

Form 3160-5
(June 2019)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021**SUNDRY NOTICES AND REPORTS ON WELLS**
Do not use this form for proposals to drill or to re-enter an
abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well

☐ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

3a. Address

3b. Phone No. (include area code)

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

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

8. Well Name and No.

9. API Well No.

10. Field and Pool or Exploratory Area

11. Country or Parish, State

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

TYPE OF SUBMISSION	TYPE OF ACTION				
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off	
	☐ 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 / 1700 FWL / TWSP: 25S / RANGE: 29E / SECTION: 24 / LAT: 32.1221913 / LONG: -103.9410653 (TVD: 0 feet, MD: 0 feet)

PPP: NWNW / 330 FNL / 1310 FWL / TWSP: 25S / RANGE: 29E / SECTION: 24 / LAT: 32.1218558 / LONG: -103.9423255 (TVD: 10554 feet, MD: 10622 feet)

BHL: SWSW / 200 FSL / 1310 FWL / TWSP: 25S / RANGE: 29E / SECTION: 25 / LAT: 32.0941174 / LONG: -103.9422401 (TVD: 10713 feet, MD: 20628 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 30-015-47661		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 705H	
7 OGRID No. 217955		8 Operator Name COG PRODUCTION LLC			9 Elevation 3161'	

10 Surface Location

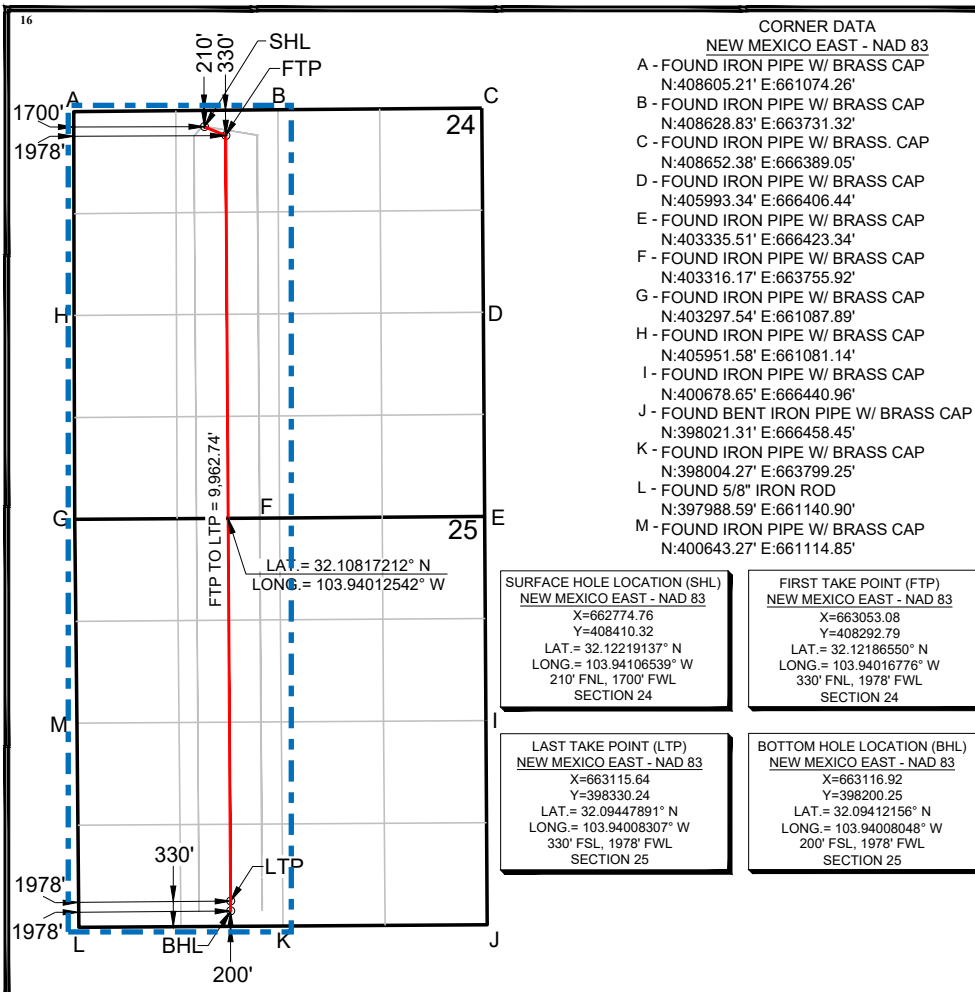
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	24	25-S	29-E		210'	NORTH	1700'	WEST	EDDY

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	1978'	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.



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.

Stan Wagner 10/11/2021
Signature Date

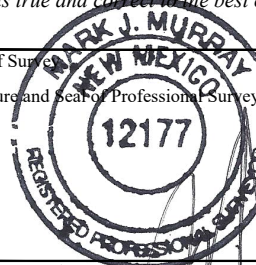
Stan Wagner
Printed Name

E-mail Address

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date of Survey
Signature and Seal of Professional Surveyor:



8/16/2021

Certificate Number

ConocoPhillips - Cabo Wabo Fed Com #705H

1. Geologic Formations

TVD of target	10,685' EOL	Pilot hole depth	NA
MD at TD:	20,725'	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	20,725	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
	1049	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.
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BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	x	Tested to:
9-7/8"	13-5/8"	5M	Annular	x	2500psi
			Blind Ram	x	5000psi
			Pipe Ram	x	
			Double Ram	x	
			Other*		
6-3/4"	13-5/8"	10M	5M Annular	x	5000psi
			Blind Ram	x	10000psi
			Pipe Ram	x	
			Double Ram	x	
			Other*		

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

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

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

ConocoPhillips - Cabo Wabo Fed Com #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
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6. Logging and Testing Procedures

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

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

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

8. Other Facets of Operation

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

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

DELAWARE BASIN WEST

ATLAS PROSPECT (NM-E)

CABO WABO FEDERAL PROJECT (ATLAS 2529)

CABO WABO FED COM #705H

OWB

PWP2

Anticollision Report

26 May, 2020

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #705H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

Reference	PWP2
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	Stations
Depth Range:	Unlimited
Results Limited by:	Maximum ellipse separation of 1,000.0 usft
Warning Levels Evaluated at:	2.00 Sigma
Error Model:	ISCWSA
Scan Method:	Closest Approach 3D
Error Surface:	Pedal Curve
Casing Method:	Not applied

Survey Tool Program		Date	5/26/2020		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	10,039.0	PWP2 (OWB)	Standard Keeper 104	Standard Wireline Keeper ver 1.0.4	
10,039.0	20,627.8	PWP2 (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
Offset Well - Wellbore - Design						
CABO WABO FEDERAL PROJECT (ATLAS 2529)						
CABO WABO 24 FED COM #5H - OWB - ACTUAL WEL	8,000.0	12,448.0	876.1	791.6	10.369	SF
CABO WABO 24 FED COM #5H - OWB - ACTUAL WEL	8,030.9	12,448.0	875.6	791.2	10.374	CC, ES
CABO WABO FED COM #503H - OWB - PWP0	6,100.0	6,105.8	78.4	63.6	5.322	SF
CABO WABO FED COM #503H - OWB - PWP0	6,195.0	6,199.6	76.8	62.5	5.363	CC, ES
CABO WABO FED COM #504H - OWB - PWP0	2,500.0	2,492.0	395.5	388.1	53.180	CC, ES
CABO WABO FED COM #504H - OWB - PWP0	9,500.0	9,115.8	785.8	763.0	34.477	SF
CABO WABO FED COM #701H - OWB - PWP1						Out of range
CABO WABO FED COM #702H - OWB - PWP2						Out of range
CABO WABO FED COM #703H - OWB - PWP1						Out of range
CABO WABO FED COM #704H - OWB - PWP1	2,500.0	2,500.0	30.0	23.1	4.350	CC, ES, SF
CABO WABO FED COM #706H - OWB - PWP1	2,500.0	2,499.0	30.0	23.1	4.344	CC, ES, SF
CABO WABO FED COM #803H - OWB - PWP0						Out of range
CABO WABO FED COM #804H - OWB - PWP0	5,629.5	5,637.5	60.3	32.4	2.164	CC, ES, SF
CABO WABO FED COM #805H - OWB - PWP0	9,339.2	9,318.8	195.9	152.6	4.529	CC
CABO WABO FED COM #805H - OWB - PWP0	9,500.0	9,479.2	196.3	152.3	4.466	ES
CABO WABO FED COM #805H - OWB - PWP0	20,628.6	21,568.4	727.1	561.8	4.398	SF

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						
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	+N/-S (usft)	+E/-W (usft)	(usft)	(usft)	(usft)		
7,600.0	7,594.1	12,448.0	7,868.4	8.7	79.0	0.60	-163.9	-1,047.8	975.9	894.3	81.60	11.959	
7,700.0	7,693.8	12,448.0	7,868.4	8.7	79.0	0.60	-163.9	-1,047.8	936.1	853.1	82.97	11.282	
7,800.0	7,793.5	12,448.0	7,868.4	8.8	79.0	0.60	-163.9	-1,047.8	905.5	821.6	83.95	10.786	
7,900.0	7,893.2	12,448.0	7,868.4	8.9	79.0	0.60	-163.9	-1,047.8	885.3	800.9	84.47	10.481	
8,000.0	7,992.9	12,448.0	7,868.4	8.9	79.0	0.60	-163.9	-1,047.8	876.1	791.6	84.50	10.369	SF
8,030.9	8,023.8	12,448.0	7,868.4	9.0	79.0	0.60	-163.9	-1,047.8	875.6	791.2	84.41	10.374	CC, ES
8,100.0	8,092.6	12,448.0	7,868.4	9.0	79.0	0.60	-163.9	-1,047.8	878.3	794.3	84.03	10.452	
8,200.0	8,192.3	12,448.0	7,868.4	9.1	79.0	0.60	-163.9	-1,047.8	891.8	808.7	83.12	10.729	
8,300.0	8,292.0	12,448.0	7,868.4	9.2	79.0	0.60	-163.9	-1,047.8	916.0	834.2	81.80	11.197	
8,400.0	8,391.7	12,448.0	7,868.4	9.2	79.0	0.60	-163.9	-1,047.8	950.2	870.0	80.20	11.848	

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 #705H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

Offset Design 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	
8,500.0	8,491.4	12,448.0	7,868.4	9.3	79.0	0.60	-163.9	-1,047.8	993.3	914.9	78.40	12.670	

Concho Resources LLC

Anticollision Report

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Reference Well:	CABO WABO FED COM #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

Offset Design 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	-123.23	-202.7	-309.5	370.1				
100.0	100.0	92.0	92.0	3.0	3.0	-123.23	-202.7	-309.5	370.0	364.0	6.00	61.662	
200.0	200.0	192.0	192.0	3.0	3.0	-123.23	-202.7	-309.5	370.0	364.0	6.00	61.614	
300.0	300.0	292.0	292.0	3.0	3.0	-123.23	-202.7	-309.5	370.0	364.0	6.02	61.507	
400.0	400.0	392.0	392.0	3.0	3.0	-123.23	-202.7	-309.5	370.0	364.0	6.03	61.342	
500.0	500.0	492.0	492.0	3.1	3.1	-123.23	-202.7	-309.5	370.0	363.9	6.05	61.121	
600.0	600.0	592.0	592.0	3.1	3.1	-123.23	-202.7	-309.5	370.0	363.9	6.08	60.846	
700.0	700.0	692.0	692.0	3.1	3.1	-123.23	-202.7	-309.5	370.0	363.9	6.11	60.518	
800.0	800.0	792.0	792.0	3.2	3.1	-123.23	-202.7	-309.5	370.0	363.8	6.15	60.141	
900.0	900.0	892.0	892.0	3.2	3.2	-123.23	-202.7	-309.5	370.0	363.8	6.20	59.716	
1,000.0	1,000.0	992.0	992.0	3.2	3.2	-123.23	-202.7	-309.5	370.0	363.7	6.24	59.248	
1,100.0	1,100.0	1,092.0	1,092.0	3.3	3.3	-123.23	-202.7	-309.5	370.0	363.7	6.30	58.740	
1,200.0	1,200.0	1,192.0	1,192.0	3.4	3.3	-123.23	-202.7	-309.5	370.0	363.6	6.36	58.195	
1,300.0	1,300.0	1,292.0	1,292.0	3.4	3.4	-123.23	-202.7	-309.5	370.0	363.6	6.42	57.617	
1,400.0	1,400.0	1,392.0	1,392.0	3.5	3.5	-123.23	-202.7	-309.5	370.0	363.5	6.49	57.008	
1,500.0	1,500.0	1,492.0	1,492.0	3.5	3.5	-123.23	-202.7	-309.5	370.0	363.4	6.56	56.373	
1,600.0	1,600.0	1,592.0	1,592.0	3.6	3.6	-123.23	-202.7	-309.5	370.0	363.4	6.64	55.716	
1,700.0	1,700.0	1,692.0	1,692.0	3.7	3.7	-123.23	-202.7	-309.5	370.0	363.3	6.72	55.038	
1,800.0	1,800.0	1,792.0	1,792.0	3.8	3.8	-123.23	-202.7	-309.5	370.0	363.2	6.81	54.345	
1,900.0	1,900.0	1,892.0	1,892.0	3.9	3.8	-123.23	-202.7	-309.5	370.0	363.1	6.90	53.638	
2,000.0	2,000.0	1,992.0	1,992.0	3.9	3.9	-123.23	-202.7	-309.5	370.0	363.0	6.99	52.920	
2,100.0	2,100.0	2,092.0	2,092.0	4.0	4.0	-123.23	-202.7	-309.5	370.0	362.9	7.09	52.195	
2,200.0	2,200.0	2,192.0	2,192.0	4.1	4.1	-123.23	-202.7	-309.5	370.0	362.8	7.19	51.464	
2,300.0	2,300.0	2,292.0	2,292.0	4.2	4.2	-123.23	-202.7	-309.5	370.0	362.7	7.29	50.730	
2,400.0	2,400.0	2,392.0	2,392.0	4.3	4.3	-123.23	-202.7	-309.5	370.0	362.6	7.40	49.995	
2,500.0	2,500.0	2,492.0	2,492.0	4.4	4.4	-123.23	-202.7	-309.5	370.0	362.5	7.51	49.261	
2,600.0	2,600.0	2,605.3	2,605.3	4.5	4.5	-123.28	-202.0	-307.7	368.3	360.7	7.64	48.194	
2,700.0	2,700.0	2,719.5	2,719.3	4.6	4.5	-123.46	-199.5	-301.8	362.8	355.0	7.79	46.566	
2,800.0	2,800.0	2,822.9	2,822.3	4.7	4.6	-123.72	-196.0	-293.6	354.3	346.4	7.94	44.624	
2,900.0	2,900.0	2,922.6	2,921.6	4.8	4.7	-123.99	-192.6	-285.6	345.8	337.7	8.09	42.717	
3,000.0	3,000.0	3,022.2	3,020.8	4.9	4.7	-124.28	-189.2	-277.6	337.2	329.0	8.25	40.858	
3,100.0	3,100.0	3,121.8	3,120.1	5.0	4.8	-124.57	-185.8	-269.6	328.7	320.2	8.42	39.048	
3,200.0	3,200.0	3,221.4	3,219.3	5.1	4.9	-124.89	-182.4	-261.6	320.1	311.5	8.59	37.288	
3,300.0	3,300.0	3,321.0	3,318.5	5.2	4.9	-125.22	-179.0	-253.7	311.6	302.8	8.76	35.579	
3,400.0	3,400.0	3,420.7	3,417.8	5.3	5.0	-125.56	-175.6	-245.7	303.1	294.2	8.94	33.920	
3,500.0	3,500.0	3,520.3	3,517.0	5.4	5.1	-125.93	-172.2	-237.7	294.6	285.5	9.12	32.311	
3,600.0	3,600.0	3,619.9	3,616.3	5.5	5.2	-126.32	-168.9	-229.7	286.1	276.8	9.30	30.751	
3,700.0	3,700.0	3,719.5	3,715.5	5.7	5.3	-126.74	-165.5	-221.7	277.6	268.1	9.49	29.240	
3,800.0	3,800.0	3,819.1	3,814.7	5.8	5.3	-127.18	-162.1	-213.7	269.2	259.5	9.69	27.778	
3,900.0	3,900.0	3,918.8	3,914.0	5.9	5.4	-127.65	-158.7	-205.7	260.7	250.8	9.89	26.363	
4,000.0	4,000.0	4,018.4	4,013.2	6.0	5.5	-128.15	-155.3	-197.7	252.3	242.2	10.09	24.994	
4,100.0	4,100.0	4,118.0	4,112.5	6.1	5.6	-128.68	-151.9	-189.7	243.9	233.6	10.30	23.671	
4,200.0	4,200.0	4,217.6	4,211.7	6.2	5.7	-129.26	-148.5	-181.7	235.5	225.0	10.52	22.393	
4,300.0	4,300.0	4,317.2	4,311.0	6.3	5.8	-129.87	-145.1	-173.7	227.2	216.4	10.74	21.158	
4,400.0	4,400.0	4,416.9	4,410.2	6.5	5.9	-130.53	-141.7	-165.7	218.8	207.9	10.96	19.965	
4,500.0	4,500.0	4,516.5	4,509.4	6.6	6.0	-131.25	-138.3	-157.7	210.5	199.3	11.19	18.814	
4,600.0	4,600.0	4,616.1	4,608.7	6.7	6.1	-132.02	-134.9	-149.8	202.3	190.8	11.43	17.703	
4,700.0	4,700.0	4,715.7	4,707.9	6.8	6.2	-132.86	-131.5	-141.8	194.0	182.4	11.67	16.632	
4,800.0	4,800.0	4,815.3	4,807.2	6.9	6.3	-133.77	-128.1	-133.8	185.9	174.0	11.91	15.600	
4,900.0	4,900.0	4,914.9	4,906.4	7.0	6.4	-134.77	-124.8	-125.8	177.7	165.6	12.17	14.607	
5,000.0	5,000.0	5,014.6	5,005.6	7.2	6.5	-135.86	-121.4	-117.8	169.7	157.2	12.43	13.651	

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 #705H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

Offset Design 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
5,100.0	5,100.0	5,114.2	5,104.9	7.3	6.6	-137.06	-118.0	-109.8	161.7	149.0	12.70	12.732	
5,200.0	5,200.0	5,213.8	5,204.1	7.4	6.7	-138.38	-114.6	-101.8	153.7	140.8	12.97	11.851	
5,300.0	5,300.0	5,313.4	5,303.4	7.5	6.8	-139.85	-111.2	-93.8	145.9	132.7	13.26	11.007	
5,400.0	5,400.0	5,413.0	5,402.6	7.6	6.9	-141.48	-107.8	-85.8	138.2	124.6	13.55	10.200	
5,500.0	5,500.0	5,512.7	5,501.8	7.8	7.0	-143.30	-104.4	-77.8	130.6	116.7	13.85	9.430	
5,600.0	5,600.0	5,612.1	5,600.9	7.8	7.1	-46.67	-101.0	-69.8	121.9	107.8	14.12	8.636	
5,700.0	5,699.8	5,711.2	5,699.6	7.9	7.2	-51.21	-97.6	-61.9	111.4	97.0	14.38	7.742	
5,722.3	5,722.1	5,733.2	5,721.5	7.9	7.2	-52.54	-96.9	-60.1	108.8	94.4	14.45	7.531	
5,800.0	5,799.5	5,809.8	5,797.9	7.9	7.3	-57.65	-94.3	-54.0	100.2	85.6	14.66	6.838	
5,900.0	5,899.2	5,908.5	5,896.2	7.9	7.4	-65.54	-90.9	-46.1	90.6	75.8	14.86	6.099	
6,000.0	5,998.9	6,007.2	5,994.4	7.9	7.5	-75.03	-87.6	-38.2	83.1	68.2	14.91	5.577	
6,100.0	6,098.6	6,105.8	6,092.7	8.0	7.6	-85.98	-84.2	-30.2	78.4	63.6	14.73	5.322 SF	
6,195.0	6,193.4	6,199.6	6,186.1	8.0	7.7	-97.23	-81.0	-22.7	76.8	62.5	14.33	5.363 CC, ES	
6,200.0	6,198.3	6,204.5	6,191.0	8.0	7.7	-97.83	-80.8	-22.3	76.8	62.5	14.30	5.373	
6,300.0	6,298.0	6,303.1	6,289.3	8.0	7.8	-109.62	-77.5	-14.4	78.7	65.0	13.74	5.727	
6,400.0	6,397.7	6,401.8	6,387.6	8.1	8.0	-120.45	-74.1	-6.5	83.8	70.5	13.24	6.328	
6,500.0	6,497.4	6,500.5	6,485.9	8.1	8.1	-129.78	-70.8	1.4	91.5	78.6	12.90	7.093	
6,600.0	6,597.1	6,599.1	6,584.2	8.2	8.2	-137.51	-67.4	9.3	101.3	88.5	12.75	7.945	
6,700.0	6,696.8	6,697.8	6,682.5	8.2	8.3	-143.81	-64.0	17.3	112.6	99.8	12.74	8.838	
6,800.0	6,796.5	6,796.5	6,780.7	8.2	8.4	-148.93	-60.7	25.2	125.0	112.2	12.82	9.747	
6,900.0	6,896.2	6,895.1	6,879.0	8.3	8.5	-153.10	-57.3	33.1	138.2	125.2	12.97	10.658	
7,000.0	6,995.9	6,993.8	6,977.3	8.3	8.6	-156.54	-54.0	41.0	152.0	138.9	13.15	11.564	
7,100.0	7,095.6	7,092.4	7,075.6	8.4	8.7	-159.40	-50.6	48.9	166.3	153.0	13.35	12.460	
7,200.0	7,195.3	7,191.1	7,173.9	8.5	8.9	-161.80	-47.2	56.8	180.9	167.4	13.56	13.344	
7,300.0	7,295.0	7,289.8	7,272.2	8.5	9.0	-163.85	-43.9	64.7	195.8	182.0	13.78	14.212	
7,400.0	7,394.7	7,388.4	7,370.5	8.6	9.1	-165.60	-40.5	72.7	210.9	196.9	14.00	15.065	
7,500.0	7,494.4	7,487.1	7,468.8	8.6	9.2	-167.12	-37.2	80.6	226.1	211.9	14.22	15.900	
7,600.0	7,594.1	7,585.8	7,567.0	8.7	9.3	-168.45	-33.8	88.5	241.5	227.1	14.45	16.718	
7,700.0	7,693.8	7,684.4	7,665.3	8.7	9.4	-169.62	-30.4	96.4	257.0	242.3	14.67	17.517	
7,800.0	7,793.5	7,783.1	7,763.6	8.8	9.6	-170.65	-27.1	104.3	272.6	257.7	14.90	18.299	
7,900.0	7,893.2	7,881.8	7,861.9	8.9	9.7	-171.58	-23.7	112.2	288.3	273.2	15.12	19.062	
8,000.0	7,992.9	7,980.4	7,960.2	8.9	9.8	-172.40	-20.4	120.2	304.0	288.7	15.35	19.806	
8,100.0	8,092.6	8,079.1	8,058.5	9.0	9.9	-173.15	-17.0	128.1	319.8	304.2	15.58	20.533	
8,200.0	8,192.3	8,177.7	8,156.8	9.1	10.0	-173.83	-13.6	136.0	335.7	319.9	15.80	21.241	
8,300.0	8,292.0	8,276.4	8,255.1	9.2	10.1	-174.44	-10.3	143.9	351.6	335.5	16.03	21.932	
8,400.0	8,391.7	8,375.1	8,353.3	9.2	10.3	-175.00	-6.9	151.8	367.5	351.2	16.26	22.605	
8,500.0	8,491.4	8,473.7	8,451.6	9.3	10.4	-175.52	-3.6	159.7	383.4	366.9	16.48	23.262	
8,600.0	8,591.1	8,572.3	8,549.9	9.4	10.5	-175.96	-0.4	167.7	399.4	382.7	16.70	23.914	
8,700.0	8,690.8	8,669.8	8,646.5	9.5	10.5	-174.87	-8.0	176.5	415.5	398.7	16.83	24.689	
8,800.0	8,790.5	8,762.0	8,735.4	9.5	10.5	-171.88	-30.1	186.2	432.8	415.8	17.00	25.452	
8,900.0	8,890.2	8,845.2	8,811.5	9.6	10.6	-167.81	-62.1	195.8	453.4	436.0	17.34	26.148	
9,000.0	8,989.9	8,917.7	8,873.4	9.7	10.6	-163.41	-98.7	204.7	479.6	461.7	17.95	26.717	
9,100.0	9,089.6	8,979.5	8,922.1	9.8	10.7	-159.20	-135.9	212.5	513.4	494.5	18.92	27.142	
9,200.0	9,189.3	9,031.7	8,959.9	9.9	10.7	-155.43	-171.3	219.2	555.5	535.3	20.19	27.518	
9,300.0	9,289.0	9,075.8	8,989.1	10.0	10.8	-152.19	-203.7	224.9	605.7	584.1	21.64	27.994	
9,400.0	9,388.7	9,113.0	9,011.8	10.0	10.9	-149.43	-232.8	229.7	663.4	640.3	23.13	28.682	
9,500.0	9,488.4	9,150.0	9,032.4	10.1	10.9	-146.71	-263.2	234.5	727.6	703.1	24.49	29.708	
9,600.0	9,588.1	9,171.5	9,043.5	10.2	10.9	-145.14	-281.4	237.2	797.1	771.2	25.89	30.783	
9,700.0	9,687.8	9,200.0	9,057.1	10.3	11.0	-143.11	-306.2	240.8	871.2	844.2	27.04	32.214	
9,800.0	9,787.5	9,215.0	9,063.7	10.4	11.0	-142.06	-319.5	242.7	948.9	920.7	28.19	33.667	

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 #705H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

Offset Design 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	-120.87	-202.9	-339.5	395.6				
100.0	100.0	92.0	92.0	3.0	3.0	-120.87	-202.9	-339.5	395.5	389.5	6.00	65.915	
200.0	200.0	192.0	192.0	3.0	3.0	-120.87	-202.9	-339.5	395.5	389.5	6.00	65.867	
300.0	300.0	292.0	292.0	3.0	3.0	-120.87	-202.9	-339.5	395.5	389.5	6.01	65.759	
400.0	400.0	392.0	392.0	3.0	3.0	-120.87	-202.9	-339.5	395.5	389.5	6.03	65.593	
500.0	500.0	492.0	492.0	3.1	3.1	-120.87	-202.9	-339.5	395.5	389.5	6.05	65.369	
600.0	600.0	592.0	592.0	3.1	3.1	-120.87	-202.9	-339.5	395.5	389.4	6.08	65.090	
700.0	700.0	692.0	692.0	3.1	3.1	-120.87	-202.9	-339.5	395.5	389.4	6.11	64.758	
800.0	800.0	792.0	792.0	3.2	3.1	-120.87	-202.9	-339.5	395.5	389.4	6.14	64.375	
900.0	900.0	892.0	892.0	3.2	3.2	-120.87	-202.9	-339.5	395.5	389.3	6.19	63.944	
1,000.0	1,000.0	992.0	992.0	3.2	3.2	-120.87	-202.9	-339.5	395.5	389.3	6.23	63.468	
1,100.0	1,100.0	1,092.0	1,092.0	3.3	3.3	-120.87	-202.9	-339.5	395.5	389.2	6.28	62.950	
1,200.0	1,200.0	1,192.0	1,192.0	3.4	3.3	-120.87	-202.9	-339.5	395.5	389.2	6.34	62.394	
1,300.0	1,300.0	1,292.0	1,292.0	3.4	3.4	-120.87	-202.9	-339.5	395.5	389.1	6.40	61.803	
1,400.0	1,400.0	1,392.0	1,392.0	3.5	3.5	-120.87	-202.9	-339.5	395.5	389.0	6.46	61.181	
1,500.0	1,500.0	1,492.0	1,492.0	3.5	3.5	-120.87	-202.9	-339.5	395.5	389.0	6.53	60.531	
1,600.0	1,600.0	1,592.0	1,592.0	3.6	3.6	-120.87	-202.9	-339.5	395.5	388.9	6.61	59.856	
1,700.0	1,700.0	1,692.0	1,692.0	3.7	3.7	-120.87	-202.9	-339.5	395.5	388.8	6.69	59.160	
1,800.0	1,800.0	1,792.0	1,792.0	3.8	3.8	-120.87	-202.9	-339.5	395.5	388.7	6.77	58.446	
1,900.0	1,900.0	1,892.0	1,892.0	3.9	3.8	-120.87	-202.9	-339.5	395.5	388.7	6.85	57.717	
2,000.0	2,000.0	1,992.0	1,992.0	3.9	3.9	-120.87	-202.9	-339.5	395.5	388.6	6.94	56.976	
2,100.0	2,100.0	2,092.0	2,092.0	4.0	4.0	-120.87	-202.9	-339.5	395.5	388.5	7.03	56.226	
2,200.0	2,200.0	2,192.0	2,192.0	4.1	4.1	-120.87	-202.9	-339.5	395.5	388.4	7.13	55.469	
2,300.0	2,300.0	2,292.0	2,292.0	4.2	4.2	-120.87	-202.9	-339.5	395.5	388.3	7.23	54.707	
2,400.0	2,400.0	2,392.0	2,392.0	4.3	4.3	-120.87	-202.9	-339.5	395.5	388.2	7.33	53.944	
2,500.0	2,500.0	2,492.0	2,492.0	4.4	4.4	-120.87	-202.9	-339.5	395.5	388.1	7.44	53.180 CC, ES	
2,600.0	2,600.0	2,585.1	2,585.1	4.5	4.5	-120.72	-202.4	-340.6	396.3	388.8	7.52	52.707	
2,700.0	2,700.0	2,677.5	2,677.3	4.6	4.5	-120.23	-200.8	-344.5	399.0	391.4	7.57	52.713	
2,800.0	2,800.0	2,771.1	2,770.7	4.7	4.6	-119.40	-197.9	-351.2	403.6	396.0	7.61	53.059	
2,900.0	2,900.0	2,870.7	2,869.9	4.8	4.6	-118.43	-194.4	-359.1	409.0	401.3	7.65	53.475	
3,000.0	3,000.0	2,970.3	2,969.2	4.9	4.7	-117.48	-191.0	-367.1	414.4	406.7	7.69	53.877	
3,100.0	3,100.0	3,069.9	3,068.4	5.0	4.8	-116.56	-187.5	-375.1	420.0	412.3	7.74	54.256	
3,200.0	3,200.0	3,169.6	3,167.7	5.1	4.8	-115.67	-184.1	-383.0	425.7	417.9	7.79	54.611	
3,300.0	3,300.0	3,269.2	3,266.9	5.2	4.9	-114.79	-180.6	-391.0	431.4	423.6	7.85	54.941	
3,400.0	3,400.0	3,368.8	3,366.1	5.3	5.0	-113.94	-177.2	-399.0	437.3	429.4	7.92	55.243	
3,500.0	3,500.0	3,468.4	3,465.4	5.4	5.1	-113.12	-173.7	-406.9	443.3	435.3	7.98	55.518	
3,600.0	3,600.0	3,568.0	3,564.6	5.5	5.1	-112.31	-170.3	-414.9	449.3	441.3	8.06	55.763	
3,700.0	3,700.0	3,667.7	3,663.9	5.7	5.2	-111.53	-166.8	-422.9	455.4	447.3	8.14	55.980	
3,800.0	3,800.0	3,767.3	3,763.1	5.8	5.3	-110.76	-163.3	-430.8	461.7	453.4	8.22	56.169	
3,900.0	3,900.0	3,866.9	3,862.3	5.9	5.4	-110.02	-159.9	-438.8	468.0	459.7	8.31	56.329	
4,000.0	4,000.0	3,966.5	3,961.6	6.0	5.5	-109.30	-156.4	-446.8	474.3	465.9	8.40	56.462	
4,100.0	4,100.0	4,066.1	4,060.8	6.1	5.6	-108.60	-153.0	-454.7	480.8	472.3	8.50	56.569	
4,200.0	4,200.0	4,165.8	4,160.1	6.2	5.6	-107.91	-149.5	-462.7	487.3	478.7	8.60	56.650	
4,300.0	4,300.0	4,265.4	4,259.3	6.3	5.7	-107.24	-146.1	-470.7	493.9	485.2	8.71	56.708	
4,400.0	4,400.0	4,365.0	4,358.5	6.5	5.8	-106.59	-142.6	-478.6	500.6	491.7	8.82	56.742	
4,500.0	4,500.0	4,464.6	4,457.8	6.6	5.9	-105.96	-139.2	-486.6	507.3	498.3	8.94	56.756	
4,600.0	4,600.0	4,564.2	4,557.0	6.7	6.0	-105.35	-135.7	-494.6	514.0	505.0	9.06	56.751	
4,700.0	4,700.0	4,663.9	4,656.3	6.8	6.1	-104.75	-132.3	-502.5	520.9	511.7	9.18	56.727	
4,800.0	4,800.0	4,763.5	4,755.5	6.9	6.2	-104.16	-128.8	-510.5	527.8	518.5	9.31	56.687	
4,900.0	4,900.0	4,863.1	4,854.7	7.0	6.3	-103.59	-125.4	-518.5	534.7	525.3	9.44	56.631	
5,000.0	5,000.0	4,962.7	4,954.0	7.2	6.4	-103.04	-121.9	-526.4	541.7	532.1	9.58	56.562	

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 #705H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

Offset Design 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
5,100.0	5,100.0	5,062.3	5,053.2	7.3	6.5	-102.50	-118.5	-534.4	548.7	539.0	9.72	56.481	
5,200.0	5,200.0	5,162.0	5,152.5	7.4	6.6	-101.97	-115.0	-542.4	555.8	546.0	9.86	56.389	
5,300.0	5,300.0	5,261.6	5,251.7	7.5	6.7	-101.46	-111.6	-550.3	563.0	553.0	10.00	56.287	
5,400.0	5,400.0	5,361.2	5,350.9	7.6	6.8	-100.96	-108.1	-558.3	570.1	560.0	10.15	56.176	
5,500.0	5,500.0	5,460.8	5,450.2	7.8	6.9	-100.47	-104.7	-566.3	577.4	567.1	10.30	56.058	
5,600.0	5,600.0	5,560.5	5,549.5	7.8	7.0	-0.61	-101.2	-574.2	582.9	572.5	10.44	55.839	
5,700.0	5,699.8	5,660.4	5,649.0	7.9	7.1	-0.14	-97.7	-582.2	585.0	574.4	10.57	55.337	
5,722.3	5,722.1	5,682.7	5,671.2	7.9	7.2	-0.04	-97.0	-584.0	585.0	574.4	10.60	55.177	
5,800.0	5,799.5	5,760.3	5,748.5	7.9	7.3	0.32	-94.3	-590.2	584.6	573.9	10.71	54.585	
5,900.0	5,899.2	5,860.2	5,848.0	7.9	7.4	0.78	-90.8	-598.2	584.3	573.4	10.86	53.810	
6,000.0	5,998.9	5,960.1	5,947.5	7.9	7.5	1.25	-87.4	-606.2	583.9	572.9	11.01	53.024	
6,100.0	6,098.6	6,060.0	6,047.0	8.0	7.6	1.71	-83.9	-614.2	583.6	572.5	11.17	52.229	
6,200.0	6,198.3	6,159.8	6,146.6	8.0	7.7	2.17	-80.4	-622.2	583.4	572.0	11.34	51.429	
6,300.0	6,298.0	6,259.7	6,246.1	8.0	7.8	2.64	-77.0	-630.2	583.1	571.6	11.52	50.626	
6,400.0	6,397.7	6,359.6	6,345.6	8.1	7.9	3.10	-73.5	-638.1	583.0	571.3	11.70	49.823	
6,500.0	6,497.4	6,459.5	6,445.1	8.1	8.0	3.57	-70.0	-646.1	582.8	570.9	11.89	49.022	
6,600.0	6,597.1	6,559.4	6,544.6	8.2	8.1	4.04	-66.6	-654.1	582.7	570.6	12.08	48.225	
6,700.0	6,696.8	6,659.3	6,644.1	8.2	8.3	4.50	-63.1	-662.1	582.6	570.4	12.28	47.434	
6,800.0	6,796.5	6,759.2	6,743.6	8.2	8.4	4.97	-59.7	-670.1	582.6	570.1	12.49	46.651	
6,824.4	6,820.8	6,783.5	6,767.8	8.3	8.4	5.08	-58.8	-672.0	582.6	570.1	12.54	46.461	
6,900.0	6,896.2	6,859.1	6,843.1	8.3	8.5	5.43	-56.2	-678.1	582.6	569.9	12.70	45.877	
7,000.0	6,995.9	6,958.9	6,942.6	8.3	8.6	5.90	-52.7	-686.1	582.7	569.8	12.92	45.114	
7,100.0	7,095.6	7,058.8	7,042.1	8.4	8.7	6.36	-49.3	-694.1	582.8	569.6	13.14	44.363	
7,200.0	7,195.3	7,158.7	7,141.6	8.5	8.8	6.83	-45.8	-702.0	582.9	569.5	13.36	43.625	
7,300.0	7,295.0	7,258.6	7,241.1	8.5	9.0	7.30	-42.3	-710.0	583.0	569.5	13.59	42.901	
7,400.0	7,394.7	7,358.5	7,340.6	8.6	9.1	7.76	-38.9	-718.0	583.3	569.4	13.82	42.192	
7,500.0	7,494.4	7,458.4	7,440.1	8.6	9.2	8.22	-35.4	-726.0	583.5	569.4	14.06	41.498	
7,600.0	7,594.1	7,558.3	7,539.7	8.7	9.3	8.69	-32.0	-734.0	583.8	569.5	14.30	40.819	
7,700.0	7,693.8	7,658.2	7,639.2	8.7	9.4	9.15	-28.5	-742.0	584.1	569.5	14.55	40.156	
7,800.0	7,793.5	7,758.0	7,738.7	8.8	9.5	9.62	-25.0	-750.0	584.4	569.7	14.79	39.509	
7,900.0	7,893.2	7,857.9	7,838.2	8.9	9.7	10.08	-21.6	-758.0	584.8	569.8	15.04	38.878	
8,000.0	7,992.9	7,957.8	7,937.7	8.9	9.8	10.54	-18.1	-765.9	585.3	570.0	15.30	38.263	
8,100.0	8,092.6	8,057.7	8,037.2	9.0	9.9	11.00	-14.7	-773.9	585.7	570.2	15.55	37.665	
8,200.0	8,192.3	8,157.6	8,136.7	9.1	10.0	11.46	-11.2	-781.9	586.3	570.4	15.81	37.083	
8,300.0	8,292.0	8,257.5	8,236.2	9.2	10.1	11.92	-7.7	-789.9	586.8	570.7	16.07	36.516	
8,400.0	8,391.7	8,357.4	8,335.7	9.2	10.3	12.38	-4.3	-797.9	587.4	571.1	16.33	35.966	
8,500.0	8,491.4	8,457.3	8,435.2	9.3	10.4	12.84	-0.8	-805.9	588.0	571.4	16.60	35.431	
8,600.0	8,591.1	8,556.2	8,533.8	9.4	10.5	13.29	2.6	-813.8	588.7	571.8	16.83	34.980	
8,700.0	8,690.8	8,645.1	8,622.1	9.5	10.5	13.03	-1.1	-822.3	590.4	573.4	16.94	34.842	
8,800.0	8,790.5	8,730.4	8,705.1	9.5	10.5	11.56	-17.2	-832.7	594.4	577.4	16.99	34.975	
8,900.0	8,890.2	8,809.4	8,778.9	9.6	10.6	9.17	-42.8	-844.4	601.8	584.7	17.07	35.262	
9,000.0	8,989.9	8,880.3	8,841.4	9.7	10.6	6.29	-74.2	-856.1	614.1	596.8	17.30	35.504	
9,100.0	9,089.6	8,942.5	8,892.4	9.8	10.6	3.26	-107.8	-867.4	632.9	615.0	17.82	35.515	
9,200.0	9,189.3	9,000.0	8,936.0	9.9	10.7	0.14	-143.6	-878.4	659.2	640.6	18.63	35.375	
9,300.0	9,289.0	9,050.0	8,970.7	10.0	10.8	-2.76	-178.2	-888.4	693.7	673.9	19.76	35.097	
9,400.0	9,388.7	9,081.8	8,991.1	10.0	10.8	-4.66	-201.7	-894.9	736.0	714.7	21.31	34.541	
9,500.0	9,488.4	9,115.8	9,011.3	10.1	10.9	-6.73	-228.1	-902.0	785.8	763.0	22.79	34.477 SF	
9,600.0	9,588.1	9,150.0	9,030.1	10.2	10.9	-8.82	-255.7	-909.2	842.4	818.2	24.19	34.826	
9,700.0	9,687.8	9,170.5	9,040.5	10.3	11.0	-10.07	-272.9	-913.6	904.8	879.1	25.65	35.271	
9,800.0	9,787.5	9,200.0	9,054.3	10.4	11.0	-11.86	-298.1	-919.9	972.3	945.4	26.85	36.207	

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 #705H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

Offset Design 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 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	89.45	0.3	30.0	30.0				
100.0	100.0	100.0	100.0	3.0	3.0	89.45	0.3	30.0	30.0	24.0	6.00	5.000	
200.0	200.0	200.0	200.0	3.0	3.0	89.45	0.3	30.0	30.0	24.0	6.00	4.998	
300.0	300.0	300.0	300.0	3.0	3.0	89.45	0.3	30.0	30.0	24.0	6.01	4.993	
400.0	400.0	400.0	400.0	3.0	3.0	89.45	0.3	30.0	30.0	24.0	6.02	4.985	
500.0	500.0	500.0	500.0	3.1	3.1	89.45	0.3	30.0	30.0	24.0	6.03	4.975	
600.0	600.0	600.0	600.0	3.1	3.1	89.45	0.3	30.0	30.0	24.0	6.05	4.962	
700.0	700.0	700.0	700.0	3.1	3.1	89.45	0.3	30.0	30.0	23.9	6.07	4.946	
800.0	800.0	800.0	800.0	3.2	3.2	89.45	0.3	30.0	30.0	23.9	6.09	4.928	
900.0	900.0	900.0	900.0	3.2	3.2	89.45	0.3	30.0	30.0	23.9	6.11	4.908	
1,000.0	1,000.0	1,000.0	1,000.0	3.2	3.2	89.45	0.3	30.0	30.0	23.9	6.14	4.886	
1,100.0	1,100.0	1,100.0	1,100.0	3.3	3.3	89.45	0.3	30.0	30.0	23.8	6.17	4.861	
1,200.0	1,200.0	1,200.0	1,200.0	3.4	3.4	89.45	0.3	30.0	30.0	23.8	6.21	4.834	
1,300.0	1,300.0	1,300.0	1,300.0	3.4	3.4	89.45	0.3	30.0	30.0	23.8	6.24	4.805	
1,400.0	1,400.0	1,400.0	1,400.0	3.5	3.5	89.45	0.3	30.0	30.0	23.7	6.28	4.775	
1,500.0	1,500.0	1,500.0	1,500.0	3.5	3.5	89.45	0.3	30.0	30.0	23.7	6.33	4.742	
1,600.0	1,600.0	1,600.0	1,600.0	3.6	3.6	89.45	0.3	30.0	30.0	23.6	6.37	4.708	
1,700.0	1,700.0	1,700.0	1,700.0	3.7	3.7	89.45	0.3	30.0	30.0	23.6	6.42	4.673	
1,800.0	1,800.0	1,800.0	1,800.0	3.8	3.8	89.45	0.3	30.0	30.0	23.5	6.47	4.636	
1,900.0	1,900.0	1,900.0	1,900.0	3.9	3.9	89.45	0.3	30.0	30.0	23.5	6.53	4.598	
2,000.0	2,000.0	2,000.0	2,000.0	3.9	3.9	89.45	0.3	30.0	30.0	23.4	6.58	4.559	
2,100.0	2,100.0	2,100.0	2,100.0	4.0	4.0	89.45	0.3	30.0	30.0	23.4	6.64	4.518	
2,200.0	2,200.0	2,200.0	2,200.0	4.1	4.1	89.45	0.3	30.0	30.0	23.3	6.70	4.477	
2,300.0	2,300.0	2,300.0	2,300.0	4.2	4.2	89.45	0.3	30.0	30.0	23.2	6.76	4.435	
2,400.0	2,400.0	2,400.0	2,400.0	4.3	4.3	89.45	0.3	30.0	30.0	23.2	6.83	4.393	
2,500.0	2,500.0	2,500.0	2,500.0	4.4	4.4	89.45	0.3	30.0	30.0	23.1	6.90	4.350 CC, ES, SF	
2,600.0	2,600.0	2,598.9	2,598.9	4.5	4.5	88.94	0.6	31.7	31.7	24.7	6.97	4.550	
2,700.0	2,700.0	2,698.0	2,697.9	4.6	4.5	87.73	1.4	36.6	36.7	29.6	7.05	5.202	
2,800.0	2,800.0	2,797.9	2,797.5	4.7	4.6	86.67	2.5	42.3	42.5	35.3	7.14	5.947	
2,900.0	2,900.0	2,897.7	2,897.2	4.8	4.6	85.86	3.5	48.1	48.3	41.0	7.24	6.668	
3,000.0	3,000.0	2,997.5	2,996.9	4.9	4.7	85.23	4.5	53.8	54.1	46.7	7.34	7.365	
3,100.0	3,100.0	3,097.3	3,096.5	5.0	4.7	84.72	5.5	59.6	59.9	52.5	7.45	8.037	
3,200.0	3,200.0	3,197.2	3,196.2	5.1	4.8	84.30	6.5	65.3	65.7	58.2	7.57	8.686	
3,300.0	3,300.0	3,297.0	3,295.8	5.2	4.8	83.95	7.5	71.0	71.6	63.9	7.69	9.310	
3,400.0	3,400.0	3,396.8	3,395.5	5.3	4.9	83.65	8.5	76.8	77.4	69.6	7.81	9.911	
3,500.0	3,500.0	3,496.7	3,495.1	5.4	5.0	83.40	9.6	82.5	83.2	75.3	7.94	10.489	
3,600.0	3,600.0	3,596.5	3,594.8	5.5	5.0	83.17	10.6	88.3	89.1	81.0	8.06	11.044	
3,700.0	3,700.0	3,696.3	3,694.5	5.7	5.1	82.98	11.6	94.0	94.9	86.7	8.20	11.577	
3,800.0	3,800.0	3,796.1	3,794.1	5.8	5.2	82.81	12.6	99.8	100.7	92.4	8.33	12.089	
3,900.0	3,900.0	3,896.0	3,893.8	5.9	5.2	82.65	13.6	105.5	106.6	98.1	8.47	12.581	
4,000.0	4,000.0	3,995.8	3,993.4	6.0	5.3	82.51	14.6	111.3	112.4	103.8	8.61	13.053	
4,100.0	4,100.0	4,095.6	4,093.1	6.1	5.4	82.39	15.6	117.0	118.2	109.5	8.76	13.506	
4,200.0	4,200.0	4,195.5	4,192.8	6.2	5.5	82.28	16.6	122.8	124.1	115.2	8.90	13.941	
4,300.0	4,300.0	4,295.3	4,292.4	6.3	5.6	82.18	17.7	128.5	129.9	120.9	9.05	14.358	
4,400.0	4,400.0	4,395.1	4,392.1	6.5	5.7	82.08	18.7	134.2	135.8	126.6	9.20	14.758	
4,500.0	4,500.0	4,494.9	4,491.7	6.6	5.7	82.00	19.7	140.0	141.6	132.3	9.35	15.142	
4,600.0	4,600.0	4,594.8	4,591.4	6.7	5.8	81.92	20.7	145.7	147.4	137.9	9.51	15.511	
4,700.0	4,700.0	4,694.6	4,691.0	6.8	5.9	81.84	21.7	151.5	153.3	143.6	9.66	15.865	
4,800.0	4,800.0	4,794.4	4,790.7	6.9	6.0	81.78	22.7	157.2	159.1	149.3	9.82	16.205	
4,900.0	4,900.0	4,894.3	4,890.4	7.0	6.1	81.71	23.7	163.0	165.0	155.0	9.98	16.531	
5,000.0	5,000.0	4,994.1	4,990.0	7.2	6.2	81.65	24.7	168.7	170.8	160.7	10.14	16.845	

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 #705H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

Offset Design 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
5,100.0	5,100.0	5,093.9	5,089.7	7.3	6.3	81.60	25.8	174.5	176.6	166.3	10.30	17.146	
5,200.0	5,200.0	5,193.8	5,189.3	7.4	6.4	81.55	26.8	180.2	182.5	172.0	10.47	17.436	
5,300.0	5,300.0	5,293.6	5,289.0	7.5	6.5	81.50	27.8	185.9	188.3	177.7	10.63	17.714	
5,400.0	5,400.0	5,393.4	5,388.7	7.6	6.6	81.46	28.8	191.7	194.2	183.4	10.80	17.982	
5,500.0	5,500.0	5,493.2	5,488.3	7.8	6.7	81.41	29.8	197.4	200.0	189.0	10.97	18.240	
5,600.0	5,600.0	5,592.9	5,587.9	7.8	6.8	-179.24	30.8	203.2	207.6	196.5	11.12	18.663	
5,700.0	5,699.8	5,692.3	5,687.1	7.9	6.9	-179.30	31.8	208.9	218.7	207.4	11.27	19.394	
5,722.3	5,722.1	5,714.4	5,709.1	7.9	6.9	-179.31	32.1	210.2	221.6	210.3	11.31	19.596	
5,800.0	5,799.5	5,791.4	5,786.0	7.9	7.0	-179.35	32.8	214.6	232.1	220.7	11.43	20.312	
5,900.0	5,899.2	5,890.5	5,884.9	7.9	7.1	-179.40	33.8	220.3	245.7	234.1	11.59	21.206	
6,000.0	5,998.9	5,989.6	5,983.8	7.9	7.2	-179.45	34.8	226.0	259.3	247.5	11.75	22.071	
6,100.0	6,098.6	6,088.6	6,082.7	8.0	7.3	-179.49	35.9	231.7	272.8	260.9	11.91	22.906	
6,200.0	6,198.3	6,187.7	6,181.6	8.0	7.4	-179.52	36.9	237.4	286.4	274.3	12.08	23.713	
6,300.0	6,298.0	6,286.8	6,280.5	8.0	7.5	-179.56	37.9	243.1	299.9	287.7	12.25	24.491	
6,400.0	6,397.7	6,385.9	6,379.4	8.1	7.6	-179.59	38.9	248.8	313.5	301.1	12.42	25.242	
6,500.0	6,497.4	6,484.9	6,478.3	8.1	7.7	-179.62	39.9	254.5	327.1	314.5	12.60	25.967	
6,600.0	6,597.1	6,584.0	6,577.2	8.2	7.8	-179.64	40.9	260.2	340.6	327.9	12.77	26.666	
6,700.0	6,696.8	6,683.1	6,676.1	8.2	7.9	-179.67	41.9	265.9	354.2	341.2	12.96	27.340	
6,800.0	6,796.5	6,782.2	6,775.0	8.2	8.1	-179.69	42.9	271.6	367.8	354.6	13.14	27.990	
6,900.0	6,896.2	6,881.2	6,874.0	8.3	8.2	-179.71	43.9	277.3	381.3	368.0	13.33	28.616	
7,000.0	6,995.9	6,980.3	6,972.9	8.3	8.3	-179.73	44.9	283.0	394.9	381.4	13.51	29.220	
7,100.0	7,095.6	7,079.4	7,071.8	8.4	8.4	-179.75	45.9	288.7	408.5	394.8	13.71	29.801	
7,200.0	7,195.3	7,178.5	7,170.7	8.5	8.5	-179.76	46.9	294.4	422.0	408.1	13.90	30.362	
7,300.0	7,295.0	7,277.6	7,269.6	8.5	8.6	-179.78	47.9	300.1	435.6	421.5	14.10	30.903	
7,400.0	7,394.7	7,376.6	7,368.5	8.6	8.7	-179.79	48.9	305.8	449.1	434.9	14.29	31.423	
7,500.0	7,494.4	7,475.7	7,467.4	8.6	8.8	-179.81	49.9	311.5	462.7	448.2	14.49	31.925	
7,600.0	7,594.1	7,574.8	7,566.3	8.7	9.0	-179.82	50.9	317.2	476.3	461.6	14.70	32.409	
7,700.0	7,693.8	7,673.9	7,665.2	8.7	9.1	-179.83	51.9	322.9	489.8	474.9	14.90	32.876	
7,800.0	7,793.5	7,772.9	7,764.1	8.8	9.2	-179.84	52.9	328.6	503.4	488.3	15.11	33.326	
7,900.0	7,893.2	7,872.0	7,863.0	8.9	9.3	-179.85	54.0	334.3	517.0	501.7	15.31	33.759	
8,000.0	7,992.9	7,971.1	7,961.9	8.9	9.4	-179.86	55.0	340.0	530.5	515.0	15.52	34.177	
8,100.0	8,092.6	8,070.2	8,060.8	9.0	9.5	-179.87	56.0	345.7	544.1	528.4	15.73	34.581	
8,200.0	8,192.3	8,169.2	8,159.7	9.1	9.6	-179.88	57.0	351.4	557.7	541.7	15.95	34.970	
8,300.0	8,292.0	8,268.3	8,258.6	9.2	9.8	-179.89	58.0	357.1	571.2	555.1	16.16	35.346	
8,400.0	8,391.7	8,367.4	8,357.5	9.2	9.9	-179.90	59.0	362.8	584.8	568.4	16.38	35.708	
8,500.0	8,491.4	8,466.5	8,456.5	9.3	10.0	-179.91	60.0	368.5	598.4	581.8	16.59	36.058	
8,600.0	8,591.1	8,565.5	8,555.4	9.4	10.1	-179.92	61.0	374.2	611.9	595.1	16.81	36.395	
8,700.0	8,690.8	8,664.6	8,654.3	9.5	10.2	-179.93	62.0	379.9	625.5	608.4	17.03	36.721	
8,800.0	8,790.5	8,763.7	8,753.2	9.5	10.3	-179.93	63.0	385.6	639.0	621.8	17.25	37.036	
8,900.0	8,890.2	8,862.8	8,852.1	9.6	10.5	-179.94	64.0	391.3	652.6	635.1	17.48	37.341	
9,000.0	8,989.9	8,961.8	8,951.0	9.7	10.6	-179.95	65.0	397.0	666.2	648.5	17.70	37.635	
9,100.0	9,089.6	9,060.9	9,049.9	9.8	10.7	-179.95	66.0	402.7	679.7	661.8	17.93	37.919	
9,200.0	9,189.3	9,160.0	9,148.8	9.9	10.8	-179.96	67.0	408.4	693.3	675.1	18.15	38.194	
9,300.0	9,289.0	9,259.1	9,247.7	10.0	10.9	-179.96	68.0	414.1	706.9	688.5	18.38	38.459	
9,400.0	9,388.7	9,358.1	9,346.6	10.0	11.1	-179.97	69.0	419.9	720.4	701.8	18.61	38.716	
9,500.0	9,488.4	9,457.2	9,445.5	10.1	11.2	-179.98	70.0	425.6	734.0	715.2	18.84	38.965	
9,600.0	9,588.1	9,556.3	9,544.4	10.2	11.3	-179.98	71.0	431.3	747.6	728.5	19.07	39.205	
9,700.0	9,687.8	9,655.4	9,643.3	10.3	11.4	-179.99	72.0	437.0	761.1	741.8	19.30	39.438	
9,800.0	9,787.5	9,754.4	9,742.2	10.4	11.5	-179.99	73.1	442.7	774.7	755.2	19.53	39.664	
9,900.0	9,887.2	9,853.5	9,841.1	10.5	11.7	-180.00	74.1	448.4	788.3	768.5	19.76	39.882	
10,000.0	9,986.9	9,952.6	9,940.1	10.6	11.8	-180.00	75.1	454.1	801.8	781.8	20.00	40.094	

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 #705H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

Offset Design 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
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	10,086.6	10,051.7	10,039.0	10.7	11.9	180.00	76.1	459.8	815.4	795.0	20.36	40.042	
10,152.2	10,138.7	10,103.4	10,090.6	10.7	12.0	179.99	76.6	462.7	822.5	802.0	20.44	40.243	
10,200.0	10,186.2	10,150.7	10,137.8	10.7	12.0	-137.30	77.1	465.5	829.2	808.8	20.48	40.487	
10,250.0	10,235.6	10,212.8	10,199.7	10.7	12.0	-121.00	75.1	469.0	836.7	816.2	20.44	40.937	
10,300.0	10,284.1	10,278.1	10,264.2	10.7	12.0	-113.72	65.9	472.8	843.8	823.4	20.40	41.362	
10,350.0	10,331.5	10,344.1	10,327.9	10.7	12.0	-109.54	49.1	476.6	850.6	830.2	20.39	41.706	
10,400.0	10,377.4	10,410.6	10,389.7	10.7	12.1	-106.69	25.0	480.3	856.9	836.5	20.43	41.950	
10,450.0	10,421.4	10,477.3	10,448.5	10.8	12.1	-104.52	-6.3	483.9	862.8	842.3	20.50	42.087	
10,500.0	10,463.3	10,543.9	10,503.2	10.8	12.1	-102.72	-44.2	487.3	868.1	847.5	20.61	42.115	
10,550.0	10,502.5	10,610.2	10,552.9	10.9	12.2	-101.14	-87.9	490.4	872.8	852.1	20.76	42.038	
10,600.0	10,539.0	10,676.0	10,596.8	10.9	12.3	-99.71	-136.6	493.3	877.0	856.1	20.95	41.865	
10,650.0	10,572.4	10,740.8	10,634.5	11.0	12.4	-98.37	-189.4	495.8	880.6	859.4	21.16	41.608	
10,700.0	10,602.4	10,804.7	10,665.5	11.1	12.5	-97.11	-245.1	497.9	883.6	862.2	21.41	41.275	
10,750.0	10,628.8	10,867.4	10,689.7	11.2	12.6	-95.92	-302.9	499.7	886.0	864.3	21.68	40.863	
10,800.0	10,651.5	10,928.7	10,707.2	11.2	12.7	-94.79	-361.6	501.0	887.9	865.9	21.98	40.390	
10,850.0	10,670.1	10,988.6	10,718.1	11.3	12.9	-93.71	-420.5	502.0	889.2	866.9	22.31	39.859	
10,900.0	10,684.7	11,047.1	10,722.8	11.4	13.1	-92.69	-478.8	502.7	890.0	867.4	22.66	39.275	
10,950.0	10,695.1	11,098.5	10,723.1	11.5	13.2	-91.89	-530.1	503.0	890.4	867.4	23.02	38.684	
11,000.0	10,701.2	11,148.1	10,723.1	11.6	13.4	-91.43	-579.8	503.3	890.7	867.3	23.41	38.050	
11,044.7	10,703.0	11,192.7	10,723.2	11.7	13.5	-91.30	-624.4	503.6	890.8	867.1	23.77	37.477	
11,100.0	10,703.1	11,248.1	10,723.3	11.9	13.7	-91.30	-679.7	503.9	890.8	866.6	24.25	36.734	
11,200.0	10,703.2	11,348.1	10,723.4	12.2	14.1	-91.30	-779.7	504.6	890.8	865.7	25.19	35.368	
11,300.0	10,703.3	11,448.1	10,723.6	12.5	14.6	-91.31	-879.7	505.2	890.8	864.6	26.21	33.995	
11,400.0	10,703.4	11,548.1	10,723.8	13.0	15.1	-91.31	-979.7	505.8	890.8	863.6	27.29	32.639	
11,500.0	10,703.5	11,648.1	10,723.9	13.5	15.6	-91.31	-1,079.7	506.5	890.8	862.4	28.45	31.317	
11,600.0	10,703.6	11,748.1	10,724.1	14.0	16.1	-91.32	-1,179.7	507.1	890.8	861.2	29.65	30.041	
11,700.0	10,703.7	11,848.1	10,724.2	14.6	16.7	-91.32	-1,279.7	507.7	890.9	859.9	30.91	28.820	
11,800.0	10,703.8	11,948.1	10,724.4	15.2	17.3	-91.32	-1,379.7	508.3	890.9	858.6	32.21	27.656	
11,900.0	10,703.9	12,048.1	10,724.5	15.9	18.0	-91.33	-1,479.7	509.0	890.9	857.3	33.55	26.553	
12,000.0	10,704.0	12,148.1	10,724.7	16.5	18.6	-91.33	-1,579.7	509.6	890.9	855.9	34.92	25.510	
12,100.0	10,704.1	12,248.1	10,724.8	17.2	19.3	-91.33	-1,679.7	510.2	890.9	854.5	36.32	24.525	
12,200.0	10,704.2	12,348.1	10,725.0	18.0	20.0	-91.34	-1,779.7	510.9	890.9	853.1	37.75	23.597	
12,300.0	10,704.3	12,448.1	10,725.1	18.7	20.7	-91.34	-1,879.7	511.5	890.9	851.7	39.21	22.723	
12,400.0	10,704.4	12,548.1	10,725.3	19.4	21.4	-91.34	-1,979.7	512.1	890.9	850.2	40.68	21.900	
12,500.0	10,704.5	12,648.1	10,725.5	20.2	22.1	-91.35	-2,079.7	512.7	890.9	848.7	42.17	21.125	
12,600.0	10,704.6	12,748.1	10,725.6	20.9	22.9	-91.35	-2,179.7	513.4	890.9	847.2	43.68	20.395	
12,700.0	10,704.7	12,848.1	10,725.8	21.7	23.6	-91.35	-2,279.7	514.0	890.9	845.7	45.21	19.707	
12,800.0	10,704.8	12,948.1	10,725.9	22.5	24.4	-91.36	-2,379.7	514.6	890.9	844.1	46.74	19.058	
12,900.0	10,704.9	13,048.1	10,726.1	23.3	25.1	-91.36	-2,479.7	515.3	890.9	842.6	48.30	18.446	
13,000.0	10,705.0	13,148.1	10,726.2	24.0	25.9	-91.36	-2,579.7	515.9	890.9	841.0	49.86	17.868	
13,100.0	10,705.1	13,248.1	10,726.4	24.8	26.7	-91.37	-2,679.7	516.5	890.9	839.4	51.43	17.322	
13,200.0	10,705.2	13,348.1	10,726.5	25.6	27.4	-91.37	-2,779.7	517.1	890.9	837.9	53.01	16.805	
13,300.0	10,705.4	13,448.1	10,726.7	26.4	28.2	-91.37	-2,879.7	517.8	890.9	836.3	54.60	16.315	
13,400.0	10,705.5	13,548.1	10,726.8	27.2	29.0	-91.38	-2,979.7	518.4	890.9	834.7	56.20	15.851	
13,500.0	10,705.6	13,648.1	10,727.0	28.1	29.8	-91.38	-3,079.7	519.0	890.9	833.1	57.81	15.411	
13,600.0	10,705.7	13,748.1	10,727.1	28.9	30.6	-91.38	-3,179.7	519.7	890.9	831.5	59.42	14.993	
13,700.0	10,705.8	13,848.1	10,727.3	29.7	31.4	-91.39	-3,279.7	520.3	890.9	829.8	61.04	14.595	
13,800.0	10,705.9	13,948.1	10,727.5	30.5	32.2	-91.39	-3,379.7	520.9	890.9	828.2	62.66	14.217	
13,900.0	10,706.0	14,048.1	10,727.6	31.3	33.0	-91.39	-3,479.7	521.5	890.9	826.6	64.29	13.857	
14,000.0	10,706.1	14,148.1	10,727.8	32.1	33.8	-91.39	-3,579.6	522.2	890.9	825.0	65.93	13.513	
14,100.0	10,706.2	14,248.1	10,727.9	33.0	34.6	-91.40	-3,679.6	522.8	890.9	823.3	67.56	13.186	

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 #705H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

Offset Design 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
Reference	Offset	Semi Major Axis					Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
14,200.0	10,706.3	14,348.1	10,728.1	33.8	35.4	-91.40	-3,779.6	523.4	890.9	821.7	69.21	12.873	
14,300.0	10,706.4	14,448.1	10,728.2	34.6	36.3	-91.40	-3,879.6	524.1	890.9	820.0	70.85	12.574	
14,400.0	10,706.5	14,548.1	10,728.4	35.5	37.1	-91.41	-3,979.6	524.7	890.9	818.4	72.50	12.288	
14,500.0	10,706.6	14,648.1	10,728.5	36.3	37.9	-91.41	-4,079.6	525.3	890.9	816.7	74.16	12.014	
14,600.0	10,706.7	14,748.1	10,728.7	37.1	38.7	-91.41	-4,179.6	526.0	890.9	815.1	75.81	11.751	
14,700.0	10,706.8	14,848.1	10,728.8	38.0	39.5	-91.42	-4,279.6	526.6	890.9	813.4	77.47	11.499	
14,800.0	10,706.9	14,948.1	10,729.0	38.8	40.4	-91.42	-4,379.6	527.2	890.9	811.8	79.14	11.258	
14,900.0	10,707.0	15,048.1	10,729.2	39.6	41.2	-91.42	-4,479.6	527.8	890.9	810.1	80.80	11.026	
15,000.0	10,707.1	15,148.1	10,729.3	40.5	42.0	-91.43	-4,579.6	528.5	890.9	808.4	82.47	10.803	
15,100.0	10,707.2	15,248.1	10,729.5	41.3	42.9	-91.43	-4,679.6	529.1	890.9	806.8	84.14	10.589	
15,200.0	10,707.3	15,348.1	10,729.6	42.1	43.7	-91.43	-4,779.6	529.7	890.9	805.1	85.81	10.383	
15,300.0	10,707.4	15,448.1	10,729.8	43.0	44.5	-91.44	-4,879.6	530.4	890.9	803.4	87.48	10.184	
15,400.0	10,707.5	15,548.1	10,729.9	43.8	45.3	-91.44	-4,979.6	531.0	890.9	801.8	89.16	9.993	
15,500.0	10,707.6	15,648.1	10,730.1	44.7	46.2	-91.44	-5,079.6	531.6	890.9	800.1	90.84	9.808	
15,600.0	10,707.8	15,748.1	10,730.2	45.5	47.0	-91.45	-5,179.6	532.2	890.9	798.4	92.51	9.630	
15,700.0	10,707.9	15,848.1	10,730.4	46.4	47.9	-91.45	-5,279.6	532.9	890.9	796.7	94.20	9.458	
15,800.0	10,708.0	15,948.1	10,730.5	47.2	48.7	-91.45	-5,379.6	533.5	890.9	795.0	95.88	9.292	
15,900.0	10,708.1	16,048.1	10,730.7	48.1	49.5	-91.46	-5,479.6	534.1	890.9	793.4	97.56	9.132	
16,000.0	10,708.2	16,148.1	10,730.9	48.9	50.4	-91.46	-5,579.6	534.8	890.9	791.7	99.25	8.977	
16,100.0	10,708.3	16,248.1	10,731.0	49.7	51.2	-91.46	-5,679.6	535.4	890.9	790.0	100.93	8.827	
16,200.0	10,708.4	16,348.1	10,731.2	50.6	52.0	-91.47	-5,779.6	536.0	890.9	788.3	102.62	8.682	
16,300.0	10,708.5	16,448.1	10,731.3	51.4	52.9	-91.47	-5,879.6	536.6	890.9	786.6	104.31	8.541	
16,400.0	10,708.6	16,548.1	10,731.5	52.3	53.7	-91.47	-5,979.6	537.3	890.9	784.9	106.00	8.405	
16,500.0	10,708.7	16,648.1	10,731.6	53.1	54.6	-91.48	-6,079.6	537.9	890.9	783.2	107.69	8.273	
16,600.0	10,708.8	16,748.1	10,731.8	54.0	55.4	-91.48	-6,179.6	538.5	890.9	781.6	109.38	8.145	
16,700.0	10,708.9	16,848.1	10,731.9	54.8	56.3	-91.48	-6,279.6	539.2	890.9	779.9	111.08	8.021	
16,800.0	10,709.0	16,948.1	10,732.1	55.7	57.1	-91.48	-6,379.6	539.8	890.9	778.2	112.77	7.901	
16,900.0	10,709.1	17,048.1	10,732.2	56.5	57.9	-91.49	-6,479.6	540.4	890.9	776.5	114.47	7.784	
17,000.0	10,709.2	17,148.1	10,732.4	57.4	58.8	-91.49	-6,579.6	541.0	890.9	774.8	116.16	7.670	
17,100.0	10,709.3	17,248.1	10,732.6	58.2	59.6	-91.49	-6,679.6	541.7	891.0	773.1	117.86	7.560	
17,200.0	10,709.4	17,348.1	10,732.7	59.1	60.5	-91.50	-6,779.6	542.3	891.0	771.4	119.55	7.452	
17,300.0	10,709.5	17,448.1	10,732.9	59.9	61.3	-91.50	-6,879.6	542.9	891.0	769.7	121.25	7.348	
17,400.0	10,709.6	17,548.1	10,733.0	60.8	62.2	-91.50	-6,979.6	543.6	891.0	768.0	122.95	7.246	
17,500.0	10,709.7	17,648.1	10,733.2	61.6	63.0	-91.51	-7,079.6	544.2	891.0	766.3	124.65	7.148	
17,600.0	10,709.8	17,748.1	10,733.3	62.5	63.9	-91.51	-7,179.6	544.8	891.0	764.6	126.35	7.051	
17,700.0	10,709.9	17,848.1	10,733.5	63.4	64.7	-91.51	-7,279.6	545.4	891.0	762.9	128.05	6.958	
17,800.0	10,710.0	17,948.1	10,733.6	64.2	65.6	-91.52	-7,379.6	546.1	891.0	761.2	129.75	6.867	
17,900.0	10,710.2	18,048.1	10,733.8	65.1	66.4	-91.52	-7,479.6	546.7	891.0	759.5	131.46	6.778	
18,000.0	10,710.3	18,148.1	10,733.9	65.9	67.3	-91.52	-7,579.6	547.3	891.0	757.8	133.16	6.691	
18,100.0	10,710.4	18,248.1	10,734.1	66.8	68.1	-91.53	-7,679.6	548.0	891.0	756.1	134.86	6.607	
18,200.0	10,710.5	18,348.1	10,734.3	67.6	69.0	-91.53	-7,779.6	548.6	891.0	754.4	136.57	6.524	
18,300.0	10,710.6	18,448.1	10,734.4	68.5	69.8	-91.53	-7,879.6	549.2	891.0	752.7	138.27	6.444	
18,400.0	10,710.7	18,548.1	10,734.6	69.3	70.7	-91.54	-7,979.6	549.9	891.0	751.0	139.97	6.365	
18,500.0	10,710.8	18,648.1	10,734.7	70.2	71.5	-91.54	-8,079.6	550.5	891.0	749.3	141.68	6.289	
18,600.0	10,710.9	18,748.1	10,734.9	71.0	72.4	-91.54	-8,179.6	551.1	891.0	747.6	143.38	6.214	
18,700.0	10,711.0	18,848.1	10,735.0	71.9	73.2	-91.55	-8,279.6	551.7	891.0	745.9	145.09	6.141	
18,800.0	10,711.1	18,948.1	10,735.2	72.7	74.1	-91.55	-8,379.6	552.4	891.0	744.2	146.80	6.069	
18,900.0	10,711.2	19,048.1	10,735.3	73.6	74.9	-91.55	-8,479.6	553.0	891.0	742.5	148.50	6.000	
19,000.0	10,711.3	19,148.1	10,735.5	74.5	75.8	-91.56	-8,579.6	553.6	891.0	740.8	150.21	5.932	
19,100.0	10,711.4	19,248.1	10,735.6	75.3	76.6	-91.56	-8,679.6	554.3	891.0	739.1	151.92	5.865	
19,200.0	10,711.5	19,348.1	10,735.8	76.2	77.5	-91.56	-8,779.6	554.9	891.0	737.4	153.63	5.800	

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 #705H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

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
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
19,300.0	10,711.6	19,448.1	10,735.9	77.0	78.3	-91.57	-8,879.5	555.5	891.0	735.7	155.34	5.736		
19,400.0	10,711.7	19,548.1	10,736.1	77.9	79.2	-91.57	-8,979.5	556.1	891.0	734.0	157.04	5.674		
19,500.0	10,711.8	19,648.1	10,736.3	78.7	80.0	-91.57	-9,079.5	556.8	891.0	732.2	158.75	5.612		
19,600.0	10,711.9	19,748.1	10,736.4	79.6	80.9	-91.57	-9,179.5	557.4	891.0	730.5	160.46	5.553		
19,700.0	10,712.0	19,848.1	10,736.6	80.5	81.7	-91.58	-9,279.5	558.0	891.0	728.8	162.17	5.494		
19,800.0	10,712.1	19,948.1	10,736.7	81.3	82.6	-91.58	-9,379.5	558.7	891.0	727.1	163.88	5.437		
19,900.0	10,712.2	20,048.1	10,736.9	82.2	83.4	-91.58	-9,479.5	559.3	891.0	725.4	165.59	5.381		
20,000.0	10,712.3	20,148.1	10,737.0	83.0	84.3	-91.59	-9,579.5	559.9	891.0	723.7	167.30	5.326		
20,100.0	10,712.4	20,248.1	10,737.2	83.9	85.2	-91.59	-9,679.5	560.5	891.0	722.0	169.01	5.272		
20,200.0	10,712.6	20,348.1	10,737.3	84.7	86.0	-91.59	-9,779.5	561.2	891.0	720.3	170.72	5.219		
20,300.0	10,712.7	20,448.1	10,737.5	85.6	86.9	-91.60	-9,879.5	561.8	891.0	718.6	172.44	5.167		
20,400.0	10,712.8	20,548.1	10,737.6	86.5	87.7	-91.60	-9,979.5	562.4	891.0	716.9	174.15	5.116		
20,500.0	10,712.9	20,648.1	10,737.8	87.3	88.6	-91.60	-10,079.5	563.1	891.0	715.2	175.86	5.067		
20,600.0	10,713.0	20,748.1	10,738.0	88.2	89.4	-91.61	-10,179.5	563.7	891.0	713.4	177.57	5.018		
20,628.6	10,713.0	20,776.7	10,738.0	88.3	89.7	-91.61	-10,208.1	563.9	891.0	713.0	177.99	5.006		

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 #705H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

Offset Design CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #706H - OWB - PWP1												Offset Site Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 10164-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	3.0	3.0	-90.46	-0.2	-30.0	30.0				
100.0	100.0	99.0	99.0	3.0	3.0	-90.46	-0.2	-30.0	30.0	24.0	6.00	4.993	
200.0	200.0	199.0	199.0	3.0	3.0	-90.46	-0.2	-30.0	30.0	24.0	6.00	4.991	
300.0	300.0	299.0	299.0	3.0	3.0	-90.46	-0.2	-30.0	30.0	24.0	6.01	4.986	
400.0	400.0	399.0	399.0	3.0	3.0	-90.46	-0.2	-30.0	30.0	23.9	6.02	4.978	
500.0	500.0	499.0	499.0	3.1	3.1	-90.46	-0.2	-30.0	30.0	23.9	6.03	4.968	
600.0	600.0	599.0	599.0	3.1	3.1	-90.46	-0.2	-30.0	30.0	23.9	6.05	4.955	
700.0	700.0	699.0	699.0	3.1	3.1	-90.46	-0.2	-30.0	30.0	23.9	6.07	4.940	
800.0	800.0	799.0	799.0	3.2	3.2	-90.46	-0.2	-30.0	30.0	23.9	6.09	4.922	
900.0	900.0	899.0	899.0	3.2	3.2	-90.46	-0.2	-30.0	30.0	23.8	6.11	4.902	
1,000.0	1,000.0	999.0	999.0	3.2	3.2	-90.46	-0.2	-30.0	30.0	23.8	6.14	4.879	
1,100.0	1,100.0	1,099.0	1,099.0	3.3	3.3	-90.46	-0.2	-30.0	30.0	23.8	6.17	4.854	
1,200.0	1,200.0	1,199.0	1,199.0	3.4	3.4	-90.46	-0.2	-30.0	30.0	23.8	6.21	4.828	
1,300.0	1,300.0	1,299.0	1,299.0	3.4	3.4	-90.46	-0.2	-30.0	30.0	23.7	6.24	4.799	
1,400.0	1,400.0	1,399.0	1,399.0	3.5	3.5	-90.46	-0.2	-30.0	30.0	23.7	6.28	4.768	
1,500.0	1,500.0	1,499.0	1,499.0	3.5	3.5	-90.46	-0.2	-30.0	30.0	23.6	6.33	4.736	
1,600.0	1,600.0	1,599.0	1,599.0	3.6	3.6	-90.46	-0.2	-30.0	30.0	23.6	6.37	4.702	
1,700.0	1,700.0	1,699.0	1,699.0	3.7	3.7	-90.46	-0.2	-30.0	30.0	23.5	6.42	4.667	
1,800.0	1,800.0	1,799.0	1,799.0	3.8	3.8	-90.46	-0.2	-30.0	30.0	23.5	6.47	4.630	
1,900.0	1,900.0	1,899.0	1,899.0	3.9	3.9	-90.46	-0.2	-30.0	30.0	23.4	6.52	4.592	
2,000.0	2,000.0	1,999.0	1,999.0	3.9	3.9	-90.46	-0.2	-30.0	30.0	23.4	6.58	4.553	
2,100.0	2,100.0	2,099.0	2,099.0	4.0	4.0	-90.46	-0.2	-30.0	30.0	23.3	6.64	4.513	
2,200.0	2,200.0	2,199.0	2,199.0	4.1	4.1	-90.46	-0.2	-30.0	30.0	23.3	6.70	4.471	
2,300.0	2,300.0	2,299.0	2,299.0	4.2	4.2	-90.46	-0.2	-30.0	30.0	23.2	6.76	4.430	
2,400.0	2,400.0	2,399.0	2,399.0	4.3	4.3	-90.46	-0.2	-30.0	30.0	23.1	6.83	4.387	
2,500.0	2,500.0	2,499.0	2,499.0	4.4	4.4	-90.46	-0.2	-30.0	30.0	23.1	6.90	4.344 CC, ES, SF	
2,600.0	2,600.0	2,597.9	2,597.9	4.5	4.5	-90.88	-0.5	-31.6	31.6	24.7	6.97	4.542	
2,700.0	2,700.0	2,696.7	2,696.5	4.6	4.5	-91.91	-1.2	-36.6	36.7	29.7	7.04	5.221	
2,800.0	2,800.0	2,795.5	2,795.0	4.7	4.5	-93.10	-2.4	-44.8	45.0	37.9	7.11	6.332	
2,900.0	2,900.0	2,895.0	2,894.1	4.8	4.5	-93.98	-3.7	-53.7	54.0	46.8	7.19	7.511	
3,000.0	3,000.0	2,994.6	2,993.3	4.9	4.6	-94.60	-5.0	-62.6	63.0	55.8	7.28	8.659	
3,100.0	3,100.0	3,094.2	3,092.5	5.0	4.6	-95.08	-6.3	-71.5	72.1	64.7	7.37	9.777	
3,200.0	3,200.0	3,193.8	3,191.7	5.1	4.6	-95.44	-7.7	-80.4	81.1	73.6	7.46	10.862	
3,300.0	3,300.0	3,293.4	3,290.9	5.2	4.7	-95.74	-9.0	-89.3	90.1	82.5	7.56	11.914	
3,400.0	3,400.0	3,393.0	3,390.1	5.3	4.7	-95.98	-10.3	-98.2	99.1	91.4	7.66	12.933	
3,500.0	3,500.0	3,492.6	3,489.2	5.4	4.8	-96.18	-11.6	-107.1	108.1	100.4	7.77	13.918	
3,600.0	3,600.0	3,592.2	3,588.4	5.5	4.8	-96.34	-12.9	-116.0	117.2	109.3	7.88	14.870	
3,700.0	3,700.0	3,691.8	3,687.6	5.7	4.9	-96.49	-14.2	-124.9	126.2	118.2	7.99	15.788	
3,800.0	3,800.0	3,791.4	3,786.8	5.8	4.9	-96.61	-15.5	-133.8	135.2	127.1	8.11	16.674	
3,900.0	3,900.0	3,891.0	3,886.0	5.9	5.0	-96.72	-16.8	-142.7	144.2	136.0	8.23	17.527	
4,000.0	4,000.0	3,990.6	3,985.2	6.0	5.1	-96.82	-18.1	-151.5	153.3	144.9	8.35	18.348	
4,100.0	4,100.0	4,090.1	4,084.4	6.1	5.1	-96.91	-19.4	-160.4	162.3	153.8	8.48	19.139	
4,200.0	4,200.0	4,189.7	4,183.5	6.2	5.2	-96.98	-20.7	-169.3	171.3	162.7	8.61	19.899	
4,300.0	4,300.0	4,289.3	4,282.7	6.3	5.3	-97.05	-22.1	-178.2	180.3	171.6	8.74	20.630	
4,400.0	4,400.0	4,388.9	4,381.9	6.5	5.4	-97.12	-23.4	-187.1	189.4	180.5	8.88	21.333	
4,500.0	4,500.0	4,488.5	4,481.1	6.6	5.4	-97.17	-24.7	-196.0	198.4	189.4	9.01	22.008	
4,600.0	4,600.0	4,588.1	4,580.3	6.7	5.5	-97.23	-26.0	-204.9	207.4	198.3	9.15	22.656	
4,700.0	4,700.0	4,687.7	4,679.5	6.8	5.6	-97.27	-27.3	-213.8	216.4	207.1	9.30	23.279	
4,800.0	4,800.0	4,787.3	4,778.6	6.9	5.7	-97.32	-28.6	-222.7	225.5	216.0	9.44	23.878	
4,900.0	4,900.0	4,886.9	4,877.8	7.0	5.8	-97.36	-29.9	-231.6	234.5	224.9	9.59	24.453	
5,000.0	5,000.0	4,986.5	4,977.0	7.2	5.8	-97.40	-31.2	-240.5	243.5	233.8	9.74	25.005	

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 #705H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

Offset Design CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #706H - OWB - PWP1												Offset Site Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 10164-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.0	5,100.0	5,086.1	5,076.2	7.3	5.9	-97.43	-32.5	-249.4	252.5	242.7	9.89	25.536	
5,200.0	5,200.0	5,185.6	5,175.4	7.4	6.0	-97.46	-33.8	-258.3	261.6	251.5	10.04	26.045	
5,300.0	5,300.0	5,285.2	5,274.6	7.5	6.1	-97.49	-35.1	-267.2	270.6	260.4	10.20	26.535	
5,400.0	5,400.0	5,384.8	5,373.8	7.6	6.2	-97.52	-36.5	-276.1	279.6	269.3	10.35	27.006	
5,500.0	5,500.0	5,484.4	5,472.9	7.8	6.3	-97.55	-37.8	-285.0	288.7	278.1	10.51	27.458	
5,600.0	5,600.0	5,584.2	5,572.3	7.8	6.4	1.82	-39.1	-293.9	296.0	285.3	10.66	27.756	
5,700.0	5,699.8	5,684.1	5,671.8	7.9	6.5	1.83	-40.4	-302.8	299.8	289.0	10.81	27.741	
5,722.3	5,722.1	5,706.4	5,694.0	7.9	6.5	1.83	-40.7	-304.8	300.1	289.3	10.84	27.692	
5,800.0	5,799.5	5,784.1	5,771.4	7.9	6.6	1.85	-41.7	-311.8	301.1	290.2	10.95	27.494	
5,900.0	5,899.2	5,884.1	5,870.9	7.9	6.7	1.87	-43.0	-320.7	302.4	291.3	11.10	27.236	
6,000.0	5,998.9	5,984.0	5,970.5	7.9	6.8	1.89	-44.3	-329.6	303.7	292.4	11.26	26.976	
6,100.0	6,098.6	6,084.0	6,070.1	8.0	6.9	1.92	-45.6	-338.6	305.0	293.6	11.42	26.714	
6,200.0	6,198.3	6,184.0	6,169.7	8.0	7.0	1.94	-47.0	-347.5	306.3	294.7	11.58	26.451	
6,300.0	6,298.0	6,284.0	6,269.3	8.0	7.1	1.96	-48.3	-356.4	307.6	295.8	11.74	26.188	
6,400.0	6,397.7	6,384.0	6,368.9	8.1	7.2	1.98	-49.6	-365.4	308.8	296.9	11.91	25.925	
6,500.0	6,497.4	6,484.0	6,468.4	8.1	7.3	2.00	-50.9	-374.3	310.1	298.0	12.08	25.662	
6,600.0	6,597.1	6,584.0	6,568.0	8.2	7.4	2.02	-52.2	-383.2	311.4	299.1	12.26	25.400	
6,700.0	6,696.8	6,684.0	6,667.6	8.2	7.5	2.04	-53.5	-392.1	312.7	300.3	12.44	25.140	
6,800.0	6,796.5	6,784.0	6,767.2	8.2	7.6	2.07	-54.8	-401.1	314.0	301.4	12.62	24.882	
6,900.0	6,896.2	6,884.0	6,866.8	8.3	7.7	2.09	-56.2	-410.0	315.3	302.5	12.80	24.625	
7,000.0	6,995.9	6,984.0	6,966.4	8.3	7.8	2.11	-57.5	-418.9	316.5	303.6	12.99	24.371	
7,100.0	7,095.6	7,084.0	7,065.9	8.4	7.9	2.13	-58.8	-427.9	317.8	304.7	13.18	24.120	
7,200.0	7,195.3	7,183.9	7,165.5	8.5	8.1	2.15	-60.1	-436.8	319.1	305.7	13.37	23.871	
7,300.0	7,295.0	7,283.9	7,265.1	8.5	8.2	2.17	-61.4	-445.7	320.4	306.8	13.56	23.625	
7,400.0	7,394.7	7,383.9	7,364.7	8.6	8.3	2.19	-62.7	-454.7	321.7	307.9	13.76	23.383	
7,500.0	7,494.4	7,483.9	7,464.3	8.6	8.4	2.21	-64.0	-463.6	323.0	309.0	13.96	23.143	
7,600.0	7,594.1	7,583.9	7,563.9	8.7	8.5	2.23	-65.4	-472.5	324.3	310.1	14.16	22.907	
7,700.0	7,693.8	7,683.9	7,663.4	8.7	8.6	2.25	-66.7	-481.5	325.5	311.2	14.36	22.675	
7,800.0	7,793.5	7,783.9	7,763.0	8.8	8.7	2.27	-68.0	-490.4	326.8	312.3	14.56	22.446	
7,900.0	7,893.2	7,883.9	7,862.6	8.9	8.8	2.29	-69.3	-499.3	328.1	313.3	14.77	22.220	
8,000.0	7,992.9	7,983.9	7,962.2	8.9	9.0	2.30	-70.6	-508.3	329.4	314.4	14.97	21.998	
8,100.0	8,092.6	8,083.9	8,061.8	9.0	9.1	2.32	-71.9	-517.2	330.7	315.5	15.18	21.780	
8,200.0	8,192.3	8,183.9	8,161.4	9.1	9.2	2.34	-73.2	-526.1	332.0	316.6	15.39	21.566	
8,300.0	8,292.0	8,283.9	8,260.9	9.2	9.3	2.36	-74.6	-535.1	333.3	317.7	15.61	21.355	
8,400.0	8,391.7	8,383.8	8,360.5	9.2	9.4	2.38	-75.9	-544.0	334.5	318.7	15.82	21.148	
8,500.0	8,491.4	8,483.8	8,460.1	9.3	9.5	2.40	-77.2	-552.9	335.8	319.8	16.03	20.945	
8,600.0	8,591.1	8,583.8	8,559.7	9.4	9.7	2.42	-78.5	-561.9	337.1	320.9	16.25	20.745	
8,700.0	8,690.8	8,683.8	8,659.3	9.5	9.8	2.43	-79.8	-570.8	338.4	321.9	16.47	20.549	
8,800.0	8,790.5	8,783.8	8,758.9	9.5	9.9	2.45	-81.1	-579.7	339.7	323.0	16.69	20.356	
8,900.0	8,890.2	8,883.8	8,858.4	9.6	10.0	2.47	-82.4	-588.7	341.0	324.1	16.91	20.168	
9,000.0	8,989.9	8,983.8	8,958.0	9.7	10.1	2.49	-83.7	-597.6	342.3	325.1	17.13	19.982	
9,100.0	9,089.6	9,083.8	9,057.6	9.8	10.3	2.50	-85.1	-606.5	343.5	326.2	17.35	19.800	
9,200.0	9,189.3	9,183.8	9,157.2	9.9	10.4	2.52	-86.4	-615.4	344.8	327.3	17.57	19.622	
9,300.0	9,289.0	9,283.8	9,256.8	10.0	10.5	2.54	-87.7	-624.4	346.1	328.3	17.80	19.447	
9,400.0	9,388.7	9,383.8	9,356.4	10.0	10.6	2.56	-89.0	-633.3	347.4	329.4	18.02	19.275	
9,500.0	9,488.4	9,483.8	9,455.9	10.1	10.7	2.57	-90.3	-642.2	348.7	330.4	18.25	19.106	
9,600.0	9,588.1	9,583.7	9,555.5	10.2	10.9	2.59	-91.6	-651.2	350.0	331.5	18.48	18.941	
9,700.0	9,687.8	9,683.7	9,655.1	10.3	11.0	2.61	-92.9	-660.1	351.3	332.6	18.71	18.779	
9,800.0	9,787.5	9,783.7	9,754.7	10.4	11.1	2.62	-94.3	-669.0	352.5	333.6	18.93	18.619	
9,900.0	9,887.2	9,883.7	9,854.3	10.5	11.2	2.64	-95.6	-678.0	353.8	334.7	19.16	18.463	
10,000.0	9,986.9	9,983.7	9,953.9	10.6	11.4	2.66	-96.9	-686.9	355.1	335.7	19.39	18.310	

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 #705H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

Offset Design CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #706H - OWB - PWP1													Offset Site Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 10164-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	10,086.6	10,083.7	10,053.4	10.7	11.5	2.67	-98.2	-695.8	356.4	336.8	19.56	18.224		
10,152.2	10,138.7	10,135.9	10,105.4	10.7	11.5	2.68	-98.9	-700.5	357.1	337.5	19.61	18.212		
10,200.0	10,186.2	10,179.0	10,148.3	10.7	11.6	45.05	-99.6	-704.4	357.6	337.9	19.66	18.186		
10,250.0	10,235.6	10,216.7	10,185.7	10.7	11.6	61.30	-102.1	-708.7	359.1	339.3	19.80	18.138		
10,300.0	10,284.1	10,250.0	10,218.4	10.7	11.6	68.42	-106.1	-713.3	361.9	341.8	20.09	18.017		
10,350.0	10,331.5	10,292.1	10,259.2	10.7	11.6	72.59	-113.7	-720.3	365.9	345.6	20.32	18.012		
10,400.0	10,377.4	10,329.7	10,295.0	10.7	11.6	75.27	-122.8	-727.5	371.4	350.7	20.66	17.973		
10,450.0	10,421.4	10,367.3	10,329.9	10.8	11.6	77.21	-134.1	-735.6	378.1	357.1	21.03	17.977		
10,500.0	10,463.3	10,400.0	10,359.5	10.8	11.6	78.53	-145.5	-743.4	386.2	364.7	21.54	17.935		
10,550.0	10,502.5	10,442.2	10,396.6	10.9	11.6	79.87	-162.6	-754.5	395.6	373.9	21.76	18.182		
10,600.0	10,539.0	10,479.6	10,428.0	10.9	11.7	80.81	-179.8	-765.1	406.4	384.3	22.08	18.402		
10,650.0	10,572.4	10,517.0	10,458.1	11.0	11.7	81.56	-198.9	-776.5	418.4	396.1	22.37	18.707		
10,700.0	10,602.4	10,550.0	10,483.4	11.1	11.7	81.95	-217.2	-787.1	431.8	409.1	22.71	19.014		
10,750.0	10,628.8	10,591.8	10,513.6	11.2	11.8	82.56	-242.3	-801.3	446.3	423.5	22.81	19.566		
10,800.0	10,651.5	10,629.2	10,538.9	11.2	11.8	82.84	-266.5	-814.7	461.9	439.0	22.98	20.105		
10,850.0	10,670.1	10,666.9	10,562.4	11.3	11.9	82.99	-292.3	-828.6	478.7	455.6	23.12	20.705		
10,900.0	10,684.7	10,704.7	10,584.0	11.4	12.0	83.01	-319.7	-843.2	496.4	473.2	23.25	21.350		
10,950.0	10,695.1	10,742.9	10,603.8	11.5	12.0	82.91	-348.7	-858.3	515.1	491.7	23.39	22.021		
11,000.0	10,701.2	10,781.5	10,621.5	11.6	12.1	82.71	-379.2	-874.0	534.5	511.0	23.55	22.700		
11,044.7	10,703.0	10,816.5	10,635.5	11.7	12.2	82.45	-407.8	-888.5	552.5	528.8	23.71	23.300		
11,100.0	10,703.1	10,861.7	10,650.7	11.9	12.3	84.38	-445.8	-907.4	575.5	551.5	23.98	24.002		
11,200.0	10,703.2	10,949.7	10,670.5	12.2	12.6	86.78	-522.8	-944.9	618.3	593.7	24.61	25.123		
11,300.0	10,703.3	11,044.8	10,677.0	12.5	12.9	87.61	-608.6	-985.3	661.2	635.8	25.36	26.071		
11,400.0	10,703.4	11,164.7	10,677.1	13.0	13.4	87.79	-718.5	-1,033.3	701.7	675.4	26.29	26.695		
11,500.0	10,703.5	11,289.0	10,677.3	13.5	13.9	87.94	-834.4	-1,078.1	738.3	711.0	27.33	27.016		
11,600.0	10,703.6	11,417.4	10,677.4	14.0	14.6	88.05	-956.1	-1,119.0	770.8	742.3	28.48	27.067		
11,700.0	10,703.7	11,549.5	10,677.5	14.6	15.3	88.15	-1,083.1	-1,155.4	798.9	769.2	29.73	26.875		
11,800.0	10,703.8	11,685.0	10,677.7	15.2	16.0	88.22	-1,214.9	-1,186.6	822.6	791.5	31.04	26.497		
11,900.0	10,703.9	11,823.4	10,677.8	15.9	16.8	88.28	-1,350.9	-1,212.0	841.6	809.1	32.42	25.961		
12,000.0	10,704.0	11,964.0	10,678.0	16.5	17.7	88.32	-1,490.3	-1,231.1	855.7	821.9	33.82	25.302		
12,100.0	10,704.1	12,106.3	10,678.1	17.2	18.5	88.35	-1,632.0	-1,243.4	865.0	829.8	35.24	24.547		
12,200.0	10,704.2	12,249.6	10,678.3	18.0	19.4	88.36	-1,775.2	-1,248.6	869.3	832.6	36.65	23.717		
12,300.0	10,704.3	12,365.2	10,678.4	18.7	20.2	88.36	-1,890.8	-1,248.4	869.6	831.6	38.05	22.852		
12,400.0	10,704.4	12,465.2	10,678.5	19.4	20.8	88.36	-1,990.8	-1,247.7	869.6	830.1	39.48	22.028		
12,500.0	10,704.5	12,565.2	10,678.6	20.2	21.5	88.36	-2,090.8	-1,247.1	869.6	828.7	40.92	21.249		
12,600.0	10,704.6	12,665.2	10,678.7	20.9	22.1	88.36	-2,190.8	-1,246.5	869.6	827.2	42.39	20.514		
12,700.0	10,704.7	12,765.2	10,678.8	21.7	22.8	88.36	-2,290.8	-1,245.8	869.6	825.7	43.88	19.820		
12,800.0	10,704.8	12,865.2	10,678.9	22.5	23.5	88.36	-2,390.8	-1,245.2	869.6	824.2	45.38	19.164		
12,900.0	10,704.9	12,965.2	10,679.0	23.3	24.2	88.36	-2,490.8	-1,244.6	869.6	822.7	46.90	18.544		
13,000.0	10,705.0	13,065.2	10,679.1	24.0	24.9	88.36	-2,590.8	-1,244.0	869.6	821.2	48.43	17.957		
13,100.0	10,705.1	13,165.2	10,679.2	24.8	25.7	88.36	-2,690.8	-1,243.3	869.6	819.7	49.97	17.403		
13,200.0	10,705.2	13,265.2	10,679.3	25.6	26.4	88.36	-2,790.8	-1,242.7	869.6	818.1	51.53	16.878		
13,300.0	10,705.4	13,365.2	10,679.4	26.4	27.1	88.36	-2,890.8	-1,242.1	869.6	816.5	53.09	16.380		
13,400.0	10,705.5	13,465.2	10,679.5	27.2	27.9	88.36	-2,990.8	-1,241.5	869.6	815.0	54.67	15.908		
13,500.0	10,705.6	13,565.2	10,679.6	28.1	28.7	88.36	-3,090.8	-1,240.8	869.6	813.4	56.25	15.460		
13,600.0	10,705.7	13,665.2	10,679.7	28.9	29.4	88.36	-3,190.8	-1,240.2	869.6	811.8	57.84	15.035		
13,700.0	10,705.8	13,765.2	10,679.8	29.7	30.2	88.36	-3,290.8	-1,239.6	869.6	810.2	59.44	14.630		
13,800.0	10,705.9	13,865.2	10,680.0	30.5	31.0	88.36	-3,390.8	-1,238.9	869.6	808.6	61.05	14.246		
13,900.0	10,706.0	13,965.2	10,680.1	31.3	31.7	88.36	-3,490.8	-1,238.3	869.6	807.0	62.66	13.879		
14,000.0	10,706.1	14,065.2	10,680.2	32.1	32.5	88.36	-3,590.8	-1,237.7	869.6	805.4	64.27	13.530		
14,100.0	10,706.2	14,165.2	10,680.3	33.0	33.3	88.36	-3,690.8	-1,237.1	869.6	803.7	65.90	13.197		

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 #705H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

Offset Design CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #706H - OWB - PWP1													Offset Site Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 10164-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
14,200.0	10,706.3	14,265.2	10,680.4	33.8	34.1	88.36		-3,790.8	-1,236.4	869.6	802.1	67.53	12.878	
14,300.0	10,706.4	14,365.2	10,680.5	34.6	34.9	88.36		-3,890.8	-1,235.8	869.6	800.5	69.16	12.574	
14,400.0	10,706.5	14,465.2	10,680.6	35.5	35.7	88.36		-3,990.8	-1,235.2	869.6	798.8	70.80	12.284	
14,500.0	10,706.6	14,565.2	10,680.7	36.3	36.5	88.36		-4,090.8	-1,234.5	869.6	797.2	72.44	12.005	
14,600.0	10,706.7	14,665.2	10,680.8	37.1	37.3	88.36		-4,190.8	-1,233.9	869.6	795.6	74.08	11.739	
14,700.0	10,706.8	14,765.2	10,680.9	38.0	38.1	88.36		-4,290.7	-1,233.3	869.6	793.9	75.73	11.483	
14,800.0	10,706.9	14,865.2	10,681.0	38.8	38.9	88.36		-4,390.7	-1,232.7	869.6	792.3	77.38	11.238	
14,900.0	10,707.0	14,965.2	10,681.1	39.6	39.7	88.36		-4,490.7	-1,232.0	869.6	790.6	79.04	11.003	
15,000.0	10,707.1	15,065.2	10,681.2	40.5	40.5	88.36		-4,590.7	-1,231.4	869.6	788.9	80.69	10.777	
15,100.0	10,707.2	15,165.2	10,681.3	41.3	41.3	88.36		-4,690.7	-1,230.8	869.6	787.3	82.35	10.560	
15,200.0	10,707.3	15,265.2	10,681.4	42.1	42.1	88.36		-4,790.7	-1,230.2	869.6	785.6	84.02	10.351	
15,300.0	10,707.4	15,365.2	10,681.5	43.0	43.0	88.36		-4,890.7	-1,229.5	869.6	784.0	85.68	10.150	
15,400.0	10,707.5	15,465.2	10,681.6	43.8	43.8	88.36		-4,990.7	-1,228.9	869.6	782.3	87.35	9.956	
15,500.0	10,707.6	15,565.2	10,681.7	44.7	44.6	88.36		-5,090.7	-1,228.3	869.6	780.6	89.02	9.769	
15,600.0	10,707.8	15,665.2	10,681.8	45.5	45.4	88.36		-5,190.7	-1,227.6	869.6	778.9	90.69	9.589	
15,700.0	10,707.9	15,765.2	10,681.9	46.4	46.2	88.36		-5,290.7	-1,227.0	869.6	777.3	92.37	9.415	
15,800.0	10,708.0	15,865.2	10,682.0	47.2	47.1	88.36		-5,390.7	-1,226.4	869.6	775.6	94.04	9.247	
15,900.0	10,708.1	15,965.2	10,682.1	48.1	47.9	88.36		-5,490.7	-1,225.8	869.6	773.9	95.72	9.085	
16,000.0	10,708.2	16,065.2	10,682.2	48.9	48.7	88.36		-5,590.7	-1,225.1	869.6	772.2	97.40	8.929	
16,100.0	10,708.3	16,165.2	10,682.3	49.7	49.5	88.36		-5,690.7	-1,224.5	869.6	770.6	99.08	8.777	
16,200.0	10,708.4	16,265.2	10,682.4	50.6	50.4	88.36		-5,790.7	-1,223.9	869.6	768.9	100.76	8.631	
16,300.0	10,708.5	16,365.2	10,682.5	51.4	51.2	88.36		-5,890.7	-1,223.3	869.6	767.2	102.44	8.489	
16,400.0	10,708.6	16,465.2	10,682.6	52.3	52.0	88.36		-5,990.7	-1,222.6	869.6	765.5	104.13	8.352	
16,500.0	10,708.7	16,565.2	10,682.7	53.1	52.9	88.36		-6,090.7	-1,222.0	869.6	763.8	105.81	8.219	
16,600.0	10,708.8	16,665.2	10,682.8	54.0	53.7	88.36		-6,190.7	-1,221.4	869.6	762.1	107.50	8.090	
16,700.0	10,708.9	16,765.2	10,682.9	54.8	54.5	88.36		-6,290.7	-1,220.7	869.6	760.5	109.19	7.965	
16,800.0	10,709.0	16,865.2	10,683.0	55.7	55.4	88.36		-6,390.7	-1,220.1	869.7	758.8	110.88	7.843	
16,900.0	10,709.1	16,965.2	10,683.2	56.5	56.2	88.36		-6,490.7	-1,219.5	869.7	757.1	112.57	7.726	
17,000.0	10,709.2	17,065.2	10,683.3	57.4	57.1	88.36		-6,590.7	-1,218.9	869.7	755.4	114.26	7.611	
17,100.0	10,709.3	17,165.2	10,683.4	58.2	57.9	88.36		-6,690.7	-1,218.2	869.7	753.7	115.95	7.500	
17,200.0	10,709.4	17,265.2	10,683.5	59.1	58.7	88.36		-6,790.7	-1,217.6	869.7	752.0	117.65	7.392	
17,300.0	10,709.5	17,365.2	10,683.6	59.9	59.6	88.36		-6,890.7	-1,217.0	869.7	750.3	119.34	7.287	
17,400.0	10,709.6	17,465.2	10,683.7	60.8	60.4	88.36		-6,990.7	-1,216.3	869.7	748.6	121.03	7.185	
17,500.0	10,709.7	17,565.2	10,683.8	61.6	61.3	88.36		-7,090.7	-1,215.7	869.7	746.9	122.73	7.086	
17,600.0	10,709.8	17,665.2	10,683.9	62.5	62.1	88.35		-7,190.7	-1,215.1	869.7	745.2	124.43	6.989	
17,700.0	10,709.9	17,765.2	10,684.0	63.4	62.9	88.35		-7,290.7	-1,214.5	869.7	743.5	126.12	6.895	
17,800.0	10,710.0	17,865.2	10,684.1	64.2	63.8	88.35		-7,390.7	-1,213.8	869.7	741.8	127.82	6.804	
17,900.0	10,710.2	17,965.2	10,684.2	65.1	64.6	88.35		-7,490.7	-1,213.2	869.7	740.1	129.52	6.714	
18,000.0	10,710.3	18,065.2	10,684.3	65.9	65.5	88.35		-7,590.7	-1,212.6	869.7	738.4	131.22	6.627	
18,100.0	10,710.4	18,165.2	10,684.4	66.8	66.3	88.35		-7,690.7	-1,212.0	869.7	736.7	132.92	6.543	
18,200.0	10,710.5	18,265.2	10,684.5	67.6	67.1	88.35		-7,790.7	-1,211.3	869.7	735.0	134.62	6.460	
18,300.0	10,710.6	18,365.2	10,684.6	68.5	68.0	88.35		-7,890.7	-1,210.7	869.7	733.3	136.32	6.379	
18,400.0	10,710.7	18,465.2	10,684.7	69.3	68.8	88.35		-7,990.7	-1,210.1	869.7	731.6	138.02	6.301	
18,500.0	10,710.8	18,565.2	10,684.8	70.2	69.7	88.35		-8,090.7	-1,209.4	869.7	729.9	139.73	6.224	
18,600.0	10,710.9	18,665.2	10,684.9	71.0	70.5	88.35		-8,190.7	-1,208.8	869.7	728.2	141.43	6.149	
18,700.0	10,711.0	18,765.2	10,685.0	71.9	71.4	88.35		-8,290.7	-1,208.2	869.7	726.5	143.13	6.076	
18,800.0	10,711.1	18,865.2	10,685.1	72.7	72.2	88.35		-8,390.7	-1,207.6	869.7	724.8	144.84	6.004	
18,900.0	10,711.2	18,965.2	10,685.2	73.6	73.1	88.35		-8,490.7	-1,206.9	869.7	723.1	146.54	5.935	
19,000.0	10,711.3	19,065.2	10,685.3	74.5	73.9	88.35		-8,590.7	-1,206.3	869.7	721.4	148.25	5.866	
19,100.0	10,711.4	19,165.2	10,685.4	75.3	74.8	88.35		-8,690.7	-1,205.7	869.7	719.7	149.95	5.800	
19,200.0	10,711.5	19,265.2	10,685.5	76.2	75.6	88.35		-8,790.7	-1,205.1	869.7	718.0	151.66	5.734	

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 #705H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

Offset Design CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #706H - OWB - PWP1													Offset Site Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 10164-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	10,711.6	19,365.2	10,685.6	77.0	76.5	88.35	-8,890.7	-1,204.4	869.7	716.3	153.36	5.671		
19,400.0	10,711.7	19,465.2	10,685.7	77.9	77.3	88.35	-8,990.7	-1,203.8	869.7	714.6	155.07	5.608		
19,500.0	10,711.8	19,565.2	10,685.8	78.7	78.2	88.35	-9,090.7	-1,203.2	869.7	712.9	156.78	5.547		
19,600.0	10,711.9	19,665.2	10,685.9	79.6	79.0	88.35	-9,190.7	-1,202.5	869.7	711.2	158.48	5.487		
19,700.0	10,712.0	19,765.2	10,686.0	80.5	79.9	88.35	-9,290.6	-1,201.9	869.7	709.5	160.19	5.429		
19,800.0	10,712.1	19,865.2	10,686.1	81.3	80.7	88.35	-9,390.6	-1,201.3	869.7	707.8	161.90	5.372		
19,900.0	10,712.2	19,965.2	10,686.2	82.2	81.6	88.35	-9,490.6	-1,200.7	869.7	706.1	163.61	5.316		
20,000.0	10,712.3	20,065.2	10,686.4	83.0	82.4	88.35	-9,590.6	-1,200.0	869.7	704.4	165.32	5.261		
20,100.0	10,712.4	20,165.2	10,686.5	83.9	83.3	88.35	-9,690.6	-1,199.4	869.7	702.7	167.02	5.207		
20,200.0	10,712.6	20,265.2	10,686.6	84.7	84.1	88.35	-9,790.6	-1,198.8	869.7	700.9	168.73	5.154		
20,300.0	10,712.7	20,365.2	10,686.7	85.6	85.0	88.35	-9,890.6	-1,198.2	869.7	699.2	170.44	5.102		
20,400.0	10,712.8	20,465.2	10,686.8	86.5	85.8	88.35	-9,990.6	-1,197.5	869.7	697.5	172.15	5.052		
20,500.0	10,712.9	20,565.2	10,686.9	87.3	86.7	88.35	-10,090.6	-1,196.9	869.7	695.8	173.86	5.002		
20,600.0	10,713.0	20,665.2	10,687.0	88.2	87.5	88.35	-10,190.6	-1,196.3	869.7	694.1	175.57	4.953		
20,628.6	10,713.0	20,693.8	10,687.0	88.3	87.8	88.35	-10,219.3	-1,196.1	869.7	693.7	175.99	4.942		

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 #705H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

Offset Design 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	-90.51	-2.5	-280.0	280.0				
100.0	100.0	96.0	96.0	3.0	3.0	-90.51	-2.5	-280.0	280.0	274.0	6.00	46.647	
200.0	200.0	196.0	196.0	3.0	3.0	-90.51	-2.5	-280.0	280.0	274.0	6.04	46.373	
300.0	300.0	296.0	296.0	3.0	3.1	-90.51	-2.5	-280.0	280.0	273.9	6.12	45.776	
400.0	400.0	396.0	396.0	3.0	3.2	-90.51	-2.5	-280.0	280.0	273.8	6.24	44.906	
500.0	500.0	496.0	496.0	3.1	3.4	-90.51	-2.5	-280.0	280.0	273.6	6.39	43.819	
600.0	600.0	596.0	596.0	3.1	3.6	-90.51	-2.5	-280.0	280.0	273.4	6.58	42.578	
700.0	700.0	696.0	696.0	3.1	3.8	-90.51	-2.5	-280.0	280.0	273.2	6.79	41.238	
800.0	800.0	796.0	796.0	3.2	4.0	-90.51	-2.5	-280.0	280.0	273.0	7.03	39.846	
900.0	900.0	896.0	896.0	3.2	4.2	-90.51	-2.5	-280.0	280.0	272.7	7.28	38.440	
1,000.0	1,000.0	996.0	996.0	3.2	4.5	-90.51	-2.5	-280.0	280.0	272.4	7.56	37.047	
1,100.0	1,100.0	1,096.0	1,096.0	3.3	4.8	-90.51	-2.5	-280.0	280.0	272.2	7.85	35.686	
1,200.0	1,200.0	1,196.0	1,196.0	3.4	5.0	-90.51	-2.5	-280.0	280.0	271.9	8.15	34.370	
1,300.0	1,300.0	1,296.0	1,296.0	3.4	5.3	-90.51	-2.5	-280.0	280.0	271.5	8.46	33.106	
1,400.0	1,400.0	1,396.0	1,396.0	3.5	5.6	-90.51	-2.5	-280.0	280.0	271.2	8.78	31.899	
1,500.0	1,500.0	1,496.0	1,496.0	3.5	5.9	-90.51	-2.5	-280.0	280.0	270.9	9.11	30.750	
1,600.0	1,600.0	1,596.0	1,596.0	3.6	6.3	-90.51	-2.5	-280.0	280.0	270.6	9.44	29.659	
1,700.0	1,700.0	1,696.0	1,696.0	3.7	6.6	-90.51	-2.5	-280.0	280.0	270.2	9.78	28.625	
1,800.0	1,800.0	1,796.0	1,796.0	3.8	6.9	-90.51	-2.5	-280.0	280.0	269.9	10.13	27.646	
1,900.0	1,900.0	1,896.0	1,896.0	3.9	7.2	-90.51	-2.5	-280.0	280.0	269.5	10.48	26.720	
2,000.0	2,000.0	1,996.0	1,996.0	3.9	7.5	-90.51	-2.5	-280.0	280.0	269.2	10.83	25.843	
2,100.0	2,100.0	2,096.0	2,096.0	4.0	7.9	-90.51	-2.5	-280.0	280.0	268.8	11.19	25.013	
2,200.0	2,200.0	2,196.0	2,196.0	4.1	8.2	-90.51	-2.5	-280.0	280.0	268.4	11.56	24.227	
2,300.0	2,300.0	2,296.0	2,296.0	4.2	8.5	-90.51	-2.5	-280.0	280.0	268.1	11.92	23.483	
2,400.0	2,400.0	2,396.0	2,396.0	4.3	8.9	-90.51	-2.5	-280.0	280.0	267.7	12.29	22.777	
2,500.0	2,500.0	2,496.0	2,496.0	4.4	9.2	-90.51	-2.5	-280.0	280.0	267.3	12.67	22.108	
2,600.0	2,600.0	2,606.1	2,606.1	4.5	9.6	-90.42	-2.0	-278.1	278.3	265.2	13.06	21.306	
2,700.0	2,700.0	2,716.3	2,716.1	4.6	9.9	-90.14	-0.7	-272.0	272.8	259.3	13.44	20.297	
2,800.0	2,800.0	2,819.8	2,819.2	4.7	10.3	-89.70	1.4	-263.2	264.3	250.5	13.81	19.138	
2,900.0	2,900.0	2,919.4	2,918.4	4.8	10.6	-89.24	3.4	-254.5	255.5	241.3	14.18	18.019	
3,000.0	3,000.0	3,019.0	3,017.6	4.9	11.0	-88.74	5.4	-245.7	246.7	232.2	14.55	16.955	
3,100.0	3,100.0	3,118.6	3,116.8	5.0	11.3	-88.20	7.4	-236.9	238.0	223.0	14.93	15.942	
3,200.0	3,200.0	3,218.2	3,216.0	5.1	11.6	-87.63	9.5	-228.2	229.2	213.9	15.31	14.977	
3,300.0	3,300.0	3,317.8	3,315.2	5.2	12.0	-87.01	11.5	-219.4	220.5	204.8	15.69	14.058	
3,400.0	3,400.0	3,417.4	3,414.3	5.3	12.3	-86.33	13.5	-210.6	211.9	195.8	16.07	13.182	
3,500.0	3,500.0	3,517.0	3,513.5	5.4	12.7	-85.61	15.5	-201.9	203.2	186.8	16.46	12.346	
3,600.0	3,600.0	3,616.6	3,612.7	5.5	13.0	-84.81	17.5	-193.1	194.6	177.8	16.85	11.548	
3,700.0	3,700.0	3,716.2	3,711.9	5.7	13.3	-83.94	19.6	-184.3	186.0	168.8	17.25	10.787	
3,800.0	3,800.0	3,815.8	3,811.1	5.8	13.7	-82.99	21.6	-175.6	177.5	159.9	17.65	10.061	
3,900.0	3,900.0	3,915.3	3,910.3	5.9	14.0	-81.95	23.6	-166.8	169.1	151.0	18.05	9.367	
4,000.0	4,000.0	4,014.9	4,009.4	6.0	14.4	-80.79	25.6	-158.0	160.7	142.2	18.46	8.704	
4,100.0	4,100.0	4,114.5	4,108.6	6.1	14.7	-79.51	27.6	-149.3	152.3	133.5	18.87	8.071	
4,200.0	4,200.0	4,214.1	4,207.8	6.2	15.1	-78.08	29.7	-140.5	144.1	124.8	19.30	7.467	
4,300.0	4,300.0	4,313.7	4,307.0	6.3	15.4	-76.48	31.7	-131.7	135.9	116.2	19.73	6.890	
4,400.0	4,400.0	4,413.3	4,406.2	6.5	15.8	-74.67	33.7	-123.0	127.9	107.7	20.17	6.341	
4,500.0	4,500.0	4,512.9	4,505.4	6.6	16.1	-72.63	35.7	-114.2	120.0	99.4	20.63	5.818	
4,600.0	4,600.0	4,612.5	4,604.6	6.7	16.5	-70.30	37.7	-105.4	112.3	91.2	21.10	5.321	
4,700.0	4,700.0	4,712.1	4,703.7	6.8	16.8	-67.64	39.8	-96.7	104.8	83.2	21.60	4.851	
4,800.0	4,800.0	4,811.7	4,802.9	6.9	17.2	-64.58	41.8	-87.9	97.6	75.4	22.13	4.408	
4,900.0	4,900.0	4,911.3	4,902.1	7.0	17.5	-61.03	43.8	-79.1	90.6	68.0	22.69	3.994	
5,000.0	5,000.0	5,010.8	5,001.3	7.2	17.9	-56.93	45.8	-70.4	84.1	60.8	23.30	3.611	

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 #705H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

Offset Design CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #804H - OWB - PWP0													Offset Site Error:	3.0 usft
Survey Program: 0-MWD+IFR1+FDIR													Offset Well Error:	3.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,100.0	5,110.4	5,100.5	7.3	18.2	-52.16		47.8	-61.6	78.1	54.2	23.95	3.262	
5,200.0	5,200.0	5,210.0	5,199.7	7.4	18.6	-46.65		49.9	-52.8	72.7	48.1	24.65	2.950	
5,300.0	5,300.0	5,309.6	5,298.8	7.5	18.9	-40.34		51.9	-44.1	68.1	42.7	25.40	2.682	
5,400.0	5,400.0	5,409.2	5,398.0	7.6	19.3	-33.21		53.9	-35.3	64.5	38.3	26.17	2.463	
5,500.0	5,500.0	5,508.8	5,497.2	7.8	19.6	-25.38		55.9	-26.5	61.9	35.0	26.94	2.298	
5,600.0	5,600.0	5,608.2	5,596.2	7.8	20.0	83.99		57.9	-17.8	60.4	32.7	27.67	2.183	
5,629.5	5,629.5	5,637.5	5,625.4	7.8	20.1	87.60		58.5	-15.2	60.3	32.4	27.85	2.164	CC, ES, SF
5,700.0	5,699.8	5,707.2	5,694.8	7.9	20.4	97.26		59.9	-9.1	61.1	32.9	28.21	2.167	
5,722.3	5,722.1	5,729.2	5,716.7	7.9	20.4	100.54		60.4	-7.1	61.8	33.5	28.29	2.185	
5,800.0	5,799.5	5,805.8	5,793.0	7.9	20.7	111.50		61.9	-0.4	65.9	37.5	28.44	2.317	
5,900.0	5,899.2	5,904.4	5,891.2	7.9	21.1	123.31		63.9	8.3	74.2	45.8	28.46	2.609	
6,000.0	5,998.9	6,003.0	5,989.4	7.9	21.4	132.48		65.9	17.0	85.1	56.6	28.43	2.992	
6,100.0	6,098.6	6,101.6	6,087.6	8.0	21.8	139.47		67.9	25.7	97.6	69.1	28.45	3.430	
6,200.0	6,198.3	6,200.2	6,185.7	8.0	22.1	144.83		69.9	34.3	111.2	82.7	28.54	3.896	
6,300.0	6,298.0	6,298.8	6,283.9	8.0	22.5	149.00		71.9	43.0	125.6	96.9	28.70	4.376	
6,400.0	6,397.7	6,397.4	6,382.1	8.1	22.8	152.31		73.9	51.7	140.5	111.6	28.91	4.859	
6,500.0	6,497.4	6,495.9	6,480.3	8.1	23.2	154.98		75.9	60.4	155.7	126.6	29.16	5.340	
6,600.0	6,597.1	6,594.5	6,578.5	8.2	23.5	157.17		77.9	69.1	171.3	141.8	29.45	5.815	
6,700.0	6,696.8	6,693.1	6,676.7	8.2	23.9	158.99		79.9	77.7	187.0	157.2	29.76	6.283	
6,800.0	6,796.5	6,791.7	6,774.9	8.2	24.2	160.53		81.9	86.4	202.9	172.8	30.10	6.741	
6,900.0	6,896.2	6,890.3	6,873.1	8.3	24.6	161.85		83.9	95.1	218.9	188.5	30.45	7.189	
7,000.0	6,995.9	6,988.9	6,971.3	8.3	24.9	162.98		85.9	103.8	235.0	204.2	30.82	7.626	
7,100.0	7,095.6	7,087.5	7,069.5	8.4	25.3	163.98		87.9	112.4	251.2	220.0	31.20	8.052	
7,200.0	7,195.3	7,186.1	7,167.6	8.5	25.7	164.85		89.9	121.1	267.5	235.9	31.59	8.468	
7,300.0	7,295.0	7,284.7	7,265.8	8.5	26.0	165.62		91.9	129.8	283.8	251.8	31.98	8.873	
7,400.0	7,394.7	7,383.3	7,364.0	8.6	26.4	166.31		93.9	138.5	300.2	267.8	32.39	9.267	
7,500.0	7,494.4	7,481.9	7,462.2	8.6	26.7	166.92		95.9	147.2	316.5	283.7	32.80	9.651	
7,600.0	7,594.1	7,580.5	7,560.4	8.7	27.1	167.48		97.9	155.8	333.0	299.8	33.21	10.025	
7,700.0	7,693.8	7,679.1	7,658.6	8.7	27.4	167.98		99.9	164.5	349.4	315.8	33.64	10.389	
7,800.0	7,793.5	7,777.7	7,756.8	8.8	27.8	168.44		101.9	173.2	365.9	331.8	34.06	10.743	
7,900.0	7,893.2	7,876.2	7,855.0	8.9	28.1	168.86		103.9	181.9	382.4	347.9	34.49	11.087	
8,000.0	7,992.9	7,974.8	7,953.2	8.9	28.5	169.24		105.9	190.6	398.9	364.0	34.92	11.423	
8,100.0	8,092.6	8,073.4	8,051.3	9.0	28.8	169.59		107.9	199.2	415.5	380.1	35.36	11.750	
8,200.0	8,192.3	8,172.0	8,149.5	9.1	29.2	169.92		109.9	207.9	432.0	396.2	35.80	12.068	
8,300.0	8,292.0	8,270.6	8,247.7	9.2	29.6	170.22		111.9	216.6	448.6	412.3	36.24	12.378	
8,400.0	8,391.7	8,369.2	8,345.9	9.2	29.9	170.50		114.0	225.3	465.1	428.5	36.68	12.679	
8,500.0	8,491.4	8,467.8	8,444.1	9.3	30.3	170.77		116.0	234.0	481.7	444.6	37.13	12.974	
8,600.0	8,591.1	8,566.4	8,542.3	9.4	30.6	171.01		118.0	242.6	498.3	460.7	37.58	13.260	
8,700.0	8,690.8	8,665.0	8,640.5	9.5	31.0	171.24		120.0	251.3	514.9	476.9	38.03	13.539	
8,800.0	8,790.5	8,763.6	8,738.7	9.5	31.3	171.45		122.0	260.0	531.5	493.0	38.48	13.811	
8,900.0	8,890.2	8,862.2	8,836.9	9.6	31.7	171.65		124.0	268.7	548.1	509.2	38.94	14.077	
9,000.0	8,989.9	8,960.8	8,935.1	9.7	32.0	171.84		126.0	277.3	564.8	525.4	39.40	14.335	
9,100.0	9,089.6	9,059.4	9,033.2	9.8	32.4	172.02		128.0	286.0	581.4	541.5	39.85	14.588	
9,200.0	9,189.3	9,157.9	9,131.4	9.9	32.8	172.19		130.0	294.7	598.0	557.7	40.31	14.834	
9,300.0	9,289.0	9,256.5	9,229.6	10.0	33.1	172.35		132.0	303.4	614.6	573.9	40.78	15.074	
9,400.0	9,388.7	9,355.1	9,327.8	10.0	33.5	172.50		134.0	312.1	631.3	590.1	41.24	15.308	
9,500.0	9,488.4	9,453.7	9,426.0	10.1	33.8	172.64		136.0	320.7	647.9	606.2	41.70	15.537	
9,600.0	9,588.1	9,552.3	9,524.2	10.2	34.2	172.78		138.0	329.4	664.6	622.4	42.17	15.761	
9,700.0	9,687.8	9,650.9	9,622.4	10.3	34.5	172.91		140.0	338.1	681.2	638.6	42.63	15.979	
9,800.0	9,787.5	9,749.5	9,720.6	10.4	34.9	173.03		142.0	346.8	697.9	654.8	43.10	16.192	
9,900.0	9,887.2	9,848.1	9,818.8	10.5	35.3	173.15		144.0	355.5	714.5	671.0	43.57	16.400	

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 #705H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

Offset Design		CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #804H - OWB - PWP0											Offset Site Error:	3.0 usft
Survey Program: 0-MWD+IFR1+FDIR													Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,000.0	9,986.9	9,946.7	9,916.9	10.6	35.6	173.26	146.0	364.1	731.2	687.2	44.04	16.603		
10,100.0	10,086.6	10,045.3	10,015.1	10.7	36.0	173.37	148.0	372.8	747.9	703.2	44.69	16.736		
10,152.2	10,138.7	10,096.8	10,066.4	10.7	36.2	173.42	149.0	377.4	756.6	711.7	44.89	16.853		
10,200.0	10,186.2	10,143.8	10,113.2	10.7	36.3	-143.67	149.9	381.5	765.1	720.0	45.08	16.972		
10,250.0	10,235.6	10,192.4	10,161.7	10.7	36.5	-127.16	150.9	385.8	775.0	729.8	45.27	17.121		
10,300.0	10,284.1	10,240.3	10,209.3	10.7	36.7	-119.91	151.9	390.0	786.1	740.7	45.45	17.297		
10,350.0	10,331.5	10,286.8	10,255.7	10.7	36.8	-115.96	152.9	394.1	798.4	752.8	45.62	17.499		
10,400.0	10,377.4	10,331.8	10,300.5	10.7	37.0	-113.51	153.8	398.0	811.9	766.2	45.80	17.730		
10,450.0	10,421.4	10,374.9	10,343.4	10.8	37.2	-111.82	154.6	401.8	826.9	780.9	45.97	17.990		
10,500.0	10,463.3	10,415.7	10,384.1	10.8	37.3	-110.53	155.5	405.4	843.4	797.3	46.14	18.281		
10,550.0	10,502.5	10,454.0	10,422.2	10.9	37.5	-109.41	156.2	408.8	861.6	815.3	46.31	18.606		
10,600.0	10,539.0	10,489.4	10,457.4	10.9	37.6	-108.30	157.0	411.9	881.5	835.1	46.48	18.965		
10,650.0	10,572.4	10,521.7	10,489.6	11.0	37.7	-107.06	157.6	414.8	903.4	856.7	46.66	19.360		
10,700.0	10,602.4	10,550.5	10,518.3	11.1	37.8	-105.60	158.2	417.3	927.1	880.3	46.84	19.791		
10,750.0	10,628.8	10,575.9	10,543.5	11.2	37.9	-103.82	158.7	419.5	952.8	905.7	47.03	20.260		
10,800.0	10,651.5	10,597.4	10,565.0	11.2	38.0	-101.64	159.2	421.4	980.3	933.1	47.21	20.764		

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 #705H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

Offset Design CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #805H - OWB - PWP0												Offset Site Error: 3.0 usft	
Survey Program: 0-MWD+IFR1+FDIR												Offset Well Error: 3.0 usft	
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance				Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)		Minimum Separation (usft)	Separation Factor
0.0	0.0	0.0	0.0	3.0	3.0	-89.77	1.4	-347.7	347.8				
100.0	100.0	95.0	95.0	3.0	3.0	-89.77	1.4	-347.7	347.7	341.7	6.00	57.934	
200.0	200.0	195.0	195.0	3.0	3.0	-89.77	1.4	-347.7	347.7	341.7	6.04	57.598	
300.0	300.0	295.0	295.0	3.0	3.1	-89.77	1.4	-347.7	347.7	341.6	6.12	56.860	
400.0	400.0	395.0	395.0	3.0	3.2	-89.77	1.4	-347.7	347.7	341.5	6.23	55.782	
500.0	500.0	495.0	495.0	3.1	3.4	-89.77	1.4	-347.7	347.7	341.4	6.39	54.435	
600.0	600.0	595.0	595.0	3.1	3.6	-89.77	1.4	-347.7	347.7	341.2	6.57	52.895	
700.0	700.0	695.0	695.0	3.1	3.8	-89.77	1.4	-347.7	347.7	341.0	6.79	51.231	
800.0	800.0	795.0	795.0	3.2	4.0	-89.77	1.4	-347.7	347.7	340.7	7.02	49.503	
900.0	900.0	895.0	895.0	3.2	4.2	-89.77	1.4	-347.7	347.7	340.5	7.28	47.757	
1,000.0	1,000.0	995.0	995.0	3.2	4.5	-89.77	1.4	-347.7	347.7	340.2	7.56	46.027	
1,100.0	1,100.0	1,095.0	1,095.0	3.3	4.8	-89.77	1.4	-347.7	347.7	339.9	7.84	44.336	
1,200.0	1,200.0	1,195.0	1,195.0	3.4	5.0	-89.77	1.4	-347.7	347.7	339.6	8.14	42.700	
1,300.0	1,300.0	1,295.0	1,295.0	3.4	5.3	-89.77	1.4	-347.7	347.7	339.3	8.45	41.130	
1,400.0	1,400.0	1,395.0	1,395.0	3.5	5.6	-89.77	1.4	-347.7	347.7	339.0	8.77	39.630	
1,500.0	1,500.0	1,495.0	1,495.0	3.5	5.9	-89.77	1.4	-347.7	347.7	338.6	9.10	38.203	
1,600.0	1,600.0	1,595.0	1,595.0	3.6	6.3	-89.77	1.4	-347.7	347.7	338.3	9.44	36.847	
1,700.0	1,700.0	1,695.0	1,695.0	3.7	6.6	-89.77	1.4	-347.7	347.7	338.0	9.78	35.562	
1,800.0	1,800.0	1,795.0	1,795.0	3.8	6.9	-89.77	1.4	-347.7	347.7	337.6	10.12	34.346	
1,900.0	1,900.0	1,895.0	1,895.0	3.9	7.2	-89.77	1.4	-347.7	347.7	337.3	10.48	33.195	
2,000.0	2,000.0	1,995.0	1,995.0	3.9	7.5	-89.77	1.4	-347.7	347.7	336.9	10.83	32.105	
2,100.0	2,100.0	2,095.0	2,095.0	4.0	7.9	-89.77	1.4	-347.7	347.7	336.6	11.19	31.074	
2,200.0	2,200.0	2,195.0	2,195.0	4.1	8.2	-89.77	1.4	-347.7	347.7	336.2	11.55	30.097	
2,300.0	2,300.0	2,295.0	2,295.0	4.2	8.5	-89.77	1.4	-347.7	347.7	335.8	11.92	29.172	
2,400.0	2,400.0	2,395.0	2,395.0	4.3	8.9	-89.77	1.4	-347.7	347.7	335.5	12.29	28.296	
2,500.0	2,500.0	2,495.0	2,495.0	4.4	9.2	-89.77	1.4	-347.7	347.7	335.1	12.66	27.464	
2,600.0	2,600.0	2,595.0	2,595.0	4.5	9.6	-89.77	1.4	-347.7	347.7	334.7	13.04	26.675	
2,700.0	2,700.0	2,695.0	2,695.0	4.6	9.9	-89.77	1.4	-347.7	347.7	334.3	13.41	25.925	
2,800.0	2,800.0	2,795.0	2,795.0	4.7	10.2	-89.77	1.4	-347.7	347.7	334.0	13.79	25.213	
2,900.0	2,900.0	2,895.0	2,895.0	4.8	10.6	-89.77	1.4	-347.7	347.7	333.6	14.17	24.535	
3,000.0	3,000.0	2,995.0	2,995.0	4.9	10.9	-89.77	1.4	-347.7	347.7	333.2	14.56	23.889	
3,100.0	3,100.0	3,095.0	3,095.0	5.0	11.3	-89.77	1.4	-347.7	347.7	332.8	14.94	23.273	
3,200.0	3,200.0	3,195.0	3,195.0	5.1	11.6	-89.77	1.4	-347.7	347.7	332.4	15.33	22.686	
3,300.0	3,300.0	3,295.0	3,295.0	5.2	12.0	-89.77	1.4	-347.7	347.7	332.0	15.72	22.126	
3,400.0	3,400.0	3,395.0	3,395.0	5.3	12.3	-89.77	1.4	-347.7	347.7	331.6	16.11	21.590	
3,500.0	3,500.0	3,495.0	3,495.0	5.4	12.7	-89.77	1.4	-347.7	347.7	331.2	16.50	21.078	
3,600.0	3,600.0	3,595.0	3,595.0	5.5	13.0	-89.77	1.4	-347.7	347.7	330.9	16.89	20.589	
3,700.0	3,700.0	3,695.0	3,695.0	5.7	13.4	-89.77	1.4	-347.7	347.7	330.5	17.28	20.120	
3,800.0	3,800.0	3,795.0	3,795.0	5.8	13.7	-89.77	1.4	-347.7	347.7	330.1	17.68	19.670	
3,900.0	3,900.0	3,895.0	3,895.0	5.9	14.1	-89.77	1.4	-347.7	347.7	329.7	18.08	19.239	
4,000.0	4,000.0	3,995.0	3,995.0	6.0	14.4	-89.77	1.4	-347.7	347.7	329.3	18.47	18.825	
4,100.0	4,100.0	4,095.0	4,095.0	6.1	14.8	-89.77	1.4	-347.7	347.7	328.9	18.87	18.428	
4,200.0	4,200.0	4,195.0	4,195.0	6.2	15.1	-89.77	1.4	-347.7	347.7	328.5	19.27	18.046	
4,300.0	4,300.0	4,295.0	4,295.0	6.3	15.5	-89.77	1.4	-347.7	347.7	328.1	19.67	17.679	
4,400.0	4,400.0	4,395.0	4,395.0	6.5	15.8	-89.77	1.4	-347.7	347.7	327.7	20.07	17.326	
4,500.0	4,500.0	4,495.0	4,495.0	6.6	16.2	-89.77	1.4	-347.7	347.7	327.3	20.47	16.985	
4,600.0	4,600.0	4,595.0	4,595.0	6.7	16.5	-89.77	1.4	-347.7	347.7	326.9	20.88	16.658	
4,700.0	4,700.0	4,695.0	4,695.0	6.8	16.9	-89.77	1.4	-347.7	347.7	326.5	21.28	16.342	
4,800.0	4,800.0	4,795.0	4,795.0	6.9	17.2	-89.77	1.4	-347.7	347.7	326.1	21.68	16.037	
4,900.0	4,900.0	4,895.0	4,895.0	7.0	17.6	-89.77	1.4	-347.7	347.7	325.7	22.09	15.743	
5,000.0	5,000.0	4,995.0	4,995.0	7.2	17.9	-89.77	1.4	-347.7	347.7	325.3	22.49	15.459	

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 #705H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

Offset Design CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #805H - OWB - PWP0												Offset Site Error: 3.0 usft	
Survey Program: 0-MWD+IFR1+FDIR												Offset Well Error: 3.0 usft	
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance				Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)		Minimum Separation (usft)	Separation Factor
5,100.0	5,100.0	5,095.0	5,095.0	7.3	18.3	-89.77	1.4	-347.7	347.7	324.8	22.90	15.185	
5,200.0	5,200.0	5,195.0	5,195.0	7.4	18.6	-89.77	1.4	-347.7	347.7	324.4	23.31	14.919	
5,300.0	5,300.0	5,295.0	5,295.0	7.5	19.0	-89.77	1.4	-347.7	347.7	324.0	23.72	14.663	
5,400.0	5,400.0	5,395.0	5,395.0	7.6	19.3	-89.77	1.4	-347.7	347.7	323.6	24.12	14.415	
5,500.0	5,500.0	5,495.0	5,495.0	7.8	19.7	-89.77	1.4	-347.7	347.7	323.2	24.53	14.175	
5,600.0	5,600.0	5,590.8	5,590.8	7.8	20.0	9.88	2.7	-348.3	346.6	321.7	24.93	13.905	
5,700.0	5,699.8	5,690.5	5,690.4	7.9	20.4	10.55	5.7	-349.5	342.7	317.4	25.34	13.525	
5,722.3	5,722.1	5,712.8	5,712.7	7.9	20.5	10.72	6.4	-349.8	341.4	315.9	25.43	13.423	
5,800.0	5,799.5	5,790.2	5,790.1	7.9	20.7	11.31	8.7	-350.7	336.5	310.7	25.76	13.062	
5,900.0	5,899.2	5,889.9	5,889.7	7.9	21.1	12.09	11.8	-351.9	330.2	304.0	26.19	12.610	
6,000.0	5,998.9	5,989.6	5,989.4	7.9	21.4	12.90	14.8	-353.1	324.0	297.4	26.62	12.171	
6,100.0	6,098.6	6,089.3	6,089.0	8.0	21.8	13.74	17.8	-354.4	317.9	290.8	27.06	11.746	
6,200.0	6,198.3	6,189.0	6,188.7	8.0	22.1	14.62	20.8	-355.6	311.9	284.3	27.51	11.335	
6,300.0	6,298.0	6,288.7	6,288.3	8.0	22.5	15.53	23.9	-356.8	305.9	277.9	27.97	10.936	
6,400.0	6,397.7	6,388.4	6,388.0	8.1	22.9	16.47	26.9	-358.0	300.0	271.6	28.43	10.551	
6,500.0	6,497.4	6,488.1	6,487.6	8.1	23.2	17.46	29.9	-359.2	294.2	265.3	28.90	10.178	
6,600.0	6,597.1	6,587.8	6,587.3	8.2	23.6	18.48	32.9	-360.4	288.5	259.1	29.38	9.819	
6,700.0	6,696.8	6,687.5	6,686.9	8.2	23.9	19.54	36.0	-361.7	282.8	253.0	29.86	9.472	
6,800.0	6,796.5	6,787.2	6,786.6	8.2	24.3	20.65	39.0	-362.9	277.3	247.0	30.35	9.137	
6,900.0	6,896.2	6,886.9	6,886.2	8.3	24.6	21.80	42.0	-364.1	271.9	241.0	30.84	8.815	
7,000.0	6,995.9	6,986.6	6,985.9	8.3	25.0	23.00	45.0	-365.3	266.6	235.2	31.34	8.505	
7,100.0	7,095.6	7,086.3	7,085.5	8.4	25.3	24.24	48.0	-366.5	261.4	229.6	31.85	8.208	
7,200.0	7,195.3	7,186.0	7,185.2	8.5	25.7	25.54	51.1	-367.7	256.4	224.0	32.36	7.922	
7,300.0	7,295.0	7,285.7	7,284.8	8.5	26.0	26.88	54.1	-369.0	251.4	218.6	32.87	7.648	
7,400.0	7,394.7	7,385.4	7,384.5	8.6	26.4	28.28	57.1	-370.2	246.7	213.3	33.39	7.387	
7,500.0	7,494.4	7,485.1	7,484.1	8.6	26.7	29.73	60.1	-371.4	242.0	208.1	33.92	7.136	
7,600.0	7,594.1	7,584.8	7,583.8	8.7	27.1	31.24	63.2	-372.6	237.6	203.1	34.44	6.898	
7,700.0	7,693.8	7,684.5	7,683.4	8.7	27.5	32.80	66.2	-373.8	233.3	198.3	34.97	6.671	
7,800.0	7,793.5	7,784.2	7,783.1	8.8	27.8	34.42	69.2	-375.0	229.2	193.7	35.50	6.456	
7,900.0	7,893.2	7,883.9	7,882.7	8.9	28.2	36.10	72.2	-376.3	225.3	189.2	36.03	6.252	
8,000.0	7,992.9	7,983.6	7,982.3	8.9	28.5	37.84	75.3	-377.5	221.6	185.0	36.57	6.059	
8,100.0	8,092.6	8,083.3	8,082.0	9.0	28.9	39.63	78.3	-378.7	218.1	181.0	37.10	5.878	
8,200.0	8,192.3	8,183.0	8,181.6	9.1	29.2	41.48	81.3	-379.9	214.8	177.1	37.63	5.708	
8,300.0	8,292.0	8,282.7	8,281.3	9.2	29.6	43.38	84.3	-381.1	211.7	173.6	38.16	5.549	
8,400.0	8,391.7	8,382.4	8,380.9	9.2	29.9	45.34	87.4	-382.3	208.9	170.2	38.68	5.401	
8,500.0	8,491.4	8,482.1	8,480.6	9.3	30.3	47.35	90.4	-383.6	206.4	167.2	39.20	5.264	
8,600.0	8,591.1	8,581.8	8,580.2	9.4	30.7	49.41	93.4	-384.8	204.1	164.3	39.72	5.138	
8,700.0	8,690.8	8,681.5	8,679.9	9.5	31.0	51.51	96.4	-386.0	202.0	161.8	40.22	5.023	
8,800.0	8,790.5	8,781.2	8,779.5	9.5	31.4	53.64	99.4	-387.2	200.3	159.6	40.72	4.918	
8,900.0	8,890.2	8,880.9	8,879.2	9.6	31.7	55.82	102.5	-388.4	198.8	157.6	41.22	4.824	
9,000.0	8,989.9	8,980.6	8,978.8	9.7	32.1	58.02	105.5	-389.6	197.6	155.9	41.70	4.740	
9,100.0	9,089.6	9,080.3	9,078.5	9.8	32.4	60.25	108.5	-390.9	196.8	154.6	42.17	4.666	
9,200.0	9,189.3	9,180.0	9,178.1	9.9	32.8	62.49	111.5	-392.1	196.2	153.6	42.63	4.602	
9,300.0	9,289.0	9,279.7	9,277.8	10.0	33.1	64.74	114.6	-393.3	195.9	152.8	43.08	4.547	
9,339.2	9,328.1	9,318.8	9,316.8	10.0	33.3	65.62	115.7	-393.8	195.9	152.6	43.26	4.529 CC	
9,400.0	9,388.7	9,379.5	9,377.4	10.0	33.5	66.99	117.6	-394.5	195.9	152.4	43.52	4.502	
9,500.0	9,488.4	9,479.2	9,477.1	10.1	33.9	69.24	120.6	-395.7	196.3	152.3	43.95	4.466 ES	
9,600.0	9,588.1	9,578.9	9,576.7	10.2	34.2	71.48	123.6	-396.9	196.9	152.6	44.37	4.438	
9,700.0	9,687.8	9,678.6	9,676.4	10.3	34.6	73.70	126.7	-398.2	197.9	153.1	44.77	4.419	
9,800.0	9,787.5	9,778.3	9,776.0	10.4	34.9	75.90	129.7	-399.4	199.1	153.9	45.17	4.408	
9,900.0	9,887.2	9,878.0	9,875.6	10.5	35.3	78.06	132.7	-400.6	200.6	155.1	45.56	4.404	

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 #705H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

Offset Design		CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #805H - OWB - PWP0											Offset Site Error:		3.0 usft		
Survey Program: 0-MWD+IFR1+FDIR															Offset Well Error:		3.0 usft
Reference		Offset		Semi Major Axis			Distance										
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	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	9,986.9	9,977.7	9,975.3	10.6	35.6	80.19	135.7	-401.8	202.4	156.5	45.93	4.407					
10,100.0	10,086.6	10,077.4	10,074.9	10.7	36.0	82.28	138.7	-403.0	204.5	158.3	46.26	4.421					
10,152.2	10,138.7	10,129.4	10,127.0	10.7	36.2	83.36	140.3	-403.7	205.7	159.3	46.42	4.432					
10,200.0	10,186.2	10,176.9	10,174.5	10.7	36.3	126.56	141.8	-404.2	208.8	162.2	46.57	4.484					
10,250.0	10,235.6	10,226.1	10,223.6	10.7	36.5	143.70	143.3	-404.8	216.2	169.5	46.71	4.629					
10,300.0	10,284.1	10,274.3	10,271.8	10.7	36.7	151.80	144.7	-405.4	228.0	181.1	46.86	4.865					
10,350.0	10,331.5	10,321.3	10,318.7	10.7	36.9	156.71	146.1	-406.0	244.0	196.9	47.01	5.189					
10,400.0	10,377.4	10,366.6	10,364.0	10.7	37.0	160.12	147.5	-406.5	264.1	216.9	47.16	5.599					
10,450.0	10,421.4	10,409.9	10,407.3	10.8	37.2	162.66	148.8	-407.1	288.2	240.9	47.32	6.091					
10,500.0	10,463.3	10,450.9	10,448.3	10.8	37.3	164.61	150.1	-407.6	316.2	268.7	47.48	6.659					
10,550.0	10,502.5	10,489.3	10,486.6	10.9	37.5	166.13	151.2	-408.0	347.7	300.1	47.65	7.297					
10,600.0	10,539.0	10,524.7	10,522.1	10.9	37.6	167.30	152.3	-408.5	382.6	334.7	47.81	8.001					
10,650.0	10,572.4	10,557.0	10,554.3	11.0	37.7	168.17	153.3	-408.9	420.4	372.5	47.98	8.763					
10,700.0	10,602.4	10,585.8	10,583.1	11.1	37.8	168.76	154.2	-409.2	461.0	412.9	48.13	9.579					
10,750.0	10,628.8	10,610.9	10,608.2	11.2	37.9	169.07	154.9	-409.5	504.1	455.8	48.28	10.441					
10,800.0	10,651.5	10,632.2	10,629.5	11.2	38.0	169.04	155.6	-409.8	549.2	500.7	48.41	11.344					
10,850.0	10,670.1	10,649.5	10,646.8	11.3	38.0	168.54	156.1	-410.0	596.0	547.4	48.53	12.282					
10,900.0	10,684.7	10,662.7	10,659.9	11.4	38.1	167.14	156.5	-410.2	644.1	595.5	48.62	13.248					
10,950.0	10,695.1	10,671.6	10,668.8	11.5	38.1	163.42	156.8	-410.3	693.3	644.6	48.69	14.238					
11,000.0	10,701.2	11,939.9	11,435.0	11.6	40.8	178.07	-585.6	-412.0	739.2	693.8	45.36	16.298					
11,044.7	10,703.0	11,984.5	11,435.0	11.7	40.9	178.09	-630.2	-411.6	737.4	691.9	45.49	16.212					
11,100.0	10,703.1	12,039.9	11,435.0	11.9	40.9	178.11	-685.6	-411.0	737.3	691.7	45.66	16.148					
11,200.0	10,703.2	12,139.9	11,435.0	12.2	41.0	178.14	-785.6	-410.0	737.2	691.2	46.02	16.020					
11,300.0	10,703.3	12,239.9	11,435.0	12.5	41.2	178.16	-885.6	-409.0	737.1	690.7	46.42	15.878					
11,400.0	10,703.4	12,339.9	11,435.0	13.0	41.3	178.19	-985.6	-408.0	737.0	690.1	46.88	15.721					
11,500.0	10,703.5	12,439.9	11,435.0	13.5	41.5	178.22	-1,085.6	-407.0	736.9	689.5	47.38	15.551					
11,600.0	10,703.6	12,539.9	11,435.0	14.0	41.7	178.25	-1,185.6	-406.0	736.8	688.8	47.93	15.370					
11,700.0	10,703.7	12,639.9	11,435.0	14.6	41.9	178.28	-1,285.6	-405.0	736.6	688.1	48.53	15.180					
11,800.0	10,703.8	12,739.9	11,435.0	15.2	42.1	178.31	-1,385.5	-404.0	736.5	687.4	49.17	14.980					
11,900.0	10,703.9	12,839.9	11,435.0	15.9	42.4	178.33	-1,485.5	-403.0	736.4	686.6	49.85	14.774					
12,000.0	10,704.0	12,939.9	11,435.0	16.5	42.6	178.36	-1,585.5	-402.0	736.3	685.7	50.56	14.562					
12,100.0	10,704.1	13,039.9	11,435.0	17.2	42.9	178.39	-1,685.5	-401.0	736.2	684.9	51.32	14.344					
12,200.0	10,704.2	13,139.9	11,435.0	18.0	43.2	178.42	-1,785.5	-400.0	736.1	684.0	52.12	14.124					
12,300.0	10,704.3	13,239.9	11,435.0	18.7	43.5	178.45	-1,885.5	-399.1	736.0	683.0	52.94	13.901					
12,400.0	10,704.4	13,339.9	11,435.0	19.4	43.8	178.48	-1,985.5	-398.1	735.8	682.0	53.81	13.676					
12,500.0	10,704.5	13,439.9	11,435.0	20.2	44.2	178.50	-2,085.5	-397.1	735.7	681.0	54.70	13.450					
12,600.0	10,704.6	13,539.9	11,435.0	20.9	44.5	178.53	-2,185.5	-396.1	735.6	680.0	55.62	13.225					
12,700.0	10,704.7	13,639.9	11,435.0	21.7	44.9	178.56	-2,285.5	-395.1	735.5	678.9	56.57	13.001					
12,800.0	10,704.8	13,739.9	11,435.0	22.5	45.3	178.59	-2,385.5	-394.1	735.4	677.8	57.55	12.777					
12,900.0	10,704.9	13,839.9	11,435.0	23.3	45.7	178.62	-2,485.5	-393.1	735.3	676.7	58.56	12.556					
13,000.0	10,705.0	13,939.9	11,435.0	24.0	46.1	178.65	-2,585.5	-392.1	735.2	675.6	59.59	12.337					
13,100.0	10,705.1	14,039.9	11,435.0	24.8	46.5	178.67	-2,685.5	-391.1	735.1	674.4	60.64	12.121					
13,200.0	10,705.2	14,139.9	11,435.0	25.6	46.9	178.70	-2,785.5	-390.1	734.9	673.2	61.72	11.908					
13,300.0	10,705.4	14,239.9	11,435.0	26.4	47.3	178.73	-2,885.5	-389.1	734.8	672.0	62.81	11.699					
13,400.0	10,705.5	14,339.9	11,435.0	27.2	47.8	178.76	-2,985.5	-388.1	734.7	670.8	63.93	11.493					
13,500.0	10,705.6	14,439.9	11,435.0	28.1	48.2	178.79	-3,085.4	-387.1	734.6	669.5	65.06	11.291					
13,600.0	10,705.7	14,539.9	11,435.0	28.9	48.7	178.82	-3,185.4	-386.1	734.5	668.3	66.21	11.093					
13,700.0	10,705.8	14,639.9	11,435.0	29.7	49.2	178.85	-3,285.4	-385.1	734.4	667.0	67.38	10.899					
13,800.0	10,705.9	14,739.9	11,435.0	30.5	49.7	178.87	-3,385.4	-384.1	734.3	665.7	68.57	10.709					
13,900.0	10,706.0	14,839.9	11,435.0	31.3	50.2	178.90	-3,485.4	-383.1	734.2	664.4	69.77	10.523					
14,000.0	10,706.1	14,939.9	11,435.0	32.1	50.7	178.93	-3,585.4	-382.1	734.0	663.1	70.98	10.341					

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 #705H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

Offset Design CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #805H - OWB - PWP0												Offset Site Error:	3.0 usft
Survey Program: 0-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
14,100.0	10,706.2	15,039.9	11,435.0	33.0	51.2	178.96	-3,685.4	-381.1	733.9	661.7	72.21	10.164	
14,200.0	10,706.3	15,139.9	11,435.0	33.8	51.8	178.99	-3,785.4	-380.1	733.8	660.4	73.45	9.991	
14,300.0	10,706.4	15,239.9	11,435.0	34.6	52.3	179.02	-3,885.4	-379.1	733.7	659.0	74.70	9.822	
14,400.0	10,706.5	15,339.9	11,435.0	35.5	52.9	179.05	-3,985.4	-378.1	733.6	657.6	75.97	9.656	
14,500.0	10,706.6	15,439.8	11,435.0	36.3	53.4	179.07	-4,085.4	-377.1	733.5	656.2	77.25	9.495	
14,600.0	10,706.7	15,539.8	11,435.0	37.1	54.0	179.10	-4,185.4	-376.1	733.4	654.8	78.53	9.338	
14,700.0	10,706.8	15,639.8	11,435.0	38.0	54.6	179.13	-4,285.4	-375.2	733.3	653.4	79.83	9.185	
14,800.0	10,706.9	15,739.8	11,435.0	38.8	55.1	179.16	-4,385.4	-374.2	733.2	652.0	81.14	9.036	
14,900.0	10,707.0	15,839.8	11,435.0	39.6	55.7	179.19	-4,485.4	-373.2	733.1	650.6	82.45	8.890	
15,000.0	10,707.1	15,939.8	11,435.0	40.5	56.3	179.22	-4,585.4	-372.2	732.9	649.2	83.78	8.749	
15,100.0	10,707.2	16,039.8	11,435.0	41.3	56.9	179.25	-4,685.4	-371.2	732.8	647.7	85.11	8.610	
15,200.0	10,707.3	16,139.8	11,435.0	42.1	57.5	179.27	-4,785.4	-370.2	732.7	646.3	86.45	8.475	
15,300.0	10,707.4	16,239.8	11,435.0	43.0	58.1	179.30	-4,885.3	-369.2	732.6	644.8	87.80	8.344	
15,400.0	10,707.5	16,339.8	11,435.0	43.8	58.8	179.33	-4,985.3	-368.2	732.5	643.3	89.16	8.216	
15,500.0	10,707.6	16,439.8	11,435.0	44.7	59.4	179.36	-5,085.3	-367.2	732.4	641.9	90.52	8.091	
15,600.0	10,707.8	16,539.8	11,435.0	45.5	60.0	179.39	-5,185.3	-366.2	732.3	640.4	91.89	7.969	
15,700.0	10,707.9	16,639.8	11,435.0	46.4	60.7	179.42	-5,285.3	-365.2	732.2	638.9	93.27	7.850	
15,800.0	10,708.0	16,739.8	11,435.0	47.2	61.3	179.45	-5,385.3	-364.2	732.1	637.4	94.65	7.735	
15,900.0	10,708.1	16,839.8	11,435.0	48.1	62.0	179.47	-5,485.3	-363.2	732.0	635.9	96.04	7.622	
16,000.0	10,708.2	16,939.8	11,435.0	48.9	62.6	179.50	-5,585.3	-362.2	731.9	634.4	97.43	7.512	
16,100.0	10,708.3	17,039.8	11,435.0	49.7	63.3	179.53	-5,685.3	-361.2	731.7	632.9	98.83	7.404	
16,200.0	10,708.4	17,139.8	11,435.0	50.6	63.9	179.56	-5,785.3	-360.2	731.6	631.4	100.23	7.300	
16,300.0	10,708.5	17,239.8	11,435.0	51.4	64.6	179.59	-5,885.3	-359.2	731.5	629.9	101.64	7.197	
16,400.0	10,708.6	17,339.8	11,435.0	52.3	65.3	179.62	-5,985.3	-358.2	731.4	628.4	103.05	7.098	
16,500.0	10,708.7	17,439.8	11,435.0	53.1	66.0	179.65	-6,085.3	-357.2	731.3	626.9	104.47	7.000	
16,600.0	10,708.8	17,539.8	11,435.0	54.0	66.6	179.68	-6,185.3	-356.2	731.2	625.3	105.89	6.905	
16,700.0	10,708.9	17,639.8	11,435.0	54.8	67.3	179.70	-6,285.3	-355.2	731.1	623.8	107.32	6.813	
16,800.0	10,709.0	17,739.8	11,435.0	55.7	68.0	179.73	-6,385.3	-354.2	731.0	622.3	108.75	6.722	
16,900.0	10,709.1	17,839.8	11,435.0	56.5	68.7	179.76	-6,485.3	-353.2	730.9	620.7	110.18	6.634	
17,000.0	10,709.2	17,939.8	11,435.0	57.4	69.4	179.79	-6,585.2	-352.2	730.8	619.2	111.62	6.547	
17,100.0	10,709.3	18,039.8	11,435.0	58.2	70.1	179.82	-6,685.2	-351.3	730.7	617.6	113.06	6.463	
17,200.0	10,709.4	18,139.8	11,435.0	59.1	70.8	179.85	-6,785.2	-350.3	730.6	616.1	114.50	6.380	
17,300.0	10,709.5	18,239.8	11,435.0	59.9	71.5	179.88	-6,885.2	-349.3	730.5	614.5	115.95	6.300	
17,400.0	10,709.6	18,339.8	11,435.0	60.8	72.2	179.91	-6,985.2	-348.3	730.4	613.0	117.40	6.221	
17,500.0	10,709.7	18,439.8	11,435.0	61.6	73.0	179.94	-7,085.2	-347.3	730.3	611.4	118.86	6.144	
17,600.0	10,709.8	18,539.8	11,435.0	62.5	73.7	179.96	-7,185.2	-346.3	730.2	609.8	120.31	6.069	
17,700.0	10,709.9	18,639.8	11,435.0	63.4	74.4	179.99	-7,285.2	-345.3	730.1	608.3	121.77	5.995	
17,800.0	10,710.0	18,739.8	11,435.0	64.2	75.1	179.98	-7,385.2	-344.3	730.0	606.7	123.23	5.923	
17,900.0	10,710.2	18,839.8	11,435.0	65.1	75.8	179.95	-7,485.2	-343.3	729.8	605.1	124.70	5.853	
18,000.0	10,710.3	18,939.8	11,435.0	65.9	76.6	179.92	-7,585.2	-342.3	729.7	603.6	126.17	5.784	
18,100.0	10,710.4	19,039.8	11,435.0	66.8	77.3	179.89	-7,685.2	-341.3	729.6	602.0	127.64	5.717	
18,200.0	10,710.5	19,139.8	11,435.0	67.6	78.0	179.86	-7,785.2	-340.3	729.5	600.4	129.11	5.651	
18,300.0	10,710.6	19,239.8	11,435.0	68.5	78.8	179.83	-7,885.2	-339.3	729.4	598.9	130.58	5.586	
18,400.0	10,710.7	19,339.8	11,435.0	69.3	79.5	179.81	-7,985.2	-338.3	729.3	597.3	132.06	5.523	
18,500.0	10,710.8	19,439.8	11,435.0	70.2	80.3	179.78	-8,085.2	-337.3	729.2	595.7	133.54	5.461	
18,600.0	10,710.9	19,539.8	11,435.0	71.0	81.0	179.75	-8,185.2	-336.3	729.1	594.1	135.02	5.400	
18,700.0	10,711.0	19,639.8	11,435.0	71.9	81.8	179.72	-8,285.2	-335.3	729.0	592.5	136.50	5.341	
18,800.0	10,711.1	19,739.8	11,435.0	72.7	82.5	179.69	-8,385.1	-334.3	728.9	590.9	137.99	5.283	
18,900.0	10,711.2	19,839.8	11,435.0	73.6	83.3	179.66	-8,485.1	-333.3	728.8	589.3	139.47	5.226	
19,000.0	10,711.3	19,939.8	11,435.0	74.5	84.0	179.63	-8,585.1	-332.3	728.7	587.8	140.96	5.170	
19,100.0	10,711.4	20,039.8	11,435.0	75.3	84.8	179.60	-8,685.1	-331.3	728.6	586.2	142.45	5.115	

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 #705H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

Offset Design CABO WABO FEDERAL PROJECT (ATLAS 2529) - CABO WABO FED COM #805H - OWB - PWP0													Offset Site Error:	3.0 usft
Survey Program: 0-MWD+IFR1+FDIR													Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
19,200.0	10,711.5	20,139.8	11,435.0	76.2	85.5	-179.57	-8,785.1	-330.3	728.5	584.6	143.94	5.061		
19,300.0	10,711.6	20,239.8	11,435.0	77.0	86.3	-179.54	-8,885.1	-329.3	728.4	583.0	145.44	5.008		
19,400.0	10,711.7	20,339.8	11,435.0	77.9	87.1	-179.52	-8,985.1	-328.3	728.3	581.4	146.93	4.957		
19,500.0	10,711.8	20,439.8	11,435.0	78.7	87.8	-179.49	-9,085.1	-327.4	728.2	579.8	148.43	4.906		
19,600.0	10,711.9	20,539.8	11,435.0	79.6	88.6	-179.46	-9,185.1	-326.4	728.1	578.2	149.93	4.856		
19,700.0	10,712.0	20,639.8	11,435.0	80.5	89.4	-179.43	-9,285.1	-325.4	728.0	576.6	151.43	4.808		
19,800.0	10,712.1	20,739.8	11,435.0	81.3	90.1	-179.40	-9,385.1	-324.4	727.9	575.0	152.93	4.760		
19,900.0	10,712.2	20,839.8	11,435.0	82.2	90.9	-179.37	-9,485.1	-323.4	727.8	573.4	154.43	4.713		
20,000.0	10,712.3	20,939.8	11,435.0	83.0	91.7	-179.34	-9,585.1	-322.4	727.7	571.8	155.93	4.667		
20,100.0	10,712.4	21,039.8	11,435.0	83.9	92.4	-179.31	-9,685.1	-321.4	727.6	570.2	157.44	4.622		
20,200.0	10,712.6	21,139.8	11,435.0	84.7	93.2	-179.28	-9,785.1	-320.4	727.5	568.6	158.95	4.577		
20,300.0	10,712.7	21,239.8	11,435.0	85.6	94.0	-179.25	-9,885.1	-319.4	727.4	567.0	160.45	4.533		
20,400.0	10,712.8	21,339.8	11,435.0	86.5	94.8	-179.23	-9,985.1	-318.4	727.3	565.3	161.96	4.491		
20,500.0	10,712.9	21,439.8	11,435.0	87.3	95.6	-179.20	-10,085.0	-317.4	727.2	563.7	163.47	4.449		
20,600.0	10,713.0	21,539.8	11,435.0	88.2	96.3	-179.17	-10,185.0	-316.4	727.1	562.1	164.98	4.407		
20,628.6	10,713.0	21,568.4	11,435.0	88.3	96.6	-179.16	-10,213.7	-316.1	727.1	561.8	165.30	4.398 SF		

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

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #705H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

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

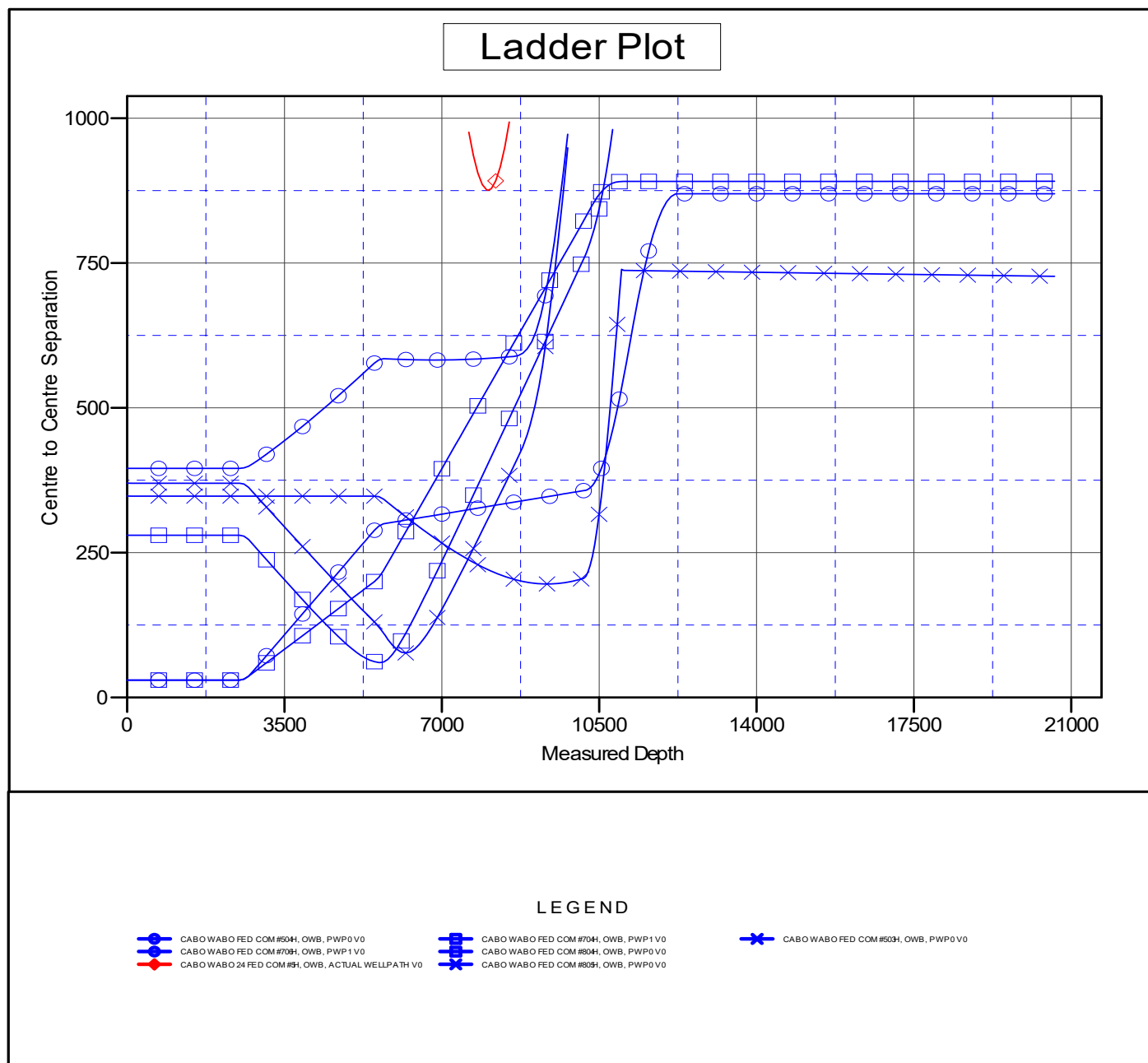
Offset Depths are relative to Offset Datum

Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: CABO WABO FED COM #705H

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

Grid Convergence at Surface is: 0.21°



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

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #705H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Reference Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	CABO WABO FED COM #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP2	Offset TVD Reference:	Offset Datum

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

Offset Depths are relative to Offset Datum

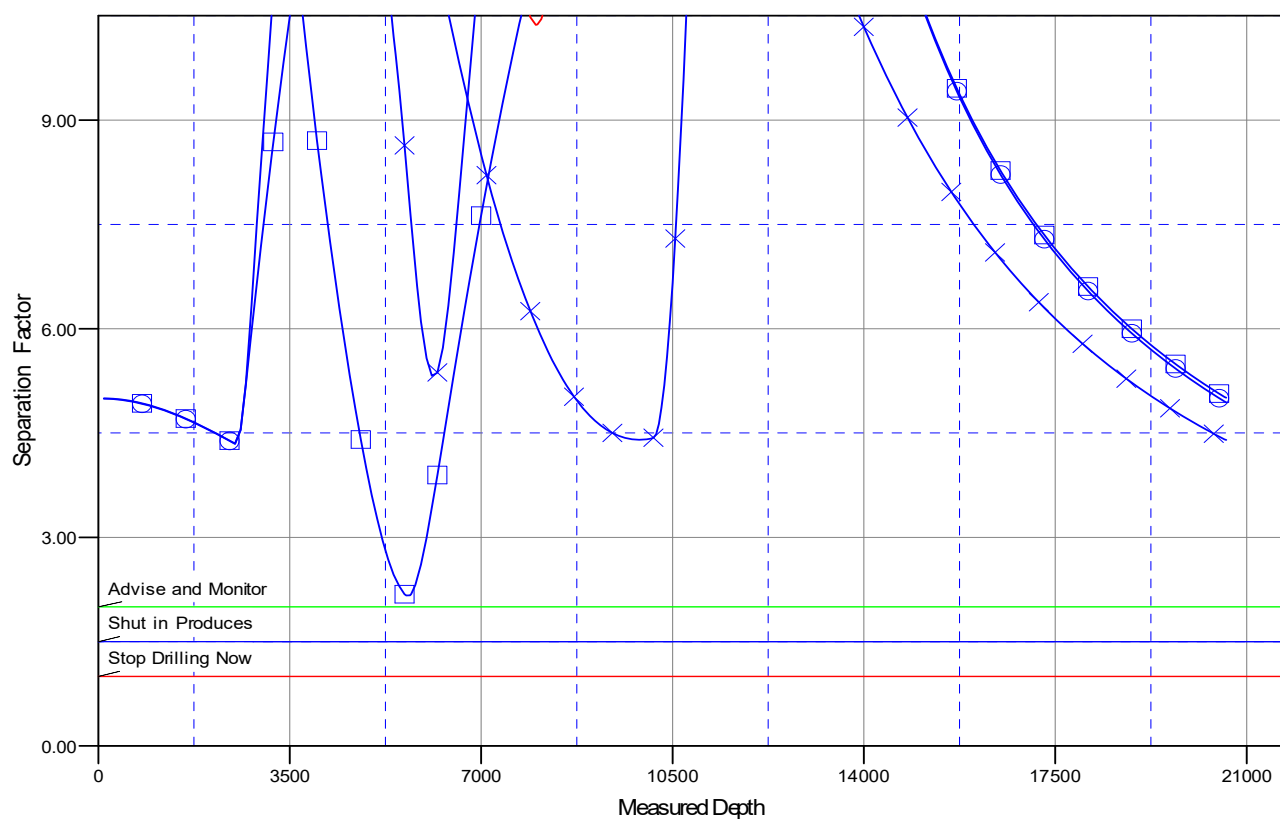
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: CABO WABO FED COM #705H

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

Grid Convergence at Surface is: 0.21°

Separation Factor Plot



LEGEND

- CABO WABO FED COM #504H, OWB, PWP0 V0
- CABO WABO FED COM #705H, OWB, PWP1 V0
- CABO WABO 24 FED COM #705H, OWB, ACTUAL WELLPATH V0
- CABO WABO FED COM #704H, OWB, PWP1 V0
- CABO WABO FED COM #804H, OWB, PWP0 V0
- CABO WABO FED COM #805H, OWB, PWP0 V0
- x— CABO WABO FED COM #503H, OWB, PWP0 V0

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

5/26/2020 8:25:04AM

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COMPASS 5000.15 Build 91E

DELAWARE BASIN WEST

ATLAS PROSPECT (NM-E)

CABO WABO FEDERAL PROJECT (ATLAS 2529)

CABO WABO FED COM #705H

OWB

Plan: PWP2

Standard Survey Report

26 May, 2020

Concho Resources LLC

Survey Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #705H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Well:	CABO WABO FED COM #705H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP2	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 #705H			
Well Position	+N/-S	0.0 usft	Northing:	408,352.15 usft
	+E/-W	0.0 usft	Easting:	621,589.81 usft
Position Uncertainty		3.0 usft	Wellhead Elevation:	usft
			Latitude:	32° 7' 19.442 N
			Longitude:	103° 56' 26.094 W
			Ground Level:	3,161.0 usft

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

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	3/3/2020	6.82	59.88	47,562.51211171

Design	PWP2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	181.83

Survey Tool Program	Date 5/26/2020			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	10,039.0	PWP2 (OWB)	Standard Keeper 104	Standard Wireline Keeper ver 1.0.4
10,039.0	20,627.8	PWP2 (OWB)	MWD+IFR1+FDIR	OWSG MWD + IFR1 + FDIR Correction

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

Concho Resources LLC

Survey Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #705H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Well:	CABO WABO FED COM #705H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP2	Database:	edm

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

Concho Resources LLC

Survey Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #705H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Well:	CABO WABO FED COM #705H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP2	Database:	edm

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
Start Build 2.00									
5,600.0	2.00	260.61	5,600.0	-0.3	-1.7	0.3	2.00	2.00	0.00
5,700.0	4.00	260.61	5,699.8	-1.1	-6.9	1.4	2.00	2.00	0.00
5,722.3	4.45	260.61	5,722.1	-1.4	-8.5	1.7	2.00	2.00	0.00
Start 4429.9 hold at 5722.3 MD									
5,800.0	4.45	260.61	5,799.5	-2.4	-14.4	2.8	0.00	0.00	0.00
5,900.0	4.45	260.61	5,899.2	-3.7	-22.1	4.4	0.00	0.00	0.00
6,000.0	4.45	260.61	5,998.9	-4.9	-29.7	5.9	0.00	0.00	0.00
6,100.0	4.45	260.61	6,098.6	-6.2	-37.4	7.4	0.00	0.00	0.00
6,200.0	4.45	260.61	6,198.3	-7.4	-45.0	8.9	0.00	0.00	0.00
6,300.0	4.45	260.61	6,298.0	-8.7	-52.7	10.4	0.00	0.00	0.00
6,400.0	4.45	260.61	6,397.7	-10.0	-60.3	11.9	0.00	0.00	0.00
6,500.0	4.45	260.61	6,497.4	-11.2	-68.0	13.4	0.00	0.00	0.00
6,600.0	4.45	260.61	6,597.1	-12.5	-75.6	14.9	0.00	0.00	0.00
6,700.0	4.45	260.61	6,696.8	-13.8	-83.3	16.4	0.00	0.00	0.00
6,800.0	4.45	260.61	6,796.5	-15.0	-90.9	17.9	0.00	0.00	0.00
6,900.0	4.45	260.61	6,896.2	-16.3	-98.6	19.4	0.00	0.00	0.00
7,000.0	4.45	260.61	6,995.9	-17.6	-106.2	20.9	0.00	0.00	0.00
7,100.0	4.45	260.61	7,095.6	-18.8	-113.9	22.5	0.00	0.00	0.00
7,200.0	4.45	260.61	7,195.3	-20.1	-121.5	24.0	0.00	0.00	0.00
7,300.0	4.45	260.61	7,295.0	-21.4	-129.2	25.5	0.00	0.00	0.00
7,400.0	4.45	260.61	7,394.7	-22.6	-136.8	27.0	0.00	0.00	0.00
7,500.0	4.45	260.61	7,494.4	-23.9	-144.5	28.5	0.00	0.00	0.00
7,600.0	4.45	260.61	7,594.1	-25.1	-152.1	30.0	0.00	0.00	0.00
7,700.0	4.45	260.61	7,693.8	-26.4	-159.8	31.5	0.00	0.00	0.00
7,800.0	4.45	260.61	7,793.5	-27.7	-167.4	33.0	0.00	0.00	0.00
7,900.0	4.45	260.61	7,893.2	-28.9	-175.1	34.5	0.00	0.00	0.00
8,000.0	4.45	260.61	7,992.9	-30.2	-182.7	36.0	0.00	0.00	0.00
8,100.0	4.45	260.61	8,092.6	-31.5	-190.4	37.5	0.00	0.00	0.00
8,200.0	4.45	260.61	8,192.3	-32.7	-198.0	39.0	0.00	0.00	0.00
8,300.0	4.45	260.61	8,292.0	-34.0	-205.6	40.5	0.00	0.00	0.00
8,400.0	4.45	260.61	8,391.7	-35.3	-213.3	42.1	0.00	0.00	0.00
8,500.0	4.45	260.61	8,491.4	-36.5	-220.9	43.6	0.00	0.00	0.00
8,600.0	4.45	260.61	8,591.1	-37.8	-228.6	45.1	0.00	0.00	0.00
8,700.0	4.45	260.61	8,690.8	-39.1	-236.2	46.6	0.00	0.00	0.00
8,800.0	4.45	260.61	8,790.5	-40.3	-243.9	48.1	0.00	0.00	0.00
8,900.0	4.45	260.61	8,890.2	-41.6	-251.5	49.6	0.00	0.00	0.00
9,000.0	4.45	260.61	8,989.9	-42.9	-259.2	51.1	0.00	0.00	0.00
9,100.0	4.45	260.61	9,089.6	-44.1	-266.8	52.6	0.00	0.00	0.00
9,200.0	4.45	260.61	9,189.3	-45.4	-274.5	54.1	0.00	0.00	0.00
9,300.0	4.45	260.61	9,289.0	-46.6	-282.1	55.6	0.00	0.00	0.00
9,400.0	4.45	260.61	9,388.7	-47.9	-289.8	57.1	0.00	0.00	0.00
9,500.0	4.45	260.61	9,488.4	-49.2	-297.4	58.6	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #705H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Well:	CABO WABO FED COM #705H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP2	Database:	edm

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,600.0	4.45	260.61	9,588.1	-50.4	-305.1	60.1	0.00	0.00	0.00
9,700.0	4.45	260.61	9,687.8	-51.7	-312.7	61.7	0.00	0.00	0.00
9,800.0	4.45	260.61	9,787.5	-53.0	-320.4	63.2	0.00	0.00	0.00
9,900.0	4.45	260.61	9,887.2	-54.2	-328.0	64.7	0.00	0.00	0.00
10,000.0	4.45	260.61	9,986.9	-55.5	-335.7	66.2	0.00	0.00	0.00
10,100.0	4.45	260.61	10,086.6	-56.8	-343.3	67.7	0.00	0.00	0.00
10,152.2	4.45	260.61	10,138.7	-57.4	-347.3	68.5	0.00	0.00	0.00
Start DLS 10.00 TFO -81.00									
10,200.0	7.01	218.26	10,186.2	-60.0	-350.9	71.2	10.00	5.37	-88.65
10,300.0	16.07	195.10	10,284.1	-78.2	-358.3	89.6	10.00	9.06	-23.16
10,400.0	25.83	188.77	10,377.4	-113.2	-365.3	124.8	10.00	9.75	-6.33
10,500.0	35.71	185.77	10,463.3	-163.9	-371.6	175.7	10.00	9.88	-3.00
10,600.0	45.64	183.94	10,539.0	-228.8	-377.0	240.7	10.00	9.93	-1.83
10,700.0	55.59	182.65	10,602.4	-305.8	-381.3	317.8	10.00	9.95	-1.29
10,800.0	65.55	181.64	10,651.5	-392.7	-384.6	404.8	10.00	9.96	-1.01
10,900.0	75.52	180.77	10,684.7	-486.9	-386.5	499.0	10.00	9.97	-0.86
11,000.0	85.49	179.98	10,701.2	-585.4	-387.1	597.4	10.00	9.97	-0.79
11,044.7	89.94	179.64	10,703.0	-630.0	-387.0	642.0	10.00	9.97	-0.77
Start 9584.0 hold at 11044.7 MD									
11,100.0	89.94	179.64	10,703.1	-685.3	-386.7	697.3	0.00	0.00	0.00
11,200.0	89.94	179.64	10,703.2	-785.3	-386.0	797.3	0.00	0.00	0.00
11,300.0	89.94	179.64	10,703.3	-885.3	-385.4	897.2	0.00	0.00	0.00
11,400.0	89.94	179.64	10,703.4	-985.3	-384.8	997.1	0.00	0.00	0.00
11,500.0	89.94	179.64	10,703.5	-1,085.3	-384.1	1,097.0	0.00	0.00	0.00
11,600.0	89.94	179.64	10,703.6	-1,185.3	-383.5	1,197.0	0.00	0.00	0.00
11,700.0	89.94	179.64	10,703.7	-1,285.3	-382.9	1,296.9	0.00	0.00	0.00
11,800.0	89.94	179.64	10,703.8	-1,385.3	-382.3	1,396.8	0.00	0.00	0.00
11,900.0	89.94	179.64	10,703.9	-1,485.3	-381.6	1,496.7	0.00	0.00	0.00
12,000.0	89.94	179.64	10,704.0	-1,585.3	-381.0	1,596.7	0.00	0.00	0.00
12,100.0	89.94	179.64	10,704.1	-1,685.3	-380.4	1,696.6	0.00	0.00	0.00
12,200.0	89.94	179.64	10,704.2	-1,785.3	-379.7	1,796.5	0.00	0.00	0.00
12,300.0	89.94	179.64	10,704.3	-1,885.3	-379.1	1,896.5	0.00	0.00	0.00
12,400.0	89.94	179.64	10,704.4	-1,985.3	-378.5	1,996.4	0.00	0.00	0.00
12,500.0	89.94	179.64	10,704.5	-2,085.3	-377.9	2,096.3	0.00	0.00	0.00
12,600.0	89.94	179.64	10,704.6	-2,185.3	-377.2	2,196.2	0.00	0.00	0.00
12,700.0	89.94	179.64	10,704.7	-2,285.3	-376.6	2,296.2	0.00	0.00	0.00
12,800.0	89.94	179.64	10,704.8	-2,385.3	-376.0	2,396.1	0.00	0.00	0.00
12,900.0	89.94	179.64	10,704.9	-2,485.3	-375.3	2,496.0	0.00	0.00	0.00
13,000.0	89.94	179.64	10,705.0	-2,585.3	-374.7	2,595.9	0.00	0.00	0.00
13,100.0	89.94	179.64	10,705.1	-2,685.3	-374.1	2,695.9	0.00	0.00	0.00
13,200.0	89.94	179.64	10,705.2	-2,785.3	-373.5	2,795.8	0.00	0.00	0.00
13,300.0	89.94	179.64	10,705.4	-2,885.3	-372.8	2,895.7	0.00	0.00	0.00
13,400.0	89.94	179.64	10,705.5	-2,985.3	-372.2	2,995.7	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #705H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Well:	CABO WABO FED COM #705H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP2	Database:	edm

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,500.0	89.94	179.64	10,705.6	-3,085.3	-371.6	3,095.6	0.00	0.00	0.00
13,600.0	89.94	179.64	10,705.7	-3,185.3	-370.9	3,195.5	0.00	0.00	0.00
13,700.0	89.94	179.64	10,705.8	-3,285.3	-370.3	3,295.4	0.00	0.00	0.00
13,800.0	89.94	179.64	10,705.9	-3,385.3	-369.7	3,395.4	0.00	0.00	0.00
13,900.0	89.94	179.64	10,706.0	-3,485.3	-369.1	3,495.3	0.00	0.00	0.00
14,000.0	89.94	179.64	10,706.1	-3,585.3	-368.4	3,595.2	0.00	0.00	0.00
14,100.0	89.94	179.64	10,706.2	-3,685.3	-367.8	3,695.1	0.00	0.00	0.00
14,200.0	89.94	179.64	10,706.3	-3,785.3	-367.2	3,795.1	0.00	0.00	0.00
14,300.0	89.94	179.64	10,706.4	-3,885.3	-366.5	3,895.0	0.00	0.00	0.00
14,400.0	89.94	179.64	10,706.5	-3,985.3	-365.9	3,994.9	0.00	0.00	0.00
14,500.0	89.94	179.64	10,706.6	-4,085.3	-365.3	4,094.8	0.00	0.00	0.00
14,600.0	89.94	179.64	10,706.7	-4,185.3	-364.7	4,194.8	0.00	0.00	0.00
14,700.0	89.94	179.64	10,706.8	-4,285.3	-364.0	4,294.7	0.00	0.00	0.00
14,800.0	89.94	179.64	10,706.9	-4,385.3	-363.4	4,394.6	0.00	0.00	0.00
14,900.0	89.94	179.64	10,707.0	-4,485.3	-362.8	4,494.6	0.00	0.00	0.00
15,000.0	89.94	179.64	10,707.1	-4,585.3	-362.1	4,594.5	0.00	0.00	0.00
15,100.0	89.94	179.64	10,707.2	-4,685.3	-361.5	4,694.4	0.00	0.00	0.00
15,200.0	89.94	179.64	10,707.3	-4,785.3	-360.9	4,794.3	0.00	0.00	0.00
15,300.0	89.94	179.64	10,707.4	-4,885.3	-360.3	4,894.3	0.00	0.00	0.00
15,400.0	89.94	179.64	10,707.5	-4,985.3	-359.6	4,994.2	0.00	0.00	0.00
15,500.0	89.94	179.64	10,707.6	-5,085.3	-359.0	5,094.1	0.00	0.00	0.00
15,600.0	89.94	179.64	10,707.8	-5,185.3	-358.4	5,194.0	0.00	0.00	0.00
15,700.0	89.94	179.64	10,707.9	-5,285.2	-357.8	5,294.0	0.00	0.00	0.00
15,800.0	89.94	179.64	10,708.0	-5,385.2	-357.1	5,393.9	0.00	0.00	0.00
15,900.0	89.94	179.64	10,708.1	-5,485.2	-356.5	5,493.8	0.00	0.00	0.00
16,000.0	89.94	179.64	10,708.2	-5,585.2	-355.9	5,593.8	0.00	0.00	0.00
16,100.0	89.94	179.64	10,708.3	-5,685.2	-355.2	5,693.7	0.00	0.00	0.00
16,200.0	89.94	179.64	10,708.4	-5,785.2	-354.6	5,793.6	0.00	0.00	0.00
16,300.0	89.94	179.64	10,708.5	-5,885.2	-354.0	5,893.5	0.00	0.00	0.00
16,400.0	89.94	179.64	10,708.6	-5,985.2	-353.4	5,993.5	0.00	0.00	0.00
16,500.0	89.94	179.64	10,708.7	-6,085.2	-352.7	6,093.4	0.00	0.00	0.00
16,600.0	89.94	179.64	10,708.8	-6,185.2	-352.1	6,193.3	0.00	0.00	0.00
16,700.0	89.94	179.64	10,708.9	-6,285.2	-351.5	6,293.2	0.00	0.00	0.00
16,800.0	89.94	179.64	10,709.0	-6,385.2	-350.8	6,393.2	0.00	0.00	0.00
16,900.0	89.94	179.64	10,709.1	-6,485.2	-350.2	6,493.1	0.00	0.00	0.00
17,000.0	89.94	179.64	10,709.2	-6,585.2	-349.6	6,593.0	0.00	0.00	0.00
17,100.0	89.94	179.64	10,709.3	-6,685.2	-349.0	6,693.0	0.00	0.00	0.00
17,200.0	89.94	179.64	10,709.4	-6,785.2	-348.3	6,792.9	0.00	0.00	0.00
17,300.0	89.94	179.64	10,709.5	-6,885.2	-347.7	6,892.8	0.00	0.00	0.00
17,400.0	89.94	179.64	10,709.6	-6,985.2	-347.1	6,992.7	0.00	0.00	0.00
17,500.0	89.94	179.64	10,709.7	-7,085.2	-346.4	7,092.7	0.00	0.00	0.00
17,600.0	89.94	179.64	10,709.8	-7,185.2	-345.8	7,192.6	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #705H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Well:	CABO WABO FED COM #705H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP2	Database:	edm

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
17,700.0	89.94	179.64	10,709.9	-7,285.2	-345.2	7,292.5	0.00	0.00	0.00
17,800.0	89.94	179.64	10,710.0	-7,385.2	-344.6	7,392.4	0.00	0.00	0.00
17,900.0	89.94	179.64	10,710.2	-7,485.2	-343.9	7,492.4	0.00	0.00	0.00
18,000.0	89.94	179.64	10,710.3	-7,585.2	-343.3	7,592.3	0.00	0.00	0.00
18,100.0	89.94	179.64	10,710.4	-7,685.2	-342.7	7,692.2	0.00	0.00	0.00
18,200.0	89.94	179.64	10,710.5	-7,785.2	-342.0	7,792.1	0.00	0.00	0.00
18,300.0	89.94	179.64	10,710.6	-7,885.2	-341.4	7,892.1	0.00	0.00	0.00
18,400.0	89.94	179.64	10,710.7	-7,985.2	-340.8	7,992.0	0.00	0.00	0.00
18,500.0	89.94	179.64	10,710.8	-8,085.2	-340.2	8,091.9	0.00	0.00	0.00
18,600.0	89.94	179.64	10,710.9	-8,185.2	-339.5	8,191.9	0.00	0.00	0.00
18,700.0	89.94	179.64	10,711.0	-8,285.2	-338.9	8,291.8	0.00	0.00	0.00
18,800.0	89.94	179.64	10,711.1	-8,385.2	-338.3	8,391.7	0.00	0.00	0.00
18,900.0	89.94	179.64	10,711.2	-8,485.2	-337.6	8,491.6	0.00	0.00	0.00
19,000.0	89.94	179.64	10,711.3	-8,585.2	-337.0	8,591.6	0.00	0.00	0.00
19,100.0	89.94	179.64	10,711.4	-8,685.2	-336.4	8,691.5	0.00	0.00	0.00
19,200.0	89.94	179.64	10,711.5	-8,785.2	-335.8	8,791.4	0.00	0.00	0.00
19,300.0	89.94	179.64	10,711.6	-8,885.2	-335.1	8,891.3	0.00	0.00	0.00
19,400.0	89.94	179.64	10,711.7	-8,985.2	-334.5	8,991.3	0.00	0.00	0.00
19,500.0	89.94	179.64	10,711.8	-9,085.2	-333.9	9,091.2	0.00	0.00	0.00
19,600.0	89.94	179.64	10,711.9	-9,185.2	-333.2	9,191.1	0.00	0.00	0.00
19,700.0	89.94	179.64	10,712.0	-9,285.2	-332.6	9,291.1	0.00	0.00	0.00
19,800.0	89.94	179.64	10,712.1	-9,385.2	-332.0	9,391.0	0.00	0.00	0.00
19,900.0	89.94	179.64	10,712.2	-9,485.2	-331.4	9,490.9	0.00	0.00	0.00
20,000.0	89.94	179.64	10,712.3	-9,585.2	-330.7	9,590.8	0.00	0.00	0.00
20,100.0	89.94	179.64	10,712.4	-9,685.2	-330.1	9,690.8	0.00	0.00	0.00
20,200.0	89.94	179.64	10,712.6	-9,785.2	-329.5	9,790.7	0.00	0.00	0.00
20,300.0	89.94	179.64	10,712.7	-9,885.2	-328.8	9,890.6	0.00	0.00	0.00
20,400.0	89.94	179.64	10,712.8	-9,985.2	-328.2	9,990.5	0.00	0.00	0.00
20,500.0	89.94	179.64	10,712.9	-10,085.2	-327.6	10,090.5	0.00	0.00	0.00
20,600.0	89.94	179.64	10,713.0	-10,185.1	-327.0	10,190.4	0.00	0.00	0.00
20,628.6	89.94	179.64	10,713.0	-10,213.8	-326.8	10,219.0	0.00	0.00	0.00
TD at 20628.6									

Concho Resources LLC

Survey Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well CABO WABO FED COM #705H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Site:	CABO WABO FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=27' @ 3188.0usft (Nabors 893)
Well:	CABO WABO FED COM #705H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP2	Database:	edm

Design Targets

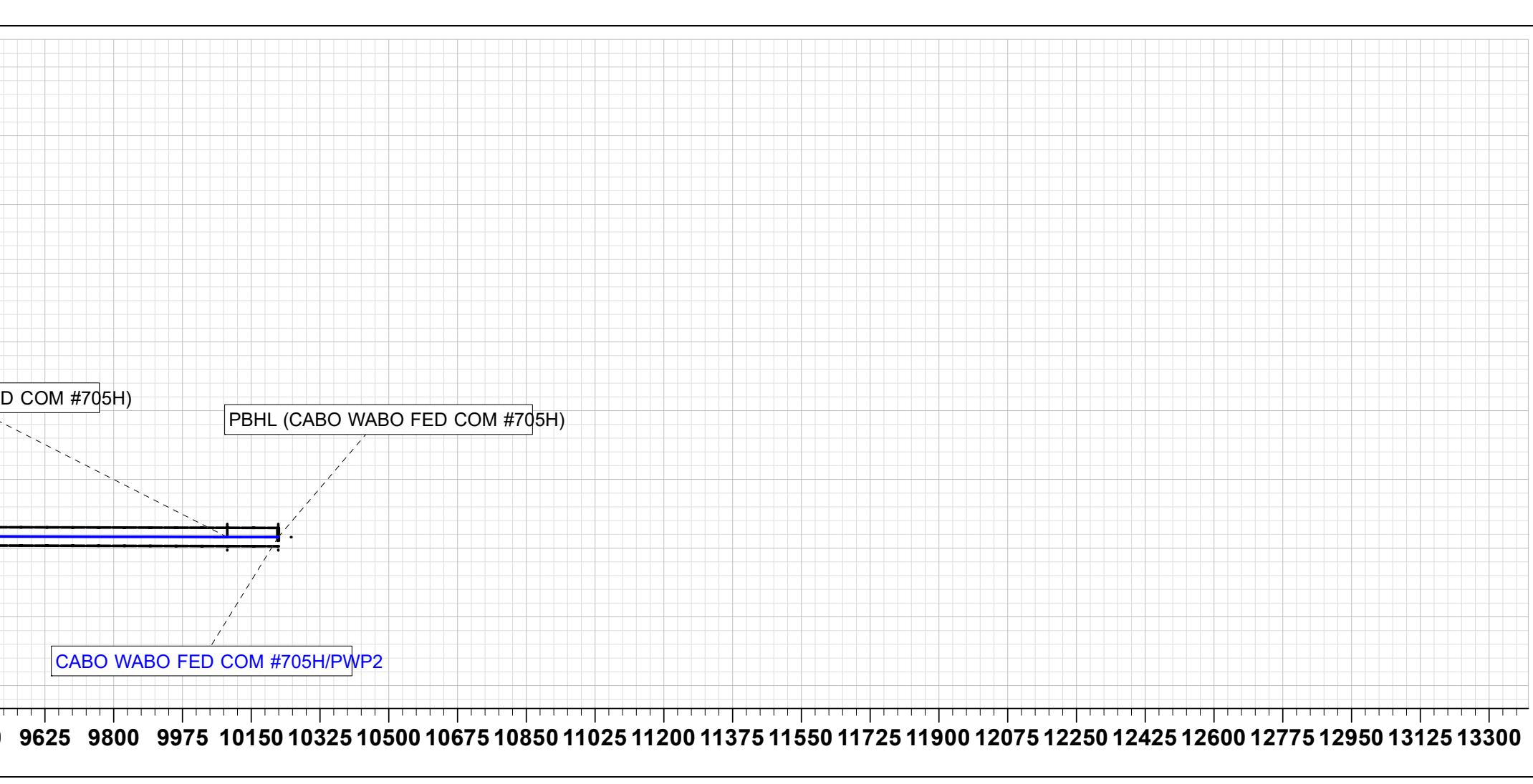
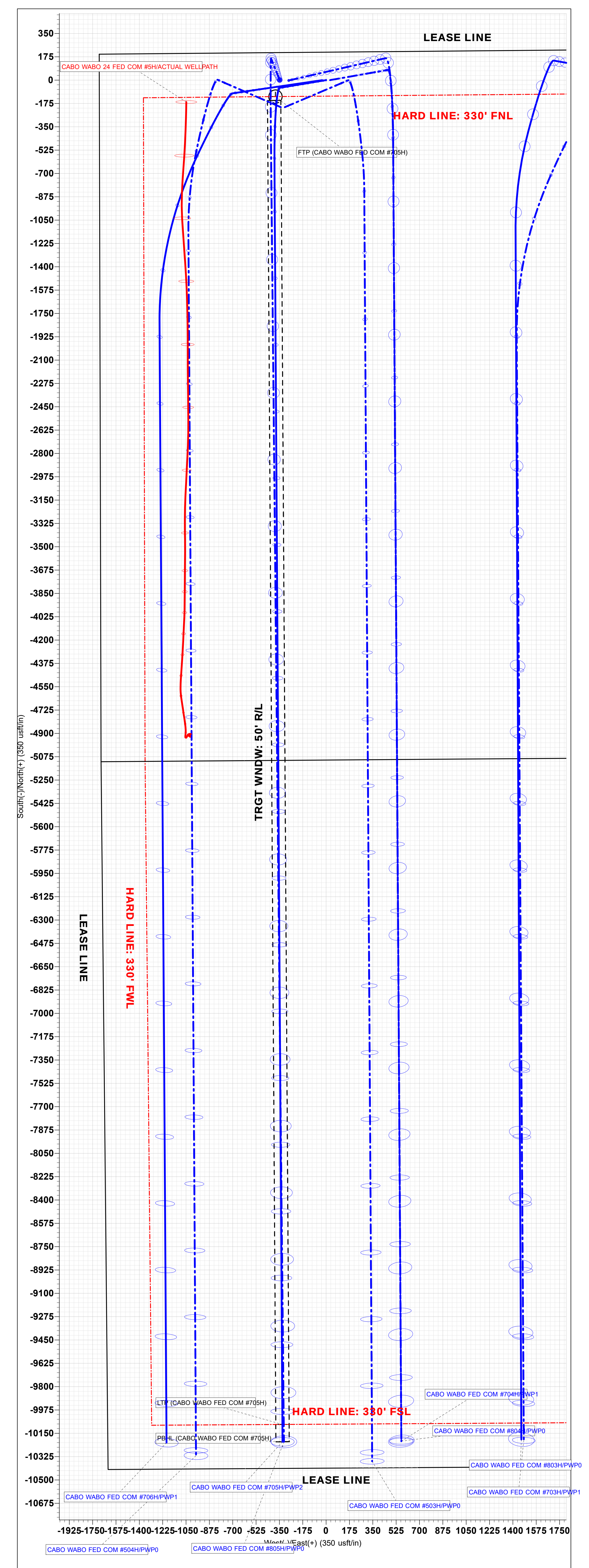
Target Name

- 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 192.1usft at 10622.9usft MD (10554.7 TVD, -245.4 N, -378.1 E) - Circle (radius 50.0)	0.00	0.01	10,703.0	-123.4	-379.7	408,228.77	621,210.14	32° 7' 18.235 N	103° 56' 30.514 W
LTP (CABO WABO FE - plan misses target center by 0.3usft at 20498.7usft MD (10712.9 TVD, -10083.8 N, -327.6 E) - Point	0.00	0.00	10,713.0	-10,083.8	-327.4	398,268.35	621,262.42	32° 5' 39.662 N	103° 56' 30.327 W
PBHL (CABO WABO - plan misses target center by 0.7usft at 20628.6usft MD (10713.0 TVD, -10213.8 N, -326.8 E) - Rectangle (sides W100.0 H10,061.0 D20.0)	-0.06	359.64	10,713.0	-10,213.8	-326.1	398,138.35	621,263.70	32° 5' 38.375 N	103° 56' 30.317 W

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
5500	5500	0	0	Start Build 2.00
5722	5722	-1	-9	Start 4429.9 hold at 5722.3 MD
10,152	10,139	-57	-347	Start DLS 10.00 TFO -81.00
11,045	10,703	-630	-387	Start 9584.0 hold at 11044.7 MD
20,629	10,713	-10,214	-327	TD at 20628.6

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 82888

COMMENTS

Operator: COG PRODUCTION, LLC 600 W. Illinois Ave Midland, TX 79701	OGRID: 217955
	Action Number: 82888
	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
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Phone:(505) 334-6178 Fax:(505) 334-6170
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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 82888

CONDITIONS

Operator: COG PRODUCTION, LLC 600 W. Illinois Ave Midland, TX 79701	OGRID: 217955
	Action Number: 82888
	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