	4,990.5	4,991.5	4,991.5	5.9	7.2	-179.03	0.2	30.0	243.7	234.0	9.73	25.047	
5,100.0	5,090.1	5,091.1	5,091.1	5.9	7.3	-179.06	0.2	30.0	252.8	242.9	9.88	25.579	
5,200.0	5,189.7	5,190.7	5,190.7	6.0	7.4	-179.09	0.2	30.0	261.8	251.8	10.03	26.090	
5,300.0	5,289.3	5,290.3	5,290.3	6.1	7.5	-179.12	0.2	30.0	270.8	260.6	10.19	26.582	
5,400.0	5,388.9	5,389.9	5,389.9	6.2	7.6	-179.15	0.2	30.0	279.9	269.5	10.34	27.054	
5,500.0	5,488.5	5,489.5	5,489.5	6.3	7.8	-179.18	0.2	30.0	288.9	278.4	10.50	27.508	
5,600.0	5,588.0	5,599.3	5,599.3	6.4	7.8	-179.19	0.0	28.3	296.4	285.7	10.65	27.821	
5,700.0	5,687.6	5,710.9	5,710.7	6.5	7.9	-179.18	-1.1	22.3	300.0	289.2	10.81	27.741	
5,800.0	5,787.2	5,811.5	5,811.0	6.6	7.9	-179.15	-2.3	14.8	301.5	290.5	10.96	27.500	
5,900.0	5,886.8	5,911.5	5,910.7	6.7	7.9	-179.12	-3.6	7.4	303.0	291.9	11.11	27.259	
6,000.0	5,986.4	6,011.4	6,010.4	6.8	7.9	-179.10	-4.9	-0.1	304.5	293.2	11.27	27.015	
6,100.0	6,086.0	6,111.4	6,110.1	6.9	8.0	-179.07	-6.1	-7.5	305.9	294.5	11.43	26.770	
6,200.0	6,185.6	6,211.4	6,209.8	7.0	8.0	-179.04	-7.4	-15.0	307.4	295.8	11.59	26.523	
6,300.0	6,285.2	6,311.4	6,309.5	7.1	8.0	-179.02	-8.6	-22.4	308.9	297.1	11.76	26.275	
6,400.0	6,384.8	6,411.4	6,409.2	7.2	8.1	-178.99	-9.9	-29.9	310.4	298.5	11.93	26.026	
6,500.0	6,484.4	6,511.4	6,508.9	7.3	8.1	-178.97	-11.2	-37.3	311.9	299.8	12.10	25.778	
6,600.0	6,584.0	6,611.4	6,608.6	7.4	8.2	-178.94	-12.4	-44.8	313.4	301.1	12.27	25.530	
6,700.0	6,683.6	6,711.4	6,708.3	7.5	8.2	-178.92	-13.7	-52.2	314.8	302.4	12.45	25.284	
6,800.0	6,783.1	6,811.4	6,808.0	7.6	8.3	-178.89	-15.0	-59.7	316.3	303.7	12.63	25.038	
6,900.0	6,882.7	6,911.3	6,907.7	7.7	8.3	-178.87	-16.2	-67.1	317.8	305.0	12.82	24.794	
7,000.0	6,982.3	7,011.3	7,007.4	7.9	8.3	-178.84	-17.5	-74.6	319.3	306.3	13.00	24.552	
7,100.0	7,081.9	7,111.3	7,107.1	8.0	8.4	-178.82	-18.8	-82.0	320.8	307.6	13.19	24.313	
7,200.0	7,181.5	7,211.3	7,206.8	8.1	8.5	-178.79	-20.0	-89.5	322.2	308.9	13.38	24.076	
7,300.0	7,281.1	7,311.3	7,306.5	8.2	8.5	-178.77	-21.3	-96.9	323.7	310.2	13.58	23.841	
7,400.0	7,380.7	7,411.3	7,406.2	8.3	8.6	-178.75	-22.6	-104.4	325.2	311.4	13.77	23.609	
7,500.0	7,480.3	7,511.3	7,505.9	8.4	8.6	-178.72	-23.8	-111.8	326.7	312.7	13.97	23.380	
7,600.0	7,579.9	7,611.3	7,605.6	8.5	8.7	-178.70	-25.1	-119.3	328.2	314.0	14.17	23.154	
7,700.0	7,679.5	7,711.3	7,705.3	8.6	8.7	-178.68	-26.3	-126.7	329.7	315.3	14.38	22.932	
7,800.0	7,779.1	7,811.2	7,805.1	8.8	8.8	-178.65	-27.6	-134.1	331.1	316.6	14.58	22.712	
7,900.0	7,878.6	7,911.2	7,904.8	8.9	8.9	-178.63	-28.9	-141.6	332.6	317.8	14.79	22.496	
8,000.0	7,978.2	8,011.2	8,004.5	9.0	8.9	-178.61	-30.1	-149.0	334.1	319.1	14.99	22.283	
8,100.0	8,077.8	8,111.2	8,104.2	9.1	9.0	-178.59	-31.4	-156.5	335.6	320.4	15.20	22.074	
8,200.0	8,177.4	8,211.2	8,203.9	9.2	9.1	-178.56	-32.7	-163.9	337.1	321.7	15.41	21.868	
8,300.0	8,277.0	8,311.2	8,303.6	9.3	9.2	-178.54	-33.9	-171.4	338.6	322.9	15.63	21.666	
8,400.0	8,376.6	8,411.2	8,403.3	9.4	9.2	-178.52	-35.2	-178.8	340.0	324.2	15.84	21.467	
8,500.0	8,476.2	8,511.2	8,503.0	9.6	9.3	-178.50	-36.5	-186.3	341.5	325.5	16.06	21.271	
8,600.0	8,575.8	8,611.2	8,602.7	9.7	9.4	-178.48	-37.7	-193.7	343.0	326.7	16.27	21.079	
8,700.0	8,675.4	8,711.1	8,702.4	9.8	9.5	-178.46	-39.0	-201.2	344.5	328.0	16.49	20.890	
8,800.0	8,775.0	8,811.1	8,802.1	9.9	9.5	-178.43	-40.2	-208.6	346.0	329.3	16.71	20.705	
8,900.0	8,874.6	8,911.1	8,901.8	10.0	9.6	-178.41	-41.5	-216.1	347.5	330.5	16.93	20.523	
9,000.0	8,974.2	9,011.1	9,001.5	10.2	9.7	-178.39	-42.8	-223.5	349.0	331.8	17.15	20.344	
9,100.0	9,073.7	9,111.1	9,101.2	10.3	9.8	-178.37	-44.0	-231.0	350.4	333.1	17.38	20.169	
9,200.0	9,173.3	9,211.1	9,200.9	10.4	9.9	-178.35	-45.3	-238.4	351.9	334.3	17.60	19.997	
9,300.0	9,272.9	9,311.1	9,300.6	10.5	9.9	-178.33	-46.6	-245.9	353.4	335.6	17.82	19.828	
9,400.0	9,372.5	9,411.1	9,400.3	10.6	10.0	-178.31	-47.8	-253.3	354.9	336.8	18.05	19.662	
9,500.0	9,472.1	9,511.1	9,500.0	10.8	10.1	-178.29	-49.1	-260.8	356.4	338.1	18.28	19.499	
9,600.0	9,571.7	9,611.0	9,599.7	10.9	10.2	-178.27	-50.4	-268.2	357.9	339.4	18.50	19.340	
9,700.0	9,671.3	9,711.0	9,699.4	11.0	10.3	-178.25	-51.6	-275.7	359.3	340.6	18.73	19.183	
9,800.0	9,770.9	9,811.0	9,799.1	11.1	10.4	-178.24	-52.9	-283.1	360.8	341.9	18.96	19.029	
9,900.0	9,870.5	9,911.0	9,898.8	11.3	10.5	-178.22	-54.1	-290.6	362.3	343.1	19.19	18.878	
10,000.0	9,970.1	10,011.0	9,998.5	11.4	10.6	-178.20	-55.4	-298.0	363.8	344.4	19.42	18.734	

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 #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #706H	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	10,069.7	10,111.0	10,098.2	11.5	10.6	-178.18	-56.7	-305.5	365.3	345.7	19.59	18.645		
10,164.6	10,134.0	10,177.4	10,164.4	11.6	10.6	-178.07	-58.1	-310.4	366.2	346.5	19.65	18.633		
10,200.0	10,169.2	10,215.2	10,201.9	11.6	10.6	-155.18	-61.5	-313.2	367.0	347.3	19.69	18.641		
10,250.0	10,218.4	10,268.3	10,254.1	11.6	10.7	-141.12	-70.5	-317.0	369.7	349.9	19.76	18.709		
10,300.0	10,266.8	10,320.8	10,304.7	11.6	10.7	-134.09	-84.1	-320.7	374.1	354.3	19.85	18.847		
10,350.0	10,314.0	10,372.8	10,353.3	11.6	10.7	-129.48	-102.1	-324.3	380.4	360.4	19.96	19.058		
10,400.0	10,359.5	10,423.9	10,399.4	11.6	10.7	-125.88	-124.1	-327.6	388.4	368.4	20.08	19.343		
10,450.0	10,403.2	10,474.3	10,442.7	11.7	10.8	-122.75	-149.6	-330.6	398.2	378.0	20.22	19.698		
10,500.0	10,444.6	10,523.9	10,482.9	11.7	10.8	-119.86	-178.4	-333.5	409.6	389.3	20.36	20.118		
10,550.0	10,483.4	10,572.5	10,519.9	11.7	10.9	-117.07	-209.9	-336.0	422.7	402.1	20.52	20.594		
10,600.0	10,519.3	10,620.4	10,553.5	11.8	10.9	-114.36	-243.9	-338.3	437.2	416.5	20.70	21.117		
10,650.0	10,552.1	10,667.4	10,583.7	11.9	11.0	-111.68	-279.9	-340.3	453.0	432.1	20.90	21.677		
10,700.0	10,581.4	10,713.7	10,610.4	11.9	11.1	-109.03	-317.6	-342.1	470.1	449.0	21.12	22.264		
10,750.0	10,607.2	10,759.3	10,633.7	12.0	11.1	-106.41	-356.8	-343.6	488.3	466.9	21.35	22.871		
10,800.0	10,629.1	10,804.3	10,653.5	12.2	11.2	-103.83	-397.1	-344.8	507.4	485.8	21.60	23.488		
10,850.0	10,647.1	10,848.8	10,670.0	12.3	11.3	-101.30	-438.5	-345.8	527.2	505.4	21.87	24.110		
10,900.0	10,660.9	10,893.0	10,683.1	12.4	11.4	-98.83	-480.6	-346.5	547.7	525.5	22.15	24.727		
10,950.0	10,670.5	10,936.8	10,692.9	12.6	11.5	-96.43	-523.3	-347.0	568.5	546.1	22.44	25.337		
11,000.0	10,675.9	10,980.4	10,699.4	12.8	11.6	-94.13	-566.4	-347.2	589.7	566.9	22.74	25.932		
11,035.6	10,677.0	11,011.5	10,702.1	12.9	11.6	-92.55	-597.4	-347.2	604.8	581.9	22.96	26.345		
11,100.0	10,677.1	11,068.8	10,703.0	13.1	11.8	-92.51	-654.7	-346.9	631.6	608.2	23.40	26.995		
11,200.0	10,677.2	11,160.9	10,703.1	13.5	12.0	-92.32	-746.7	-346.3	670.7	646.5	24.19	27.722		
11,300.0	10,677.3	11,254.2	10,703.2	14.0	12.3	-92.18	-840.1	-345.7	706.6	681.5	25.07	28.179		
11,400.0	10,677.4	11,348.7	10,703.3	14.5	12.7	-92.05	-934.6	-345.1	739.1	713.1	26.03	28.392		
11,500.0	10,677.5	11,444.4	10,703.4	15.0	13.2	-91.95	-1,030.2	-344.5	768.4	741.3	27.06	28.391		
11,600.0	10,677.6	11,540.9	10,703.5	15.5	13.7	-91.87	-1,126.8	-343.9	794.3	766.1	28.16	28.205		
11,700.0	10,677.7	11,638.4	10,703.6	16.1	14.2	-91.80	-1,224.2	-343.3	816.8	787.5	29.32	27.862		
11,800.0	10,677.8	11,736.5	10,703.7	16.7	14.8	-91.75	-1,322.4	-342.7	835.9	805.4	30.52	27.386		
11,900.0	10,677.9	11,835.3	10,703.8	17.3	15.4	-91.70	-1,421.1	-342.1	851.6	819.8	31.78	26.800		
12,000.0	10,678.0	11,934.5	10,703.9	17.9	16.1	-91.67	-1,520.3	-341.4	863.8	830.8	33.07	26.122		
12,100.0	10,678.1	12,034.1	10,704.0	18.5	16.8	-91.64	-1,620.0	-340.8	872.6	838.2	34.40	25.368		
12,200.0	10,678.2	12,134.0	10,704.1	19.1	17.5	-91.63	-1,719.8	-340.2	877.9	842.1	35.75	24.553		
12,301.1	10,678.3	12,235.0	10,704.2	19.7	18.2	-91.62	-1,820.9	-339.5	879.6	842.5	37.15	23.677		
12,400.0	10,678.4	12,334.0	10,704.4	20.4	18.9	-91.62	-1,919.8	-338.9	879.6	841.1	38.54	22.822		
12,500.0	10,678.5	12,434.0	10,704.5	21.0	19.7	-91.62	-2,019.8	-338.3	879.6	839.7	39.98	22.004		
12,600.0	10,678.6	12,534.0	10,704.6	21.7	20.4	-91.62	-2,119.8	-337.6	879.6	838.2	41.43	21.232		
12,700.0	10,678.7	12,634.0	10,704.7	22.4	21.2	-91.62	-2,219.8	-337.0	879.6	836.7	42.90	20.503		
12,800.0	10,678.9	12,734.0	10,704.8	23.1	22.0	-91.62	-2,319.8	-336.4	879.7	835.3	44.39	19.814		
12,900.0	10,679.0	12,834.0	10,704.9	23.8	22.7	-91.62	-2,419.8	-335.8	879.7	833.8	45.90	19.164		
13,000.0	10,679.1	12,934.0	10,705.0	24.5	23.5	-91.62	-2,519.8	-335.1	879.7	832.2	47.42	18.549		
13,100.0	10,679.2	13,034.0	10,705.1	25.2	24.3	-91.62	-2,619.8	-334.5	879.7	830.7	48.96	17.967		
13,200.0	10,679.3	13,134.0	10,705.2	25.9	25.1	-91.62	-2,719.8	-333.9	879.7	829.2	50.51	17.416		
13,300.0	10,679.4	13,234.0	10,705.3	26.7	25.9	-91.62	-2,819.8	-333.2	879.7	827.6	52.07	16.895		
13,400.0	10,679.5	13,334.0	10,705.4	27.4	26.7	-91.62	-2,919.8	-332.6	879.7	826.0	53.64	16.401		
13,500.0	10,679.6	13,434.0	10,705.5	28.2	27.5	-91.62	-3,019.8	-332.0	879.7	824.5	55.21	15.932		
13,600.0	10,679.7	13,534.0	10,705.6	28.9	28.3	-91.62	-3,119.8	-331.3	879.7	822.9	56.80	15.487		
13,700.0	10,679.8	13,634.0	10,705.7	29.7	29.1	-91.62	-3,219.8	-330.7	879.7	821.3	58.39	15.065		
13,800.0	10,679.9	13,734.0	10,705.8	30.4	30.0	-91.62	-3,319.8	-330.1	879.7	819.7	60.00	14.663		
13,900.0	10,680.0	13,834.0	10,705.9	31.2	30.8	-91.62	-3,419.8	-329.4	879.7	818.1	61.60	14.280		
14,000.0	10,680.1	13,934.0	10,706.0	32.0	31.6	-91.62	-3,519.8	-328.8	879.7	816.5	63.22	13.915		
14,100.0	10,680.2	14,034.0	10,706.1	32.8	32.4	-91.62	-3,619.8	-328.2	879.7	814.9	64.84	13.568		

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 #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #706H	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									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,200.0	10,680.3	14,134.0	10,706.2	33.6	33.3	-91.62	-3,719.8	-327.6	879.7	813.2	66.46	13.236	
14,300.0	10,680.4	14,234.0	10,706.3	34.4	34.1	-91.62	-3,819.7	-326.9	879.7	811.6	68.09	12.919	
14,400.0	10,680.5	14,334.0	10,706.4	35.2	34.9	-91.62	-3,919.7	-326.3	879.7	810.0	69.73	12.617	
14,500.0	10,680.6	14,434.0	10,706.5	36.0	35.7	-91.62	-4,019.7	-325.7	879.7	808.3	71.36	12.327	
14,600.0	10,680.7	14,534.0	10,706.7	36.8	36.6	-91.62	-4,119.7	-325.0	879.7	806.7	73.01	12.050	
14,700.0	10,680.8	14,634.0	10,706.8	37.6	37.4	-91.62	-4,219.7	-324.4	879.7	805.1	74.65	11.784	
14,800.0	10,680.9	14,734.0	10,706.9	38.4	38.2	-91.63	-4,319.7	-323.8	879.7	803.4	76.30	11.529	
14,900.0	10,681.0	14,834.0	10,707.0	39.2	39.1	-91.63	-4,419.7	-323.1	879.7	801.8	77.96	11.285	
15,000.0	10,681.1	14,934.0	10,707.1	40.0	39.9	-91.63	-4,519.7	-322.5	879.7	800.1	79.61	11.050	
15,100.0	10,681.2	15,034.0	10,707.2	40.8	40.8	-91.63	-4,619.7	-321.9	879.7	798.5	81.27	10.825	
15,200.0	10,681.3	15,134.0	10,707.3	41.6	41.6	-91.63	-4,719.7	-321.3	879.7	796.8	82.93	10.608	
15,300.0	10,681.4	15,234.0	10,707.4	42.4	42.4	-91.63	-4,819.7	-320.6	879.7	795.1	84.59	10.399	
15,400.0	10,681.5	15,334.0	10,707.5	43.2	43.3	-91.63	-4,919.7	-320.0	879.7	793.5	86.26	10.198	
15,500.0	10,681.6	15,434.0	10,707.6	44.1	44.1	-91.63	-5,019.7	-319.4	879.7	791.8	87.93	10.005	
15,600.0	10,681.7	15,534.0	10,707.7	44.9	45.0	-91.63	-5,119.7	-318.7	879.7	790.1	89.60	9.818	
15,700.0	10,681.8	15,634.0	10,707.8	45.7	45.8	-91.63	-5,219.7	-318.1	879.7	788.5	91.27	9.639	
15,800.0	10,681.9	15,734.0	10,707.9	46.5	46.7	-91.63	-5,319.7	-317.5	879.7	786.8	92.95	9.465	
15,900.0	10,682.1	15,834.0	10,708.0	47.4	47.5	-91.63	-5,419.7	-316.8	879.7	785.1	94.62	9.297	
16,000.0	10,682.2	15,934.0	10,708.1	48.2	48.3	-91.63	-5,519.7	-316.2	879.7	783.4	96.30	9.135	
16,100.0	10,682.3	16,034.0	10,708.2	49.0	49.2	-91.63	-5,619.7	-315.6	879.8	781.8	97.98	8.979	
16,200.0	10,682.4	16,134.0	10,708.3	49.8	50.0	-91.63	-5,719.7	-314.9	879.8	780.1	99.66	8.827	
16,300.0	10,682.5	16,234.0	10,708.4	50.7	50.9	-91.63	-5,819.7	-314.3	879.8	778.4	101.34	8.681	
16,400.0	10,682.6	16,334.0	10,708.5	51.5	51.7	-91.63	-5,919.7	-313.7	879.8	776.7	103.03	8.539	
16,500.0	10,682.7	16,434.0	10,708.6	52.3	52.6	-91.63	-6,019.7	-313.1	879.8	775.1	104.71	8.402	
16,600.0	10,682.8	16,534.0	10,708.7	53.2	53.4	-91.63	-6,119.7	-312.4	879.8	773.4	106.40	8.269	
16,700.0	10,682.9	16,634.0	10,708.9	54.0	54.3	-91.63	-6,219.7	-311.8	879.8	771.7	108.09	8.140	
16,800.0	10,683.0	16,734.0	10,709.0	54.8	55.1	-91.63	-6,319.7	-311.2	879.8	770.0	109.78	8.014	
16,900.0	10,683.1	16,834.0	10,709.1	55.7	56.0	-91.63	-6,419.7	-310.5	879.8	768.3	111.46	7.893	
17,000.0	10,683.2	16,934.0	10,709.2	56.5	56.8	-91.63	-6,519.7	-309.9	879.8	766.6	113.16	7.775	
17,100.0	10,683.3	17,034.0	10,709.3	57.3	57.7	-91.63	-6,619.7	-309.3	879.8	764.9	114.85	7.660	
17,200.0	10,683.4	17,134.0	10,709.4	58.2	58.5	-91.63	-6,719.7	-308.6	879.8	763.2	116.54	7.549	
17,300.0	10,683.5	17,234.0	10,709.5	59.0	59.4	-91.63	-6,819.7	-308.0	879.8	761.6	118.23	7.441	
17,400.0	10,683.6	17,334.0	10,709.6	59.9	60.2	-91.63	-6,919.7	-307.4	879.8	759.9	119.93	7.336	
17,500.0	10,683.7	17,434.0	10,709.7	60.7	61.1	-91.63	-7,019.7	-306.7	879.8	758.2	121.62	7.234	
17,600.0	10,683.8	17,534.0	10,709.8	61.5	61.9	-91.63	-7,119.7	-306.1	879.8	756.5	123.32	7.134	
17,700.0	10,683.9	17,634.0	10,709.9	62.4	62.8	-91.63	-7,219.7	-305.5	879.8	754.8	125.02	7.037	
17,800.0	10,684.0	17,734.0	10,710.0	63.2	63.6	-91.63	-7,319.7	-304.9	879.8	753.1	126.71	6.943	
17,900.0	10,684.1	17,834.0	10,710.1	64.1	64.5	-91.63	-7,419.7	-304.2	879.8	751.4	128.41	6.851	
18,000.0	10,684.2	17,934.0	10,710.2	64.9	65.4	-91.63	-7,519.7	-303.6	879.8	749.7	130.11	6.762	
18,100.0	10,684.3	18,034.0	10,710.3	65.8	66.2	-91.63	-7,619.7	-303.0	879.8	748.0	131.81	6.675	
18,200.0	10,684.4	18,134.0	10,710.4	66.6	67.1	-91.63	-7,719.7	-302.3	879.8	746.3	133.51	6.590	
18,300.0	10,684.5	18,234.0	10,710.5	67.4	67.9	-91.63	-7,819.7	-301.7	879.8	744.6	135.21	6.507	
18,400.0	10,684.6	18,334.0	10,710.6	68.3	68.8	-91.63	-7,919.7	-301.1	879.8	742.9	136.91	6.426	
18,500.0	10,684.7	18,434.0	10,710.7	69.1	69.6	-91.63	-8,019.7	-300.4	879.8	741.2	138.62	6.347	
18,600.0	10,684.8	18,534.0	10,710.8	70.0	70.5	-91.63	-8,119.7	-299.8	879.8	739.5	140.32	6.270	
18,700.0	10,684.9	18,634.0	10,710.9	70.8	71.3	-91.63	-8,219.7	-299.2	879.8	737.8	142.02	6.195	
18,800.0	10,685.0	18,734.0	10,711.1	71.7	72.2	-91.63	-8,319.7	-298.6	879.8	736.1	143.72	6.122	
18,900.0	10,685.1	18,834.0	10,711.2	72.5	73.0	-91.63	-8,419.7	-297.9	879.8	734.4	145.43	6.050	
19,000.0	10,685.3	18,934.0	10,711.3	73.4	73.9	-91.63	-8,519.7	-297.3	879.8	732.7	147.13	5.980	
19,100.0	10,685.4	19,034.0	10,711.4	74.2	74.8	-91.63	-8,619.7	-296.7	879.8	731.0	148.84	5.911	
19,200.0	10,685.5	19,134.0	10,711.5	75.1	75.6	-91.63	-8,719.6	-296.0	879.8	729.3	150.54	5.844	

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 #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #706H	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)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
19,300.0	10,685.6	19,234.0	10,711.6	75.9	76.5	-91.63	-8,819.6	-295.4	879.8	727.6	152.25	5.779		
19,400.0	10,685.7	19,334.0	10,711.7	76.8	77.3	-91.63	-8,919.6	-294.8	879.9	725.9	153.96	5.715		
19,500.0	10,685.8	19,434.0	10,711.8	77.6	78.2	-91.63	-9,019.6	-294.1	879.9	724.2	155.66	5.652		
19,600.0	10,685.9	19,534.0	10,711.9	78.5	79.0	-91.63	-9,119.6	-293.5	879.9	722.5	157.37	5.591		
19,700.0	10,686.0	19,634.0	10,712.0	79.3	79.9	-91.63	-9,219.6	-292.9	879.9	720.8	159.08	5.531		
19,800.0	10,686.1	19,734.0	10,712.1	80.2	80.8	-91.63	-9,319.6	-292.2	879.9	719.1	160.78	5.472		
19,900.0	10,686.2	19,834.0	10,712.2	81.0	81.6	-91.63	-9,419.6	-291.6	879.9	717.4	162.49	5.415		
20,000.0	10,686.3	19,934.0	10,712.3	81.9	82.5	-91.63	-9,519.6	-291.0	879.9	715.7	164.20	5.358		
20,100.0	10,686.4	20,034.0	10,712.4	82.7	83.3	-91.63	-9,619.6	-290.4	879.9	714.0	165.91	5.303		
20,200.0	10,686.5	20,134.0	10,712.5	83.6	84.2	-91.63	-9,719.6	-289.7	879.9	712.3	167.62	5.249		
20,300.0	10,686.6	20,234.0	10,712.6	84.4	85.0	-91.63	-9,819.6	-289.1	879.9	710.6	169.33	5.196		
20,400.0	10,686.7	20,334.0	10,712.7	85.3	85.9	-91.63	-9,919.6	-288.5	879.9	708.8	171.04	5.144		
20,500.0	10,686.8	20,434.0	10,712.8	86.1	86.8	-91.63	-10,019.6	-287.8	879.9	707.1	172.75	5.093		
20,600.0	10,686.9	20,534.0	10,712.9	87.0	87.6	-91.63	-10,119.6	-287.2	879.9	705.4	174.46	5.044		
20,693.5	10,687.0	20,627.5	10,713.0	87.8	88.4	-91.63	-10,213.1	-286.6	879.9	703.8	176.06	4.998		
20,694.3	10,687.0	20,628.2	10,713.0	87.8	88.4	-91.63	-10,213.9	-286.6	879.9	703.8	176.07	4.997		

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 #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #706H	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	Offset		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
	0.0	0.0	0.0	0.0	3.0	3.0	-90.52	-2.2	-250.0	250.1			
	100.0	100.0	97.0	97.0	3.0	3.0	-90.52	-2.2	-250.0	250.0	244.0	6.00	41.655
	200.0	200.0	197.0	197.0	3.0	3.0	-90.52	-2.2	-250.0	250.0	244.0	6.04	41.407
	300.0	300.0	297.0	297.0	3.0	3.1	-90.52	-2.2	-250.0	250.0	243.9	6.12	40.872
	400.0	400.0	397.0	397.0	3.0	3.2	-90.52	-2.2	-250.0	250.0	243.8	6.24	40.092
	500.0	500.0	497.0	497.0	3.1	3.4	-90.52	-2.2	-250.0	250.0	243.6	6.39	39.120
	600.0	600.0	597.0	597.0	3.1	3.6	-90.52	-2.2	-250.0	250.0	243.5	6.58	38.011
	700.0	700.0	697.0	697.0	3.1	3.8	-90.52	-2.2	-250.0	250.0	243.2	6.79	36.813
	800.0	800.0	797.0	797.0	3.2	4.0	-90.52	-2.2	-250.0	250.0	243.0	7.03	35.571
	900.0	900.0	897.0	897.0	3.2	4.2	-90.52	-2.2	-250.0	250.0	242.8	7.29	34.315
	1,000.0	1,000.0	997.0	997.0	3.2	4.5	-90.52	-2.2	-250.0	250.0	242.5	7.56	33.071
	1,100.0	1,100.0	1,097.0	1,097.0	3.3	4.8	-90.52	-2.2	-250.0	250.0	242.2	7.85	31.856
	1,200.0	1,200.0	1,197.0	1,197.0	3.4	5.0	-90.52	-2.2	-250.0	250.0	241.9	8.15	30.681
	1,300.0	1,300.0	1,297.0	1,297.0	3.4	5.3	-90.52	-2.2	-250.0	250.0	241.6	8.46	29.553
	1,400.0	1,400.0	1,397.0	1,397.0	3.5	5.6	-90.52	-2.2	-250.0	250.0	241.3	8.78	28.476
	1,500.0	1,500.0	1,497.0	1,497.0	3.5	5.9	-90.52	-2.2	-250.0	250.0	240.9	9.11	27.450
	1,600.0	1,600.0	1,597.0	1,597.0	3.6	6.3	-90.52	-2.2	-250.0	250.0	240.6	9.44	26.477
	1,700.0	1,700.0	1,697.0	1,697.0	3.7	6.6	-90.52	-2.2	-250.0	250.0	240.3	9.78	25.554
	1,800.0	1,800.0	1,797.0	1,797.0	3.8	6.9	-90.52	-2.2	-250.0	250.0	239.9	10.13	24.680
	1,900.0	1,900.0	1,897.0	1,897.0	3.9	7.2	-90.52	-2.2	-250.0	250.0	239.6	10.48	23.853
	2,000.0	2,000.0	1,997.0	1,997.0	3.9	7.5	-90.52	-2.2	-250.0	250.0	239.2	10.84	23.070
	2,100.0	2,100.0	2,097.0	2,097.0	4.0	7.9	-90.52	-2.2	-250.0	250.0	238.8	11.20	22.330
	2,200.0	2,200.0	2,197.0	2,197.0	4.1	8.2	-90.52	-2.2	-250.0	250.0	238.5	11.56	21.628
	2,300.0	2,300.0	2,297.0	2,297.0	4.2	8.5	-90.52	-2.2	-250.0	250.0	238.1	11.93	20.964
	2,400.0	2,400.0	2,397.0	2,397.0	4.3	8.9	-90.52	-2.2	-250.0	250.0	237.7	12.30	20.334
	2,500.0	2,500.0	2,497.0	2,497.0	4.4	9.2	-90.52	-2.2	-250.0	250.0	237.4	12.67	19.737
	2,600.0	2,600.0	2,605.9	2,605.9	4.5	9.6	8.02	-1.8	-248.1	246.6	233.5	13.06	18.879
	2,700.0	2,699.8	2,714.2	2,714.0	4.5	9.9	8.57	-0.5	-242.2	236.0	222.5	13.44	17.559
	2,759.0	2,758.7	2,776.0	2,775.5	4.5	10.1	9.09	0.7	-237.1	226.4	212.8	13.66	16.580
	2,800.0	2,799.5	2,816.3	2,815.7	4.5	10.3	9.47	1.5	-233.6	219.2	205.4	13.81	15.873
	2,900.0	2,899.1	2,914.7	2,913.7	4.5	10.6	10.52	3.5	-224.9	201.7	187.5	14.19	14.207
	3,000.0	2,998.7	3,013.0	3,011.6	4.6	10.9	11.76	5.5	-216.3	184.2	169.6	14.59	12.625
	3,100.0	3,098.3	3,111.4	3,109.6	4.6	11.3	13.26	7.5	-207.6	166.8	151.8	14.99	11.125
	3,200.0	3,197.8	3,209.8	3,207.6	4.6	11.6	15.11	9.5	-198.9	149.5	134.1	15.41	9.703
	3,300.0	3,297.4	3,308.1	3,305.5	4.7	11.9	17.43	11.5	-190.3	132.4	116.6	15.84	8.361
	3,400.0	3,397.0	3,406.5	3,403.5	4.7	12.3	20.43	13.5	-181.6	115.6	99.3	16.29	7.098
	3,500.0	3,496.6	3,504.9	3,501.5	4.8	12.6	24.43	15.5	-173.0	99.3	82.5	16.77	5.920
	3,600.0	3,596.2	3,603.3	3,599.5	4.8	13.0	29.97	17.5	-164.3	83.5	66.3	17.28	4.835
	3,700.0	3,695.8	3,701.6	3,697.4	4.9	13.3	37.92	19.5	-155.6	68.9	51.1	17.83	3.866
	3,800.0	3,795.4	3,800.0	3,795.4	4.9	13.6	49.70	21.5	-147.0	56.3	37.9	18.42	3.057
	3,900.0	3,895.0	3,898.4	3,893.4	5.0	14.0	66.88	23.5	-138.3	47.3	28.3	18.96	2.493
	3,994.7	3,989.3	3,991.6	3,986.2	5.1	14.3	87.69	25.4	-130.1	44.1	24.8	19.27	2.288 CC, ES
	4,000.0	3,994.6	3,996.7	3,991.3	5.1	14.3	88.90	25.5	-129.7	44.1	24.8	19.27	2.288 SF
	4,100.0	4,094.2	4,095.1	4,089.3	5.1	14.7	110.57	27.5	-121.0	48.0	28.6	19.34	2.481
	4,200.0	4,193.8	4,193.5	4,187.3	5.2	15.0	127.15	29.5	-112.4	57.5	38.1	19.43	2.959
	4,300.0	4,293.4	4,291.9	4,285.2	5.3	15.3	138.44	31.5	-103.7	70.4	50.7	19.66	3.580
	4,400.0	4,392.9	4,390.2	4,383.2	5.4	15.7	146.08	33.5	-95.0	85.1	65.2	19.99	4.259
	4,500.0	4,492.5	4,488.6	4,481.2	5.4	16.0	151.42	35.5	-86.4	101.0	80.6	20.38	4.953
	4,600.0	4,592.1	4,587.0	4,579.1	5.5	16.4	155.30	37.5	-77.7	117.4	96.6	20.80	5.644
	4,700.0	4,691.7	4,685.3	4,677.1	5.6	16.7	158.22	39.5	-69.1	134.2	113.0	21.23	6.321
	4,800.0	4,791.3	4,783.7	4,775.1	5.7	17.1	160.48	41.5	-60.4	151.3	129.6	21.67	6.982

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 #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #706H	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
4,900.0	4,890.9	4,882.1	4,873.1	5.8	17.4	162.29		43.4	-51.7	168.6	146.5	22.12	7.622	
5,000.0	4,990.5	4,980.5	4,971.0	5.9	17.8	163.76		45.4	-43.1	186.0	163.4	22.57	8.242	
5,100.0	5,090.1	5,078.8	5,069.0	5.9	18.1	164.97		47.4	-34.4	203.5	180.5	23.02	8.841	
5,200.0	5,189.7	5,177.2	5,167.0	6.0	18.5	166.00		49.4	-25.8	221.1	197.6	23.47	9.419	
5,300.0	5,289.3	5,275.6	5,264.9	6.1	18.8	166.87		51.4	-17.1	238.7	214.8	23.93	9.977	
5,400.0	5,388.9	5,373.9	5,362.9	6.2	19.2	167.62		53.4	-8.4	256.4	232.0	24.38	10.515	
5,500.0	5,488.5	5,472.3	5,460.9	6.3	19.5	168.28		55.4	0.2	274.1	249.3	24.84	11.035	
5,600.0	5,588.0	5,570.7	5,558.8	6.4	19.9	168.86		57.4	8.9	291.9	266.6	25.30	11.536	
5,700.0	5,687.6	5,669.1	5,656.8	6.5	20.2	169.37		59.4	17.5	309.7	283.9	25.76	12.020	
5,800.0	5,787.2	5,767.4	5,754.8	6.6	20.6	169.82		61.4	26.2	327.5	301.2	26.22	12.488	
5,900.0	5,886.8	5,865.8	5,852.7	6.7	20.9	170.23		63.4	34.9	345.3	318.6	26.69	12.939	
6,000.0	5,986.4	5,964.2	5,950.7	6.8	21.3	170.60		65.4	43.5	363.1	336.0	27.15	13.375	
6,100.0	6,086.0	6,062.5	6,048.7	6.9	21.6	170.93		67.4	52.2	381.0	353.4	27.61	13.796	
6,200.0	6,185.6	6,160.9	6,146.7	7.0	22.0	171.24		69.4	60.8	398.8	370.7	28.08	14.203	
6,300.0	6,285.2	6,259.3	6,244.6	7.1	22.3	171.51		71.4	69.5	416.7	388.1	28.55	14.597	
6,400.0	6,384.8	6,357.7	6,342.6	7.2	22.7	171.77		73.4	78.2	434.6	405.6	29.01	14.978	
6,500.0	6,484.4	6,456.0	6,440.6	7.3	23.0	172.00		75.4	86.8	452.5	423.0	29.48	15.347	
6,600.0	6,584.0	6,554.4	6,538.5	7.4	23.4	172.22		77.4	95.5	470.4	440.4	29.95	15.703	
6,700.0	6,683.6	6,652.8	6,636.5	7.5	23.7	172.42		79.4	104.1	488.3	457.8	30.42	16.049	
6,800.0	6,783.1	6,751.1	6,734.5	7.6	24.1	172.61		81.4	112.8	506.2	475.3	30.89	16.384	
6,900.0	6,882.7	6,849.5	6,832.4	7.7	24.4	172.78		83.4	121.5	524.1	492.7	31.36	16.709	
7,000.0	6,982.3	6,947.9	6,930.4	7.9	24.8	172.94		85.4	130.1	542.0	510.1	31.84	17.024	
7,100.0	7,081.9	7,046.3	7,028.4	8.0	25.1	173.10		87.4	138.8	559.9	527.6	32.31	17.329	
7,200.0	7,181.5	7,144.6	7,126.3	8.1	25.5	173.24		89.3	147.4	577.8	545.0	32.78	17.625	
7,300.0	7,281.1	7,243.0	7,224.3	8.2	25.9	173.37		91.3	156.1	595.7	562.5	33.26	17.913	
7,400.0	7,380.7	7,341.4	7,322.3	8.3	26.2	173.50		93.3	164.8	613.7	579.9	33.73	18.192	
7,500.0	7,480.3	7,439.7	7,420.3	8.4	26.6	173.62		95.3	173.4	631.6	597.4	34.21	18.463	
7,600.0	7,579.9	7,538.1	7,518.2	8.5	26.9	173.73		97.3	182.1	649.5	614.8	34.68	18.727	
7,700.0	7,679.5	7,636.5	7,616.2	8.6	27.3	173.84		99.3	190.7	667.5	632.3	35.16	18.983	
7,800.0	7,779.1	7,734.9	7,714.2	8.8	27.6	173.94		101.3	199.4	685.4	649.8	35.64	19.232	
7,900.0	7,878.6	7,833.2	7,812.1	8.9	28.0	174.03		103.3	208.1	703.3	667.2	36.12	19.475	
8,000.0	7,978.2	7,931.6	7,910.1	9.0	28.3	174.12		105.3	216.7	721.3	684.7	36.59	19.710	
8,100.0	8,077.8	8,030.0	8,008.1	9.1	28.7	174.21		107.3	225.4	739.2	702.1	37.07	19.940	
8,200.0	8,177.4	8,128.3	8,106.0	9.2	29.0	174.29		109.3	234.0	757.2	719.6	37.55	20.163	
8,300.0	8,277.0	8,226.7	8,204.0	9.3	29.4	174.37		111.3	242.7	775.1	737.1	38.03	20.380	
8,400.0	8,376.6	8,325.1	8,302.0	9.4	29.8	174.45		113.3	251.4	793.0	754.5	38.51	20.592	
8,500.0	8,476.2	8,423.5	8,399.9	9.6	30.1	174.52		115.3	260.0	811.0	772.0	38.99	20.798	
8,600.0	8,575.8	8,521.8	8,497.9	9.7	30.5	174.59		117.3	268.7	828.9	789.5	39.47	20.999	
8,700.0	8,675.4	8,620.2	8,595.9	9.8	30.8	174.65		119.3	277.3	846.9	806.9	39.96	21.196	
8,800.0	8,775.0	8,718.6	8,693.9	9.9	31.2	174.72		121.3	286.0	864.8	824.4	40.44	21.387	
8,900.0	8,874.6	8,816.9	8,791.8	10.0	31.5	174.78		123.3	294.6	882.8	841.9	40.92	21.573	
9,000.0	8,974.2	8,915.3	8,889.8	10.2	31.9	174.83		125.3	303.3	900.7	859.3	41.40	21.755	
9,100.0	9,073.7	9,013.7	8,987.8	10.3	32.2	174.89		127.3	312.0	918.7	876.8	41.89	21.932	
9,200.0	9,173.3	9,112.1	9,085.7	10.4	32.6	174.94		129.3	320.6	936.7	894.3	42.37	22.106	
9,300.0	9,272.9	9,210.4	9,183.7	10.5	33.0	175.00		131.3	329.3	954.6	911.8	42.86	22.275	
9,400.0	9,372.5	9,308.8	9,281.7	10.6	33.3	175.04		133.3	337.9	972.6	929.2	43.34	22.440	
9,500.0	9,472.1	9,407.2	9,379.6	10.8	33.7	175.09		135.2	346.6	990.5	946.7	43.83	22.601	

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 #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #706H	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	-89.71	1.6	-317.8	317.8				
100.0	100.0	96.0	96.0	3.0	3.0	-89.71	1.6	-317.8	317.8	311.8	6.00	52.942	
200.0	200.0	196.0	196.0	3.0	3.0	-89.71	1.6	-317.8	317.8	311.7	6.04	52.631	
300.0	300.0	296.0	296.0	3.0	3.1	-89.71	1.6	-317.8	317.8	311.7	6.12	51.954	
400.0	400.0	396.0	396.0	3.0	3.2	-89.71	1.6	-317.8	317.8	311.6	6.24	50.966	
500.0	500.0	496.0	496.0	3.1	3.4	-89.71	1.6	-317.8	317.8	311.4	6.39	49.732	
600.0	600.0	596.0	596.0	3.1	3.6	-89.71	1.6	-317.8	317.8	311.2	6.58	48.324	
700.0	700.0	696.0	696.0	3.1	3.8	-89.71	1.6	-317.8	317.8	311.0	6.79	46.803	
800.0	800.0	796.0	796.0	3.2	4.0	-89.71	1.6	-317.8	317.8	310.8	7.03	45.223	
900.0	900.0	896.0	896.0	3.2	4.2	-89.71	1.6	-317.8	317.8	310.5	7.28	43.628	
1,000.0	1,000.0	996.0	996.0	3.2	4.5	-89.71	1.6	-317.8	317.8	310.2	7.56	42.047	
1,100.0	1,100.0	1,096.0	1,096.0	3.3	4.8	-89.71	1.6	-317.8	317.8	309.9	7.85	40.502	
1,200.0	1,200.0	1,196.0	1,196.0	3.4	5.0	-89.71	1.6	-317.8	317.8	309.6	8.15	39.008	
1,300.0	1,300.0	1,296.0	1,296.0	3.4	5.3	-89.71	1.6	-317.8	317.8	309.3	8.46	37.574	
1,400.0	1,400.0	1,396.0	1,396.0	3.5	5.6	-89.71	1.6	-317.8	317.8	309.0	8.78	36.203	
1,500.0	1,500.0	1,496.0	1,496.0	3.5	5.9	-89.71	1.6	-317.8	317.8	308.7	9.11	34.899	
1,600.0	1,600.0	1,596.0	1,596.0	3.6	6.3	-89.71	1.6	-317.8	317.8	308.3	9.44	33.661	
1,700.0	1,700.0	1,696.0	1,696.0	3.7	6.6	-89.71	1.6	-317.8	317.8	308.0	9.78	32.488	
1,800.0	1,800.0	1,796.0	1,796.0	3.8	6.9	-89.71	1.6	-317.8	317.8	307.7	10.13	31.377	
1,900.0	1,900.0	1,896.0	1,896.0	3.9	7.2	-89.71	1.6	-317.8	317.8	307.3	10.48	30.325	
2,000.0	2,000.0	1,996.0	1,996.0	3.9	7.5	-89.71	1.6	-317.8	317.8	307.0	10.83	29.330	
2,100.0	2,100.0	2,096.0	2,096.0	4.0	7.9	-89.71	1.6	-317.8	317.8	306.6	11.19	28.388	
2,200.0	2,200.0	2,196.0	2,196.0	4.1	8.2	-89.71	1.6	-317.8	317.8	306.2	11.56	27.496	
2,300.0	2,300.0	2,296.0	2,296.0	4.2	8.5	-89.71	1.6	-317.8	317.8	305.9	11.92	26.652	
2,400.0	2,400.0	2,396.0	2,396.0	4.3	8.9	-89.71	1.6	-317.8	317.8	305.5	12.29	25.851	
2,500.0	2,500.0	2,496.0	2,496.0	4.4	9.2	-89.71	1.6	-317.8	317.8	305.1	12.67	25.092	
2,600.0	2,600.0	2,596.0	2,596.0	4.5	9.6	8.71	1.6	-317.8	316.1	303.0	13.04	24.237	
2,700.0	2,699.8	2,695.8	2,695.8	4.5	9.9	8.87	1.6	-317.8	310.9	297.5	13.42	23.165	
2,759.0	2,758.7	2,754.7	2,754.7	4.5	10.1	9.02	1.6	-317.8	306.2	292.6	13.65	22.437	
2,800.0	2,799.5	2,795.5	2,795.5	4.5	10.2	9.13	1.6	-317.8	302.6	288.8	13.81	21.915	
2,900.0	2,899.1	2,895.1	2,895.1	4.5	10.6	9.41	1.6	-317.8	293.7	279.5	14.20	20.683	
3,000.0	2,998.7	2,994.7	2,994.7	4.6	10.9	9.71	1.6	-317.8	284.8	270.2	14.60	19.510	
3,100.0	3,098.3	3,094.3	3,094.3	4.6	11.3	10.03	1.6	-317.8	275.9	260.9	15.00	18.393	
3,200.0	3,197.8	3,193.8	3,193.8	4.6	11.6	10.37	1.6	-317.8	267.0	251.6	15.41	17.330	
3,300.0	3,297.4	3,293.4	3,293.4	4.7	12.0	10.73	1.6	-317.8	258.1	242.3	15.82	16.316	
3,400.0	3,397.0	3,393.0	3,393.0	4.7	12.3	11.11	1.6	-317.8	249.2	233.0	16.24	15.350	
3,500.0	3,496.6	3,492.6	3,492.6	4.8	12.6	11.53	1.6	-317.8	240.4	223.7	16.66	14.430	
3,600.0	3,596.2	3,592.2	3,592.2	4.8	13.0	11.97	1.6	-317.8	231.5	214.4	17.08	13.552	
3,700.0	3,695.8	3,691.8	3,691.8	4.9	13.3	12.46	1.6	-317.8	222.7	205.2	17.52	12.714	
3,800.0	3,795.4	3,791.4	3,791.4	4.9	13.7	12.98	1.6	-317.8	213.9	195.9	17.95	11.915	
3,900.0	3,895.0	3,891.0	3,891.0	5.0	14.0	13.54	1.6	-317.8	205.1	186.7	18.39	11.153	
4,000.0	3,994.6	3,990.6	3,990.6	5.1	14.4	14.16	1.6	-317.8	196.3	177.5	18.83	10.424	
4,100.0	4,094.2	4,090.2	4,090.2	5.1	14.7	14.83	1.6	-317.8	187.6	168.3	19.28	9.729	
4,200.0	4,193.8	4,189.8	4,189.8	5.2	15.1	15.57	1.6	-317.8	178.9	159.1	19.73	9.064	
4,300.0	4,293.4	4,289.4	4,289.4	5.3	15.4	16.39	1.6	-317.8	170.2	150.0	20.19	8.430	
4,400.0	4,392.9	4,388.9	4,388.9	5.4	15.8	17.29	1.6	-317.8	161.5	140.9	20.65	7.823	
4,500.0	4,492.5	4,488.5	4,488.5	5.4	16.1	18.30	1.6	-317.8	152.9	131.8	21.11	7.244	
4,600.0	4,592.1	4,588.1	4,588.1	5.5	16.5	19.42	1.6	-317.8	144.4	122.8	21.58	6.691	
4,700.0	4,691.7	4,687.7	4,687.7	5.6	16.8	20.69	1.6	-317.8	135.9	113.9	22.05	6.163	
4,800.0	4,791.3	4,787.3	4,787.3	5.7	17.2	22.12	1.6	-317.8	127.5	105.0	22.53	5.659	
4,900.0	4,890.9	4,886.9	4,886.9	5.8	17.5	23.75	1.6	-317.8	119.2	96.2	23.01	5.180	

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 #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #706H	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	4,990.5	4,986.5	4,986.5	5.9	17.9	25.63		1.6	-317.8	111.0	87.5	23.49	4.723	
5,100.0	5,090.1	5,086.1	5,086.1	5.9	18.2	27.81		1.6	-317.8	102.9	78.9	23.98	4.290	
5,200.0	5,189.7	5,185.7	5,185.7	6.0	18.6	30.34		1.6	-317.8	95.0	70.5	24.47	3.881	
5,300.0	5,289.3	5,285.3	5,285.3	6.1	19.0	33.33		1.6	-317.8	87.3	62.3	24.97	3.497	
5,400.0	5,388.9	5,384.9	5,384.9	6.2	19.3	36.89		1.6	-317.8	79.9	54.5	25.46	3.139	
5,500.0	5,488.5	5,484.5	5,484.5	6.3	19.7	41.15		1.6	-317.8	72.9	46.9	25.94	2.809	
5,600.0	5,588.0	5,582.4	5,582.4	6.4	20.0	46.69		2.7	-318.2	67.4	41.0	26.40	2.552	
5,700.0	5,687.6	5,681.8	5,681.7	6.5	20.4	53.93		5.7	-319.4	64.5	37.7	26.83	2.404	
5,800.0	5,787.2	5,781.4	5,781.2	6.6	20.7	61.72		8.7	-320.6	62.8	35.6	27.21	2.307	
5,889.7	5,876.6	5,870.8	5,870.6	6.7	21.0	68.96		11.4	-321.7	62.3	34.8	27.51	2.265 CC	
5,900.0	5,886.8	5,881.0	5,880.8	6.7	21.1	69.79		11.7	-321.9	62.3	34.8	27.54	2.262 ES, SF	
6,000.0	5,986.4	5,980.6	5,980.3	6.8	21.4	77.83		14.8	-323.1	63.0	35.2	27.81	2.267	
6,100.0	6,086.0	6,080.2	6,079.9	6.9	21.8	85.53		17.8	-324.3	65.0	36.9	28.06	2.317	
6,200.0	6,185.6	6,179.8	6,179.5	7.0	22.1	92.67		20.8	-325.5	68.1	39.8	28.30	2.405	
6,300.0	6,285.2	6,279.4	6,279.0	7.1	22.5	99.10		23.8	-326.7	72.1	43.5	28.56	2.525	
6,400.0	6,384.8	6,379.0	6,378.6	7.2	22.8	104.80		26.8	-327.9	76.9	48.1	28.84	2.668	
6,500.0	6,484.4	6,478.6	6,478.1	7.3	23.2	109.78		29.9	-329.2	82.4	53.3	29.15	2.828	
6,600.0	6,584.0	6,578.2	6,577.7	7.4	23.5	114.11		32.9	-330.4	88.5	59.0	29.50	3.000	
6,700.0	6,683.6	6,677.8	6,677.2	7.5	23.9	117.87		35.9	-331.6	95.0	65.1	29.87	3.181	
6,800.0	6,783.1	6,777.4	6,776.8	7.6	24.2	121.14		38.9	-332.8	101.8	71.6	30.26	3.366	
6,900.0	6,882.7	6,877.0	6,876.3	7.7	24.6	124.00		41.9	-334.0	109.0	78.3	30.67	3.553	
7,000.0	6,982.3	6,976.6	6,975.9	7.9	24.9	126.49		45.0	-335.2	116.4	85.3	31.09	3.742	
7,100.0	7,081.9	7,076.3	7,075.4	8.0	25.3	128.69		48.0	-336.4	123.9	92.4	31.53	3.930	
7,200.0	7,181.5	7,175.9	7,175.0	8.1	25.7	130.63		51.0	-337.7	131.6	99.7	31.97	4.117	
7,300.0	7,281.1	7,275.5	7,274.6	8.2	26.0	132.35		54.0	-338.9	139.5	107.1	32.42	4.302	
7,400.0	7,380.7	7,375.1	7,374.1	8.3	26.4	133.89		57.0	-340.1	147.5	114.6	32.88	4.485	
7,500.0	7,480.3	7,474.7	7,473.7	8.4	26.7	135.27		60.1	-341.3	155.5	122.2	33.34	4.665	
7,600.0	7,579.9	7,574.3	7,573.2	8.5	27.1	136.52		63.1	-342.5	163.7	129.9	33.81	4.842	
7,700.0	7,679.5	7,673.9	7,672.8	8.6	27.4	137.64		66.1	-343.7	171.9	137.6	34.27	5.016	
7,800.0	7,779.1	7,773.5	7,772.3	8.8	27.8	138.66		69.1	-345.0	180.2	145.5	34.74	5.187	
7,900.0	7,878.6	7,873.1	7,871.9	8.9	28.1	139.60		72.1	-346.2	188.5	153.3	35.21	5.354	
8,000.0	7,978.2	7,972.7	7,971.4	9.0	28.5	140.45		75.2	-347.4	196.9	161.2	35.68	5.518	
8,100.0	8,077.8	8,072.3	8,071.0	9.1	28.8	141.24		78.2	-348.6	205.3	169.2	36.15	5.679	
8,200.0	8,177.4	8,171.9	8,170.5	9.2	29.2	141.96		81.2	-349.8	213.8	177.1	36.63	5.836	
8,300.0	8,277.0	8,271.5	8,270.1	9.3	29.5	142.62		84.2	-351.0	222.3	185.1	37.10	5.990	
8,400.0	8,376.6	8,371.2	8,369.7	9.4	29.9	143.24		87.2	-352.2	230.8	193.2	37.58	6.141	
8,500.0	8,476.2	8,470.8	8,469.2	9.6	30.3	143.82		90.3	-353.5	239.3	201.2	38.06	6.288	
8,600.0	8,575.8	8,570.4	8,568.8	9.7	30.6	144.35		93.3	-354.7	247.9	209.3	38.53	6.432	
8,700.0	8,675.4	8,670.0	8,668.3	9.8	31.0	144.85		96.3	-355.9	256.4	217.4	39.01	6.574	
8,800.0	8,775.0	8,769.6	8,767.9	9.9	31.3	145.32		99.3	-357.1	265.0	225.5	39.49	6.712	
8,900.0	8,874.6	8,869.2	8,867.4	10.0	31.7	145.75		102.4	-358.3	273.6	233.7	39.97	6.847	
9,000.0	8,974.2	8,968.8	8,967.0	10.2	32.0	146.16		105.4	-359.5	282.3	241.8	40.44	6.979	
9,100.0	9,073.7	9,068.4	9,066.5	10.3	32.4	146.55		108.4	-360.8	290.9	250.0	40.92	7.109	
9,200.0	9,173.3	9,168.0	9,166.1	10.4	32.7	146.91		111.4	-362.0	299.6	258.2	41.40	7.235	
9,300.0	9,272.9	9,267.6	9,265.6	10.5	33.1	147.26		114.4	-363.2	308.2	266.3	41.88	7.359	
9,400.0	9,372.5	9,367.2	9,365.2	10.6	33.5	147.58		117.5	-364.4	316.9	274.5	42.36	7.481	
9,500.0	9,472.1	9,466.8	9,464.7	10.8	33.8	147.89		120.5	-365.6	325.6	282.7	42.84	7.599	
9,600.0	9,571.7	9,566.4	9,564.3	10.9	34.2	148.18		123.5	-366.8	334.3	290.9	43.32	7.716	
9,700.0	9,671.3	9,666.0	9,663.9	11.0	34.5	148.46		126.5	-368.0	343.0	299.2	43.80	7.830	
9,800.0	9,770.9	9,765.7	9,763.4	11.1	34.9	148.72		129.5	-369.3	351.7	307.4	44.29	7.941	
9,900.0	9,870.5	9,865.3	9,863.0	11.3	35.2	148.97		132.6	-370.5	360.4	315.6	44.77	8.050	

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 #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #706H	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
10,000.0	9,970.1	9,964.9	9,962.5	11.4	35.6	149.21	135.6	-371.7	369.1	323.9	45.25	8.158	
10,100.0	10,069.7	10,064.5	10,062.1	11.5	35.9	149.44	138.6	-372.9	377.8	332.1	45.73	8.262	
10,164.6	10,134.0	10,128.8	10,126.4	11.6	36.2	149.58	140.5	-373.7	383.5	337.4	46.04	8.329	
10,200.0	10,169.2	10,164.0	10,161.5	11.6	36.3	172.28	141.6	-374.1	387.5	341.4	46.17	8.393	
10,250.0	10,218.4	10,213.1	10,210.6	11.6	36.5	-174.27	143.1	-374.7	396.6	350.2	46.36	8.555	
10,300.0	10,266.8	10,261.3	10,258.8	11.6	36.7	-168.21	144.6	-375.3	409.4	362.9	46.54	8.797	
10,350.0	10,314.0	10,308.2	10,305.6	11.6	36.8	-164.87	146.0	-375.9	426.1	379.3	46.72	9.119	
10,400.0	10,359.5	10,353.3	10,350.8	11.6	37.0	-162.74	147.4	-376.4	446.4	399.5	46.90	9.517	
10,450.0	10,403.2	10,396.5	10,393.9	11.7	37.1	-161.22	148.7	-377.0	470.3	423.2	47.08	9.989	
10,500.0	10,444.6	10,437.3	10,434.7	11.7	37.3	-159.98	149.9	-377.5	497.7	450.5	47.26	10.532	
10,550.0	10,483.4	10,475.5	10,472.8	11.7	37.4	-158.79	151.1	-377.9	528.5	481.0	47.43	11.141	
10,600.0	10,519.3	10,510.6	10,508.0	11.8	37.5	-157.50	152.1	-378.3	562.3	514.7	47.61	11.812	
10,650.0	10,552.1	10,542.6	10,540.0	11.9	37.7	-155.95	153.1	-378.7	599.1	551.4	47.78	12.541	
10,700.0	10,581.4	10,571.1	10,568.5	11.9	37.8	-153.94	154.0	-379.1	638.6	590.7	47.93	13.322	
10,750.0	10,607.2	10,596.0	10,593.3	12.0	37.8	-151.22	154.7	-379.4	680.4	632.3	48.08	14.151	
10,800.0	10,629.1	10,616.9	10,614.2	12.2	37.9	-147.41	155.3	-379.6	724.3	676.1	48.22	15.022	
10,850.0	10,647.1	10,633.9	10,631.2	12.3	38.0	-141.87	155.9	-379.9	769.9	721.6	48.33	15.929	
10,900.0	10,660.9	10,646.7	10,643.9	12.4	38.0	-133.52	156.3	-380.0	816.9	768.5	48.43	16.868	
10,950.0	10,670.5	10,655.2	10,652.5	12.6	38.1	-120.71	156.5	-380.1	864.9	816.4	48.50	17.832	
11,000.0	10,675.9	10,659.4	10,656.7	12.8	38.1	-101.90	156.6	-380.2	913.5	864.9	48.55	18.816	
11,035.6	10,677.0	10,659.7	10,657.0	12.9	38.1	-85.68	156.6	-380.2	948.3	899.7	48.57	19.525	
11,100.0	10,677.1	12,007.3	11,435.0	13.1	40.9	-144.48	-652.8	-381.4	967.8	918.5	49.24	19.656	
11,200.0	10,677.2	12,099.2	11,435.0	13.5	41.0	-142.31	-744.6	-380.5	992.5	942.7	49.83	19.916	

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 #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #706H	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' @ 3187.0usft (Nabors 893)

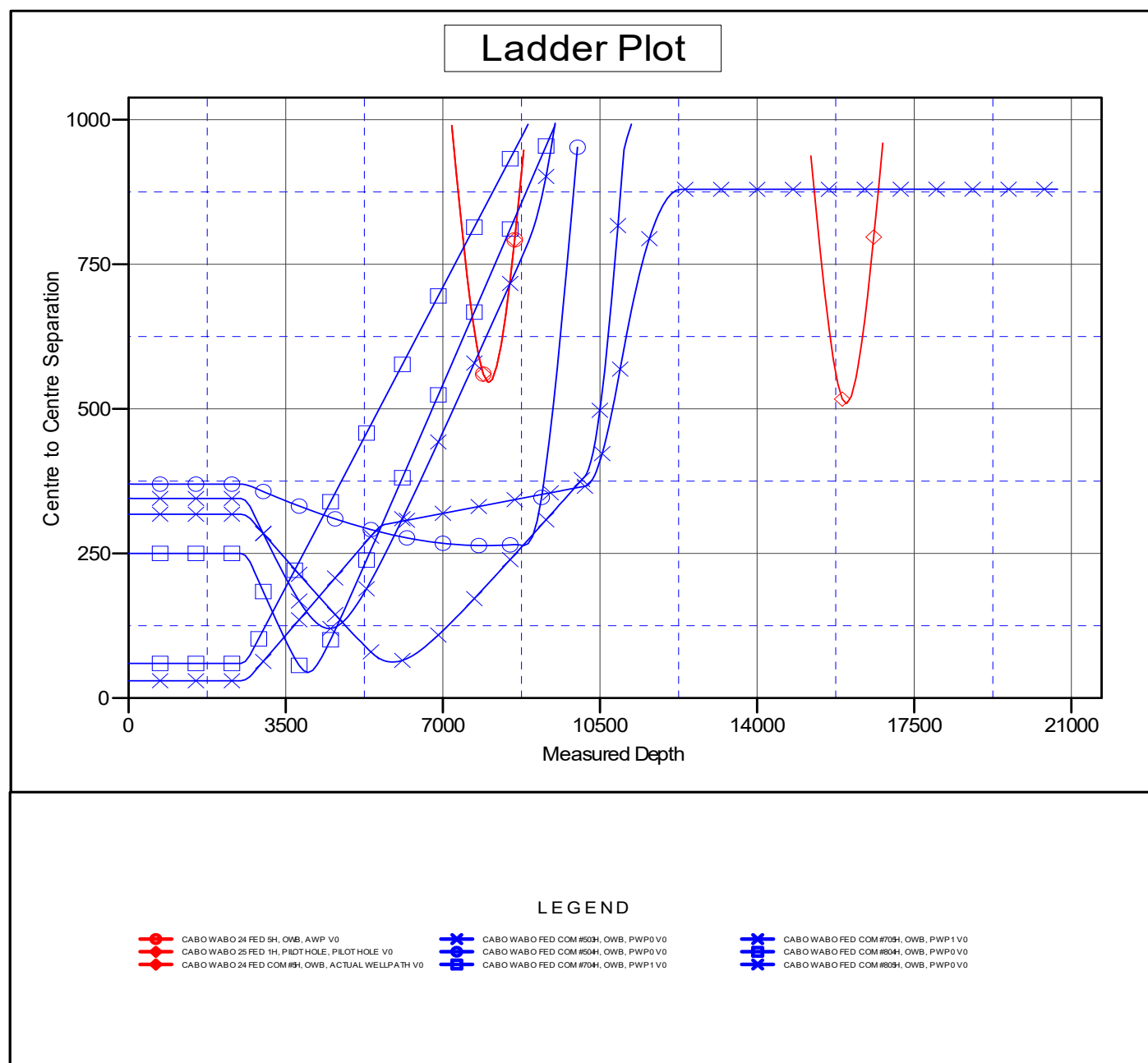
Offset Depths are relative to Offset Datum

Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: CABO WABO FED COM #706H

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

5/19/2020 9:07:51AM

Page 23

COMPASS 5000.15 Build 91E

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #706H	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' @ 3187.0usft (Nabors 893)

Offset Depths are relative to Offset Datum

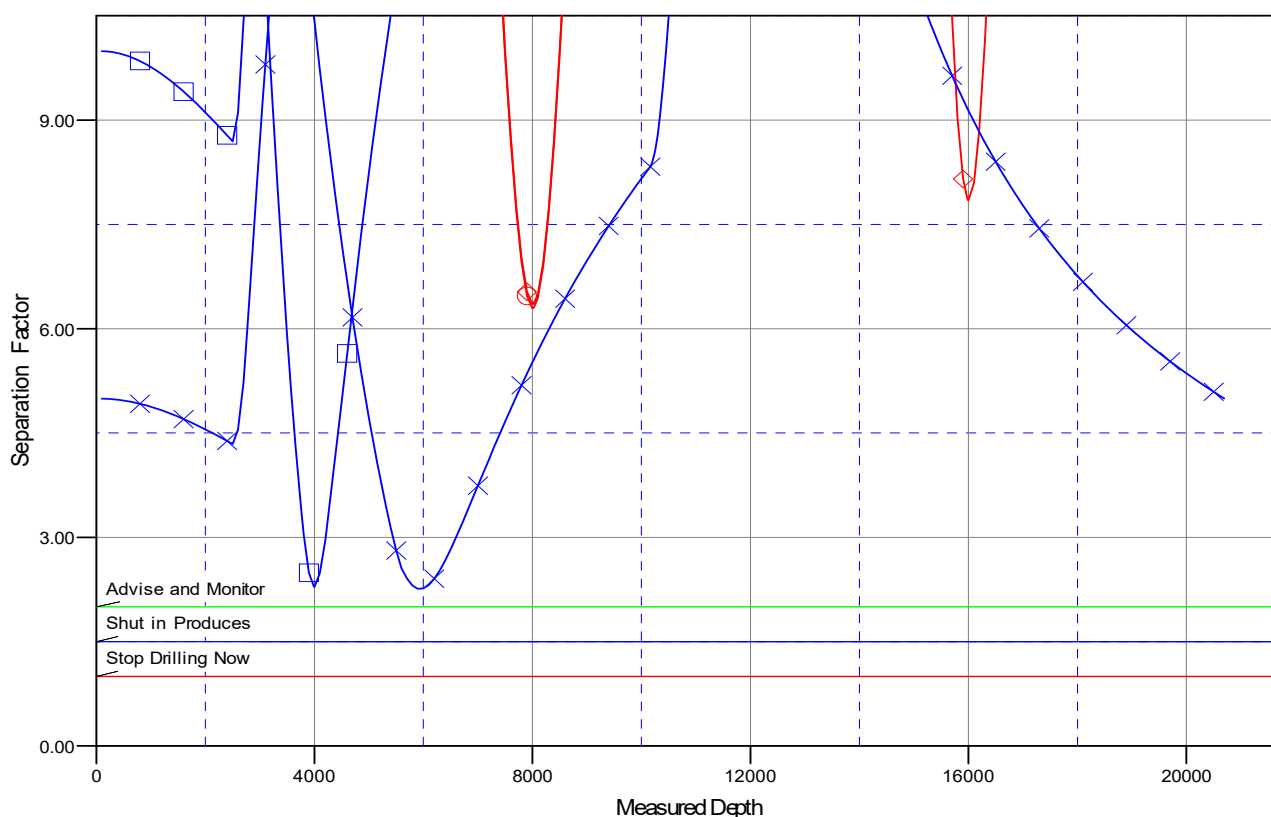
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: CABO WABO FED COM #706H

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 24 FED 5H, OWB, AWP V0
 CABO WABO 25 FED 1H, PILOT HOLE, PILOT HOLE V0
 CABO WABO 24 FED COM #71, OWB, ACTUAL WELLPATH V0

CABO WABO FED COM #603H, OWB, PWP0 V0
 CABO WABO FED COM #604H, OWB, PWP0 V0
 CABO WABO FED COM #704H, OWB, PWP1 V0

CABO WABO FED COM #705H, OWB, PWP1 V0
 CABO WABO FED COM #804H, OWB, PWP0 V0
 CABO WABO FED COM #805H, OWB, PWP0 V0

DELAWARE BASIN WEST

ATLAS PROSPECT (NM-E)

CABO WABO FEDERAL PROJECT (ATLAS 2529)

CABO WABO FED COM #706H

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 #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Well:	CABO WABO FED COM #706H	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 #706H			
Well Position	+N/-S	0.0 usft	Northing:	408,351.91 usft
	+E/-W	0.0 usft	Easting:	621,559.85 usft
Position Uncertainty		3.0 usft	Wellhead Elevation:	usft
			Latitude:	32° 7' 19.441 N
			Longitude:	103° 56' 26.442 W
			Ground Level:	3,160.0 usft

Wellbore	OWB
-----------------	-----

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	5/19/2020	6.83	59.79	47,508.64703017

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 (°)
	10,687.0	0.0	0.0	186.51

Survey Tool Program	Date	5/19/2020		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	10,164.0	PWP1 (OWB)	Standard Keeper 104	Standard Wireline Keeper ver 1.0.4
10,164.0	20,693.3	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 #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Well:	CABO WABO FED COM #706H	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	261.63	2,600.0	-0.3	-1.7	0.4	2.00	2.00	0.00
2,700.0	4.00	261.63	2,699.8	-1.0	-6.9	1.8	2.00	2.00	0.00
2,759.0	5.18	261.63	2,758.7	-1.7	-11.6	3.0	2.00	2.00	0.00
Start 7405.6 hold at 2759.0 MD									
2,800.0	5.18	261.63	2,799.5	-2.2	-15.2	4.0	0.00	0.00	0.00
2,900.0	5.18	261.63	2,899.1	-3.6	-24.2	6.3	0.00	0.00	0.00
3,000.0	5.18	261.63	2,998.7	-4.9	-33.1	8.6	0.00	0.00	0.00
3,100.0	5.18	261.63	3,098.3	-6.2	-42.0	10.9	0.00	0.00	0.00
3,200.0	5.18	261.63	3,197.8	-7.5	-51.0	13.2	0.00	0.00	0.00
3,300.0	5.18	261.63	3,297.4	-8.8	-59.9	15.5	0.00	0.00	0.00
3,400.0	5.18	261.63	3,397.0	-10.1	-68.8	17.9	0.00	0.00	0.00
3,500.0	5.18	261.63	3,496.6	-11.4	-77.8	20.2	0.00	0.00	0.00
3,600.0	5.18	261.63	3,596.2	-12.8	-86.7	22.5	0.00	0.00	0.00
3,700.0	5.18	261.63	3,695.8	-14.1	-95.6	24.8	0.00	0.00	0.00
3,800.0	5.18	261.63	3,795.4	-15.4	-104.6	27.1	0.00	0.00	0.00
3,900.0	5.18	261.63	3,895.0	-16.7	-113.5	29.5	0.00	0.00	0.00
4,000.0	5.18	261.63	3,994.6	-18.0	-122.4	31.8	0.00	0.00	0.00
4,100.0	5.18	261.63	4,094.2	-19.3	-131.4	34.1	0.00	0.00	0.00
4,200.0	5.18	261.63	4,193.8	-20.6	-140.3	36.4	0.00	0.00	0.00
4,300.0	5.18	261.63	4,293.4	-22.0	-149.2	38.7	0.00	0.00	0.00
4,400.0	5.18	261.63	4,392.9	-23.3	-158.2	41.1	0.00	0.00	0.00
4,500.0	5.18	261.63	4,492.5	-24.6	-167.1	43.4	0.00	0.00	0.00
4,600.0	5.18	261.63	4,592.1	-25.9	-176.0	45.7	0.00	0.00	0.00
4,700.0	5.18	261.63	4,691.7	-27.2	-185.0	48.0	0.00	0.00	0.00
4,800.0	5.18	261.63	4,791.3	-28.5	-193.9	50.3	0.00	0.00	0.00
4,900.0	5.18	261.63	4,890.9	-29.8	-202.8	52.6	0.00	0.00	0.00
5,000.0	5.18	261.63	4,990.5	-31.2	-211.8	55.0	0.00	0.00	0.00
5,100.0	5.18	261.63	5,090.1	-32.5	-220.7	57.3	0.00	0.00	0.00
5,200.0	5.18	261.63	5,189.7	-33.8	-229.6	59.6	0.00	0.00	0.00
5,300.0	5.18	261.63	5,289.3	-35.1	-238.6	61.9	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Well:	CABO WABO FED COM #706H	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	5.18	261.63	5,388.9	-36.4	-247.5	64.2	0.00	0.00	0.00
5,500.0	5.18	261.63	5,488.5	-37.7	-256.4	66.6	0.00	0.00	0.00
5,600.0	5.18	261.63	5,588.0	-39.0	-265.4	68.9	0.00	0.00	0.00
5,700.0	5.18	261.63	5,687.6	-40.4	-274.3	71.2	0.00	0.00	0.00
5,800.0	5.18	261.63	5,787.2	-41.7	-283.2	73.5	0.00	0.00	0.00
5,900.0	5.18	261.63	5,886.8	-43.0	-292.2	75.8	0.00	0.00	0.00
6,000.0	5.18	261.63	5,986.4	-44.3	-301.1	78.1	0.00	0.00	0.00
6,100.0	5.18	261.63	6,086.0	-45.6	-310.0	80.5	0.00	0.00	0.00
6,200.0	5.18	261.63	6,185.6	-46.9	-319.0	82.8	0.00	0.00	0.00
6,300.0	5.18	261.63	6,285.2	-48.2	-327.9	85.1	0.00	0.00	0.00
6,400.0	5.18	261.63	6,384.8	-49.6	-336.8	87.4	0.00	0.00	0.00
6,500.0	5.18	261.63	6,484.4	-50.9	-345.8	89.7	0.00	0.00	0.00
6,600.0	5.18	261.63	6,584.0	-52.2	-354.7	92.1	0.00	0.00	0.00
6,700.0	5.18	261.63	6,683.6	-53.5	-363.6	94.4	0.00	0.00	0.00
6,800.0	5.18	261.63	6,783.1	-54.8	-372.5	96.7	0.00	0.00	0.00
6,900.0	5.18	261.63	6,882.7	-56.1	-381.5	99.0	0.00	0.00	0.00
7,000.0	5.18	261.63	6,982.3	-57.4	-390.4	101.3	0.00	0.00	0.00
7,100.0	5.18	261.63	7,081.9	-58.8	-399.3	103.7	0.00	0.00	0.00
7,200.0	5.18	261.63	7,181.5	-60.1	-408.3	106.0	0.00	0.00	0.00
7,300.0	5.18	261.63	7,281.1	-61.4	-417.2	108.3	0.00	0.00	0.00
7,400.0	5.18	261.63	7,380.7	-62.7	-426.1	110.6	0.00	0.00	0.00
7,500.0	5.18	261.63	7,480.3	-64.0	-435.1	112.9	0.00	0.00	0.00
7,600.0	5.18	261.63	7,579.9	-65.3	-444.0	115.2	0.00	0.00	0.00
7,700.0	5.18	261.63	7,679.5	-66.6	-452.9	117.6	0.00	0.00	0.00
7,800.0	5.18	261.63	7,779.1	-68.0	-461.9	119.9	0.00	0.00	0.00
7,900.0	5.18	261.63	7,878.6	-69.3	-470.8	122.2	0.00	0.00	0.00
8,000.0	5.18	261.63	7,978.2	-70.6	-479.7	124.5	0.00	0.00	0.00
8,100.0	5.18	261.63	8,077.8	-71.9	-488.7	126.8	0.00	0.00	0.00
8,200.0	5.18	261.63	8,177.4	-73.2	-497.6	129.2	0.00	0.00	0.00
8,300.0	5.18	261.63	8,277.0	-74.5	-506.5	131.5	0.00	0.00	0.00
8,400.0	5.18	261.63	8,376.6	-75.8	-515.5	133.8	0.00	0.00	0.00
8,500.0	5.18	261.63	8,476.2	-77.2	-524.4	136.1	0.00	0.00	0.00
8,600.0	5.18	261.63	8,575.8	-78.5	-533.3	138.4	0.00	0.00	0.00
8,700.0	5.18	261.63	8,675.4	-79.8	-542.3	140.7	0.00	0.00	0.00
8,800.0	5.18	261.63	8,775.0	-81.1	-551.2	143.1	0.00	0.00	0.00
8,900.0	5.18	261.63	8,874.6	-82.4	-560.1	145.4	0.00	0.00	0.00
9,000.0	5.18	261.63	8,974.2	-83.7	-569.1	147.7	0.00	0.00	0.00
9,100.0	5.18	261.63	9,073.7	-85.0	-578.0	150.0	0.00	0.00	0.00
9,200.0	5.18	261.63	9,173.3	-86.4	-586.9	152.3	0.00	0.00	0.00
9,300.0	5.18	261.63	9,272.9	-87.7	-595.9	154.7	0.00	0.00	0.00
9,400.0	5.18	261.63	9,372.5	-89.0	-604.8	157.0	0.00	0.00	0.00
9,500.0	5.18	261.63	9,472.1	-90.3	-613.7	159.3	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Well:	CABO WABO FED COM #706H	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	5.18	261.63	9,571.7	-91.6	-622.7	161.6	0.00	0.00	0.00
9,700.0	5.18	261.63	9,671.3	-92.9	-631.6	163.9	0.00	0.00	0.00
9,800.0	5.18	261.63	9,770.9	-94.2	-640.5	166.3	0.00	0.00	0.00
9,900.0	5.18	261.63	9,870.5	-95.6	-649.5	168.6	0.00	0.00	0.00
10,000.0	5.18	261.63	9,970.1	-96.9	-658.4	170.9	0.00	0.00	0.00
10,100.0	5.18	261.63	10,069.7	-98.2	-667.3	173.2	0.00	0.00	0.00
10,164.6	5.18	261.63	10,134.0	-99.0	-673.1	174.7	0.00	0.00	0.00
Start DLS 10.00 TFO -56.79									
10,200.0	7.71	238.98	10,169.2	-100.5	-676.7	176.6	10.00	7.14	-64.00
10,300.0	16.93	219.36	10,266.8	-115.2	-691.7	192.9	10.00	9.22	-19.63
10,400.0	26.71	213.61	10,359.5	-145.3	-713.5	225.2	10.00	9.78	-5.75
10,500.0	36.60	210.80	10,444.6	-189.7	-741.2	272.5	10.00	9.89	-2.81
10,600.0	46.54	209.06	10,519.3	-247.2	-774.2	333.4	10.00	9.93	-1.74
10,700.0	56.49	207.82	10,581.4	-316.0	-811.4	405.9	10.00	9.95	-1.24
10,800.0	66.45	206.84	10,629.1	-393.9	-851.7	488.0	10.00	9.96	-0.98
10,900.0	76.42	205.99	10,660.9	-478.7	-893.8	577.0	10.00	9.97	-0.84
11,000.0	86.39	205.22	10,675.9	-567.8	-936.4	670.3	10.00	9.97	-0.77
11,035.6	89.94	204.95	10,677.0	-600.0	-951.5	704.0	10.00	9.97	-0.76
Start DLS 2.00 TFO -90.01									
11,100.0	89.94	203.66	10,677.1	-658.7	-978.0	765.3	2.00	0.00	-2.00
11,200.0	89.94	201.66	10,677.2	-751.0	-1,016.5	861.4	2.00	0.00	-2.00
11,300.0	89.94	199.66	10,677.3	-844.5	-1,051.8	958.4	2.00	0.00	-2.00
11,400.0	89.94	197.66	10,677.4	-939.3	-1,083.8	1,056.1	2.00	0.00	-2.00
11,500.0	89.94	195.66	10,677.5	-1,035.1	-1,112.5	1,154.5	2.00	0.00	-2.00
11,600.0	89.94	193.66	10,677.6	-1,131.8	-1,137.8	1,253.5	2.00	0.00	-2.00
11,700.0	89.94	191.66	10,677.7	-1,229.4	-1,159.7	1,352.9	2.00	0.00	-2.00
11,800.0	89.94	189.66	10,677.8	-1,327.6	-1,178.2	1,452.7	2.00	0.00	-2.00
11,900.0	89.94	187.66	10,677.9	-1,426.5	-1,193.3	1,552.6	2.00	0.00	-2.00
12,000.0	89.94	185.66	10,678.0	-1,525.8	-1,204.9	1,652.6	2.00	0.00	-2.00
12,100.0	89.94	183.66	10,678.1	-1,625.5	-1,213.0	1,752.5	2.00	0.00	-2.00
12,200.0	89.94	181.66	10,678.2	-1,725.4	-1,217.6	1,852.3	2.00	0.00	-2.00
12,300.0	89.94	179.66	10,678.3	-1,825.4	-1,218.8	1,951.8	2.00	0.00	-2.00
12,301.1	89.94	179.64	10,678.3	-1,826.4	-1,218.8	1,952.8	2.00	0.00	-2.00
Start 8392.4 hold at 12301.1 MD									
12,400.0	89.94	179.64	10,678.4	-1,925.4	-1,218.2	2,051.1	0.00	0.00	0.00
12,500.0	89.94	179.64	10,678.5	-2,025.4	-1,217.5	2,150.3	0.00	0.00	0.00
12,600.0	89.94	179.64	10,678.6	-2,125.4	-1,216.9	2,249.6	0.00	0.00	0.00
12,700.0	89.94	179.64	10,678.7	-2,225.4	-1,216.3	2,348.9	0.00	0.00	0.00
12,800.0	89.94	179.64	10,678.9	-2,325.3	-1,215.7	2,448.2	0.00	0.00	0.00
12,900.0	89.94	179.64	10,679.0	-2,425.3	-1,215.0	2,547.5	0.00	0.00	0.00
13,000.0	89.94	179.64	10,679.1	-2,525.3	-1,214.4	2,646.8	0.00	0.00	0.00
13,100.0	89.94	179.64	10,679.2	-2,625.3	-1,213.8	2,746.0	0.00	0.00	0.00
13,200.0	89.94	179.64	10,679.3	-2,725.3	-1,213.2	2,845.3	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Well:	CABO WABO FED COM #706H	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)
13,300.0	89.94	179.64	10,679.4	-2,825.3	-1,212.5	2,944.6	0.00	0.00	0.00
13,400.0	89.94	179.64	10,679.5	-2,925.3	-1,211.9	3,043.9	0.00	0.00	0.00
13,500.0	89.94	179.64	10,679.6	-3,025.3	-1,211.3	3,143.2	0.00	0.00	0.00
13,600.0	89.94	179.64	10,679.7	-3,125.3	-1,210.6	3,242.4	0.00	0.00	0.00
13,700.0	89.94	179.64	10,679.8	-3,225.3	-1,210.0	3,341.7	0.00	0.00	0.00
13,800.0	89.94	179.64	10,679.9	-3,325.3	-1,209.4	3,441.0	0.00	0.00	0.00
13,900.0	89.94	179.64	10,680.0	-3,425.3	-1,208.8	3,540.3	0.00	0.00	0.00
14,000.0	89.94	179.64	10,680.1	-3,525.3	-1,208.1	3,639.6	0.00	0.00	0.00
14,100.0	89.94	179.64	10,680.2	-3,625.3	-1,207.5	3,738.9	0.00	0.00	0.00
14,200.0	89.94	179.64	10,680.3	-3,725.3	-1,206.9	3,838.1	0.00	0.00	0.00
14,300.0	89.94	179.64	10,680.4	-3,825.3	-1,206.3	3,937.4	0.00	0.00	0.00
14,400.0	89.94	179.64	10,680.5	-3,925.3	-1,205.6	4,036.7	0.00	0.00	0.00
14,500.0	89.94	179.64	10,680.6	-4,025.3	-1,205.0	4,136.0	0.00	0.00	0.00
14,600.0	89.94	179.64	10,680.7	-4,125.3	-1,204.4	4,235.3	0.00	0.00	0.00
14,700.0	89.94	179.64	10,680.8	-4,225.3	-1,203.7	4,334.5	0.00	0.00	0.00
14,800.0	89.94	179.64	10,680.9	-4,325.3	-1,203.1	4,433.8	0.00	0.00	0.00
14,900.0	89.94	179.64	10,681.0	-4,425.3	-1,202.5	4,533.1	0.00	0.00	0.00
15,000.0	89.94	179.64	10,681.1	-4,525.3	-1,201.9	4,632.4	0.00	0.00	0.00
15,100.0	89.94	179.64	10,681.2	-4,625.3	-1,201.2	4,731.7	0.00	0.00	0.00
15,200.0	89.94	179.64	10,681.3	-4,725.3	-1,200.6	4,831.0	0.00	0.00	0.00
15,300.0	89.94	179.64	10,681.4	-4,825.3	-1,200.0	4,930.2	0.00	0.00	0.00
15,400.0	89.94	179.64	10,681.5	-4,925.3	-1,199.3	5,029.5	0.00	0.00	0.00
15,500.0	89.94	179.64	10,681.6	-5,025.3	-1,198.7	5,128.8	0.00	0.00	0.00
15,600.0	89.94	179.64	10,681.7	-5,125.3	-1,198.1	5,228.1	0.00	0.00	0.00
15,700.0	89.94	179.64	10,681.8	-5,225.3	-1,197.5	5,327.4	0.00	0.00	0.00
15,800.0	89.94	179.64	10,681.9	-5,325.3	-1,196.8	5,426.6	0.00	0.00	0.00
15,900.0	89.94	179.64	10,682.1	-5,425.3	-1,196.2	5,525.9	0.00	0.00	0.00
16,000.0	89.94	179.64	10,682.2	-5,525.3	-1,195.6	5,625.2	0.00	0.00	0.00
16,100.0	89.94	179.64	10,682.3	-5,625.3	-1,195.0	5,724.5	0.00	0.00	0.00
16,200.0	89.94	179.64	10,682.4	-5,725.3	-1,194.3	5,823.8	0.00	0.00	0.00
16,300.0	89.94	179.64	10,682.5	-5,825.3	-1,193.7	5,923.1	0.00	0.00	0.00
16,400.0	89.94	179.64	10,682.6	-5,925.3	-1,193.1	6,022.3	0.00	0.00	0.00
16,500.0	89.94	179.64	10,682.7	-6,025.3	-1,192.4	6,121.6	0.00	0.00	0.00
16,600.0	89.94	179.64	10,682.8	-6,125.3	-1,191.8	6,220.9	0.00	0.00	0.00
16,700.0	89.94	179.64	10,682.9	-6,225.3	-1,191.2	6,320.2	0.00	0.00	0.00
16,800.0	89.94	179.64	10,683.0	-6,325.3	-1,190.6	6,419.5	0.00	0.00	0.00
16,900.0	89.94	179.64	10,683.1	-6,425.3	-1,189.9	6,518.7	0.00	0.00	0.00
17,000.0	89.94	179.64	10,683.2	-6,525.3	-1,189.3	6,618.0	0.00	0.00	0.00
17,100.0	89.94	179.64	10,683.3	-6,625.3	-1,188.7	6,717.3	0.00	0.00	0.00
17,200.0	89.94	179.64	10,683.4	-6,725.3	-1,188.1	6,816.6	0.00	0.00	0.00
17,300.0	89.94	179.64	10,683.5	-6,825.3	-1,187.4	6,915.9	0.00	0.00	0.00
17,400.0	89.94	179.64	10,683.6	-6,925.3	-1,186.8	7,015.2	0.00	0.00	0.00
17,500.0	89.94	179.64	10,683.7	-7,025.3	-1,186.2	7,114.4	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Well:	CABO WABO FED COM #706H	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)
17,600.0	89.94	179.64	10,683.8	-7,125.3	-1,185.5	7,213.7	0.00	0.00	0.00
17,700.0	89.94	179.64	10,683.9	-7,225.3	-1,184.9	7,313.0	0.00	0.00	0.00
17,800.0	89.94	179.64	10,684.0	-7,325.2	-1,184.3	7,412.3	0.00	0.00	0.00
17,900.0	89.94	179.64	10,684.1	-7,425.2	-1,183.7	7,511.6	0.00	0.00	0.00
18,000.0	89.94	179.64	10,684.2	-7,525.2	-1,183.0	7,610.9	0.00	0.00	0.00
18,100.0	89.94	179.64	10,684.3	-7,625.2	-1,182.4	7,710.1	0.00	0.00	0.00
18,200.0	89.94	179.64	10,684.4	-7,725.2	-1,181.8	7,809.4	0.00	0.00	0.00
18,300.0	89.94	179.64	10,684.5	-7,825.2	-1,181.2	7,908.7	0.00	0.00	0.00
18,400.0	89.94	179.64	10,684.6	-7,925.2	-1,180.5	8,008.0	0.00	0.00	0.00
18,500.0	89.94	179.64	10,684.7	-8,025.2	-1,179.9	8,107.3	0.00	0.00	0.00
18,600.0	89.94	179.64	10,684.8	-8,125.2	-1,179.3	8,206.5	0.00	0.00	0.00
18,700.0	89.94	179.64	10,684.9	-8,225.2	-1,178.6	8,305.8	0.00	0.00	0.00
18,800.0	89.94	179.64	10,685.0	-8,325.2	-1,178.0	8,405.1	0.00	0.00	0.00
18,900.0	89.94	179.64	10,685.1	-8,425.2	-1,177.4	8,504.4	0.00	0.00	0.00
19,000.0	89.94	179.64	10,685.3	-8,525.2	-1,176.8	8,603.7	0.00	0.00	0.00
19,100.0	89.94	179.64	10,685.4	-8,625.2	-1,176.1	8,703.0	0.00	0.00	0.00
19,200.0	89.94	179.64	10,685.5	-8,725.2	-1,175.5	8,802.2	0.00	0.00	0.00
19,300.0	89.94	179.64	10,685.6	-8,825.2	-1,174.9	8,901.5	0.00	0.00	0.00
19,400.0	89.94	179.64	10,685.7	-8,925.2	-1,174.2	9,000.8	0.00	0.00	0.00
19,500.0	89.94	179.64	10,685.8	-9,025.2	-1,173.6	9,100.1	0.00	0.00	0.00
19,600.0	89.94	179.64	10,685.9	-9,125.2	-1,173.0	9,199.4	0.00	0.00	0.00
19,700.0	89.94	179.64	10,686.0	-9,225.2	-1,172.4	9,298.6	0.00	0.00	0.00
19,800.0	89.94	179.64	10,686.1	-9,325.2	-1,171.7	9,397.9	0.00	0.00	0.00
19,900.0	89.94	179.64	10,686.2	-9,425.2	-1,171.1	9,497.2	0.00	0.00	0.00
20,000.0	89.94	179.64	10,686.3	-9,525.2	-1,170.5	9,596.5	0.00	0.00	0.00
20,100.0	89.94	179.64	10,686.4	-9,625.2	-1,169.9	9,695.8	0.00	0.00	0.00
20,200.0	89.94	179.64	10,686.5	-9,725.2	-1,169.2	9,795.1	0.00	0.00	0.00
20,300.0	89.94	179.64	10,686.6	-9,825.2	-1,168.6	9,894.3	0.00	0.00	0.00
20,400.0	89.94	179.64	10,686.7	-9,925.2	-1,168.0	9,993.6	0.00	0.00	0.00
20,500.0	89.94	179.64	10,686.8	-10,025.2	-1,167.3	10,092.9	0.00	0.00	0.00
20,600.0	89.94	179.64	10,686.9	-10,125.2	-1,166.7	10,192.2	0.00	0.00	0.00
20,693.5	89.94	179.64	10,687.0	-10,218.7	-1,166.1	10,285.0	0.00	0.00	0.00
TD at 20693.5									

Concho Resources LLC

Survey Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3187.0usft (Nabors 893)
Well:	CABO WABO FED COM #706H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP1	Database:	edm

Design Targets

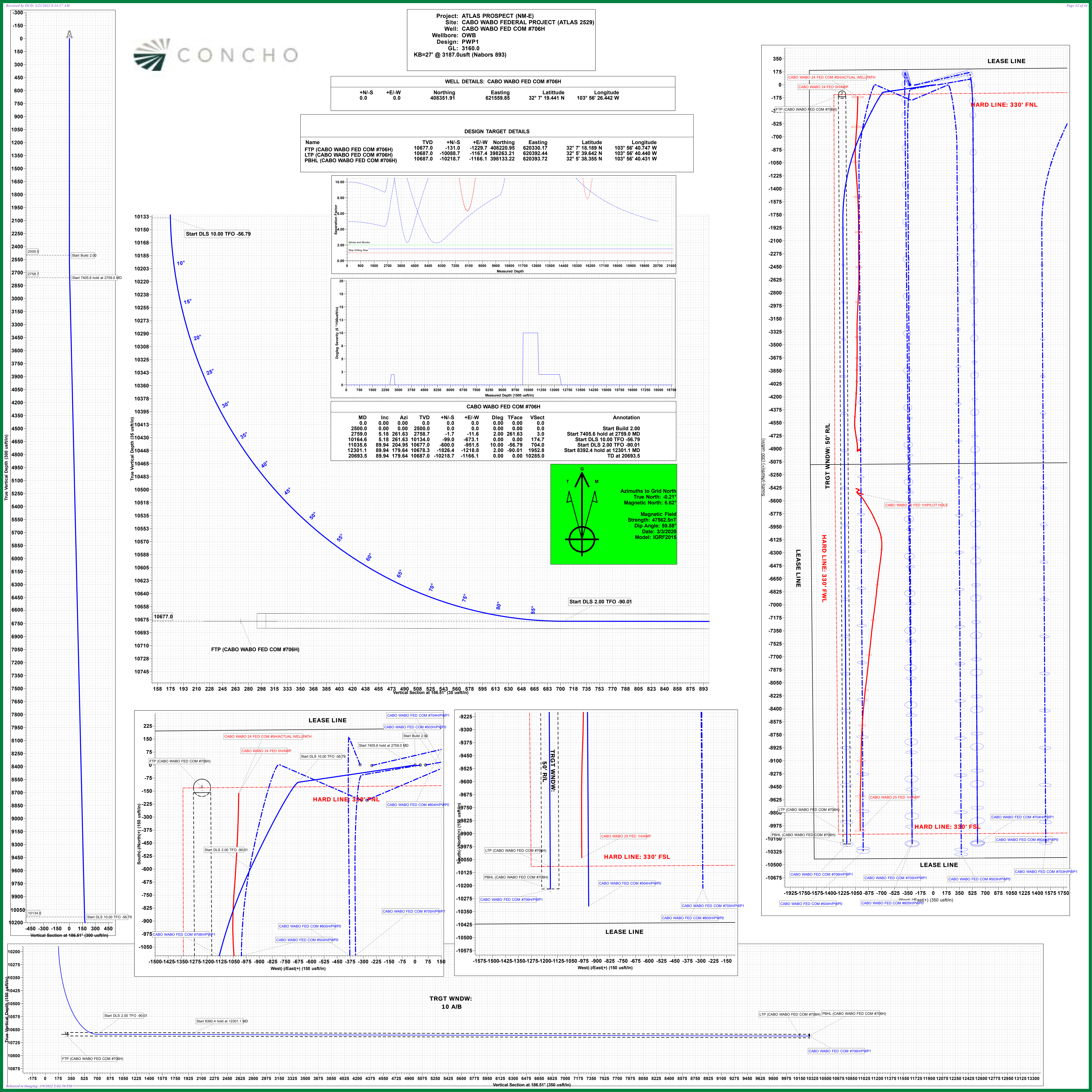
Target Name

- 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 461.6usft at 10769.9usft MD (10616.4 TVD, -369.6 N, -839.3 E) - Circle (radius 50.0)	0.00	0.01	10,677.0	-131.0	-1,229.7	408,220.95	620,330.17	32° 7' 18.189 N	103° 56' 40.747 W
LTP (CABO WABO FE - plan misses target center by 0.5usft at 20563.5usft MD (10686.9 TVD, -10088.7 N, -1166.9 E) - Point	0.00	0.00	10,687.0	-10,088.7	-1,167.4	398,263.21	620,392.44	32° 5' 39.642 N	103° 56' 40.440 W
PBHL (CABO WABO - plan hits target center - Rectangle (sides W100.0 H10,060.0 D20.0)	-0.06	359.64	10,687.0	-10,218.7	-1,166.1	398,133.22	620,393.72	32° 5' 38.355 N	103° 56' 40.431 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
2759	2759	-2	-12	Start 7405.6 hold at 2759.0 MD
10,165	10,134	-99	-673	Start DLS 10.00 TFO -56.79
11,036	10,677	-600	-952	Start DLS 2.00 TFO -90.01
12,301	10,678	-1826	-1219	Start 8392.4 hold at 12301.1 MD
20,694	10,687	-10,219	-1166	TD at 20693.5

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 82889

COMMENTS

Operator: COG PRODUCTION, LLC 600 W. Illinois Ave Midland, TX 79701	OGRID: 217955
	Action Number: 82889
	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

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

CONDITIONS

Action 82889

CONDITIONS

Operator: COG PRODUCTION, LLC 600 W. Illinois Ave Midland, TX 79701	OGRID: 217955
	Action Number: 82889
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

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