

Form 3160-3
(June 2015)FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: ☐ DRILL ☐ REENTER 1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Other 1c. Type of Completion: ☐ Hydraulic Fracturing ☐ Single Zone ☐ Multiple Zone		5. Lease Serial No. 6. If Indian, Allottee or Tribe Name 7. If Unit or CA Agreement, Name and No. 8. Lease Name and Well No.	
2. Name of Operator		9. API Well No. 30 015 48787	
3a. Address		3b. Phone No. (include area code)	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface At proposed prod. zone		10. Field and Pool, or Exploratory 11. Sec., T. R. M. or Blk. and Survey or Area	
14. Distance in miles and direction from nearest town or post office*		12. County or Parish	
13. State		15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	
16. No of acres in lease		17. Spacing Unit dedicated to this well	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.		19. Proposed Depth	
20. BLM/BIA Bond No. in file		21. Elevations (Show whether DF, KDB, RT, GL, etc.)	
22. Approximate date work will start*		23. Estimated duration	
24. Attachments			
The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)			
1. Well plat certified by a registered surveyor. 2. A Drilling Plan. 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).		4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). 5. Operator certification. 6. Such other site specific information and/or plans as may be requested by the BLM.	
25. Signature		Name (Printed/Typed)	
Title		Date	
Approved by (Signature)		Name (Printed/Typed)	
Title		Office	
Application approval 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. Conditions of approval, if any, are attached.			
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.			

(Continued on page 2)

*(Instructions on page 2)



Approval Date: 07/20/2021

Additional Operator Remarks

Location of Well

0. SHL: SWSW / 785 FSL / 860 FWL / TWSP: 25S / RANGE: 29E / SECTION: 28 / LAT: 32.095699 / LONG: -103.995106 (TVD: 0 feet, MD: 0 feet)

PPP: SESW / 330 FSL / 2178 FWL / TWSP: 25S / RANGE: 29E / SECTION: 28 / LAT: 32.094453 / LONG: -103.990836 (TVD: 10824 feet, MD: 10900 feet)

BHL: NENW / 200 FNL / 2178 FWL / TWSP: 25S / RANGE: 29E / SECTION: 21 / LAT: 32.122178 / LONG: -103.990987 (TVD: 11001 feet, MD: 20564 feet)

BLM Point of Contact

Name: Gavin Mickwee

Title: Land Law Examiner

Phone: (575) 234-5972

Email: gmickwee@blm.gov

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) 746-1293 Fax: (575) 746-0720

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

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-	Pool Code 98220	Pool Name Purple Sage; Wolfcamp (Gas)
Property Code	Property Name ADMIRAL FEDERAL COM	Well Number 804H
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 2991.5'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	28	25-S	29-E		785	SOUTH	860	WEST	EDDY

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
C	21	25-S	29-E		200	NORTH	2178	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
1280			

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

POINT LEGEND

1	Y=408543.7 N X=645141.6 E
2	Y=405890.8 N X=645148.5 E
3	Y=403236.4 N X=645154.2 E
4	Y=400584.3 N X=645190.7 E
5	Y=397927.6 N X=645225.2 E
6	Y=397939.4 N X=647886.6 E
7	Y=403248.3 N X=647816.8 E
8	Y=408554.9 N X=647798.5 E

LTP
330' FNL & 2178' FWL
Y=408222.9 N
X=647321.1 E
LAT.=32.121821° N
LONG.=103.990985° W

FTP
330' FSL & 2178' FWL
Y=398267.3 N
X=647399.0 E
LAT.=32.094453° N
LONG.=103.990836° W
GRID AZ. TO FTP
108°44'23"

PROPOSED BOTTOM HOLE LOCATION
Y=408352.9 N
X=647320.1 E
LAT.=32.122178° N
LONG.=103.990987° W

SURFACE LOCATION
Y=398716.4 N
X=646075.1 E
LAT.=32.095699° N
LONG.=103.995106° W

OPERATOR CERTIFICATION

I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Stan Wagner 12/23/2020
Signature Date
Stan Wagner
Printed Name
E-mail Address

SURVEYOR CERTIFICATION

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

NOVEMBER 6, 2020
Date of Survey

Signature & Seal of Professional Surveyor

Chad L. Harcrow 11/16/20
Certificate No. CHAD HARCROW 17777
W.O. # 20-1714 DRAWN BY: WN

Intent ☒ As Drilled ☐

API # 30-015		
Operator Name: COG Operating LLC	Property Name: Admiral Federal Com	Well Number 804H

Kick Off Point (KOP)

UL M	Section 28	Township 25S	Range 29E	Lot	Feet	From N/S	Feet	From E/W	County Eddy
Latitude					Longitude				NAD 83

First Take Point (FTP)

UL N	Section 28	Township 25S	Range 29E	Lot	Feet 330	From N/S South	Feet 2178	From E/W West	County Eddy
Latitude 32.094453					Longitude -103.990836				NAD 83

Last Take Point (LTP)

UL C	Section 21	Township 25S	Range 29E	Lot	Feet 330	From N/S North	Feet 2178	From E/W West	County Eddy
Latitude 32.121821					Longitude -103.990985				NAD 83

Is this well the defining well for the Horizontal Spacing Unit? ☐ NoIs this well an infill well? ☐ Yes

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

API # 30-015-		
Operator Name: COG Operating LLC	Property Name: Admiral Federal Com	Well Number 704H

KZ 06/29/2018

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description Effective May 25, 2021

I. Operator: COG Operating LLC

OGRID: 239137

Date: 11/30/2020

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Admiral Federal Com 701H	30-015-	O-28-25S-29E	311 FSL & 1570 FEL	± 1342	± 4687	± 4046
Admiral Federal Com 704H	30-015-	N-28-25S-29E	220 FSL & 1530 FWL	± 1342	± 4687	± 4046
Admiral Federal Com 705H	30-015-	N-28-25S-29E	220 FSL & 1500 FWL	± 1342	± 4687	± 4046
Admiral Federal Com 706H	30-015-	N-28-25S-29E	220 FSL & 1470 FWL	± 1342	± 4687	± 4046
Admiral Federal Com 804H	30-015-	M-28-25S-29E	785 FSL & 860 FWL	± 780	± 8000	± 4251
Admiral Federal Com 805H	30-015-	M-28-25S-29E	785 FSL & 830 FWL	± 1283	± 8000	± 5558
Admiral Federal Com 806H	30-015-	M-28-25S-29E	785 FSL & 800 FWL	± 780	± 8000	± 4251

IV. Central Delivery Point Name: Admiral Fed Com CTB A 778 FSL & 1868 FWL 28-25S-29E [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Admiral Federal Com	Pending	± 10/1/2022	± 25 days from spud	TBD	TBD	TBD
701H, 704H, 705H, 706H, 804H, 805H, 806H						

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☒ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications

Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.

If Operator checks this box, Operator will select one of the following:

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

Section 4 - Notices

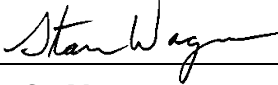
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature: 
Printed Name: Stan Wagner
Title: Regulatory Advisor
E-mail Address: stan.s.wagner@conocophillips.com
Date: 07/26/2021
Phone: 432-253-9685
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

VI. Separation Equipment

How Operator will size separation equipment to optimize gas capture:

All ConocoPhillips production facility equipment will be sized per industry standards (API 12J) with adequate retention time to effectively separate all phases of production. Each project will take into consideration the number of wells and type curves for each formation pool to ensure adequate facility capacity. Design considerations will also include review of all piping, tanks, VRU's and associated equipment to ensure optimized gas capture minimized risk of release.

VII. Operational Practices

Actions Operator will take to comply with the requirements below:

B. Drilling Operations

- During drilling, flare stacks will be located a minimum of 100 feet from the nearest surface hole location. All gas is captured or combusted. If an emergency or malfunction occurs, gas will be flared or vented for public health, safety, and the environment and be properly reported to the NMOCD pursuant to 19.15.27.8.G.
- Measure or estimate the volume of natural gas that is vented, flared or beneficially used during drilling, completion and production operations, regardless of the reason or authorization for such venting or flaring.

C. Completion Operations

- During completion operations, operator does not produce oil or gas but maintains adequate well control through completion operations.
- Individual well test separators will be set to properly separate gas and liquids. A temporary test separator will be utilized initially to process volumes. In addition, separators will be tied into flowback tanks which will be tied into the gas processing equipment for sales down a pipeline.

D. Venting and flaring during production operations

- During each phase of well life (drilling, completion and production) of a ConocoPhillips well, COP personnel will follow all necessary procedures to ensure both the operation and the equipment are within the NMAC 19.15.27.8 Subsection D guidelines.
- During well operations that require unloading of the well to atmospheric pressure, all reasonable actions will be taken to minimize vented gas
- Through the life of the well all flaring shall be measured, and venting events quantified using the data available and industry best practice.

E. Performance standards for separation, storage tank and flare equipment

- All storage tanks and separation equipment are designed minimize risk of liquid or vapor release and optimize gas capture. This includes automation for automatic gauging and pressure monitoring.

- All flare stacks are equipped with auto ignition devices and/or continuous pilots and are designed to operate at maximum combustion efficiency pursuant NMAC 19.15.27.8 Subsection E. Flares will follow COP spacing guidelines to ensure they are a safe distance from combustibles and operations equipment.
- COP personnel will conduct routine AVO inspections on a regular basis per NMAC 19.15.27.8 Subsection E guidelines.

F. Measurement of vented and flared natural gas.

- Measurement equipment will be installed to quantify gas flared during drilling, completion and production of the well.
- All measurement devices installed will meet accuracy ratings per AGA and API standards.
- Measurement devices will be installed without manifolds that allow diversion of gas around the metering element, except for the sole purpose of inspection of servicing the measurement device.

VIII. Best Management Practices

- Operator will curtail or shut in production, within reasonable limits, during upset conditions to minimize venting and flaring.
- When feasible, Operator will use equipment to capture gas that would otherwise be vented or flared.
- During completions and production operations Operator will minimize blowdowns to atmosphere
- When feasible, Operator will use electric or air actuated equipment to reduce bleed emissions

COG Operating, LLC - Admiral Federal Com #804H

1. Geologic Formations

TVD of target	11,001' EOL	Pilot hole depth	NA
MD at TD:	20,565'	Deepest expected fresh water:	200'

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface	Water	
Rustler	574	Water	
Top of Salt	746	Salt	
Base of Salt	2746	Salt	
Lamar	2927	Salt Water	
Bell Canyon	2971	Salt Water	
Brushy Canyon	5097	Oil/Gas	
Bone Spring Lime	6691	Oil/Gas	
1st Bone Spring Sand	7605	Oil/Gas	
2nd Bone Spring Sand	8271	Oil/Gas	
3rd Bone Spring Sand	9532	Oil/Gas	
Wolfcamp	9891	Oil/Gas	
Wolfcamp B	10363	Oil/Gas	
Wolfcamp C	10491	Oil/Gas	
Wolfcamp D	10911	Target Oil/Gas	

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	696	10.75"	45.5	N80	BTC	7.94	1.58	32.84	34.64
9.875"	0	8500	7.625"	29.7	HCL80	BTC	1.50	1.27	2.88	2.90
8.750"	8500	10456	7.625"	29.7	HCP 110	TL-FJ	1.38	1.31	3.03	2.12
6.75"	0	10256	5.5"	23	P110	BTC	2.12	2.52	2.88	2.86
6.75"	10256	20,565	5.5"	23	P110	Talon HTQ	2.12	2.52	2.88	2.79
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. Intermediate burst based on 0.7 frac gradient at the shoe with Gas Gradient 0.1 psi/ft to surface.

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

COG Operating, LLC - Admiral Federal Com #804H

	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.	N
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?	

COG Operating, LLC - Admiral Federal Com #804H

3. Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft ³ / sack	H ₂ O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	230	13.5	1.75	9	12	Lead: Class C + 4% Gel
	250	14.8	1.34	6.34	8	Tail: Class C + 2% CaCl ₂
Inter.	1400	11	2.8	19	48	Lead: NeoCem
	300	16.4	1.1	5	8	Tail: Class H
5.5 Prod	750	12.7	2	10.6	16	Lead: 35:65:6 H Blend
	1200	14.4	1.24	5.7	19	Tail: 50:50:2 Class H Blend

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	8,000'	35%

COG Operating, LLC - Admiral Federal Com #804H

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:
12-1/4"	13-5/8"	3M	Annular	x	2500 psi
			Blind Ram		3M
			Pipe Ram	x	
			Double Ram	x	
			Other*		
8 1/2"	13-5/8"	5M	5M Annular	x	2500 psi
			Blind Ram		5M
			Pipe Ram	x	
			Double Ram	x	
			Other*		

BOP and BOPE will be installed per Onshore Order #2 requirements prior to drilling below the surface casing and will be rated to the above pressure rating or greater, see attached diagrams. Required safety valves, with appropriate wrenches and subs for the drill string being utilized, will be in the open position and accessible on the rig floor.

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 valves (inside BOP and full-opening valve) with appropriate wrenches 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.

COG Operating, LLC - Admiral Federal Com #804H

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	Surf. Shoe	FW Gel	8.4 - 8.6	28-29	N/C
Surf csg	Int shoe	Diesel Brine Emul	8.6 - 9.4	30-40	N/C
Int shoe	Lateral TD	OBM	10.5 - 12	30-40	20

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

What will be used to monitor the loss or gain of fluid?	PVT/Pason/Visual Monitoring
---	-----------------------------

6. Logging and Testing Procedures

Logging, Coring and Testing.	
Y	Will run GR/CNL from TD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.
N	Are 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	

COG Operating, LLC - Admiral Federal Com #804H**7. Drilling Conditions**

Condition	Specify what type and where?
BH Pressure at deepest TVD	6865 psi at 11001' 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
x	5M Annular Variance

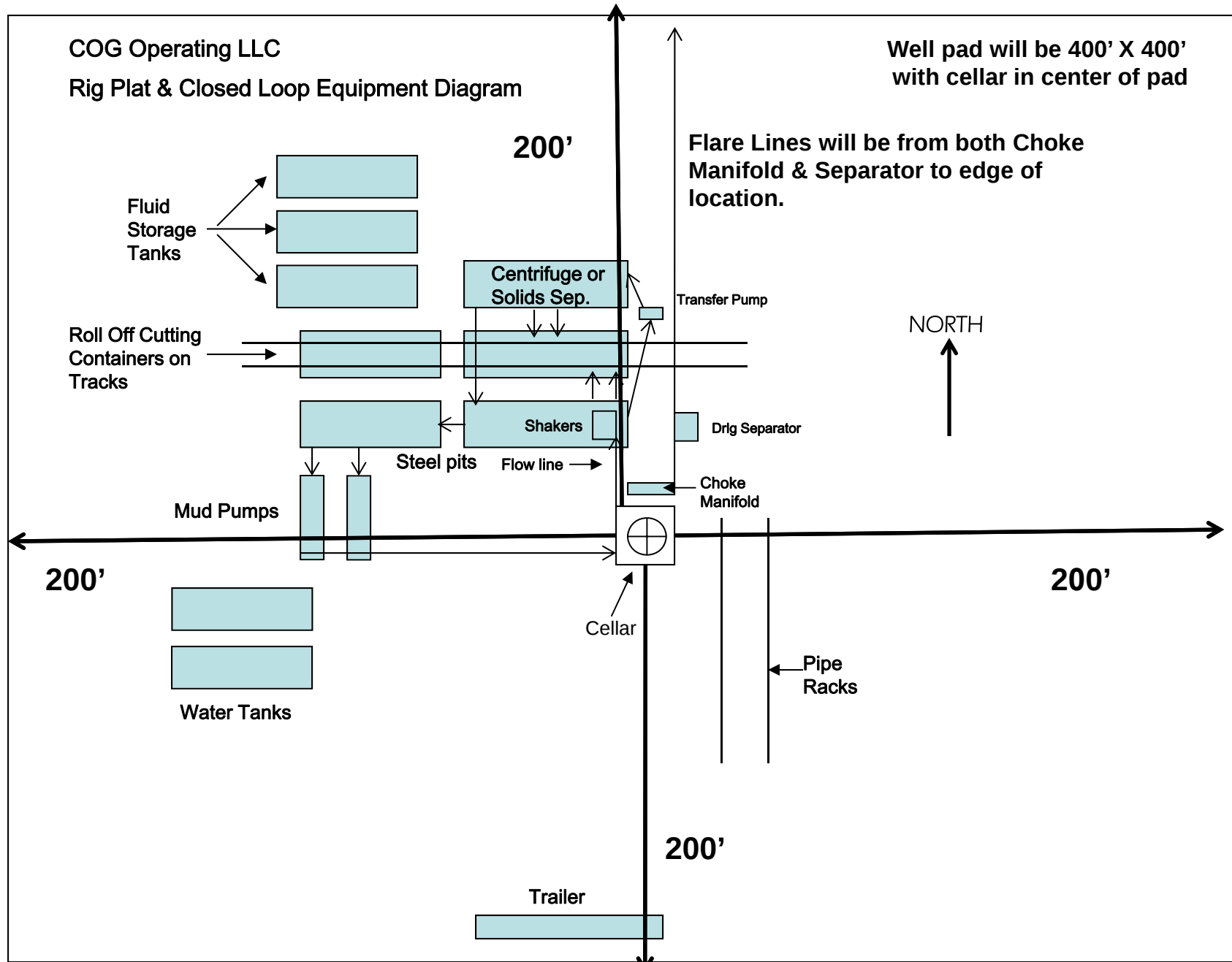


Exhibit 1

"I further certify that COG will comply with Rule 19.15.17 NMAC by using a Closed Loop System."

DELAWARE BASIN WEST

ATLAS PROSPECT (NM-E)

ADMIRAL FEDERAL PROJECT (ATLAS 2529)

ADMIRAL FEDERAL #804H

OWB

PWP1

Anticollision Report

10 December, 2020

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Reference Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ADMIRAL FEDERAL #804H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP1	Offset TVD Reference:	Offset Datum

Reference	PWP1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCSWA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum ellipse separation of 2,000.0 usft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	12/10/2020		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	10,609.0	PWP1 (OWB)	Standard Keeper 104	Standard Wireline Keeper ver 1.0.4	
10,609.0	20,564.8	PWP1 (OWB)	MWD+IFR1+FDIR	OWSG MWD + IFR1 + FDIR Correction	

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
ADMIRAL FEDERAL PROJECT (ATLAS 2529)						
ADMIRAL FEDERAL #704H - OWB - PWP1	10,255.1	10,496.7	618.1	570.9	13.094	CC, ES
ADMIRAL FEDERAL #704H - OWB - PWP1	20,564.8	20,289.0	864.1	699.5	5.249	SF
ADMIRAL FEDERAL #705H - OWB - PWP1	10,164.6	10,644.4	322.3	300.8	15.021	CC, ES
ADMIRAL FEDERAL #705H - OWB - PWP1	20,564.8	20,329.8	1,143.9	977.1	6.857	SF
ADMIRAL FEDERAL #706H - OWB - PWP1	5,585.6	5,578.0	536.1	510.1	20.659	CC
ADMIRAL FEDERAL #706H - OWB - PWP1	5,600.0	5,592.0	536.1	510.1	20.604	ES
ADMIRAL FEDERAL #706H - OWB - PWP1	6,700.0	6,665.7	588.4	557.0	18.742	SF
ADMIRAL FEDERAL #805H - OWB - PWP1	2,500.0	2,500.3	30.1	23.2	4.363	CC, ES, SF
ADMIRAL FEDERAL #806H - OWB - PWP1	2,416.5	2,417.1	60.1	47.7	4.855	CC
ADMIRAL FEDERAL #806H - OWB - PWP1	2,500.0	2,500.0	60.1	47.4	4.737	ES, SF
ADMIRAL FEDERAL COM 501H - OWB - AWP	574.0	565.8	561.1	555.0	91.581	CC
ADMIRAL FEDERAL COM 501H - OWB - AWP	2,107.8	2,100.0	562.0	554.7	76.421	ES
ADMIRAL FEDERAL COM 501H - OWB - AWP	9,200.0	9,159.4	1,394.3	1,371.1	59.976	SF
ADMIRAL FEDERAL COM 502H - OWB - AWP	8,691.2	9,199.4	77.0	38.2	1.983	Advise and Monitor, CC,

Offset Design		ADMIRAL FEDERAL PROJECT (ATLAS 2529) - ADMIRAL FEDERAL #704H - OWB - PWP1											Offset Site Error:		0.0 usft		
Survey Program: 0-MWD+IFR1+FDIR															Offset Well Error:		3.0 usft
Reference		Offset		Semi Major Axis			Distance										
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore +N/-S (usft)	Centre +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	129.69	-562.0	677.2	880.1								
100.0	100.0	92.5	92.5	3.0	3.0	129.69	-562.0	677.2	880.0	874.0	6.00	146.602					
200.0	200.0	192.5	192.5	3.0	3.0	129.69	-562.0	677.2	880.0	874.0	6.04	145.721					
300.0	300.0	292.5	292.5	3.0	3.1	129.69	-562.0	677.2	880.0	873.9	6.12	143.781					
400.0	400.0	392.5	392.5	3.0	3.2	129.69	-562.0	677.2	880.0	873.8	6.24	140.946					
500.0	500.0	492.5	492.5	3.1	3.4	129.69	-562.0	677.2	880.0	873.6	6.40	137.408					
600.0	600.0	592.5	592.5	3.1	3.6	129.69	-562.0	677.2	880.0	873.4	6.60	133.364					
700.0	700.0	692.5	692.5	3.1	3.8	129.69	-562.0	677.2	880.0	873.2	6.82	129.001					
800.0	800.0	792.5	792.5	3.2	4.0	129.69	-562.0	677.2	880.0	873.0	7.07	124.472					
900.0	900.0	892.5	892.5	3.2	4.2	129.69	-562.0	677.2	880.0	872.7	7.34	119.900					
1,000.0	1,000.0	992.5	992.5	3.2	4.5	129.69	-562.0	677.2	880.0	872.4	7.63	115.374					

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 ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Reference Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ADMIRAL FEDERAL #804H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design ADMIRAL FEDERAL PROJECT (ATLAS 2529) - ADMIRAL FEDERAL #704H - OWB - PWP1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
1,100.0	1,100.0	1,092.5	1,092.5	3.3	4.8	129.69	-562.0	677.2	880.0	872.1	7.93	110.956	
1,200.0	1,200.0	1,192.5	1,192.5	3.4	5.0	129.69	-562.0	677.2	880.0	871.8	8.25	106.688	
1,300.0	1,300.0	1,292.5	1,292.5	3.4	5.3	129.69	-562.0	677.2	880.0	871.4	8.58	102.595	
1,400.0	1,400.0	1,392.5	1,392.5	3.5	5.6	129.69	-562.0	677.2	880.0	871.1	8.92	98.691	
1,500.0	1,500.0	1,492.5	1,492.5	3.5	5.9	129.69	-562.0	677.2	880.0	870.8	9.27	94.981	
1,600.0	1,600.0	1,592.5	1,592.5	3.6	6.3	129.69	-562.0	677.2	880.0	870.4	9.62	91.463	
1,700.0	1,700.0	1,692.5	1,692.5	3.7	6.6	129.69	-562.0	677.2	880.0	870.0	9.99	88.134	
1,800.0	1,800.0	1,792.5	1,792.5	3.8	6.9	129.69	-562.0	677.2	880.0	869.7	10.35	84.987	
1,900.0	1,900.0	1,892.5	1,892.5	3.9	7.2	129.69	-562.0	677.2	880.0	869.3	10.73	82.013	
2,000.0	2,000.0	1,992.5	1,992.5	3.9	7.5	129.69	-562.0	677.2	880.0	868.9	11.11	79.204	
2,100.0	2,100.0	2,092.5	2,092.5	4.0	7.9	129.69	-562.0	677.2	880.0	868.5	11.50	76.549	
2,200.0	2,200.0	2,192.5	2,192.5	4.1	8.2	129.69	-562.0	677.2	880.0	868.1	11.89	74.041	
2,300.0	2,300.0	2,292.5	2,292.5	4.2	8.5	129.69	-562.0	677.2	880.0	867.7	12.28	71.668	
2,400.0	2,400.0	2,392.5	2,392.5	4.3	8.9	129.69	-562.0	677.2	880.0	867.3	12.68	69.424	
2,500.0	2,500.0	2,492.5	2,492.5	4.4	9.2	129.69	-562.0	677.2	880.0	866.9	13.08	67.298	
2,600.0	2,600.0	2,573.1	2,573.1	4.5	9.5	39.72	-562.2	678.1	879.7	866.3	13.37	65.798	
2,700.0	2,699.8	2,652.2	2,652.1	4.5	9.7	39.80	-562.7	681.2	879.1	865.5	13.62	64.558	
2,800.0	2,799.5	2,731.3	2,731.0	4.5	10.0	39.92	-563.5	686.4	878.1	864.3	13.86	63.350	
2,828.9	2,828.2	2,755.3	2,755.0	4.5	10.1	39.97	-563.8	688.4	877.8	863.9	13.94	62.982	
2,900.0	2,898.8	2,826.3	2,825.7	4.6	10.3	40.11	-564.9	694.5	876.9	862.7	14.17	61.869	
3,000.0	2,998.2	2,926.3	2,925.3	4.6	10.6	40.30	-566.3	703.1	875.6	861.1	14.51	60.342	
3,100.0	3,097.5	3,026.2	3,024.8	4.6	11.0	40.49	-567.7	711.7	874.3	859.5	14.85	58.865	
3,200.0	3,196.8	3,126.2	3,124.4	4.7	11.3	40.68	-569.1	720.3	873.1	857.9	15.20	57.436	
3,300.0	3,296.2	3,226.1	3,224.0	4.7	11.6	40.88	-570.5	728.9	871.8	856.3	15.55	56.053	
3,400.0	3,395.5	3,326.1	3,323.6	4.8	12.0	41.07	-571.9	737.4	870.6	854.7	15.91	54.716	
3,500.0	3,494.9	3,426.0	3,423.1	4.9	12.3	41.27	-573.3	746.0	869.3	853.1	16.27	53.423	
3,600.0	3,594.2	3,526.0	3,522.7	4.9	12.6	41.46	-574.8	754.6	868.1	851.5	16.64	52.173	
3,700.0	3,693.5	3,625.9	3,622.3	5.0	13.0	41.66	-576.2	763.2	866.9	849.9	17.01	50.965	
3,800.0	3,792.9	3,725.9	3,721.8	5.1	13.3	41.86	-577.6	771.8	865.7	848.3	17.38	49.797	
3,900.0	3,892.2	3,825.8	3,821.4	5.1	13.7	42.05	-579.0	780.4	864.5	846.7	17.76	48.668	
4,000.0	3,991.6	3,925.8	3,921.0	5.2	14.0	42.25	-580.4	789.0	863.3	845.2	18.15	47.577	
4,100.0	4,090.9	4,025.7	4,020.5	5.3	14.4	42.45	-581.8	797.6	862.1	843.6	18.53	46.522	
4,200.0	4,190.2	4,125.6	4,120.1	5.4	14.7	42.65	-583.3	806.1	861.0	842.0	18.92	45.502	
4,300.0	4,289.6	4,225.6	4,219.7	5.4	15.1	42.85	-584.7	814.7	859.8	840.5	19.31	44.516	
4,400.0	4,388.9	4,325.5	4,319.2	5.5	15.4	43.05	-586.1	823.3	858.7	839.0	19.71	43.562	
4,500.0	4,488.3	4,425.5	4,418.8	5.6	15.8	43.25	-587.5	831.9	857.5	837.4	20.11	42.640	
4,600.0	4,587.6	4,525.4	4,518.4	5.7	16.1	43.45	-588.9	840.5	856.4	835.9	20.51	41.748	
4,700.0	4,687.0	4,625.4	4,618.0	5.8	16.5	43.65	-590.3	849.1	855.3	834.4	20.92	40.885	
4,800.0	4,786.3	4,725.3	4,717.5	5.9	16.8	43.85	-591.8	857.7	854.2	832.9	21.33	40.050	
4,900.0	4,885.6	4,825.3	4,817.1	6.0	17.2	44.05	-593.2	866.3	853.1	831.4	21.74	39.241	
5,000.0	4,985.0	4,925.2	4,916.7	6.1	17.5	44.26	-594.6	874.8	852.0	829.9	22.15	38.459	
5,100.0	5,084.3	5,025.2	5,016.2	6.1	17.9	44.46	-596.0	883.4	851.0	828.4	22.57	37.701	
5,200.0	5,183.7	5,125.1	5,115.8	6.2	18.2	44.66	-597.4	892.0	849.9	826.9	22.99	36.967	
5,300.0	5,283.0	5,225.1	5,215.4	6.3	18.6	44.87	-598.8	900.6	848.9	825.5	23.41	36.257	
5,400.0	5,382.3	5,325.0	5,314.9	6.4	18.9	45.07	-600.2	909.2	847.8	824.0	23.84	35.568	
5,500.0	5,481.7	5,425.0	5,414.5	6.5	19.3	45.28	-601.7	917.8	846.8	822.5	24.26	34.901	
5,600.0	5,581.0	5,524.9	5,514.1	6.6	19.6	45.49	-603.1	926.4	845.8	821.1	24.69	34.254	
5,700.0	5,680.4	5,624.9	5,613.6	6.7	20.0	45.69	-604.5	934.9	844.8	819.7	25.12	33.626	
5,800.0	5,779.7	5,724.8	5,713.2	6.9	20.3	45.90	-605.9	943.5	843.8	818.2	25.56	33.018	
5,900.0	5,879.1	5,824.8	5,812.8	7.0	20.7	46.11	-607.3	952.1	842.8	816.8	25.99	32.428	
6,000.0	5,978.4	5,924.7	5,912.3	7.1	21.0	46.31	-608.7	960.7	841.8	815.4	26.43	31.855	

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

Concho Resources LLC

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Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design ADMIRAL FEDERAL PROJECT (ATLAS 2529) - ADMIRAL FEDERAL #704H - OWB - PWP1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
6,100.0	6,077.7	6,024.7	6,011.9	7.2	21.4	46.52	-610.2	969.3	840.9	814.0	26.87	31.299	
6,200.0	6,177.1	6,124.6	6,111.5	7.3	21.8	46.73	-611.6	977.9	839.9	812.6	27.31	30.759	
6,300.0	6,276.4	6,224.6	6,211.1	7.4	22.1	46.94	-613.0	986.5	839.0	811.3	27.75	30.235	
6,400.0	6,375.8	6,324.5	6,310.6	7.5	22.5	47.15	-614.4	995.1	838.1	809.9	28.19	29.726	
6,500.0	6,475.1	6,424.5	6,410.2	7.6	22.8	47.36	-615.8	1,003.6	837.2	808.5	28.64	29.231	
6,600.0	6,574.4	6,524.4	6,509.8	7.7	23.2	47.57	-617.2	1,012.2	836.3	807.2	29.09	28.751	
6,700.0	6,673.8	6,624.4	6,609.3	7.8	23.5	47.78	-618.7	1,020.8	835.4	805.8	29.54	28.283	
6,800.0	6,773.1	6,724.3	6,708.9	7.9	23.9	47.99	-620.1	1,029.4	834.5	804.5	29.99	27.829	
6,900.0	6,872.5	6,824.3	6,808.5	8.1	24.3	48.21	-621.5	1,038.0	833.6	803.2	30.44	27.387	
7,000.0	6,971.8	6,924.2	6,908.0	8.2	24.6	48.42	-622.9	1,046.6	832.8	801.9	30.89	26.957	
7,100.0	7,071.2	7,024.2	7,007.6	8.3	25.0	48.63	-624.3	1,055.2	831.9	800.6	31.35	26.538	
7,200.0	7,170.5	7,124.1	7,107.2	8.4	25.3	48.85	-625.7	1,063.7	831.1	799.3	31.80	26.131	
7,300.0	7,269.8	7,224.1	7,206.7	8.5	25.7	49.06	-627.2	1,072.3	830.3	798.0	32.26	25.734	
7,400.0	7,369.2	7,324.0	7,306.3	8.6	26.1	49.27	-628.6	1,080.9	829.4	796.7	32.72	25.348	
7,500.0	7,468.5	7,424.0	7,405.9	8.8	26.4	49.49	-630.0	1,089.5	828.6	795.5	33.18	24.972	
7,600.0	7,567.9	7,523.9	7,505.4	8.9	26.8	49.70	-631.4	1,098.1	827.9	794.2	33.65	24.606	
7,700.0	7,667.2	7,623.8	7,605.0	9.0	27.1	49.92	-632.8	1,106.7	827.1	793.0	34.11	24.249	
7,800.0	7,766.5	7,723.8	7,704.6	9.1	27.5	50.13	-634.2	1,115.3	826.3	791.7	34.57	23.900	
7,900.0	7,865.9	7,823.7	7,804.2	9.2	27.8	50.35	-635.6	1,123.9	825.6	790.5	35.04	23.561	
8,000.0	7,965.2	7,923.7	7,903.7	9.4	28.2	50.57	-637.1	1,132.4	824.8	789.3	35.51	23.230	
8,100.0	8,064.6	8,023.6	8,003.3	9.5	28.6	50.78	-638.5	1,141.0	824.1	788.1	35.98	22.907	
8,200.0	8,163.9	8,123.6	8,102.9	9.6	28.9	51.00	-639.9	1,149.6	823.4	786.9	36.45	22.592	
8,300.0	8,263.3	8,223.5	8,202.4	9.7	29.3	51.22	-641.3	1,158.2	822.7	785.8	36.92	22.284	
8,400.0	8,362.6	8,323.5	8,302.0	9.8	29.6	51.44	-642.7	1,166.8	822.0	784.6	37.39	21.984	
8,500.0	8,461.9	8,423.4	8,401.6	10.0	30.0	51.66	-644.1	1,175.4	821.3	783.4	37.86	21.691	
8,600.0	8,561.3	8,523.4	8,501.1	10.1	30.4	51.88	-645.6	1,184.0	820.6	782.3	38.34	21.405	
8,700.0	8,660.6	8,623.3	8,600.7	10.2	30.7	52.09	-647.0	1,192.6	820.0	781.2	38.81	21.126	
8,800.0	8,760.0	8,723.3	8,700.3	10.3	31.1	52.31	-648.4	1,201.1	819.3	780.0	39.29	20.853	
8,900.0	8,859.3	8,823.2	8,799.8	10.5	31.4	52.53	-649.8	1,209.7	818.7	778.9	39.77	20.586	
9,000.0	8,958.6	8,923.2	8,899.4	10.6	31.8	52.75	-651.2	1,218.3	818.1	777.8	40.25	20.325	
9,100.0	9,058.0	9,023.1	8,999.0	10.7	32.2	52.98	-652.6	1,226.9	817.5	776.7	40.73	20.070	
9,200.0	9,157.3	9,123.1	9,098.6	10.8	32.5	53.20	-654.1	1,235.5	816.9	775.7	41.21	19.821	
9,300.0	9,256.7	9,223.0	9,198.1	11.0	32.9	53.42	-655.5	1,244.1	816.3	774.6	41.69	19.578	
9,400.0	9,356.0	9,323.0	9,297.7	11.1	33.3	53.64	-656.9	1,252.7	815.7	773.5	42.18	19.339	
9,500.0	9,455.3	9,422.9	9,397.3	11.2	33.6	53.86	-658.3	1,261.2	815.2	772.5	42.66	19.106	
9,600.0	9,554.7	9,522.9	9,496.8	11.4	34.0	54.08	-659.7	1,269.8	814.6	771.5	43.15	18.878	
9,700.0	9,654.0	9,622.8	9,596.4	11.5	34.3	54.31	-661.1	1,278.4	814.1	770.4	43.64	18.655	
9,800.0	9,753.4	10,478.3	10,129.2	11.6	36.3	15.53	-165.5	1,461.4	767.4	722.0	45.43	16.891	
9,900.0	9,852.7	10,482.4	10,129.2	11.8	36.3	15.15	-161.5	1,462.4	712.7	666.5	46.17	15.437	
10,000.0	9,952.1	10,486.5	10,129.2	11.9	36.3	14.77	-157.6	1,463.4	668.6	621.9	46.72	14.312	
10,100.0	10,051.4	10,490.5	10,129.2	12.0	36.3	14.39	-153.6	1,464.4	637.2	590.2	47.03	13.548	
10,200.0	10,150.7	10,494.5	10,129.2	12.1	36.3	14.02	-149.8	1,465.4	620.5	573.4	47.17	13.156	
10,255.1	10,205.5	10,496.7	10,129.2	12.2	36.3	13.82	-147.7	1,465.9	618.1	570.9	47.20	13.094 CC, ES	
10,300.0	10,250.1	10,498.5	10,129.2	12.3	36.3	13.66	-145.9	1,466.3	619.7	572.5	47.22	13.123	
10,400.0	10,349.4	10,502.4	10,129.3	12.4	36.3	13.29	-142.1	1,467.3	634.8	587.6	47.25	13.435	
10,500.0	10,448.8	10,506.3	10,129.3	12.5	36.3	12.93	-138.4	1,468.2	664.8	617.6	47.20	14.084	
10,607.0	10,555.1	10,510.4	10,129.3	12.7	36.3	12.55	-134.4	1,469.2	711.1	664.1	47.02	15.124	
10,625.0	10,572.9	10,511.5	10,129.3	12.8	36.3	26.61	-133.3	1,469.4	720.1	673.3	46.81	15.386	
10,650.0	10,597.6	10,514.4	10,129.3	12.8	36.3	39.14	-130.4	1,470.1	733.1	686.3	46.73	15.687	
10,675.0	10,622.2	10,519.0	10,129.3	12.8	36.3	45.95	-126.0	1,471.2	746.4	699.7	46.65	15.999	
10,700.0	10,646.5	10,525.1	10,129.3	12.8	36.3	49.42	-120.1	1,472.6	760.0	713.4	46.58	16.317	

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 ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Reference Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ADMIRAL FEDERAL #804H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design ADMIRAL FEDERAL PROJECT (ATLAS 2529) - ADMIRAL FEDERAL #704H - OWB - PWP1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,725.0	10,670.5	10,532.7	10,129.4	12.8	36.3	50.90	-112.6	1,474.4	773.9	727.4	46.51	16.640	
10,750.0	10,694.2	10,541.9	10,129.4	12.8	36.3	51.14	-103.7	1,476.4	787.9	741.5	46.44	16.967	
10,775.0	10,717.4	10,552.6	10,129.4	12.9	36.4	50.60	-93.3	1,478.8	802.0	755.6	46.37	17.295	
10,800.0	10,740.1	10,564.8	10,129.5	12.9	36.4	49.53	-81.4	1,481.5	816.0	769.7	46.31	17.621	
10,825.0	10,762.3	10,578.3	10,129.5	12.9	36.4	48.12	-68.2	1,484.4	829.9	783.6	46.25	17.944	
10,850.0	10,783.8	10,593.3	10,129.6	12.9	36.4	46.51	-53.6	1,487.6	843.6	797.4	46.20	18.261	
10,875.0	10,804.7	10,609.5	10,129.6	12.9	36.4	44.79	-37.7	1,490.9	857.0	810.9	46.15	18.570	
10,900.0	10,824.8	10,627.0	10,129.7	13.0	36.4	43.03	-20.5	1,494.4	870.1	824.0	46.11	18.870	
10,925.0	10,844.1	10,645.7	10,129.8	13.0	36.5	41.27	-2.1	1,498.0	882.7	836.6	46.07	19.159	
10,950.0	10,862.6	10,665.6	10,129.8	13.0	36.5	39.56	17.4	1,501.7	894.7	848.7	46.04	19.434	
10,975.0	10,880.2	10,686.6	10,129.9	13.1	36.5	37.91	38.0	1,505.5	906.2	860.2	46.01	19.694	
11,000.0	10,896.9	10,708.5	10,130.0	13.1	36.6	36.35	59.6	1,509.3	917.0	871.0	45.99	19.939	
11,025.0	10,912.5	10,731.4	10,130.1	13.1	36.6	34.89	82.2	1,513.0	927.0	881.1	45.98	20.162	
11,050.0	10,927.2	10,755.2	10,130.1	13.1	36.6	33.54	105.7	1,516.7	936.3	890.3	45.97	20.367	
11,075.0	10,940.7	10,779.7	10,130.2	13.2	36.7	32.28	129.9	1,520.4	944.7	898.7	45.97	20.551	
11,100.0	10,953.2	10,805.0	10,130.3	13.2	36.7	31.14	155.0	1,523.9	952.2	906.2	45.97	20.713	
11,125.0	10,964.5	10,830.9	10,130.4	13.2	36.7	30.09	180.7	1,527.3	958.7	912.8	45.98	20.850	
11,150.0	10,974.6	10,857.4	10,130.5	13.3	36.8	29.15	206.9	1,530.5	964.3	918.3	46.00	20.964	
11,175.0	10,983.6	10,884.3	10,130.6	13.3	36.8	28.30	233.7	1,533.5	968.8	922.8	46.02	21.053	
11,200.0	10,991.3	10,911.6	10,130.7	13.3	36.9	27.55	260.9	1,536.3	972.3	926.2	46.04	21.116	
11,225.0	10,997.8	10,939.3	10,130.8	13.4	36.9	26.89	288.4	1,538.9	974.6	928.5	46.08	21.151	
11,250.0	11,003.0	10,967.2	10,130.9	13.4	37.0	26.31	316.2	1,541.3	975.9	929.7	46.12	21.161	
11,275.0	11,006.9	10,995.2	10,131.0	13.4	37.0	25.82	344.1	1,543.3	976.0	929.8	46.16	21.145	
11,300.0	11,009.5	11,023.3	10,131.1	13.4	37.1	25.41	372.2	1,545.1	974.9	928.7	46.21	21.099	
11,325.0	11,010.9	11,051.4	10,131.2	13.5	37.1	25.08	400.2	1,546.7	972.7	926.4	46.26	21.027	
11,338.8	11,011.0	11,066.8	10,131.3	13.5	37.2	24.94	415.6	1,547.4	971.0	924.7	46.29	20.976	
11,400.0	11,011.0	11,135.1	10,131.5	13.6	37.3	23.97	483.9	1,549.6	962.7	916.3	46.43	20.733	
11,500.0	11,010.8	11,244.0	10,131.9	13.7	37.5	22.36	592.7	1,549.7	949.7	903.0	46.69	20.339	
11,600.0	11,010.7	11,339.7	10,132.2	13.9	37.8	21.02	688.5	1,548.4	938.1	891.2	46.99	19.964	
11,700.0	11,010.6	11,436.4	10,132.6	14.1	38.0	19.78	785.2	1,547.0	928.5	881.2	47.37	19.603	
11,800.0	11,010.5	11,533.9	10,132.9	14.5	38.3	18.67	882.7	1,545.5	920.6	872.8	47.81	19.255	
11,900.0	11,010.3	11,632.1	10,133.3	14.8	38.5	17.71	980.9	1,544.1	914.2	865.9	48.33	18.915	
12,000.0	11,010.2	11,731.0	10,133.6	15.3	38.8	16.91	1,079.7	1,542.7	909.2	860.3	48.93	18.582	
12,100.0	11,010.1	11,830.3	10,134.0	15.8	39.1	16.28	1,179.0	1,541.2	905.4	855.8	49.59	18.256	
12,200.0	11,010.0	11,929.9	10,134.3	16.3	39.5	15.83	1,278.6	1,539.8	902.6	852.3	50.33	17.934	
12,300.0	11,009.9	12,029.8	10,134.7	16.8	39.8	15.57	1,378.5	1,538.4	900.8	849.7	51.13	17.619	
12,388.8	11,009.8	12,118.6	10,135.0	17.4	40.1	15.51	1,467.3	1,537.1	900.0	848.2	51.89	17.344	
12,400.0	11,009.8	12,129.8	10,135.0	17.4	40.2	15.51	1,478.5	1,536.9	900.0	848.0	51.99	17.310	
12,500.0	11,009.6	12,229.8	10,135.4	18.0	40.5	15.52	1,578.4	1,535.5	899.5	846.6	52.90	17.003	
12,600.0	11,009.5	12,329.8	10,135.8	18.6	40.9	15.53	1,678.4	1,534.0	899.1	845.2	53.85	16.697	
12,700.0	11,009.4	12,429.8	10,136.1	19.3	41.3	15.53	1,778.4	1,532.6	898.6	843.8	54.82	16.393	
12,800.0	11,009.3	12,529.8	10,136.5	19.9	41.8	15.54	1,878.4	1,531.1	898.2	842.4	55.82	16.091	
12,900.0	11,009.2	12,629.8	10,136.8	20.6	42.2	15.55	1,978.4	1,529.7	897.7	840.9	56.85	15.792	
13,000.0	11,009.1	12,729.8	10,137.2	21.3	42.6	15.56	2,078.4	1,528.2	897.3	839.4	57.90	15.497	
13,100.0	11,008.9	12,829.8	10,137.5	22.0	43.1	15.57	2,178.4	1,526.8	896.8	837.8	58.98	15.207	
13,200.0	11,008.8	12,929.8	10,137.9	22.7	43.6	15.58	2,278.4	1,525.3	896.4	836.3	60.07	14.921	
13,300.0	11,008.7	13,029.8	10,138.2	23.4	44.1	15.58	2,378.3	1,523.9	895.9	834.7	61.20	14.640	
13,400.0	11,008.6	13,129.8	10,138.6	24.1	44.5	15.59	2,478.3	1,522.4	895.5	833.1	62.34	14.365	
13,500.0	11,008.5	13,229.8	10,139.0	24.9	45.0	15.60	2,578.3	1,521.0	895.0	831.5	63.50	14.095	
13,600.0	11,008.4	13,329.7	10,139.3	25.6	45.6	15.61	2,678.3	1,519.5	894.5	829.9	64.68	13.831	
13,700.0	11,008.2	13,429.7	10,139.7	26.4	46.1	15.62	2,778.3	1,518.1	894.1	828.2	65.87	13.573	

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 ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Reference Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ADMIRAL FEDERAL #804H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design ADMIRAL FEDERAL PROJECT (ATLAS 2529) - ADMIRAL FEDERAL #704H - OWB - PWP1													Offset Site Error:	0.0 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
13,800.0	11,008.1	13,529.7	10,140.0	27.1	46.6	15.63	15.63	2,878.3	1,516.6	893.6	826.6	67.09	13.321	
13,900.0	11,008.0	13,629.7	10,140.4	27.9	47.2	15.63	15.63	2,978.3	1,515.2	893.2	824.9	68.31	13.075	
14,000.0	11,007.9	13,729.7	10,140.7	28.6	47.7	15.64	15.64	3,078.3	1,513.7	892.7	823.2	69.56	12.835	
14,100.0	11,007.8	13,829.7	10,141.1	29.4	48.3	15.65	15.65	3,178.2	1,512.3	892.3	821.5	70.81	12.601	
14,200.0	11,007.7	13,929.7	10,141.4	30.2	48.9	15.66	15.66	3,278.2	1,510.8	891.8	819.7	72.08	12.372	
14,300.0	11,007.5	14,029.7	10,141.8	31.0	49.4	15.67	15.67	3,378.2	1,509.4	891.4	818.0	73.36	12.150	
14,400.0	11,007.4	14,129.7	10,142.2	31.8	50.0	15.68	15.68	3,478.2	1,507.9	890.9	816.3	74.66	11.934	
14,500.0	11,007.3	14,229.7	10,142.5	32.6	50.6	15.68	15.68	3,578.2	1,506.5	890.5	814.5	75.96	11.723	
14,600.0	11,007.2	14,329.7	10,142.9	33.3	51.2	15.69	15.69	3,678.2	1,505.0	890.0	812.7	77.28	11.517	
14,700.0	11,007.1	14,429.7	10,143.2	34.1	51.8	15.70	15.70	3,778.2	1,503.6	889.6	811.0	78.60	11.317	
14,800.0	11,007.0	14,529.7	10,143.6	34.9	52.5	15.71	15.71	3,878.2	1,502.2	889.1	809.2	79.94	11.123	
14,900.0	11,006.8	14,629.7	10,143.9	35.8	53.1	15.72	15.72	3,978.1	1,500.7	888.6	807.4	81.28	10.933	
15,000.0	11,006.7	14,729.7	10,144.3	36.6	53.7	15.73	15.73	4,078.1	1,499.3	888.2	805.6	82.63	10.749	
15,100.0	11,006.6	14,829.7	10,144.6	37.4	54.4	15.73	15.73	4,178.1	1,497.8	887.7	803.7	83.99	10.569	
15,200.0	11,006.5	14,929.7	10,145.0	38.2	55.0	15.74	15.74	4,278.1	1,496.4	887.3	801.9	85.36	10.394	
15,300.0	11,006.4	15,029.7	10,145.4	39.0	55.6	15.75	15.75	4,378.1	1,494.9	886.8	800.1	86.74	10.224	
15,400.0	11,006.3	15,129.7	10,145.7	39.8	56.3	15.76	15.76	4,478.1	1,493.5	886.4	798.3	88.12	10.059	
15,458.4	11,006.2	15,187.7	10,145.9	40.3	56.7	15.77	15.77	4,536.1	1,492.6	886.1	797.2	88.93	9.964	
15,496.3	11,006.2	15,222.8	10,146.0	40.6	56.9	15.77	15.77	4,571.2	1,492.4	886.0	796.5	89.46	9.903	
15,500.0	11,006.2	15,226.5	10,146.1	40.6	56.9	15.77	15.77	4,574.8	1,492.4	885.9	796.4	89.52	9.897	
15,600.0	11,006.1	15,326.5	10,146.4	41.4	57.6	15.78	15.78	4,674.8	1,492.3	885.5	794.6	90.91	9.740	
15,700.0	11,006.0	15,426.5	10,146.8	42.3	58.3	15.79	15.79	4,774.8	1,492.2	885.1	792.8	92.31	9.588	
15,800.0	11,005.8	15,526.5	10,147.1	43.1	59.0	15.80	15.80	4,874.8	1,492.1	884.6	790.9	93.72	9.439	
15,900.0	11,005.7	15,626.5	10,147.5	43.9	59.6	15.81	15.81	4,974.8	1,492.0	884.2	789.1	95.13	9.294	
16,000.0	11,005.6	15,726.5	10,147.8	44.7	60.3	15.82	15.82	5,074.8	1,491.9	883.8	787.2	96.55	9.153	
16,100.0	11,005.5	15,826.5	10,148.2	45.6	61.0	15.83	15.83	5,174.8	1,491.8	883.4	785.4	97.98	9.016	
16,200.0	11,005.4	15,926.5	10,148.5	46.4	61.7	15.84	15.84	5,274.8	1,491.7	882.9	783.5	99.41	8.882	
16,300.0	11,005.3	16,026.5	10,148.9	47.2	62.4	15.85	15.85	5,374.8	1,491.6	882.5	781.6	100.84	8.751	
16,400.0	11,005.2	16,126.5	10,149.2	48.0	63.1	15.86	15.86	5,474.8	1,491.5	882.1	779.8	102.28	8.624	
16,500.0	11,005.1	16,226.5	10,149.6	48.9	63.8	15.87	15.87	5,574.8	1,491.4	881.6	777.9	103.72	8.500	
16,600.0	11,005.0	16,326.5	10,150.0	49.7	64.5	15.87	15.87	5,674.8	1,491.3	881.2	776.0	105.17	8.379	
16,700.0	11,004.9	16,426.5	10,150.3	50.5	65.2	15.88	15.88	5,774.8	1,491.2	880.8	774.1	106.62	8.261	
16,800.0	11,004.8	16,526.5	10,150.7	51.4	65.9	15.89	15.89	5,874.8	1,491.1	880.3	772.3	108.07	8.146	
16,900.0	11,004.7	16,626.5	10,151.0	52.2	66.7	15.90	15.90	5,974.8	1,491.0	879.9	770.4	109.53	8.033	
17,000.0	11,004.6	16,726.5	10,151.4	53.0	67.4	15.91	15.91	6,074.8	1,490.9	879.5	768.5	110.99	7.924	
17,100.0	11,004.5	16,826.5	10,151.7	53.9	68.1	15.92	15.92	6,174.8	1,490.8	879.0	766.6	112.46	7.817	
17,200.0	11,004.4	16,926.5	10,152.1	54.7	68.8	15.93	15.93	6,274.8	1,490.7	878.6	764.7	113.92	7.712	
17,300.0	11,004.3	17,026.5	10,152.4	55.6	69.6	15.94	15.94	6,374.8	1,490.5	878.2	762.8	115.39	7.610	
17,400.0	11,004.2	17,126.5	10,152.8	56.4	70.3	15.95	15.95	6,474.8	1,490.4	877.7	760.9	116.87	7.510	
17,500.0	11,004.1	17,226.5	10,153.1	57.2	71.1	15.96	15.96	6,574.8	1,490.3	877.3	759.0	118.35	7.413	
17,600.0	11,004.0	17,326.5	10,153.5	58.1	71.8	15.97	15.97	6,674.8	1,490.2	876.9	757.0	119.83	7.318	
17,700.0	11,003.9	17,426.5	10,153.9	58.9	72.5	15.98	15.98	6,774.8	1,490.1	876.4	755.1	121.31	7.225	
17,800.0	11,003.8	17,526.5	10,154.2	59.8	73.3	15.99	15.99	6,874.8	1,490.0	876.0	753.2	122.79	7.134	
17,900.0	11,003.7	17,626.5	10,154.6	60.6	74.0	16.00	16.00	6,974.8	1,489.9	875.6	751.3	124.28	7.045	
18,000.0	11,003.6	17,726.5	10,154.9	61.4	74.8	16.01	16.01	7,074.8	1,489.8	875.1	749.4	125.77	6.958	
18,100.0	11,003.5	17,826.5	10,155.3	62.3	75.5	16.02	16.02	7,174.8	1,489.7	874.7	747.4	127.26	6.873	
18,200.0	11,003.4	17,926.4	10,155.6	63.1	76.3	16.03	16.03	7,274.8	1,489.6	874.3	745.5	128.76	6.790	
18,300.0	11,003.3	18,026.4	10,156.0	64.0	77.1	16.04	16.04	7,374.8	1,489.5	873.8	743.6	130.25	6.709	
18,400.0	11,003.2	18,126.4	10,156.3	64.8	77.8	16.05	16.05	7,474.8	1,489.4	873.4	741.7	131.75	6.629	
18,500.0	11,003.1	18,226.4	10,156.7	65.7	78.6	16.06	16.06	7,574.8	1,489.3	873.0	739.7	133.25	6.551	
18,600.0	11,003.0	18,326.4	10,157.0	66.5	79.3	16.07	16.07	7,674.8	1,489.2	872.6	737.8	134.76	6.475	

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 ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Reference Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ADMIRAL FEDERAL #804H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design ADMIRAL FEDERAL PROJECT (ATLAS 2529) - ADMIRAL FEDERAL #704H - OWB - PWP1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD+IFR1+FDIR													Offset Well Error:	3.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
18,700.0	11,002.9	18,426.4	10,157.4	67.3	80.1	16.08	7,774.8	1,489.1	872.1	735.9	136.26	6.400		
18,800.0	11,002.8	18,526.4	10,157.8	68.2	80.9	16.09	7,874.8	1,489.0	871.7	733.9	137.77	6.327		
18,900.0	11,002.7	18,626.4	10,158.1	69.0	81.6	16.10	7,974.8	1,488.9	871.3	732.0	139.28	6.256		
19,000.0	11,002.6	18,726.4	10,158.5	69.9	82.4	16.11	8,074.8	1,488.8	870.8	730.0	140.79	6.185		
19,100.0	11,002.5	18,826.4	10,158.8	70.7	83.2	16.12	8,174.8	1,488.7	870.4	728.1	142.30	6.117		
19,200.0	11,002.4	18,926.4	10,159.2	71.6	84.0	16.13	8,274.8	1,488.6	870.0	726.2	143.81	6.049		
19,300.0	11,002.3	19,026.4	10,159.5	72.4	84.7	16.14	8,374.8	1,488.5	869.5	724.2	145.33	5.983		
19,400.0	11,002.2	19,126.4	10,159.9	73.3	85.5	16.15	8,474.8	1,488.4	869.1	722.3	146.84	5.919		
19,500.0	11,002.1	19,226.4	10,160.2	74.1	86.3	16.16	8,574.8	1,488.3	868.7	720.3	148.36	5.855		
19,600.0	11,002.0	19,326.4	10,160.6	75.0	87.1	16.17	8,674.8	1,488.2	868.2	718.4	149.88	5.793		
19,700.0	11,001.9	19,426.4	10,160.9	75.8	87.9	16.18	8,774.8	1,488.1	867.8	716.4	151.40	5.732		
19,800.0	11,001.8	19,526.4	10,161.3	76.7	88.6	16.19	8,874.8	1,488.0	867.4	714.5	152.92	5.672		
19,900.0	11,001.7	19,626.4	10,161.7	77.5	89.4	16.20	8,974.7	1,487.9	866.9	712.5	154.44	5.613		
20,000.0	11,001.6	19,726.4	10,162.0	78.4	90.2	16.21	9,074.7	1,487.8	866.5	710.5	155.97	5.556		
20,100.0	11,001.5	19,826.4	10,162.4	79.2	91.0	16.22	9,174.7	1,487.7	866.1	708.6	157.49	5.499		
20,200.0	11,001.4	19,926.4	10,162.7	80.1	91.8	16.23	9,274.7	1,487.6	865.7	706.6	159.02	5.444		
20,300.0	11,001.3	20,026.4	10,163.1	80.9	92.6	16.24	9,374.7	1,487.5	865.2	704.7	160.55	5.389		
20,400.0	11,001.2	20,126.4	10,163.4	81.8	93.4	16.25	9,474.7	1,487.4	864.8	702.7	162.08	5.336		
20,500.0	11,001.1	20,226.4	10,163.8	82.6	94.2	16.26	9,574.7	1,487.3	864.4	700.7	163.61	5.283		
20,564.8	11,001.0	20,289.0	10,164.0	83.2	94.7	16.26	9,637.3	1,487.2	864.1	699.5	164.60	5.249 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 ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Reference Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ADMIRAL FEDERAL #804H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 9672-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	3.0	3.0	130.98	-562.2	647.3	857.4				
100.0	100.0	92.7	92.7	3.0	3.0	130.98	-562.2	647.3	857.4	851.4	6.00	142.883	
200.0	200.0	192.7	192.7	3.0	3.0	130.98	-562.2	647.3	857.4	851.4	6.01	142.748	
300.0	300.0	292.7	292.7	3.0	3.0	130.98	-562.2	647.3	857.4	851.3	6.02	142.450	
400.0	400.0	392.7	392.7	3.0	3.0	130.98	-562.2	647.3	857.4	851.3	6.04	141.995	
500.0	500.0	492.7	492.7	3.1	3.1	130.98	-562.2	647.3	857.4	851.3	6.06	141.386	
600.0	600.0	592.7	592.7	3.1	3.1	130.98	-562.2	647.3	857.4	851.3	6.10	140.629	
700.0	700.0	692.7	692.7	3.1	3.1	130.98	-562.2	647.3	857.4	851.2	6.14	139.731	
800.0	800.0	792.7	792.7	3.2	3.2	130.98	-562.2	647.3	857.4	851.2	6.18	138.702	
900.0	900.0	892.7	892.7	3.2	3.2	130.98	-562.2	647.3	857.4	851.1	6.23	137.550	
1,000.0	1,000.0	892.7	892.7	3.2	3.2	130.98	-562.2	647.3	857.4	851.1	6.29	136.284	
1,100.0	1,100.0	1,092.7	1,092.7	3.3	3.3	130.98	-562.2	647.3	857.4	851.0	6.35	134.916	
1,200.0	1,200.0	1,192.7	1,192.7	3.4	3.3	130.98	-562.2	647.3	857.4	850.9	6.42	133.455	
1,300.0	1,300.0	1,292.7	1,292.7	3.4	3.4	130.98	-562.2	647.3	857.4	850.9	6.50	131.912	
1,400.0	1,400.0	1,392.7	1,392.7	3.5	3.5	130.98	-562.2	647.3	857.4	850.8	6.58	130.298	
1,500.0	1,500.0	1,492.7	1,492.7	3.5	3.5	130.98	-562.2	647.3	857.4	850.7	6.67	128.623	
1,600.0	1,600.0	1,592.7	1,592.7	3.6	3.6	130.98	-562.2	647.3	857.4	850.6	6.76	126.897	
1,700.0	1,700.0	1,692.7	1,692.7	3.7	3.7	130.98	-562.2	647.3	857.4	850.5	6.85	125.129	
1,800.0	1,800.0	1,792.7	1,792.7	3.8	3.8	130.98	-562.2	647.3	857.4	850.4	6.95	123.328	
1,900.0	1,900.0	1,892.7	1,892.7	3.9	3.8	130.98	-562.2	647.3	857.4	850.3	7.06	121.503	
2,000.0	2,000.0	1,992.7	1,992.7	3.9	3.9	130.98	-562.2	647.3	857.4	850.2	7.16	119.660	
2,100.0	2,100.0	2,092.7	2,092.7	4.0	4.0	130.98	-562.2	647.3	857.4	850.1	7.28	117.808	
2,200.0	2,200.0	2,192.7	2,192.7	4.1	4.1	130.98	-562.2	647.3	857.4	850.0	7.39	115.952	
2,300.0	2,300.0	2,292.7	2,292.7	4.2	4.2	130.98	-562.2	647.3	857.4	849.8	7.51	114.098	
2,400.0	2,400.0	2,392.7	2,392.7	4.3	4.3	130.98	-562.2	647.3	857.4	849.7	7.64	112.251	
2,500.0	2,500.0	2,492.7	2,492.7	4.4	4.4	130.98	-562.2	647.3	857.4	849.6	7.76	110.416	
2,600.0	2,600.0	2,574.0	2,574.0	4.5	4.4	41.07	-563.1	647.6	857.1	849.2	7.82	109.567	
2,700.0	2,699.8	2,653.7	2,653.6	4.5	4.4	41.38	-566.2	648.5	856.5	848.6	7.83	109.400	
2,800.0	2,799.5	2,741.5	2,741.3	4.5	4.4	41.94	-571.7	650.1	855.5	847.6	7.84	109.143	
2,828.9	2,828.2	2,770.3	2,770.0	4.5	4.4	42.16	-573.6	650.7	854.9	847.0	7.84	108.988	
2,900.0	2,898.8	2,840.9	2,840.4	4.6	4.4	42.70	-578.3	652.0	853.1	845.2	7.86	108.546	
3,000.0	2,998.2	2,940.2	2,939.5	4.6	4.3	43.46	-585.0	654.0	850.7	842.8	7.89	107.890	
3,100.0	3,097.5	3,039.5	3,038.5	4.6	4.3	44.22	-591.6	656.0	848.5	840.6	7.92	107.192	
3,200.0	3,196.8	3,138.9	3,137.6	4.7	4.3	44.99	-598.3	657.9	846.4	838.5	7.95	106.456	
3,300.0	3,296.2	3,238.2	3,236.7	4.7	4.3	45.76	-604.9	659.9	844.5	836.5	7.99	105.681	
3,400.0	3,395.5	3,337.5	3,335.8	4.8	4.3	46.53	-611.6	661.8	842.8	834.7	8.04	104.870	
3,500.0	3,494.9	3,436.8	3,434.9	4.9	4.3	47.31	-618.2	663.8	841.2	833.1	8.09	104.024	
3,600.0	3,594.2	3,536.2	3,534.0	4.9	4.3	48.09	-624.9	665.7	839.8	831.6	8.14	103.146	
3,700.0	3,693.5	3,635.5	3,633.0	5.0	4.3	48.87	-631.5	667.7	838.5	830.3	8.20	102.237	
3,800.0	3,792.9	3,734.8	3,732.1	5.1	4.3	49.65	-638.1	669.6	837.4	829.1	8.27	101.300	
3,900.0	3,892.2	3,834.1	3,831.2	5.1	4.3	50.44	-644.8	671.6	836.4	828.1	8.34	100.336	
4,000.0	3,991.6	3,933.5	3,930.3	5.2	4.3	51.23	-651.4	673.5	835.6	827.2	8.41	99.349	
4,100.0	4,090.9	4,032.8	4,029.4	5.3	4.3	52.02	-658.1	675.5	835.0	826.5	8.49	98.341	
4,200.0	4,190.2	4,132.1	4,128.5	5.4	4.3	52.81	-664.7	677.5	834.5	825.9	8.58	97.314	
4,300.0	4,289.6	4,231.4	4,227.5	5.4	4.4	53.60	-671.4	679.4	834.2	825.5	8.66	96.270	
4,400.0	4,388.9	4,330.8	4,326.6	5.5	4.4	54.39	-678.0	681.4	834.0	825.2	8.76	95.213	
4,447.3	4,436.0	4,377.8	4,373.5	5.6	4.4	54.76	-681.2	682.3	834.0	825.2	8.81	94.706	
4,500.0	4,488.3	4,430.1	4,425.7	5.6	4.4	55.18	-684.7	683.3	834.0	825.1	8.86	94.144	
4,600.0	4,587.6	4,529.4	4,524.8	5.7	4.5	55.97	-691.3	685.3	834.2	825.2	8.96	93.066	
4,700.0	4,687.0	4,628.7	4,623.9	5.8	4.5	56.76	-698.0	687.2	834.5	825.4	9.07	91.982	
4,800.0	4,786.3	4,728.1	4,723.0	5.9	4.6	57.55	-704.6	689.2	835.0	825.8	9.19	90.893	

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 ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Reference Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ADMIRAL FEDERAL #804H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 9672-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,900.0	4,885.6	4,827.4	4,822.0	6.0	4.6	58.34	-711.3	691.1	835.6	826.3	9.31	89.803	
5,000.0	4,985.0	4,926.7	4,921.1	6.1	4.7	59.13	-717.9	693.1	836.4	827.0	9.43	88.714	
5,100.0	5,084.3	5,040.3	5,034.5	6.1	4.7	60.01	-724.7	695.1	836.7	827.1	9.56	87.475	
5,200.0	5,183.7	5,156.1	5,150.2	6.2	4.8	60.88	-729.4	696.5	835.1	825.4	9.71	86.010	
5,300.0	5,283.0	5,272.0	5,266.0	6.3	4.9	61.72	-731.8	697.2	831.8	821.9	9.86	84.328	
5,400.0	5,382.3	5,381.0	5,375.0	6.4	4.9	62.49	-732.2	697.3	826.7	816.7	10.00	82.636	
5,500.0	5,481.7	5,480.3	5,474.4	6.5	5.0	63.19	-732.2	697.3	821.5	811.3	10.13	81.090	
5,600.0	5,581.0	5,579.7	5,573.7	6.6	5.0	63.91	-732.2	697.3	816.3	806.1	10.26	79.553	
5,700.0	5,680.4	5,679.0	5,673.1	6.7	5.1	64.63	-732.2	697.3	811.3	800.9	10.40	78.028	
5,800.0	5,779.7	5,778.4	5,772.4	6.9	5.2	65.36	-732.2	697.3	806.5	795.9	10.54	76.516	
5,900.0	5,879.1	5,877.7	5,871.8	7.0	5.2	66.10	-732.2	697.3	801.7	791.0	10.69	75.020	
6,000.0	5,978.4	5,977.0	5,971.1	7.1	5.3	66.85	-732.2	697.3	797.1	786.3	10.84	73.541	
6,100.0	6,077.7	6,076.4	6,070.4	7.2	5.4	67.61	-732.2	697.3	792.7	781.7	11.00	72.081	
6,200.0	6,177.1	6,175.7	6,169.8	7.3	5.4	68.37	-732.2	697.3	788.4	777.2	11.16	70.642	
6,300.0	6,276.4	6,275.1	6,269.1	7.4	5.5	69.15	-732.2	697.3	784.2	772.9	11.33	69.225	
6,400.0	6,375.8	6,374.4	6,368.5	7.5	5.6	69.93	-732.2	697.3	780.2	768.7	11.50	67.832	
6,500.0	6,475.1	6,473.7	6,467.8	7.6	5.6	70.72	-732.2	697.3	776.3	764.6	11.68	66.464	
6,600.0	6,574.4	6,573.1	6,567.1	7.7	5.7	71.52	-732.2	697.3	772.5	760.7	11.86	65.121	
6,700.0	6,673.8	6,672.4	6,666.5	7.8	5.8	72.32	-732.2	697.3	769.0	756.9	12.05	63.806	
6,800.0	6,773.1	6,771.8	6,765.8	7.9	5.9	73.13	-732.2	697.3	765.5	753.3	12.24	62.519	
6,900.0	6,872.5	6,871.1	6,865.2	8.1	6.0	73.95	-732.2	697.3	762.3	749.8	12.44	61.261	
7,000.0	6,971.8	6,970.5	6,964.5	8.2	6.1	74.78	-732.2	697.3	759.2	746.5	12.65	60.032	
7,100.0	7,071.2	7,069.8	7,063.9	8.3	6.1	75.61	-732.2	697.3	756.2	743.4	12.85	58.833	
7,200.0	7,170.5	7,169.1	7,163.2	8.4	6.2	76.45	-732.2	697.3	753.4	740.4	13.07	57.664	
7,300.0	7,269.8	7,268.5	7,262.5	8.5	6.3	77.29	-732.2	697.3	750.8	737.5	13.28	56.526	
7,400.0	7,369.2	7,367.8	7,361.9	8.6	6.4	78.14	-732.2	697.3	748.4	734.9	13.50	55.419	
7,500.0	7,468.5	7,467.2	7,461.2	8.8	6.5	79.00	-732.2	697.3	746.1	732.4	13.73	54.344	
7,600.0	7,567.9	7,566.5	7,560.6	8.9	6.6	79.86	-732.2	697.3	744.0	730.0	13.96	53.299	
7,700.0	7,667.2	7,665.8	7,659.9	9.0	6.7	80.73	-732.2	697.3	742.0	727.8	14.19	52.286	
7,800.0	7,766.5	7,765.2	7,759.2	9.1	6.8	81.60	-732.2	697.3	740.3	725.8	14.43	51.305	
7,900.0	7,865.9	7,864.5	7,858.6	9.2	6.9	82.47	-732.2	697.3	738.7	724.0	14.67	50.354	
8,000.0	7,965.2	7,963.9	7,957.9	9.4	7.0	83.35	-732.2	697.3	737.2	722.3	14.91	49.434	
8,100.0	8,064.6	8,063.2	8,057.3	9.5	7.1	84.23	-732.2	697.3	736.0	720.8	15.16	48.545	
8,200.0	8,163.9	8,162.6	8,156.6	9.6	7.2	85.11	-732.2	697.3	734.9	719.5	15.41	47.685	
8,300.0	8,263.3	8,261.9	8,256.0	9.7	7.3	85.99	-732.2	697.3	734.0	718.4	15.67	46.856	
8,400.0	8,362.6	8,361.2	8,355.3	9.8	7.4	86.88	-732.2	697.3	733.3	717.4	15.92	46.056	
8,500.0	8,461.9	8,460.6	8,454.6	10.0	7.5	87.77	-732.2	697.3	732.8	716.6	16.18	45.286	
8,600.0	8,561.3	8,559.9	8,554.0	10.1	7.6	88.66	-732.2	697.3	732.4	716.0	16.44	44.543	
8,700.0	8,660.6	8,659.3	8,653.3	10.2	7.7	89.55	-732.2	697.3	732.2	715.5	16.71	43.829	
8,750.5	8,710.8	8,709.5	8,703.5	10.3	7.8	90.00	-732.2	697.3	732.2	715.4	16.84	43.478	
8,800.0	8,760.0	8,758.6	8,752.7	10.3	7.8	90.44	-732.2	697.3	732.2	715.2	16.97	43.142	
8,900.0	8,859.3	8,857.9	8,852.0	10.5	7.9	91.33	-732.2	697.3	732.4	715.2	17.24	42.482	
9,000.0	8,958.6	8,957.3	8,951.3	10.6	8.0	92.22	-732.2	697.3	732.8	715.2	17.51	41.849	
9,100.0	9,058.0	9,056.6	9,050.7	10.7	8.1	93.11	-732.2	697.3	733.3	715.5	17.78	41.241	
9,200.0	9,157.3	9,156.0	9,150.0	10.8	8.3	94.00	-732.2	697.3	734.0	716.0	18.05	40.658	
9,300.0	9,256.7	9,255.3	9,249.4	11.0	8.4	94.88	-732.2	697.3	734.9	716.6	18.33	40.099	
9,400.0	9,356.0	9,354.7	9,348.7	11.1	8.5	95.76	-732.2	697.3	736.0	717.4	18.60	39.565	
9,500.0	9,455.3	9,454.0	9,448.0	11.2	8.6	96.64	-732.2	697.3	737.2	718.3	18.88	39.053	
9,600.0	9,554.7	10,653.4	10,144.8	11.4	10.1	172.63	-41.3	541.6	650.1	615.1	34.97	18.588	
9,700.0	9,654.0	10,651.8	10,144.8	11.5	10.1	172.36	-42.9	541.9	565.4	531.2	34.20	16.532	
9,800.0	9,753.4	10,650.2	10,144.8	11.6	10.1	172.08	-44.4	542.1	486.6	453.8	32.83	14.820	

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 ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Reference Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ADMIRAL FEDERAL #804H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design ADMIRAL FEDERAL PROJECT (ATLAS 2529) - ADMIRAL FEDERAL #705H - OWB - PWP1												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 9672-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,900.0	9,852.7	10,648.7	10,144.8	11.8	10.1	171.80	-46.0	542.4	417.0	386.5	30.53	13.659	
10,000.0	9,952.1	10,647.1	10,144.8	11.9	10.1	171.52	-47.5	542.6	361.9	334.9	27.02	13.395	
10,100.0	10,051.4	10,645.5	10,144.8	12.0	10.1	171.23	-49.1	542.9	328.7	305.7	23.00	14.292	
10,164.6	10,115.6	10,644.4	10,144.7	12.1	10.1	171.05	-50.1	543.0	322.3	300.8	21.46	15.021	CC, ES
10,200.0	10,150.7	10,643.9	10,144.7	12.1	10.1	170.95	-50.7	543.1	324.2	302.9	21.38	15.165	
10,300.0	10,250.1	10,642.2	10,144.7	12.3	10.1	170.66	-52.3	543.4	349.6	325.6	23.95	14.596	
10,400.0	10,349.4	10,640.6	10,144.7	12.4	10.1	170.36	-54.0	543.6	399.1	371.1	28.00	14.256	
10,500.0	10,448.8	10,638.9	10,144.7	12.5	10.1	170.07	-55.6	543.9	465.1	433.7	31.43	14.800	
10,607.0	10,555.1	10,637.1	10,144.7	12.7	10.0	169.75	-57.4	544.2	547.3	513.2	34.10	16.052	
10,625.0	10,572.9	10,637.2	10,144.7	12.8	10.0	-172.16	-57.3	544.2	562.1	527.2	34.82	16.141	
10,650.0	10,597.6	10,638.3	10,144.7	12.8	10.1	-153.13	-56.2	544.0	583.1	547.8	35.27	16.531	
10,675.0	10,622.2	10,640.8	10,144.7	12.8	10.1	-138.76	-53.7	543.6	604.7	569.0	35.68	16.948	
10,700.0	10,646.5	10,644.7	10,144.7	12.8	10.1	-126.73	-49.9	543.0	626.7	590.7	36.05	17.387	
10,725.0	10,670.5	10,649.8	10,144.8	12.8	10.1	-115.83	-44.9	542.2	649.1	612.7	36.38	17.843	
10,750.0	10,694.2	10,656.2	10,144.8	12.8	10.1	-105.58	-38.5	541.2	671.6	634.9	36.67	18.314	
10,775.0	10,717.4	10,664.0	10,144.8	12.9	10.2	-95.88	-30.8	540.0	694.2	657.3	36.94	18.794	
10,800.0	10,740.1	10,673.1	10,144.8	12.9	10.2	-86.87	-21.8	538.7	716.8	679.6	37.18	19.281	
10,825.0	10,762.3	10,683.5	10,144.9	12.9	10.2	-78.68	-11.5	537.2	739.3	701.9	37.39	19.770	
10,850.0	10,783.8	10,695.2	10,144.9	12.9	10.3	-71.44	0.0	535.6	761.5	724.0	37.59	20.261	
10,875.0	10,804.7	10,708.1	10,145.0	12.9	10.3	-65.14	12.8	533.8	783.5	745.7	37.76	20.747	
10,900.0	10,824.8	10,722.3	10,145.0	13.0	10.4	-59.75	26.9	531.9	805.1	767.2	37.93	21.228	
10,925.0	10,844.1	10,737.8	10,145.1	13.0	10.5	-55.18	42.3	530.0	826.2	788.1	38.07	21.702	
10,950.0	10,862.6	10,754.4	10,145.1	13.0	10.5	-51.32	58.8	527.9	846.8	808.6	38.20	22.166	
10,975.0	10,880.2	10,772.3	10,145.2	13.1	10.6	-48.06	76.6	525.9	866.8	828.4	38.32	22.619	
11,000.0	10,896.9	10,791.3	10,145.3	13.1	10.7	-45.32	95.5	523.8	886.1	847.6	38.43	23.058	
11,025.0	10,912.5	10,811.5	10,145.3	13.1	10.8	-43.02	115.5	521.8	904.6	866.1	38.53	23.481	
11,050.0	10,927.2	10,832.8	10,145.4	13.1	10.9	-41.09	136.7	519.7	922.4	883.8	38.62	23.884	
11,075.0	10,940.7	10,855.1	10,145.5	13.2	11.1	-39.47	158.9	517.8	939.3	900.6	38.70	24.270	
11,100.0	10,953.2	10,878.4	10,145.6	13.2	11.2	-38.12	182.2	516.0	955.3	916.5	38.78	24.635	
11,125.0	10,964.5	10,902.7	10,145.7	13.2	11.3	-37.01	206.4	514.2	970.3	931.4	38.84	24.979	
11,150.0	10,974.6	10,927.9	10,145.7	13.3	11.5	-36.10	231.6	512.7	984.3	945.4	38.91	25.295	
11,175.0	10,983.6	10,954.0	10,145.8	13.3	11.6	-35.37	257.6	511.3	997.3	958.3	38.97	25.588	
11,200.0	10,991.3	10,980.8	10,145.9	13.3	11.8	-34.81	284.4	510.1	1,009.1	970.1	39.03	25.856	
11,225.0	10,997.8	11,008.4	10,146.0	13.4	12.0	-34.39	312.0	509.1	1,019.9	980.8	39.08	26.097	
11,250.0	11,003.0	11,036.6	10,146.1	13.4	12.1	-34.10	340.2	508.4	1,029.5	990.3	39.13	26.309	
11,275.0	11,006.9	11,062.7	10,146.2	13.4	12.3	-33.91	366.3	508.0	1,037.9	998.7	39.18	26.493	
11,300.0	11,009.5	11,085.8	10,146.3	13.4	12.4	-33.78	389.4	507.7	1,045.2	1,006.0	39.21	26.654	
11,325.0	11,010.9	11,109.1	10,146.4	13.5	12.6	-33.77	412.6	507.3	1,051.5	1,012.2	39.25	26.791	
11,338.8	11,011.0	11,121.9	10,146.4	13.5	12.7	-33.81	425.5	507.2	1,054.5	1,015.2	39.26	26.856	
11,400.0	11,011.0	11,179.3	10,146.6	13.6	13.0	-34.94	482.9	506.3	1,066.8	1,027.5	39.36	27.106	
11,500.0	11,010.8	11,274.0	10,147.0	13.7	13.7	-36.61	577.5	505.0	1,085.9	1,046.3	39.60	27.425	
11,600.0	11,010.7	11,369.7	10,147.3	13.9	14.3	-38.08	673.3	503.6	1,103.5	1,063.6	39.94	27.629	
11,700.0	11,010.6	11,466.4	10,147.6	14.1	15.0	-39.35	769.9	502.2	1,119.5	1,079.1	40.39	27.717	
11,800.0	11,010.5	11,563.9	10,148.0	14.5	15.7	-40.44	867.5	500.8	1,133.5	1,092.6	40.93	27.691	
11,900.0	11,010.3	11,662.2	10,148.3	14.8	16.5	-41.34	965.7	499.3	1,145.5	1,103.9	41.57	27.556	
12,000.0	11,010.2	11,761.0	10,148.7	15.3	17.2	-42.07	1,064.5	497.9	1,155.4	1,113.1	42.29	27.319	
12,100.0	11,010.1	11,860.3	10,149.0	15.8	18.0	-42.63	1,163.8	496.5	1,163.0	1,119.9	43.09	26.988	
12,200.0	11,010.0	11,959.9	10,149.4	16.3	18.7	-43.03	1,263.4	495.0	1,168.3	1,124.3	43.97	26.573	
12,300.0	11,009.9	12,059.8	10,149.7	16.8	19.5	-43.26	1,363.3	493.6	1,171.3	1,126.4	44.91	26.082	
12,388.8	11,009.8	12,148.6	10,150.1	17.4	20.2	-43.33	1,452.1	492.3	1,171.9	1,126.1	45.79	25.592	
12,400.0	11,009.8	12,159.8	10,150.1	17.4	20.3	-43.34	1,463.2	492.1	1,171.9	1,126.0	45.91	25.527	

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

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Reference Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ADMIRAL FEDERAL #804H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design ADMIRAL FEDERAL PROJECT (ATLAS 2529) - ADMIRAL FEDERAL #705H - OWB - PWP1												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 9672-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Distance		Warning							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,500.0	11,009.6	12,259.8	10,150.4	18.0	21.1	-43.35	1,563.2	490.7	1,171.5	1,124.6	46.95	24.952	
12,600.0	11,009.5	12,359.8	10,150.8	18.6	21.9	-43.37	1,663.2	489.2	1,171.2	1,123.2	48.03	24.386	
12,700.0	11,009.4	12,459.8	10,151.2	19.3	22.7	-43.38	1,763.2	487.8	1,170.8	1,121.7	49.13	23.829	
12,800.0	11,009.3	12,559.8	10,151.5	19.9	23.5	-43.40	1,863.2	486.3	1,170.5	1,120.2	50.27	23.284	
12,900.0	11,009.2	12,659.8	10,151.9	20.6	24.3	-43.41	1,963.2	484.9	1,170.2	1,118.7	51.43	22.751	
13,000.0	11,009.1	12,759.8	10,152.2	21.3	25.1	-43.43	2,063.2	483.5	1,169.8	1,117.2	52.62	22.231	
13,100.0	11,008.9	12,859.8	10,152.6	22.0	25.9	-43.44	2,163.2	482.0	1,169.5	1,115.6	53.83	21.724	
13,200.0	11,008.8	12,959.8	10,152.9	22.7	26.8	-43.46	2,263.2	480.6	1,169.1	1,114.1	55.07	21.231	
13,300.0	11,008.7	13,059.8	10,153.3	23.4	27.6	-43.48	2,363.1	479.1	1,168.8	1,112.5	56.32	20.752	
13,400.0	11,008.6	13,159.8	10,153.6	24.1	28.4	-43.49	2,463.1	477.7	1,168.4	1,110.8	57.60	20.286	
13,500.0	11,008.5	13,259.8	10,154.0	24.9	29.2	-43.51	2,563.1	476.2	1,168.1	1,109.2	58.89	19.835	
13,600.0	11,008.4	13,359.8	10,154.3	25.6	30.1	-43.52	2,663.1	474.8	1,167.8	1,107.6	60.20	19.398	
13,700.0	11,008.2	13,459.8	10,154.7	26.4	30.9	-43.54	2,763.1	473.3	1,167.4	1,105.9	61.53	18.975	
13,800.0	11,008.1	13,559.8	10,155.0	27.1	31.7	-43.55	2,863.1	471.9	1,167.1	1,104.2	62.87	18.565	
13,900.0	11,008.0	13,659.8	10,155.4	27.9	32.6	-43.57	2,963.1	470.4	1,166.7	1,102.5	64.22	18.167	
14,000.0	11,007.9	13,759.8	10,155.7	28.6	33.4	-43.59	3,063.1	469.0	1,166.4	1,100.8	65.59	17.783	
14,100.0	11,007.8	13,859.8	10,156.1	29.4	34.2	-43.60	3,163.0	467.5	1,166.0	1,099.1	66.97	17.411	
14,200.0	11,007.7	13,959.8	10,156.4	30.2	35.1	-43.62	3,263.0	466.1	1,165.7	1,097.3	68.36	17.052	
14,300.0	11,007.5	14,059.8	10,156.8	31.0	35.9	-43.63	3,363.0	464.6	1,165.4	1,095.6	69.77	16.704	
14,400.0	11,007.4	14,159.8	10,157.1	31.8	36.8	-43.65	3,463.0	463.2	1,165.0	1,093.8	71.18	16.367	
14,500.0	11,007.3	14,259.8	10,157.5	32.6	37.6	-43.66	3,563.0	461.8	1,164.7	1,092.1	72.60	16.041	
14,600.0	11,007.2	14,359.8	10,157.9	33.3	38.4	-43.68	3,663.0	460.3	1,164.3	1,090.3	74.04	15.726	
14,700.0	11,007.1	14,459.8	10,158.2	34.1	39.3	-43.70	3,763.0	458.9	1,164.0	1,088.5	75.48	15.421	
14,800.0	11,007.0	14,559.8	10,158.6	34.9	40.1	-43.71	3,863.0	457.4	1,163.7	1,086.7	76.93	15.126	
14,900.0	11,006.8	14,659.8	10,158.9	35.8	41.0	-43.73	3,962.9	456.0	1,163.3	1,084.9	78.39	14.840	
15,000.0	11,006.7	14,759.8	10,159.3	36.6	41.8	-43.74	4,062.9	454.5	1,163.0	1,083.1	79.85	14.564	
15,100.0	11,006.6	14,859.8	10,159.6	37.4	42.7	-43.76	4,162.9	453.1	1,162.6	1,081.3	81.33	14.296	
15,200.0	11,006.5	14,959.8	10,160.0	38.2	43.5	-43.78	4,262.9	451.6	1,162.3	1,079.5	82.81	14.036	
15,300.0	11,006.4	15,059.8	10,160.3	39.0	44.4	-43.79	4,362.9	450.2	1,161.9	1,077.7	84.29	13.785	
15,400.0	11,006.3	15,159.8	10,160.7	39.8	45.2	-43.81	4,462.9	448.7	1,161.6	1,075.8	85.78	13.541	
15,458.4	11,006.2	15,218.2	10,160.9	40.3	45.7	-43.82	4,521.3	447.9	1,161.4	1,074.7	86.65	13.403	
15,496.3	11,006.2	15,268.7	10,161.1	40.6	46.1	-43.83	4,571.8	447.5	1,161.3	1,074.0	87.26	13.308	
15,500.0	11,006.2	15,270.6	10,161.1	40.6	46.1	-43.83	4,573.7	447.5	1,161.3	1,074.0	87.31	13.300	
15,600.0	11,006.1	15,370.6	10,161.4	41.4	47.0	-43.84	4,673.7	447.4	1,160.9	1,072.1	88.82	13.071	
15,700.0	11,006.0	15,470.6	10,161.8	42.3	47.8	-43.86	4,773.7	447.3	1,160.6	1,070.3	90.33	12.849	
15,800.0	11,005.8	15,570.6	10,162.1	43.1	48.7	-43.87	4,873.7	447.2	1,160.2	1,068.4	91.84	12.633	
15,900.0	11,005.7	15,670.6	10,162.5	43.9	49.5	-43.89	4,973.7	447.1	1,159.9	1,066.5	93.36	12.424	
16,000.0	11,005.6	15,770.6	10,162.8	44.7	50.4	-43.90	5,073.7	447.0	1,159.5	1,064.7	94.88	12.221	
16,100.0	11,005.5	15,870.6	10,163.2	45.6	51.2	-43.91	5,173.7	446.9	1,159.2	1,062.8	96.40	12.024	
16,200.0	11,005.4	15,970.6	10,163.5	46.4	52.1	-43.93	5,273.7	446.8	1,158.9	1,060.9	97.93	11.833	
16,300.0	11,005.3	16,070.6	10,163.9	47.2	52.9	-43.94	5,373.7	446.7	1,158.5	1,059.0	99.47	11.647	
16,400.0	11,005.2	16,170.6	10,164.3	48.0	53.8	-43.96	5,473.7	446.6	1,158.2	1,057.2	101.01	11.466	
16,500.0	11,005.1	16,270.6	10,164.6	48.9	54.6	-43.97	5,573.7	446.4	1,157.8	1,055.3	102.55	11.291	
16,600.0	11,005.0	16,370.6	10,165.0	49.7	55.5	-43.99	5,673.7	446.3	1,157.5	1,053.4	104.09	11.120	
16,700.0	11,004.9	16,470.6	10,165.3	50.5	56.3	-44.00	5,773.7	446.2	1,157.1	1,051.5	105.64	10.954	
16,800.0	11,004.8	16,570.6	10,165.7	51.4	57.2	-44.02	5,873.7	446.1	1,156.8	1,049.6	107.19	10.792	
16,900.0	11,004.7	16,670.6	10,166.0	52.2	58.0	-44.03	5,973.7	446.0	1,156.4	1,047.7	108.74	10.635	
17,000.0	11,004.6	16,770.6	10,166.4	53.0	58.9	-44.05	6,073.7	445.9	1,156.1	1,045.8	110.30	10.482	
17,100.0	11,004.5	16,870.6	10,166.7	53.9	59.7	-44.06	6,173.7	445.8	1,155.8	1,043.9	111.86	10.333	
17,200.0	11,004.4	16,970.6	10,167.1	54.7	60.6	-44.08	6,273.7	445.7	1,155.4	1,042.0	113.42	10.187	
17,300.0	11,004.3	17,070.6	10,167.4	55.6	61.4	-44.09	6,373.7	445.6	1,155.1	1,040.1	114.98	10.046	

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 ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Reference Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ADMIRAL FEDERAL #804H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design ADMIRAL FEDERAL PROJECT (ATLAS 2529) - ADMIRAL FEDERAL #705H - OWB - PWP1													Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 9672-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	
17,400.0	11,004.2	17,170.6	10,167.8	56.4	62.3	-44.11	6,473.7	445.5	1,154.7	1,038.2	116.55	9.908		
17,500.0	11,004.1	17,270.6	10,168.2	57.2	63.1	-44.12	6,573.6	445.4	1,154.4	1,036.3	118.12	9.773		
17,600.0	11,004.0	17,370.6	10,168.5	58.1	64.0	-44.14	6,673.6	445.3	1,154.0	1,034.4	119.69	9.642		
17,700.0	11,003.9	17,470.5	10,168.9	58.9	64.8	-44.15	6,773.6	445.2	1,153.7	1,032.4	121.26	9.514		
17,800.0	11,003.8	17,570.5	10,169.2	59.8	65.7	-44.17	6,873.6	445.1	1,153.4	1,030.5	122.83	9.390		
17,900.0	11,003.7	17,670.5	10,169.6	60.6	66.5	-44.18	6,973.6	445.0	1,153.0	1,028.6	124.41	9.268		
18,000.0	11,003.6	17,770.5	10,169.9	61.4	67.4	-44.20	7,073.6	444.9	1,152.7	1,026.7	125.99	9.149		
18,100.0	11,003.5	17,870.5	10,170.3	62.3	68.3	-44.21	7,173.6	444.8	1,152.3	1,024.8	127.57	9.033		
18,200.0	11,003.4	17,970.5	10,170.6	63.1	69.1	-44.23	7,273.6	444.7	1,152.0	1,022.8	129.15	8.920		
18,300.0	11,003.3	18,070.5	10,171.0	64.0	70.0	-44.24	7,373.6	444.6	1,151.6	1,020.9	130.73	8.809		
18,400.0	11,003.2	18,170.5	10,171.3	64.8	70.8	-44.26	7,473.6	444.5	1,151.3	1,019.0	132.32	8.701		
18,500.0	11,003.1	18,270.5	10,171.7	65.7	71.7	-44.27	7,573.6	444.4	1,151.0	1,017.1	133.91	8.595		
18,600.0	11,003.0	18,370.5	10,172.1	66.5	72.5	-44.29	7,673.6	444.2	1,150.6	1,015.1	135.49	8.492		
18,700.0	11,002.9	18,470.5	10,172.4	67.3	73.4	-44.30	7,773.6	444.1	1,150.3	1,013.2	137.08	8.391		
18,800.0	11,002.8	18,570.5	10,172.8	68.2	74.2	-44.32	7,873.6	444.0	1,149.9	1,011.3	138.68	8.292		
18,900.0	11,002.7	18,670.5	10,173.1	69.0	75.1	-44.33	7,973.6	443.9	1,149.6	1,009.3	140.27	8.196		
19,000.0	11,002.6	18,770.5	10,173.5	69.9	75.9	-44.35	8,073.6	443.8	1,149.2	1,007.4	141.86	8.101		
19,100.0	11,002.5	18,870.5	10,173.8	70.7	76.8	-44.36	8,173.6	443.7	1,148.9	1,005.5	143.46	8.009		
19,200.0	11,002.4	18,970.5	10,174.2	71.6	77.7	-44.38	8,273.6	443.6	1,148.6	1,003.5	145.05	7.918		
19,300.0	11,002.3	19,070.5	10,174.5	72.4	78.5	-44.39	8,373.6	443.5	1,148.2	1,001.6	146.65	7.830		
19,400.0	11,002.2	19,170.5	10,174.9	73.3	79.4	-44.41	8,473.6	443.4	1,147.9	999.6	148.25	7.743		
19,500.0	11,002.1	19,270.5	10,175.2	74.1	80.2	-44.42	8,573.6	443.3	1,147.5	997.7	149.85	7.658		
19,600.0	11,002.0	19,370.5	10,175.6	75.0	81.1	-44.44	8,673.6	443.2	1,147.2	995.7	151.45	7.575		
19,700.0	11,001.9	19,470.5	10,176.0	75.8	81.9	-44.46	8,773.6	443.1	1,146.9	993.8	153.05	7.493		
19,800.0	11,001.8	19,570.5	10,176.3	76.7	82.8	-44.47	8,873.6	443.0	1,146.5	991.9	154.66	7.413		
19,900.0	11,001.7	19,670.5	10,176.7	77.5	83.6	-44.49	8,973.6	442.9	1,146.2	989.9	156.26	7.335		
20,000.0	11,001.6	19,770.5	10,177.0	78.4	84.5	-44.50	9,073.6	442.8	1,145.8	988.0	157.87	7.258		
20,100.0	11,001.5	19,870.5	10,177.4	79.2	85.4	-44.52	9,173.6	442.7	1,145.5	986.0	159.47	7.183		
20,200.0	11,001.4	19,970.5	10,177.7	80.1	86.2	-44.53	9,273.6	442.6	1,145.2	984.1	161.08	7.109		
20,300.0	11,001.3	20,070.5	10,178.1	80.9	87.1	-44.55	9,373.6	442.5	1,144.8	982.1	162.69	7.037		
20,400.0	11,001.2	20,170.5	10,178.4	81.8	87.9	-44.56	9,473.6	442.4	1,144.5	980.2	164.30	6.966		
20,500.0	11,001.1	20,270.5	10,178.8	82.6	88.8	-44.58	9,573.6	442.3	1,144.1	978.2	165.91	6.896		
20,562.8	11,001.0	20,329.8	10,179.0	83.1	89.2	-44.59	9,632.9	442.2	1,143.9	977.1	166.81	6.858		
20,564.8	11,001.0	20,329.8	10,179.0	83.2	89.2	-44.59	9,632.9	442.2	1,143.9	977.1	166.83	6.857 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 ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Reference Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ADMIRAL FEDERAL #804H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design ADMIRAL FEDERAL PROJECT (ATLAS 2529) - ADMIRAL FEDERAL #706H - OWB - PWP1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD+IFR1+FDIR													Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	3.0	3.0	132.33	-562.3	617.3	835.0					
100.0	100.0	92.9	92.9	3.0	3.0	132.33	-562.3	617.3	835.0	829.0	6.00	139.102		
200.0	200.0	192.9	192.9	3.0	3.0	132.33	-562.3	617.3	835.0	829.0	6.04	138.258		
300.0	300.0	292.9	292.9	3.0	3.1	132.33	-562.3	617.3	835.0	828.9	6.12	136.406		
400.0	400.0	392.9	392.9	3.0	3.2	132.33	-562.3	617.3	835.0	828.8	6.25	133.702		
500.0	500.0	492.9	492.9	3.1	3.4	132.33	-562.3	617.3	835.0	828.6	6.41	130.329		
600.0	600.0	592.9	592.9	3.1	3.6	132.33	-562.3	617.3	835.0	828.4	6.60	126.476		
700.0	700.0	692.9	692.9	3.1	3.8	132.33	-562.3	617.3	835.0	828.2	6.83	122.319		
800.0	800.0	792.9	792.9	3.2	4.0	132.33	-562.3	617.3	835.0	827.9	7.08	118.006		
900.0	900.0	892.9	892.9	3.2	4.2	132.33	-562.3	617.3	835.0	827.7	7.35	113.652		
1,000.0	1,000.0	892.9	892.9	3.2	4.5	132.33	-562.3	617.3	835.0	827.4	7.64	109.342		
1,100.0	1,100.0	1,092.9	1,092.9	3.3	4.8	132.33	-562.3	617.3	835.0	827.1	7.94	105.137		
1,200.0	1,200.0	1,192.9	1,192.9	3.4	5.0	132.33	-562.3	617.3	835.0	826.7	8.26	101.076		
1,300.0	1,300.0	1,292.9	1,292.9	3.4	5.3	132.33	-562.3	617.3	835.0	826.4	8.59	97.181		
1,400.0	1,400.0	1,392.9	1,392.9	3.5	5.6	132.33	-562.3	617.3	835.0	826.1	8.93	93.467		
1,500.0	1,500.0	1,492.9	1,492.9	3.5	5.9	132.33	-562.3	617.3	835.0	825.7	9.28	89.938		
1,600.0	1,600.0	1,592.9	1,592.9	3.6	6.3	132.33	-562.3	617.3	835.0	825.4	9.64	86.593		
1,700.0	1,700.0	1,692.9	1,692.9	3.7	6.6	132.33	-562.3	617.3	835.0	825.0	10.01	83.429		
1,800.0	1,800.0	1,792.9	1,792.9	3.8	6.9	132.33	-562.3	617.3	835.0	824.6	10.38	80.437		
1,900.0	1,900.0	1,892.9	1,892.9	3.9	7.2	132.33	-562.3	617.3	835.0	824.3	10.76	77.611		
2,000.0	2,000.0	1,992.9	1,992.9	3.9	7.5	132.33	-562.3	617.3	835.0	823.9	11.14	74.942		
2,100.0	2,100.0	2,092.9	2,092.9	4.0	7.9	132.33	-562.3	617.3	835.0	823.5	11.53	72.420		
2,200.0	2,200.0	2,192.9	2,192.9	4.1	8.2	132.33	-562.3	617.3	835.0	823.1	11.92	70.038		
2,300.0	2,300.0	2,292.9	2,292.9	4.2	8.5	132.33	-562.3	617.3	835.0	822.7	12.32	67.785		
2,400.0	2,400.0	2,392.9	2,392.9	4.3	8.9	132.33	-562.3	617.3	835.0	822.3	12.72	65.654		
2,500.0	2,500.0	2,492.9	2,492.9	4.4	9.2	132.33	-562.3	617.3	835.0	821.9	13.12	63.637		
2,600.0	2,600.0	2,620.7	2,620.7	4.5	9.6	42.58	-562.1	614.8	832.2	818.6	13.57	61.312		
2,700.0	2,699.8	2,749.5	2,749.1	4.5	10.1	43.38	-561.4	606.5	823.2	809.2	13.98	58.875		
2,800.0	2,799.5	2,859.1	2,858.2	4.5	10.4	44.53	-560.4	595.5	809.1	794.7	14.35	56.379		
2,828.9	2,828.2	2,887.3	2,886.3	4.5	10.5	44.88	-560.1	592.6	804.5	790.0	14.45	55.671		
2,900.0	2,898.8	2,956.7	2,955.3	4.6	10.8	45.63	-559.5	585.3	793.0	778.3	14.70	53.954		
3,000.0	2,998.2	3,054.3	3,052.4	4.6	11.1	46.71	-558.6	575.2	777.1	762.0	15.05	51.632		
3,100.0	3,097.5	3,151.9	3,149.4	4.6	11.4	47.84	-557.7	565.0	761.5	746.1	15.41	49.419		
3,200.0	3,196.8	3,249.5	3,246.5	4.7	11.7	49.02	-556.8	554.9	746.2	730.4	15.77	47.309		
3,300.0	3,296.2	3,347.1	3,343.6	4.7	12.1	50.24	-555.9	544.7	731.2	715.1	16.14	45.300		
3,400.0	3,395.5	3,444.7	3,440.6	4.8	12.4	51.51	-555.1	534.5	716.6	700.1	16.52	43.388		
3,500.0	3,494.9	3,542.3	3,537.7	4.9	12.7	52.84	-554.2	524.4	702.4	685.5	16.90	41.570		
3,600.0	3,594.2	3,639.9	3,634.8	4.9	13.1	54.21	-553.3	514.2	688.5	671.2	17.28	39.844		
3,700.0	3,693.5	3,737.5	3,731.9	5.0	13.4	55.64	-552.4	504.0	675.1	657.4	17.67	38.205		
3,800.0	3,792.9	3,835.1	3,828.9	5.1	13.8	57.13	-551.5	493.9	662.1	644.0	18.06	36.652		
3,900.0	3,892.2	3,932.7	3,926.0	5.1	14.1	58.67	-550.6	483.7	649.5	631.1	18.46	35.180		
4,000.0	3,991.6	4,030.3	4,023.1	5.2	14.4	60.27	-549.7	473.5	637.5	618.6	18.87	33.789		
4,100.0	4,090.9	4,128.0	4,120.1	5.3	14.8	61.92	-548.8	463.4	626.0	606.7	19.28	32.474		
4,200.0	4,190.2	4,225.6	4,217.2	5.4	15.1	63.64	-547.9	453.2	615.0	595.4	19.69	31.234		
4,300.0	4,289.6	4,323.2	4,314.3	5.4	15.5	65.41	-547.1	443.1	604.7	584.6	20.11	30.067		
4,400.0	4,388.9	4,420.8	4,411.3	5.5	15.8	67.24	-546.2	432.9	594.9	574.4	20.54	28.970		
4,500.0	4,488.3	4,518.4	4,508.4	5.6	16.1	69.13	-545.3	422.7	585.8	564.9	20.97	27.942		
4,600.0	4,587.6	4,616.0	4,605.5	5.7	16.5	71.07	-544.4	412.6	577.4	556.0	21.40	26.980		
4,700.0	4,687.0	4,713.6	4,702.5	5.8	16.8	73.07	-543.5	402.4	569.7	547.8	21.84	26.082		
4,800.0	4,786.3	4,811.2	4,799.6	5.9	17.2	75.11	-542.6	392.2	562.7	540.4	22.29	25.247		
4,900.0	4,885.6	4,908.8	4,896.7	6.0	17.5	77.21	-541.7	382.1	556.5	533.7	22.74	24.473		

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

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Reference Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ADMIRAL FEDERAL #804H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design ADMIRAL FEDERAL PROJECT (ATLAS 2529) - ADMIRAL FEDERAL #706H - OWB - PWP1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD+IFR1+FDIR													Offset Well Error:	3.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.0	4,985.0	5,006.4	4,993.8	6.1	17.9	79.34		-540.8	371.9	551.0	527.8	23.19	23.758	
5,100.0	5,084.3	5,104.0	5,090.8	6.1	18.2	81.51		-539.9	361.7	546.4	522.8	23.65	23.100	
5,200.0	5,183.7	5,201.6	5,187.9	6.2	18.6	83.72		-539.1	351.6	542.6	518.5	24.12	22.497	
5,300.0	5,283.0	5,299.2	5,285.0	6.3	18.9	85.95		-538.2	341.4	539.7	515.1	24.59	21.948	
5,400.0	5,382.3	5,396.8	5,382.0	6.4	19.3	88.19		-537.3	331.3	537.6	512.6	25.06	21.451	
5,500.0	5,481.7	5,494.4	5,479.1	6.5	19.6	90.46		-536.4	321.1	536.4	510.9	25.54	21.004	
5,585.6	5,566.7	5,578.0	5,562.2	6.6	19.9	92.40		-535.6	312.4	536.1	510.1	25.95	20.659 CC	
5,600.0	5,581.0	5,592.0	5,576.2	6.6	20.0	92.73		-535.5	310.9	536.1	510.1	26.02	20.604 ES	
5,700.0	5,680.4	5,689.6	5,673.2	6.7	20.3	94.99		-534.6	300.8	536.7	510.2	26.50	20.250	
5,800.0	5,779.7	5,787.2	5,770.3	6.9	20.7	97.25		-533.7	290.6	538.1	511.1	26.99	19.939	
5,900.0	5,879.1	5,884.8	5,867.4	7.0	21.0	99.50		-532.8	280.4	540.4	513.0	27.47	19.670	
6,000.0	5,978.4	5,982.4	5,964.5	7.1	21.4	101.72		-531.9	270.3	543.6	515.7	27.96	19.441	
6,100.0	6,077.7	6,080.0	6,061.5	7.2	21.7	103.92		-531.1	260.1	547.7	519.2	28.45	19.248	
6,200.0	6,177.1	6,177.6	6,158.6	7.3	22.1	106.08		-530.2	249.9	552.5	523.6	28.94	19.090	
6,300.0	6,276.4	6,275.2	6,255.7	7.4	22.4	108.20		-529.3	239.8	558.2	528.7	29.43	18.964	
6,400.0	6,375.8	6,372.9	6,352.7	7.5	22.8	110.28		-528.4	229.6	564.6	534.7	29.92	18.868	
6,500.0	6,475.1	6,470.5	6,449.8	7.6	23.1	112.31		-527.5	219.5	571.8	541.4	30.41	18.801	
6,600.0	6,574.4	6,568.1	6,546.9	7.7	23.5	114.29		-526.6	209.3	579.8	548.8	30.90	18.760	
6,700.0	6,673.8	6,665.7	6,643.9	7.8	23.8	116.22		-525.7	199.1	588.4	557.0	31.39	18.742 SF	
6,800.0	6,773.1	6,763.3	6,741.0	7.9	24.2	118.09		-524.8	189.0	597.7	565.8	31.88	18.746	
6,900.0	6,872.5	6,860.9	6,838.1	8.1	24.5	119.90		-523.9	178.8	607.6	575.2	32.37	18.771	
7,000.0	6,971.8	6,958.5	6,935.1	8.2	24.9	121.66		-523.0	168.6	618.1	585.3	32.86	18.813	
7,100.0	7,071.2	7,056.1	7,032.2	8.3	25.2	123.36		-522.2	158.5	629.3	595.9	33.34	18.872	
7,200.0	7,170.5	7,153.7	7,129.3	8.4	25.6	125.00		-521.3	148.3	640.9	607.1	33.83	18.946	
7,300.0	7,269.8	7,251.3	7,226.4	8.5	25.9	126.58		-520.4	138.2	653.1	618.8	34.31	19.034	
7,400.0	7,369.2	7,348.9	7,323.4	8.6	26.3	128.11		-519.5	128.0	665.8	631.0	34.80	19.133	
7,500.0	7,468.5	7,446.5	7,420.5	8.8	26.6	129.57		-518.6	117.8	678.9	643.6	35.28	19.243	
7,600.0	7,567.9	7,544.1	7,517.6	8.9	27.0	130.99		-517.7	107.7	692.5	656.7	35.76	19.362	
7,700.0	7,667.2	7,641.7	7,614.6	9.0	27.4	132.35		-516.8	97.5	706.4	670.2	36.24	19.490	
7,800.0	7,766.5	7,739.3	7,711.7	9.1	27.7	133.66		-515.9	87.3	720.8	684.1	36.73	19.626	
7,900.0	7,865.9	7,836.9	7,808.8	9.2	28.1	134.91		-515.0	77.2	735.5	698.3	37.21	19.768	
8,000.0	7,965.2	7,934.5	7,905.8	9.4	28.4	136.12		-514.2	67.0	750.6	712.9	37.69	19.915	
8,100.0	8,064.6	8,032.1	8,002.9	9.5	28.8	137.29		-513.3	56.8	766.0	727.8	38.17	20.067	
8,200.0	8,163.9	8,129.7	8,100.0	9.6	29.1	138.40		-512.4	46.7	781.6	743.0	38.65	20.224	
8,300.0	8,263.3	8,227.3	8,197.1	9.7	29.5	139.48		-511.5	36.5	797.6	758.5	39.13	20.384	
8,400.0	8,362.6	8,324.9	8,294.1	9.8	29.8	140.51		-510.6	26.4	813.9	774.3	39.61	20.547	
8,500.0	8,461.9	8,422.5	8,391.2	10.0	30.2	141.50		-509.7	16.2	830.4	790.3	40.09	20.712	
8,600.0	8,561.3	8,520.1	8,488.3	10.1	30.5	142.46		-508.8	6.0	847.1	806.5	40.57	20.879	
8,700.0	8,660.6	8,617.8	8,585.3	10.2	30.9	143.37		-507.9	-4.1	864.0	823.0	41.05	21.048	
8,800.0	8,760.0	8,715.4	8,682.4	10.3	31.2	144.26		-507.0	-14.3	881.2	839.7	41.53	21.218	
8,900.0	8,859.3	8,813.0	8,779.5	10.5	31.6	145.11		-506.2	-24.5	898.6	856.6	42.01	21.388	
9,000.0	8,958.6	8,910.6	8,876.5	10.6	32.0	145.92		-505.3	-34.6	916.1	873.6	42.49	21.560	
9,100.0	9,058.0	9,008.2	8,973.6	10.7	32.3	146.71		-504.4	-44.8	933.9	890.9	42.97	21.731	
9,200.0	9,157.3	9,105.8	9,070.7	10.8	32.7	147.47		-503.5	-55.0	951.8	908.3	43.46	21.902	
9,300.0	9,256.7	9,203.4	9,167.8	11.0	33.0	148.20		-502.6	-65.1	969.8	925.9	43.94	22.073	
9,400.0	9,356.0	9,301.0	9,264.8	11.1	33.4	148.90		-501.7	-75.3	988.0	943.6	44.42	22.243	
9,500.0	9,455.3	9,398.6	9,361.9	11.2	33.7	149.58		-500.8	-85.4	1,006.4	961.5	44.90	22.413	
9,600.0	9,554.7	9,496.2	9,459.0	11.4	34.1	150.24		-499.9	-95.6	1,024.8	979.5	45.38	22.582	
9,700.0	9,654.0	9,593.8	9,556.0	11.5	34.4	150.87		-499.0	-105.8	1,043.4	997.6	45.87	22.750	
9,800.0	9,753.4	9,691.4	9,653.1	11.6	34.8	151.48		-498.1	-115.9	1,062.2	1,015.8	46.35	22.917	
9,900.0	9,852.7	9,801.3	9,762.1	11.8	35.2	152.32		-494.0	-128.6	1,080.8	1,033.9	46.85	23.070	

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 ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Reference Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ADMIRAL FEDERAL #804H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design ADMIRAL FEDERAL PROJECT (ATLAS 2529) - ADMIRAL FEDERAL #706H - OWB - PWP1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD+IFR1+FDIR													Offset Well Error:	3.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,000.0	9,952.1	9,915.0	9,870.5	11.9	35.6	154.35		-468.3	-149.9	1,098.0	1,050.7	47.33	23.197	
10,100.0	10,051.4	10,007.7	9,951.4	12.0	35.9	156.91		-429.8	-173.5	1,115.8	1,068.0	47.78	23.350	
10,200.0	10,150.7	10,079.8	10,007.4	12.1	36.1	159.37		-390.1	-195.2	1,136.3	1,088.1	48.21	23.571	
10,300.0	10,250.1	10,135.0	10,045.4	12.3	36.2	161.49		-354.4	-213.3	1,161.3	1,112.7	48.61	23.891	
10,400.0	10,349.4	10,175.0	10,069.9	12.4	36.3	163.13		-326.1	-227.2	1,191.8	1,142.8	48.98	24.331	
10,500.0	10,448.8	10,211.1	10,089.7	12.5	36.4	164.67		-298.8	-240.1	1,228.0	1,178.7	49.32	24.896	
10,607.0	10,555.1	10,239.4	10,103.6	12.7	36.4	165.91		-276.5	-250.5	1,273.1	1,223.4	49.64	25.645	
10,625.0	10,572.9	10,243.7	10,105.6	12.8	36.4	-177.56		-273.1	-252.1	1,281.4	1,231.4	50.03	25.613	
10,650.0	10,597.6	10,250.0	10,108.5	12.8	36.4	-161.24		-267.9	-254.5	1,293.9	1,243.8	50.09	25.832	
10,675.0	10,622.2	10,250.0	10,108.5	12.8	36.4	-150.54		-267.9	-254.5	1,307.2	1,257.1	50.14	26.073	
10,700.0	10,646.5	10,262.1	10,113.8	12.8	36.5	-142.31		-258.0	-259.0	1,321.3	1,271.1	50.21	26.317	
10,725.0	10,670.5	10,268.5	10,116.4	12.8	36.5	-136.00		-252.7	-261.4	1,336.2	1,286.0	50.27	26.582	
10,750.0	10,694.2	10,275.0	10,119.1	12.8	36.5	-130.63		-247.3	-263.8	1,351.8	1,301.4	50.33	26.859	
10,775.0	10,717.4	10,275.0	10,119.1	12.9	36.5	-126.07		-247.3	-263.8	1,368.0	1,317.6	50.38	27.154	
10,800.0	10,740.1	10,288.0	10,124.1	12.9	36.5	-121.33		-236.3	-268.7	1,384.6	1,334.2	50.45	27.444	
10,825.0	10,762.3	10,300.0	10,128.5	12.9	36.5	-116.85		-226.1	-273.3	1,401.8	1,351.3	50.53	27.745	
10,850.0	10,783.8	10,300.0	10,128.5	12.9	36.5	-112.89		-226.1	-273.3	1,419.3	1,368.7	50.57	28.064	
10,875.0	10,804.7	10,308.1	10,131.2	12.9	36.5	-108.73		-219.2	-276.3	1,437.2	1,386.6	50.64	28.381	
10,900.0	10,824.8	10,314.9	10,133.5	13.0	36.5	-104.66		-213.3	-278.9	1,455.3	1,404.6	50.70	28.703	
10,925.0	10,844.1	10,325.0	10,136.6	13.0	36.5	-100.57		-204.5	-282.8	1,473.7	1,422.9	50.77	29.025	
10,950.0	10,862.6	10,325.0	10,136.6	13.0	36.5	-96.75		-204.5	-282.8	1,492.1	1,441.3	50.82	29.360	
10,975.0	10,880.2	10,335.6	10,139.7	13.1	36.6	-92.80		-195.3	-286.8	1,510.7	1,459.8	50.89	29.684	
11,000.0	10,896.9	10,342.5	10,141.6	13.1	36.6	-89.02		-189.1	-289.5	1,529.3	1,478.3	50.96	30.012	
11,025.0	10,912.5	10,350.0	10,143.5	13.1	36.6	-85.36		-182.5	-292.3	1,547.8	1,496.8	51.02	30.338	
11,050.0	10,927.2	10,350.0	10,143.5	13.1	36.6	-81.87		-182.5	-292.3	1,566.3	1,515.3	51.07	30.670	
11,075.0	10,940.7	10,363.6	10,146.8	13.2	36.6	-78.49		-170.3	-297.5	1,584.6	1,533.5	51.15	30.983	
11,100.0	10,953.2	10,375.0	10,149.2	13.2	36.6	-75.32		-160.1	-301.9	1,602.8	1,551.6	51.22	31.294	
11,125.0	10,964.5	10,375.0	10,149.2	13.2	36.6	-72.30		-160.1	-301.9	1,620.7	1,569.5	51.27	31.614	
11,150.0	10,974.6	10,385.1	10,151.1	13.3	36.6	-69.51		-151.0	-305.7	1,638.4	1,587.0	51.33	31.916	
11,175.0	10,983.6	10,392.3	10,152.4	13.3	36.6	-66.90		-144.5	-308.5	1,655.7	1,604.3	51.40	32.215	
11,200.0	10,991.3	10,400.0	10,153.6	13.3	36.7	-64.48		-137.4	-311.5	1,672.7	1,621.3	51.46	32.506	
11,225.0	10,997.8	10,400.0	10,153.6	13.4	36.7	-62.14		-137.4	-311.5	1,689.4	1,637.9	51.51	32.798	
11,250.0	11,003.0	10,414.1	10,155.5	13.4	36.7	-60.18		-124.5	-316.8	1,705.6	1,654.0	51.58	33.065	
11,275.0	11,006.9	10,425.0	10,156.7	13.4	36.7	-58.35		-114.5	-321.0	1,721.3	1,669.7	51.65	33.327	
11,300.0	11,009.5	10,425.0	10,156.7	13.4	36.7	-56.51		-114.5	-321.0	1,736.6	1,684.9	51.70	33.592	
11,325.0	11,010.9	10,436.3	10,157.7	13.5	36.7	-55.02		-104.1	-325.2	1,751.3	1,699.5	51.76	33.834	
11,338.8	11,011.0	10,440.4	10,158.0	13.5	36.7	-54.23		-100.3	-326.8	1,759.2	1,707.4	51.79	33.966	
11,400.0	11,011.0	10,458.9	10,158.8	13.6	36.7	-55.02		-83.2	-333.8	1,793.9	1,742.0	51.95	34.534	
11,500.0	11,010.8	10,584.6	10,159.4	13.7	36.9	-57.42		34.3	-378.6	1,849.5	1,797.2	52.38	35.312	
11,600.0	11,010.7	10,785.1	10,160.1	13.9	37.3	-60.06		225.3	-439.2	1,898.8	1,845.8	53.00	35.826	
11,700.0	11,010.6	11,008.4	10,160.9	14.1	37.7	-62.15		442.4	-490.9	1,939.8	1,886.1	53.74	36.094	
11,800.0	11,010.5	11,252.2	10,161.8	14.5	38.3	-63.70		683.4	-527.8	1,971.5	1,916.9	54.61	36.104	
11,900.0	11,010.3	11,512.4	10,162.7	14.8	39.0	-64.71		943.0	-544.5	1,992.6	1,937.1	55.56	35.867	

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 ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Reference Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ADMIRAL FEDERAL #804H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 10515-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Distance		Warning							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.0	0.0	0.3	0.3	3.0	3.0	-90.19	-0.1	-30.1	30.1				
100.0	100.0	100.3	100.3	3.0	3.0	-90.19	-0.1	-30.1	30.1	24.1	6.00	5.017	
200.0	200.0	200.3	200.3	3.0	3.0	-90.19	-0.1	-30.1	30.1	24.1	6.00	5.014	
300.0	300.0	300.3	300.3	3.0	3.0	-90.19	-0.1	-30.1	30.1	24.1	6.01	5.009	
400.0	400.0	400.3	400.3	3.0	3.0	-90.19	-0.1	-30.1	30.1	24.1	6.02	5.001	
500.0	500.0	500.3	500.3	3.1	3.1	-90.19	-0.1	-30.1	30.1	24.1	6.03	4.991	
600.0	600.0	600.3	600.3	3.1	3.1	-90.19	-0.1	-30.1	30.1	24.1	6.05	4.978	
700.0	700.0	700.3	700.3	3.1	3.1	-90.19	-0.1	-30.1	30.1	24.0	6.07	4.962	
800.0	800.0	800.3	800.3	3.2	3.2	-90.19	-0.1	-30.1	30.1	24.0	6.09	4.944	
900.0	900.0	900.3	900.3	3.2	3.2	-90.19	-0.1	-30.1	30.1	24.0	6.11	4.924	
1,000.0	1,000.0	1,000.3	1,000.3	3.2	3.2	-90.19	-0.1	-30.1	30.1	24.0	6.14	4.901	
1,100.0	1,100.0	1,100.3	1,100.3	3.3	3.3	-90.19	-0.1	-30.1	30.1	23.9	6.17	4.877	
1,200.0	1,200.0	1,200.3	1,200.3	3.4	3.4	-90.19	-0.1	-30.1	30.1	23.9	6.21	4.850	
1,300.0	1,300.0	1,300.3	1,300.3	3.4	3.4	-90.19	-0.1	-30.1	30.1	23.9	6.24	4.821	
1,400.0	1,400.0	1,400.3	1,400.3	3.5	3.5	-90.19	-0.1	-30.1	30.1	23.8	6.28	4.790	
1,500.0	1,500.0	1,500.3	1,500.3	3.5	3.5	-90.19	-0.1	-30.1	30.1	23.8	6.33	4.757	
1,600.0	1,600.0	1,600.3	1,600.3	3.6	3.6	-90.19	-0.1	-30.1	30.1	23.7	6.37	4.723	
1,700.0	1,700.0	1,700.3	1,700.3	3.7	3.7	-90.19	-0.1	-30.1	30.1	23.7	6.42	4.688	
1,800.0	1,800.0	1,800.3	1,800.3	3.8	3.8	-90.19	-0.1	-30.1	30.1	23.6	6.47	4.651	
1,900.0	1,900.0	1,900.3	1,900.3	3.9	3.9	-90.19	-0.1	-30.1	30.1	23.6	6.53	4.613	
2,000.0	2,000.0	2,000.3	2,000.3	3.9	3.9	-90.19	-0.1	-30.1	30.1	23.5	6.58	4.573	
2,100.0	2,100.0	2,100.3	2,100.3	4.0	4.0	-90.19	-0.1	-30.1	30.1	23.5	6.64	4.533	
2,200.0	2,200.0	2,200.3	2,200.3	4.1	4.1	-90.19	-0.1	-30.1	30.1	23.4	6.70	4.492	
2,300.0	2,300.0	2,300.3	2,300.3	4.2	4.2	-90.19	-0.1	-30.1	30.1	23.3	6.76	4.450	
2,400.0	2,400.0	2,400.3	2,400.3	4.3	4.3	-90.19	-0.1	-30.1	30.1	23.3	6.83	4.407	
2,500.0	2,500.0	2,500.3	2,500.3	4.4	4.4	-90.19	-0.1	-30.1	30.1	23.2	6.90	4.363 CC, ES, SF	
2,600.0	2,600.0	2,600.3	2,600.3	4.5	4.5	179.82	-0.1	-30.1	31.8	24.9	6.97	4.570	
2,700.0	2,699.8	2,700.1	2,700.1	4.5	4.6	179.85	-0.1	-30.1	37.1	30.0	7.04	5.264	
2,800.0	2,799.5	2,799.8	2,799.8	4.5	4.7	179.87	-0.1	-30.1	45.8	38.7	7.12	6.428	
2,828.9	2,828.2	2,828.5	2,828.5	4.5	4.7	179.88	-0.1	-30.1	49.0	41.8	7.15	6.850	
2,900.0	2,898.8	2,899.1	2,899.1	4.6	4.8	179.90	-0.1	-30.1	57.1	49.9	7.21	7.921	
3,000.0	2,998.2	2,998.5	2,998.5	4.6	4.9	179.92	-0.1	-30.1	68.6	61.3	7.30	9.393	
3,100.0	3,097.5	3,097.8	3,097.8	4.6	5.0	179.93	-0.1	-30.1	80.0	72.6	7.39	10.823	
3,200.0	3,196.8	3,197.1	3,197.1	4.7	5.1	179.94	-0.1	-30.1	91.5	84.0	7.49	12.210	
3,300.0	3,296.2	3,296.5	3,296.5	4.7	5.2	179.94	-0.1	-30.1	102.9	95.3	7.60	13.553	
3,400.0	3,395.5	3,395.8	3,395.8	4.8	5.3	179.95	-0.1	-30.1	114.4	106.7	7.70	14.852	
3,500.0	3,494.9	3,495.2	3,495.2	4.9	5.4	179.95	-0.1	-30.1	125.8	118.0	7.81	16.107	
3,600.0	3,594.2	3,594.5	3,594.5	4.9	5.5	179.96	-0.1	-30.1	137.3	129.4	7.93	17.319	
3,700.0	3,693.5	3,693.8	3,693.8	5.0	5.6	179.96	-0.1	-30.1	148.8	140.7	8.05	18.488	
3,800.0	3,792.9	3,793.2	3,793.2	5.1	5.8	179.96	-0.1	-30.1	160.2	152.1	8.17	19.616	
3,900.0	3,892.2	3,892.5	3,892.5	5.1	5.9	179.97	-0.1	-30.1	171.7	163.4	8.29	20.702	
4,000.0	3,991.6	3,991.9	3,991.9	5.2	6.0	179.97	-0.1	-30.1	183.1	174.7	8.42	21.748	
4,100.0	4,090.9	4,091.2	4,091.2	5.3	6.1	179.97	-0.1	-30.1	194.6	186.0	8.55	22.755	
4,200.0	4,190.2	4,190.5	4,190.5	5.4	6.2	179.97	-0.1	-30.1	206.0	197.4	8.68	23.725	
4,300.0	4,289.6	4,289.9	4,289.9	5.4	6.3	179.97	-0.1	-30.1	217.5	208.7	8.82	24.657	
4,400.0	4,388.9	4,389.2	4,389.2	5.5	6.4	179.97	-0.1	-30.1	229.0	220.0	8.96	25.554	
4,500.0	4,488.3	4,488.6	4,488.6	5.6	6.6	179.98	-0.1	-30.1	240.4	231.3	9.10	26.417	
4,600.0	4,587.6	4,587.9	4,587.9	5.7	6.7	179.98	-0.1	-30.1	251.9	242.6	9.24	27.247	
4,700.0	4,687.0	4,687.3	4,687.3	5.8	6.8	179.98	-0.1	-30.1	263.3	253.9	9.39	28.045	
4,800.0	4,786.3	4,786.6	4,786.6	5.9	6.9	179.98	-0.1	-30.1	274.8	265.3	9.54	28.813	
4,900.0	4,885.6	4,885.9	4,885.9	6.0	7.0	179.98	-0.1	-30.1	286.2	276.6	9.69	29.551	

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 ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Reference Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ADMIRAL FEDERAL #804H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 10515-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Distance		Warning							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.0	4,985.0	4,985.3	4,985.3	6.1	7.2	179.98	-0.1	-30.1	297.7	287.9	9.84	30.262	
5,100.0	5,084.3	5,084.6	5,084.6	6.1	7.3	179.98	-0.1	-30.1	309.2	299.2	9.99	30.945	
5,200.0	5,183.7	5,184.0	5,184.0	6.2	7.4	179.98	-0.1	-30.1	320.6	310.5	10.15	31.603	
5,300.0	5,283.0	5,283.3	5,283.3	6.3	7.5	179.98	-0.1	-30.1	332.1	321.8	10.30	32.236	
5,400.0	5,382.3	5,382.6	5,382.6	6.4	7.6	179.98	-0.1	-30.1	343.5	333.1	10.46	32.845	
5,500.0	5,481.7	5,482.0	5,482.0	6.5	7.7	179.98	-0.1	-30.1	355.0	344.4	10.62	33.431	
5,600.0	5,581.0	5,592.0	5,591.9	6.6	7.8	179.89	-0.7	-28.8	365.3	354.5	10.78	33.878	
5,700.0	5,680.4	5,704.9	5,704.7	6.7	7.8	179.51	-3.2	-23.5	372.1	361.1	10.97	33.913	
5,800.0	5,779.7	5,810.0	5,809.4	6.9	7.8	178.95	-6.9	-15.5	376.0	364.8	11.17	33.666	
5,900.0	5,879.1	5,909.9	5,908.9	7.0	7.8	178.40	-10.6	-7.6	379.6	368.3	11.36	33.421	
6,000.0	5,978.4	6,009.7	6,008.4	7.1	7.8	177.87	-14.3	0.3	383.3	371.8	11.56	33.172	
6,100.0	6,077.7	6,109.6	6,107.9	7.2	7.9	177.34	-17.9	8.2	387.0	375.3	11.76	32.921	
6,200.0	6,177.1	6,209.5	6,207.4	7.3	7.9	176.83	-21.6	16.0	390.8	378.8	11.96	32.670	
6,300.0	6,276.4	6,309.3	6,306.9	7.4	7.9	176.32	-25.3	23.9	394.6	382.4	12.17	32.419	
6,400.0	6,375.8	6,409.2	6,406.4	7.5	7.9	175.83	-29.0	31.8	398.4	386.0	12.38	32.170	
6,500.0	6,475.1	6,509.1	6,505.9	7.6	7.9	175.34	-32.6	39.7	402.3	389.7	12.60	31.923	
6,600.0	6,574.4	6,608.9	6,605.4	7.7	7.9	174.87	-36.3	47.6	406.1	393.3	12.82	31.679	
6,700.0	6,673.8	6,708.8	6,704.8	7.8	8.0	174.40	-40.0	55.5	410.0	397.0	13.04	31.440	
6,800.0	6,773.1	6,808.7	6,804.3	7.9	8.0	173.94	-43.7	63.3	414.0	400.7	13.27	31.204	
6,900.0	6,872.5	6,908.5	6,903.8	8.1	8.0	173.49	-47.3	71.2	417.9	404.4	13.49	30.973	
7,000.0	6,971.8	7,008.4	7,003.3	8.2	8.1	173.05	-51.0	79.1	421.9	408.2	13.72	30.748	
7,100.0	7,071.2	7,108.3	7,102.8	8.3	8.1	172.62	-54.7	87.0	425.9	412.0	13.95	30.527	
7,200.0	7,170.5	7,208.2	7,202.3	8.4	8.1	172.19	-58.4	94.9	429.9	415.8	14.18	30.312	
7,300.0	7,269.8	7,308.0	7,301.8	8.5	8.2	171.77	-62.1	102.7	434.0	419.6	14.42	30.102	
7,400.0	7,369.2	7,407.9	7,401.3	8.6	8.2	171.36	-65.7	110.6	438.1	423.4	14.65	29.898	
7,500.0	7,468.5	7,507.8	7,500.8	8.8	8.2	170.96	-69.4	118.5	442.2	427.3	14.89	29.700	
7,600.0	7,567.9	7,607.6	7,600.2	8.9	8.3	170.57	-73.1	126.4	446.3	431.2	15.12	29.507	
7,700.0	7,667.2	7,707.5	7,699.7	9.0	8.3	170.18	-76.8	134.3	450.4	435.1	15.36	29.320	
7,800.0	7,766.5	7,807.4	7,799.2	9.1	8.4	169.80	-80.4	142.2	454.6	439.0	15.60	29.138	
7,900.0	7,865.9	7,907.2	7,898.7	9.2	8.4	169.43	-84.1	150.0	458.8	442.9	15.84	28.961	
8,000.0	7,965.2	8,007.1	7,998.2	9.4	8.5	169.06	-87.8	157.9	463.0	446.9	16.08	28.790	
8,100.0	8,064.6	8,107.0	8,097.7	9.5	8.5	168.70	-91.5	165.8	467.2	450.9	16.32	28.623	
8,200.0	8,163.9	8,206.8	8,197.2	9.6	8.6	168.35	-95.1	173.7	471.4	454.9	16.56	28.462	
8,300.0	8,263.3	8,306.7	8,296.7	9.7	8.7	168.00	-98.8	181.6	475.7	458.9	16.80	28.306	
8,400.0	8,362.6	8,406.6	8,396.2	9.8	8.7	167.66	-102.5	189.5	479.9	462.9	17.05	28.154	
8,500.0	8,461.9	8,506.4	8,495.6	10.0	8.8	167.32	-106.2	197.3	484.2	466.9	17.29	28.007	
8,600.0	8,561.3	8,606.3	8,595.1	10.1	8.8	166.99	-109.8	205.2	488.5	471.0	17.53	27.864	
8,700.0	8,660.6	8,706.2	8,694.6	10.2	8.9	166.67	-113.5	213.1	492.8	475.1	17.78	27.726	
8,800.0	8,760.0	8,806.0	8,794.1	10.3	9.0	166.35	-117.2	221.0	497.2	479.2	18.02	27.592	
8,900.0	8,859.3	8,905.9	8,893.6	10.5	9.1	166.04	-120.9	228.9	501.5	483.3	18.26	27.461	
9,000.0	8,958.6	9,005.8	8,993.1	10.6	9.1	165.73	-124.5	236.7	505.9	487.4	18.51	27.335	
9,100.0	9,058.0	9,105.6	9,092.6	10.7	9.2	165.43	-128.2	244.6	510.3	491.5	18.75	27.212	
9,200.0	9,157.3	9,205.5	9,192.1	10.8	9.3	165.14	-131.9	252.5	514.7	495.7	19.00	27.093	
9,300.0	9,256.7	9,305.4	9,291.6	11.0	9.4	164.85	-135.6	260.4	519.1	499.8	19.24	26.978	
9,400.0	9,356.0	9,405.3	9,391.0	11.1	9.4	164.56	-139.2	268.3	523.5	504.0	19.49	26.865	
9,500.0	9,455.3	9,505.1	9,490.5	11.2	9.5	164.28	-142.9	276.2	527.9	508.2	19.73	26.756	
9,600.0	9,554.7	9,605.0	9,590.0	11.4	9.6	164.00	-146.6	284.0	532.4	512.4	19.98	26.650	
9,700.0	9,654.0	9,704.9	9,689.5	11.5	9.7	163.73	-150.3	291.9	536.8	516.6	20.22	26.547	
9,800.0	9,753.4	9,804.7	9,789.0	11.6	9.8	163.46	-153.9	299.8	541.3	520.8	20.47	26.446	
9,900.0	9,852.7	9,904.6	9,888.5	11.8	9.9	163.20	-157.6	307.7	545.8	525.1	20.71	26.348	
10,000.0	9,952.1	10,004.5	9,988.0	11.9	9.9	162.94	-161.3	315.6	550.3	529.3	20.96	26.253	

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

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Reference Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ADMIRAL FEDERAL #804H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design ADMIRAL FEDERAL PROJECT (ATLAS 2529) - ADMIRAL FEDERAL #805H - OWB - PWP1												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 10515-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,100.0	10,051.4	10,104.3	10,087.5	12.0	10.0	162.68	-165.0	323.5	554.8	533.6	21.21	26.161	
10,200.0	10,150.7	10,204.2	10,187.0	12.1	10.1	162.43	-168.6	331.3	559.3	537.8	21.45	26.071	
10,300.0	10,250.1	10,304.1	10,286.5	12.3	10.2	162.18	-172.3	339.2	563.8	542.1	21.70	25.983	
10,400.0	10,349.4	10,403.9	10,385.9	12.4	10.3	161.94	-176.0	347.1	568.3	546.4	21.95	25.897	
10,500.0	10,448.8	10,503.8	10,485.4	12.5	10.4	161.70	-179.7	355.0	572.9	550.7	22.19	25.814	
10,607.0	10,555.1	10,661.5	10,641.1	12.7	10.4	163.45	-163.2	367.0	573.4	551.1	22.37	25.629	
10,625.0	10,572.9	10,687.4	10,665.8	12.8	10.5	179.50	-155.7	368.8	572.8	550.5	22.36	25.613	
10,650.0	10,597.6	10,722.4	10,698.5	12.8	10.5	-164.92	-143.4	371.2	572.3	549.9	22.36	25.588	
10,670.6	10,617.9	10,750.4	10,723.9	12.8	10.5	-156.27	-131.8	373.1	572.1	549.8	22.36	25.588	
10,675.0	10,622.2	10,756.3	10,729.2	12.8	10.5	-154.76	-129.1	373.4	572.1	549.8	22.36	25.591	
10,700.0	10,646.5	10,789.1	10,757.9	12.8	10.5	-147.68	-113.4	375.5	572.4	550.1	22.34	25.629	
10,725.0	10,670.5	10,820.9	10,784.5	12.8	10.5	-142.38	-96.2	377.3	573.2	550.9	22.30	25.708	
10,750.0	10,694.2	10,851.6	10,809.2	12.8	10.6	-138.14	-78.0	379.0	574.5	552.3	22.25	25.827	
10,775.0	10,717.4	10,881.2	10,831.9	12.9	10.6	-134.57	-59.0	380.5	576.4	554.2	22.18	25.986	
10,800.0	10,740.1	10,910.0	10,852.6	12.9	10.6	-131.45	-39.2	381.9	578.8	556.6	22.11	26.181	
10,825.0	10,762.3	10,937.8	10,871.6	12.9	10.7	-128.63	-18.9	383.1	581.7	559.7	22.03	26.408	
10,850.0	10,783.8	10,964.7	10,888.8	12.9	10.7	-126.02	1.8	384.1	585.2	563.3	21.95	26.660	
10,875.0	10,804.7	10,990.8	10,904.4	12.9	10.7	-123.57	22.8	385.1	589.3	567.4	21.88	26.931	
10,900.0	10,824.8	11,016.2	10,918.4	13.0	10.8	-121.22	43.9	385.8	593.9	572.1	21.83	27.213	
10,925.0	10,844.1	11,040.9	10,930.9	13.0	10.8	-118.97	65.2	386.5	599.1	577.3	21.79	27.498	
10,950.0	10,862.6	11,065.0	10,942.1	13.0	10.8	-116.77	86.5	387.1	604.8	583.0	21.77	27.782	
10,975.0	10,880.2	11,088.5	10,951.9	13.1	10.9	-114.62	107.8	387.6	611.0	589.2	21.78	28.058	
11,000.0	10,896.9	11,111.4	10,960.5	13.1	10.9	-112.52	129.1	387.9	617.6	595.8	21.81	28.322	
11,025.0	10,912.5	11,133.8	10,967.8	13.1	10.9	-110.44	150.3	388.2	624.7	602.9	21.87	28.572	
11,050.0	10,927.2	11,155.8	10,974.1	13.1	11.0	-108.40	171.3	388.4	632.3	610.3	21.95	28.805	
11,075.0	10,940.7	11,177.4	10,979.3	13.2	11.0	-106.38	192.3	388.5	640.2	618.1	22.06	29.023	
11,100.0	10,953.2	11,198.6	10,983.5	13.2	11.0	-104.39	213.0	388.6	648.4	626.2	22.19	29.225	
11,125.0	10,964.5	11,219.4	10,986.8	13.2	11.0	-102.43	233.6	388.5	656.9	634.6	22.34	29.412	
11,150.0	10,974.6	11,240.0	10,989.1	13.3	11.1	-100.51	254.0	388.4	665.7	643.2	22.50	29.588	
11,175.0	10,983.6	11,260.2	10,990.5	13.3	11.1	-98.61	274.2	388.2	674.8	652.1	22.68	29.755	
11,200.0	10,991.3	11,280.2	10,991.0	13.3	11.2	-96.75	294.2	388.0	684.0	661.1	22.86	29.915	
11,225.0	10,997.8	11,302.1	10,991.0	13.4	11.2	-94.91	316.0	387.7	693.3	670.3	23.05	30.080	
11,250.0	11,003.0	11,324.7	10,991.0	13.4	11.2	-93.19	338.7	387.3	702.7	679.4	23.23	30.243	
11,275.0	11,006.9	11,347.6	10,991.0	13.4	11.3	-91.62	361.5	387.0	712.0	688.6	23.41	30.417	
11,300.0	11,009.5	11,370.7	10,991.0	13.4	11.3	-90.19	384.6	386.7	721.2	697.7	23.57	30.601	
11,325.0	11,010.9	11,393.9	10,990.9	13.5	11.4	-88.91	407.9	386.3	730.3	706.6	23.72	30.794	
11,338.8	11,011.0	11,406.7	10,990.9	13.5	11.4	-88.27	420.7	386.2	735.3	711.5	23.80	30.900	
11,400.0	11,011.0	11,464.1	10,990.8	13.6	11.6	-88.33	478.1	385.3	756.6	732.5	24.17	31.305	
11,500.0	11,010.8	11,558.8	10,990.7	13.7	11.9	-88.42	572.8	384.0	788.8	763.9	24.85	31.737	
11,600.0	11,010.7	11,654.6	10,990.6	13.9	12.3	-88.50	668.5	382.6	817.6	792.0	25.63	31.901	
11,700.0	11,010.6	11,751.2	10,990.5	14.1	12.7	-88.56	765.2	381.2	843.1	816.6	26.49	31.825	
11,800.0	11,010.5	11,848.8	10,990.4	14.5	13.2	-88.61	862.7	379.8	865.2	837.8	27.43	31.540	
11,900.0	11,010.3	11,947.0	10,990.3	14.8	13.7	-88.65	960.9	378.4	883.9	855.5	28.44	31.077	
12,000.0	11,010.2	12,045.8	10,990.2	15.3	14.3	-88.68	1,059.7	376.9	899.2	869.6	29.52	30.462	
12,100.0	11,010.1	12,145.1	10,990.1	15.8	14.9	-88.71	1,159.0	375.5	910.9	880.3	30.65	29.723	
12,200.0	11,010.0	12,244.8	10,990.0	16.3	15.5	-88.73	1,258.7	374.1	919.3	887.4	31.83	28.881	
12,300.0	11,009.9	12,344.7	10,989.9	16.8	16.2	-88.74	1,358.5	372.6	924.1	891.0	33.05	27.957	
12,388.8	11,009.8	12,433.5	10,989.8	17.4	16.8	-88.74	1,447.3	371.3	925.5	891.3	34.17	27.081	
12,400.0	11,009.8	12,444.6	10,989.7	17.4	16.9	-88.74	1,458.5	371.2	925.5	891.1	34.32	26.969	
12,500.0	11,009.6	12,544.6	10,989.6	18.0	17.6	-88.74	1,558.5	369.7	925.5	889.8	35.62	25.984	
12,600.0	11,009.5	12,644.6	10,989.5	18.6	18.3	-88.74	1,658.5	368.3	925.4	888.5	36.95	25.046	

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 ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Reference Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ADMIRAL FEDERAL #804H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design		ADMIRAL FEDERAL PROJECT (ATLAS 2529) - ADMIRAL FEDERAL #805H - OWB - PWP1											Offset Site Error:		0.0 usft
Survey Program:		0-Standard Keeper 104, 10515-MWD+IFR1+FDIR											Offset Well Error:		3.0 usft
Reference		Offset		Semi Major Axis		Distance								Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
12,700.0	11,009.4	12,744.6	10,989.4	19.3	19.0	-88.74	1,758.5	366.8	925.4	887.1	38.32	24.153			
12,800.0	11,009.3	12,844.6	10,989.3	19.9	19.8	-88.74	1,858.5	365.4	925.4	885.7	39.71	23.306			
12,900.0	11,009.2	12,944.6	10,989.2	20.6	20.5	-88.74	1,958.5	364.0	925.4	884.3	41.13	22.502			
13,000.0	11,009.1	13,044.6	10,989.1	21.3	21.3	-88.74	2,058.4	362.5	925.4	882.8	42.57	21.741			
13,100.0	11,008.9	13,144.6	10,989.0	22.0	22.0	-88.74	2,158.4	361.1	925.4	881.4	44.03	21.020			
13,200.0	11,008.8	13,244.6	10,988.8	22.7	22.8	-88.74	2,258.4	359.6	925.4	879.9	45.50	20.336			
13,300.0	11,008.7	13,344.6	10,988.7	23.4	23.6	-88.74	2,358.4	358.2	925.4	878.4	47.00	19.689			
13,400.0	11,008.6	13,444.6	10,988.6	24.1	24.4	-88.74	2,458.4	356.7	925.4	876.9	48.51	19.076			
13,500.0	11,008.5	13,544.6	10,988.5	24.9	25.2	-88.75	2,558.4	355.3	925.4	875.3	50.03	18.495			
13,600.0	11,008.4	13,644.6	10,988.4	25.6	26.0	-88.75	2,658.4	353.9	925.4	873.8	51.57	17.944			
13,700.0	11,008.2	13,744.6	10,988.3	26.4	26.8	-88.75	2,758.4	352.4	925.4	872.2	53.12	17.421			
13,800.0	11,008.1	13,844.6	10,988.2	27.1	27.6	-88.75	2,858.4	351.0	925.3	870.7	54.68	16.924			
13,900.0	11,008.0	13,944.6	10,988.1	27.9	28.4	-88.75	2,958.4	349.5	925.3	869.1	56.24	16.452			
14,000.0	11,007.9	14,044.6	10,987.9	28.6	29.2	-88.75	3,058.3	348.1	925.3	867.5	57.82	16.003			
14,100.0	11,007.8	14,144.6	10,987.8	29.4	30.0	-88.75	3,158.3	346.6	925.3	865.9	59.41	15.576			
14,200.0	11,007.7	14,244.6	10,987.7	30.2	30.8	-88.75	3,258.3	345.2	925.3	864.3	61.00	15.169			
14,300.0	11,007.5	14,344.6	10,987.6	31.0	31.6	-88.75	3,358.3	343.8	925.3	862.7	62.60	14.781			
14,400.0	11,007.4	14,444.6	10,987.5	31.8	32.4	-88.75	3,458.3	342.3	925.3	861.1	64.21	14.412			
14,500.0	11,007.3	14,544.6	10,987.4	32.6	33.3	-88.75	3,558.3	340.9	925.3	859.5	65.82	14.058			
14,600.0	11,007.2	14,644.6	10,987.3	33.3	34.1	-88.75	3,658.3	339.4	925.3	857.8	67.43	13.721			
14,700.0	11,007.1	14,744.6	10,987.2	34.1	34.9	-88.75	3,758.3	338.0	925.3	856.2	69.06	13.399			
14,800.0	11,007.0	14,844.6	10,987.1	34.9	35.7	-88.75	3,858.3	336.5	925.3	854.6	70.68	13.090			
14,900.0	11,006.8	14,944.6	10,986.9	35.8	36.6	-88.75	3,958.2	335.1	925.3	852.9	72.32	12.794			
15,000.0	11,006.7	15,044.6	10,986.8	36.6	37.4	-88.75	4,058.2	333.7	925.2	851.3	73.95	12.511			
15,100.0	11,006.6	15,144.6	10,986.7	37.4	38.2	-88.75	4,158.2	332.2	925.2	849.6	75.59	12.240			
15,200.0	11,006.5	15,244.6	10,986.6	38.2	39.1	-88.75	4,258.2	330.8	925.2	848.0	77.24	11.979			
15,300.0	11,006.4	15,344.6	10,986.5	39.0	39.9	-88.75	4,358.2	329.3	925.2	846.3	78.88	11.729			
15,400.0	11,006.3	15,444.6	10,986.4	39.8	40.7	-88.75	4,458.2	327.9	925.2	844.7	80.53	11.489			
15,458.4	11,006.2	15,503.1	10,986.3	40.3	41.2	-88.75	4,516.6	327.0	925.2	843.7	81.50	11.353			
15,458.6	11,006.2	15,503.3	10,986.3	40.3	41.2	-88.75	4,516.8	327.0	925.2	843.7	81.50	11.352			
15,496.3	11,006.2	15,554.3	10,986.3	40.6	41.7	-88.75	4,567.8	326.6	925.3	843.0	82.24	11.251			
15,499.7	11,006.2	15,559.2	10,986.3	40.6	41.7	-88.75	4,572.7	326.6	925.3	842.9	82.30	11.242			
15,500.0	11,006.2	15,557.0	10,986.3	40.6	41.7	-88.75	4,570.5	326.6	925.3	843.0	82.29	11.244			
15,600.0	11,006.1	15,657.0	10,986.1	41.4	42.5	-88.75	4,670.5	326.5	925.2	841.3	83.94	11.022			
15,700.0	11,006.0	15,757.0	10,986.0	42.3	43.4	-88.75	4,770.5	326.4	925.2	839.6	85.60	10.808			
15,800.0	11,005.8	15,857.0	10,985.9	43.1	44.2	-88.75	4,870.5	326.3	925.2	837.9	87.26	10.602			
15,900.0	11,005.7	15,957.0	10,985.8	43.9	45.0	-88.75	4,970.5	326.2	925.2	836.3	88.93	10.404			
16,000.0	11,005.6	16,057.0	10,985.7	44.7	45.9	-88.75	5,070.5	326.1	925.2	834.6	90.59	10.212			
16,100.0	11,005.5	16,157.0	10,985.6	45.6	46.7	-88.75	5,170.5	326.0	925.1	832.9	92.26	10.028			
16,200.0	11,005.4	16,257.0	10,985.5	46.4	47.6	-88.75	5,270.5	325.9	925.1	831.2	93.93	9.849			
16,300.0	11,005.3	16,357.0	10,985.4	47.2	48.4	-88.75	5,370.5	325.7	925.1	829.5	95.60	9.677			
16,400.0	11,005.2	16,457.0	10,985.3	48.0	49.2	-88.75	5,470.5	325.6	925.1	827.8	97.27	9.510			
16,500.0	11,005.1	16,557.0	10,985.2	48.9	50.1	-88.75	5,570.5	325.5	925.1	826.1	98.94	9.349			
16,600.0	11,005.0	16,657.0	10,985.1	49.7	50.9	-88.75	5,670.5	325.4	925.0	824.4	100.62	9.193			
16,700.0	11,004.9	16,757.0	10,985.0	50.5	51.8	-88.75	5,770.5	325.3	925.0	822.7	102.30	9.042			
16,800.0	11,004.8	16,857.0	10,984.9	51.4	52.6	-88.75	5,870.5	325.2	925.0	821.0	103.98	8.896			
16,900.0	11,004.7	16,957.0	10,984.8	52.2	53.5	-88.75	5,970.5	325.1	925.0	819.3	105.66	8.754			
17,000.0	11,004.6	17,057.0	10,984.7	53.0	54.3	-88.75	6,070.5	325.0	925.0	817.6	107.34	8.617			
17,100.0	11,004.5	17,157.0	10,984.6	53.9	55.2	-88.75	6,170.5	324.9	924.9	815.9	109.02	8.484			
17,200.0	11,004.4	17,257.0	10,984.5	54.7	56.0	-88.75	6,270.5	324.8	924.9	814.2	110.71	8.355			
17,300.0	11,004.3	17,357.0	10,984.4	55.6	56.9	-88.75	6,370.5	324.7	924.9	812.5	112.39	8.229			

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 ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Reference Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ADMIRAL FEDERAL #804H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 10515-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Distance		Warning							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
17,400.0	11,004.2	17,457.0	10,984.3	56.4	57.7	-88.75	6,470.5	324.6	924.9	810.8	114.08	8.107	
17,500.0	11,004.1	17,557.0	10,984.2	57.2	58.6	-88.75	6,570.5	324.5	924.9	809.1	115.76	7.989	
17,600.0	11,004.0	17,657.0	10,984.1	58.1	59.4	-88.75	6,670.5	324.4	924.8	807.4	117.45	7.874	
17,700.0	11,003.9	17,757.0	10,984.0	58.9	60.2	-88.75	6,770.5	324.3	924.8	805.7	119.14	7.762	
17,800.0	11,003.8	17,857.0	10,983.9	59.8	61.1	-88.75	6,870.5	324.1	924.8	804.0	120.83	7.654	
17,900.0	11,003.7	17,957.0	10,983.8	60.6	61.9	-88.75	6,970.5	324.0	924.8	802.2	122.52	7.548	
18,000.0	11,003.6	18,057.0	10,983.7	61.4	62.8	-88.75	7,070.5	323.9	924.7	800.5	124.21	7.445	
18,100.0	11,003.5	18,157.0	10,983.6	62.3	63.6	-88.74	7,170.5	323.8	924.7	798.8	125.91	7.345	
18,200.0	11,003.4	18,257.0	10,983.5	63.1	64.5	-88.74	7,270.5	323.7	924.7	797.1	127.60	7.247	
18,300.0	11,003.3	18,357.0	10,983.3	64.0	65.4	-88.74	7,370.5	323.6	924.7	795.4	129.29	7.152	
18,400.0	11,003.2	18,457.0	10,983.2	64.8	66.2	-88.74	7,470.5	323.5	924.7	793.7	130.99	7.059	
18,500.0	11,003.1	18,557.0	10,983.1	65.7	67.1	-88.74	7,570.5	323.4	924.6	792.0	132.68	6.969	
18,600.0	11,003.0	18,657.0	10,983.0	66.5	67.9	-88.74	7,670.5	323.3	924.6	790.2	134.38	6.881	
18,700.0	11,002.9	18,757.0	10,982.9	67.3	68.8	-88.74	7,770.5	323.2	924.6	788.5	136.08	6.795	
18,800.0	11,002.8	18,857.0	10,982.8	68.2	69.6	-88.74	7,870.5	323.1	924.6	786.8	137.77	6.711	
18,900.0	11,002.7	18,957.0	10,982.7	69.0	70.5	-88.74	7,970.5	323.0	924.6	785.1	139.47	6.629	
19,000.0	11,002.6	19,057.0	10,982.6	69.9	71.3	-88.74	8,070.5	322.9	924.5	783.4	141.17	6.549	
19,100.0	11,002.5	19,157.0	10,982.5	70.7	72.2	-88.74	8,170.5	322.8	924.5	781.7	142.87	6.471	
19,200.0	11,002.4	19,257.0	10,982.4	71.6	73.0	-88.74	8,270.5	322.7	924.5	779.9	144.57	6.395	
19,300.0	11,002.3	19,357.0	10,982.3	72.4	73.9	-88.74	8,370.5	322.5	924.5	778.2	146.27	6.320	
19,400.0	11,002.2	19,457.0	10,982.2	73.3	74.7	-88.74	8,470.5	322.4	924.5	776.5	147.97	6.248	
19,500.0	11,002.1	19,557.0	10,982.1	74.1	75.6	-88.74	8,570.5	322.3	924.4	774.8	149.67	6.176	
19,600.0	11,002.0	19,657.0	10,982.0	75.0	76.4	-88.74	8,670.5	322.2	924.4	773.1	151.37	6.107	
19,700.0	11,001.9	19,757.0	10,981.9	75.8	77.3	-88.74	8,770.5	322.1	924.4	771.3	153.07	6.039	
19,800.0	11,001.8	19,857.0	10,981.8	76.7	78.1	-88.74	8,870.5	322.0	924.4	769.6	154.78	5.972	
19,900.0	11,001.7	19,957.0	10,981.7	77.5	79.0	-88.74	8,970.5	321.9	924.4	767.9	156.48	5.907	
20,000.0	11,001.6	20,057.0	10,981.6	78.4	79.8	-88.74	9,070.5	321.8	924.3	766.2	158.18	5.844	
20,100.0	11,001.5	20,157.0	10,981.5	79.2	80.7	-88.74	9,170.5	321.7	924.3	764.4	159.89	5.781	
20,200.0	11,001.4	20,257.0	10,981.4	80.1	81.6	-88.74	9,270.5	321.6	924.3	762.7	161.59	5.720	
20,300.0	11,001.3	20,357.0	10,981.3	80.9	82.4	-88.74	9,370.5	321.5	924.3	761.0	163.29	5.660	
20,400.0	11,001.2	20,457.0	10,981.2	81.8	83.3	-88.74	9,470.5	321.4	924.3	759.3	165.00	5.602	
20,500.0	11,001.1	20,557.0	10,981.1	82.6	84.1	-88.74	9,570.5	321.3	924.2	757.5	166.70	5.544	
20,560.5	11,001.0	20,617.5	10,981.0	83.1	84.6	-88.74	9,631.0	321.2	924.2	756.5	167.74	5.510	
20,564.8	11,001.0	20,618.9	10,981.0	83.2	84.7	-88.74	9,632.4	321.2	924.2	756.4	167.78	5.509	

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 ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Reference Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ADMIRAL FEDERAL #804H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design		ADMIRAL FEDERAL PROJECT (ATLAS 2529) - ADMIRAL FEDERAL #806H - OWB - PWP1											Offset Site Error:	0.0 usft
Survey Program: 0-MWD+IFR1+FDIR													Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Distance								
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside 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	0.6	0.6	3.0	3.0	-90.29	-0.3	-60.1	60.1					
100.0	100.0	100.6	100.6	3.0	3.0	-90.29	-0.3	-60.1	60.1	54.1	6.00	10.011		
200.0	200.0	200.6	200.6	3.0	3.0	-90.29	-0.3	-60.1	60.1	54.1	6.04	9.947		
300.0	300.0	300.6	300.6	3.0	3.1	-90.29	-0.3	-60.1	60.1	54.0	6.12	9.815		
400.0	400.0	400.6	400.6	3.0	3.2	-90.29	-0.3	-60.1	60.1	53.9	6.24	9.624		
500.0	500.0	500.6	500.6	3.1	3.4	-90.29	-0.3	-60.1	60.1	53.7	6.40	9.388		
600.0	600.0	600.6	600.6	3.1	3.6	-90.29	-0.3	-60.1	60.1	53.5	6.59	9.120		
700.0	700.0	700.6	700.6	3.1	3.8	-90.29	-0.3	-60.1	60.1	53.3	6.81	8.831		
800.0	800.0	800.6	800.6	3.2	4.0	-90.29	-0.3	-60.1	60.1	53.1	7.04	8.532		
900.0	900.0	900.6	900.6	3.2	4.2	-90.29	-0.3	-60.1	60.1	52.8	7.30	8.231		
1,000.0	1,000.0	1,000.6	1,000.6	3.2	4.5	-90.29	-0.3	-60.1	60.1	52.5	7.58	7.932		
1,100.0	1,100.0	1,100.6	1,100.6	3.3	4.8	-90.29	-0.3	-60.1	60.1	52.2	7.87	7.640		
1,200.0	1,200.0	1,200.6	1,200.6	3.4	5.1	-90.29	-0.3	-60.1	60.1	51.9	8.17	7.359		
1,300.0	1,300.0	1,300.6	1,300.6	3.4	5.4	-90.29	-0.3	-60.1	60.1	51.6	8.48	7.088		
1,400.0	1,400.0	1,400.6	1,400.6	3.5	5.7	-90.29	-0.3	-60.1	60.1	51.3	8.80	6.830		
1,500.0	1,500.0	1,500.6	1,500.6	3.5	6.0	-90.29	-0.3	-60.1	60.1	51.0	9.13	6.584		
1,600.0	1,600.0	1,600.6	1,600.6	3.6	6.3	-90.29	-0.3	-60.1	60.1	50.6	9.46	6.351		
1,700.0	1,700.0	1,700.6	1,700.6	3.7	6.6	-90.29	-0.3	-60.1	60.1	50.3	9.80	6.130		
1,800.0	1,800.0	1,800.6	1,800.6	3.8	6.9	-90.29	-0.3	-60.1	60.1	49.9	10.15	5.921		
1,900.0	1,900.0	1,900.6	1,900.6	3.9	7.2	-90.29	-0.3	-60.1	60.1	49.6	10.50	5.722		
2,000.0	2,000.0	2,000.6	2,000.6	3.9	7.6	-90.29	-0.3	-60.1	60.1	49.2	10.86	5.535		
2,100.0	2,100.0	2,100.6	2,100.6	4.0	7.9	-90.29	-0.3	-60.1	60.1	48.9	11.22	5.357		
2,200.0	2,200.0	2,200.6	2,200.6	4.1	8.2	-90.29	-0.3	-60.1	60.1	48.5	11.58	5.189		
2,300.0	2,300.0	2,300.6	2,300.6	4.2	8.6	-90.29	-0.3	-60.1	60.1	48.2	11.95	5.030		
2,400.0	2,400.0	2,400.6	2,400.6	4.3	8.9	-90.29	-0.3	-60.1	60.1	47.8	12.32	4.879		
2,416.5	2,416.5	2,417.1	2,417.1	4.3	9.0	-90.29	-0.3	-60.1	60.1	47.7	12.38	4.855 CC		
2,500.0	2,500.0	2,500.0	2,500.0	4.4	9.2	-90.29	-0.3	-60.1	60.1	47.4	12.69	4.737 ES, SF		
2,600.0	2,600.0	2,599.1	2,599.1	4.5	9.6	178.55	-1.6	-61.2	63.0	50.0	13.04	4.831		
2,700.0	2,699.8	2,697.1	2,696.9	4.5	9.9	175.65	-5.4	-64.6	71.8	58.4	13.39	5.362		
2,800.0	2,799.5	2,795.1	2,794.6	4.5	10.2	172.33	-11.4	-69.8	86.4	72.6	13.77	6.273		
2,828.9	2,828.2	2,823.5	2,823.0	4.5	10.3	171.57	-13.2	-71.3	91.3	77.5	13.88	6.581		
2,900.0	2,898.8	2,893.4	2,892.6	4.6	10.5	170.08	-17.6	-75.2	103.9	89.8	14.16	7.341		
3,000.0	2,998.2	2,991.8	2,990.6	4.6	10.8	168.51	-23.9	-80.6	121.7	107.2	14.55	8.365		
3,100.0	3,097.5	3,090.1	3,088.6	4.6	11.1	167.34	-30.1	-86.1	139.6	124.7	14.95	9.337		
3,200.0	3,196.8	3,188.5	3,186.6	4.7	11.4	166.44	-36.3	-91.5	157.5	142.2	15.36	10.258		
3,300.0	3,296.2	3,286.9	3,284.6	4.7	11.8	165.72	-42.6	-97.0	175.5	159.7	15.77	11.131		
3,400.0	3,395.5	3,385.2	3,382.6	4.8	12.1	165.13	-48.8	-102.4	193.5	177.3	16.18	11.958		
3,500.0	3,494.9	3,483.6	3,480.6	4.9	12.4	164.65	-55.1	-107.9	211.4	194.8	16.59	12.743		
3,600.0	3,594.2	3,581.9	3,578.6	4.9	12.7	164.24	-61.3	-113.3	229.4	212.4	17.01	13.488		
3,700.0	3,693.5	3,680.3	3,676.7	5.0	13.1	163.89	-67.6	-118.7	247.4	230.0	17.43	14.195		
3,800.0	3,792.9	3,778.6	3,774.7	5.1	13.4	163.58	-73.8	-124.2	265.5	247.6	17.86	14.867		
3,900.0	3,892.2	3,877.0	3,872.7	5.1	13.7	163.32	-80.0	-129.6	283.5	265.2	18.28	15.505		
4,000.0	3,991.6	3,975.3	3,970.7	5.2	14.1	163.09	-86.3	-135.1	301.5	282.8	18.71	16.112		
4,100.0	4,090.9	4,073.7	4,068.7	5.3	14.4	162.88	-92.5	-140.5	319.5	300.4	19.15	16.690		
4,200.0	4,190.2	4,172.0	4,166.7	5.4	14.7	162.70	-98.8	-146.0	337.6	318.0	19.58	17.241		
4,300.0	4,289.6	4,270.4	4,264.7	5.4	15.1	162.53	-105.0	-151.4	355.6	335.6	20.02	17.765		
4,400.0	4,388.9	4,368.8	4,362.7	5.5	15.4	162.38	-111.3	-156.9	373.7	353.2	20.46	18.266		
4,500.0	4,488.3	4,467.1	4,460.7	5.6	15.8	162.24	-117.5	-162.3	391.7	370.8	20.90	18.743		
4,600.0	4,587.6	4,565.5	4,558.7	5.7	16.1	162.12	-123.7	-167.7	409.8	388.4	21.34	19.200		
4,700.0	4,687.0	4,663.8	4,656.7	5.8	16.4	162.01	-130.0	-173.2	427.8	406.0	21.79	19.636		
4,800.0	4,786.3	4,762.2	4,754.7	5.9	16.8	161.90	-136.2	-178.6	445.9	423.6	22.23	20.053		

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 ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Reference Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ADMIRAL FEDERAL #804H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,900.0	4,885.6	4,860.5	4,852.7	6.0	17.1	161.81	-142.5	-184.1	463.9	441.2	22.68	20.452	
5,000.0	4,985.0	4,958.9	4,950.7	6.1	17.5	161.72	-148.7	-189.5	482.0	458.8	23.13	20.834	
5,100.0	5,084.3	5,057.2	5,048.7	6.1	17.8	161.63	-155.0	-195.0	500.0	476.4	23.58	21.201	
5,200.0	5,183.7	5,155.6	5,146.7	6.2	18.2	161.56	-161.2	-200.4	518.1	494.0	24.04	21.552	
5,300.0	5,283.0	5,253.9	5,244.7	6.3	18.5	161.49	-167.4	-205.8	536.1	511.6	24.49	21.889	
5,400.0	5,382.3	5,352.3	5,342.7	6.4	18.9	161.42	-173.7	-211.3	554.2	529.2	24.95	22.213	
5,500.0	5,481.7	5,450.7	5,440.7	6.5	19.2	161.36	-179.9	-216.7	572.2	546.8	25.41	22.524	
5,600.0	5,581.0	5,549.0	5,538.7	6.6	19.5	161.30	-186.2	-222.2	590.3	564.4	25.86	22.823	
5,700.0	5,680.4	5,647.4	5,636.8	6.7	19.9	161.24	-192.4	-227.6	608.3	582.0	26.32	23.110	
5,800.0	5,779.7	5,745.7	5,734.8	6.9	20.2	161.19	-198.6	-233.1	626.4	599.6	26.78	23.387	
5,900.0	5,879.1	5,844.1	5,832.8	7.0	20.6	161.14	-204.9	-238.5	644.5	617.2	27.25	23.653	
6,000.0	5,978.4	5,942.4	5,930.8	7.1	20.9	161.09	-211.1	-243.9	662.5	634.8	27.71	23.910	
6,100.0	6,077.7	6,040.8	6,028.8	7.2	21.3	161.05	-217.4	-249.4	680.6	652.4	28.17	24.157	
6,200.0	6,177.1	6,139.1	6,126.8	7.3	21.6	161.01	-223.6	-254.8	698.6	670.0	28.64	24.396	
6,300.0	6,276.4	6,237.5	6,224.8	7.4	22.0	160.97	-229.9	-260.3	716.7	687.6	29.10	24.626	
6,400.0	6,375.8	6,335.8	6,322.8	7.5	22.3	160.93	-236.1	-265.7	734.8	705.2	29.57	24.848	
6,500.0	6,475.1	6,434.2	6,420.8	7.6	22.7	160.89	-242.3	-271.2	752.8	722.8	30.04	25.062	
6,600.0	6,574.4	6,532.6	6,518.8	7.7	23.0	160.86	-248.6	-276.6	770.9	740.4	30.51	25.270	
6,700.0	6,673.8	6,630.9	6,616.8	7.8	23.4	160.83	-254.8	-282.1	788.9	758.0	30.98	25.470	
6,800.0	6,773.1	6,729.3	6,714.8	7.9	23.7	160.80	-261.1	-287.5	807.0	775.6	31.45	25.664	
6,900.0	6,872.5	6,827.6	6,812.8	8.1	24.1	160.77	-267.3	-292.9	825.1	793.1	31.92	25.851	
7,000.0	6,971.8	6,926.0	6,910.8	8.2	24.4	160.74	-273.6	-298.4	843.1	810.7	32.39	26.032	
7,100.0	7,071.2	7,024.3	7,008.8	8.3	24.8	160.71	-279.8	-303.8	861.2	828.3	32.86	26.207	
7,200.0	7,170.5	7,122.7	7,106.8	8.4	25.1	160.68	-286.0	-309.3	879.2	845.9	33.33	26.377	
7,300.0	7,269.8	7,221.0	7,204.8	8.5	25.5	160.66	-292.3	-314.7	897.3	863.5	33.81	26.542	
7,400.0	7,369.2	7,319.4	7,302.8	8.6	25.8	160.63	-298.5	-320.2	915.4	881.1	34.28	26.702	
7,500.0	7,468.5	7,417.7	7,400.8	8.8	26.2	160.61	-304.8	-325.6	933.4	898.7	34.76	26.856	
7,600.0	7,567.9	7,516.1	7,498.9	8.9	26.6	160.59	-311.0	-331.0	951.5	916.3	35.23	27.006	
7,700.0	7,667.2	7,614.5	7,596.9	9.0	26.9	160.57	-317.3	-336.5	969.6	933.9	35.71	27.152	
7,800.0	7,766.5	7,712.8	7,694.9	9.1	27.3	160.55	-323.5	-341.9	987.6	951.4	36.19	27.293	
7,900.0	7,865.9	7,811.2	7,792.9	9.2	27.6	160.53	-329.7	-347.4	1,005.7	969.0	36.66	27.430	
8,000.0	7,965.2	7,909.5	7,890.9	9.4	28.0	160.51	-336.0	-352.8	1,023.7	986.6	37.14	27.563	
8,100.0	8,064.6	8,007.9	7,988.9	9.5	28.3	160.49	-342.2	-358.3	1,041.8	1,004.2	37.62	27.693	
8,200.0	8,163.9	8,106.2	8,086.9	9.6	28.7	160.47	-348.5	-363.7	1,059.9	1,021.8	38.10	27.818	
8,300.0	8,263.3	8,204.6	8,184.9	9.7	29.0	160.45	-354.7	-369.2	1,077.9	1,039.4	38.58	27.941	
8,400.0	8,362.6	8,302.9	8,282.9	9.8	29.4	160.44	-361.0	-374.6	1,096.0	1,056.9	39.06	28.059	
8,500.0	8,461.9	8,401.3	8,380.9	10.0	29.7	160.42	-367.2	-380.0	1,114.1	1,074.5	39.54	28.175	
8,600.0	8,561.3	8,499.6	8,478.9	10.1	30.1	160.40	-373.4	-385.5	1,132.1	1,092.1	40.02	28.287	
8,700.0	8,660.6	8,598.0	8,576.9	10.2	30.4	160.39	-379.7	-390.9	1,150.2	1,109.7	40.50	28.396	
8,800.0	8,760.0	8,696.4	8,674.9	10.3	30.8	160.37	-385.9	-396.4	1,168.3	1,127.3	40.99	28.503	
8,900.0	8,859.3	8,794.7	8,772.9	10.5	31.2	160.36	-392.2	-401.8	1,186.3	1,144.8	41.47	28.606	
9,000.0	8,958.6	8,893.1	8,870.9	10.6	31.5	160.35	-398.4	-407.3	1,204.4	1,162.4	41.95	28.707	
9,100.0	9,058.0	8,991.4	8,968.9	10.7	31.9	160.33	-404.7	-412.7	1,222.4	1,180.0	42.44	28.805	
9,200.0	9,157.3	9,089.8	9,066.9	10.8	32.2	160.32	-410.9	-418.1	1,240.5	1,197.6	42.92	28.901	
9,300.0	9,256.7	9,188.1	9,164.9	11.0	32.6	160.31	-417.1	-423.6	1,258.6	1,215.2	43.41	28.994	
9,400.0	9,356.0	9,286.5	9,262.9	11.1	32.9	160.29	-423.4	-429.0	1,276.6	1,232.7	43.89	29.085	
9,500.0	9,455.3	9,384.8	9,360.9	11.2	33.3	160.28	-429.6	-434.5	1,294.7	1,250.3	44.38	29.173	
9,600.0	9,554.7	9,483.2	9,459.0	11.4	33.6	160.27	-435.9	-439.9	1,312.8	1,267.9	44.87	29.260	
9,700.0	9,654.0	9,581.5	9,557.0	11.5	34.0	160.26	-442.1	-445.4	1,330.8	1,285.5	45.35	29.344	
9,800.0	9,753.4	9,679.9	9,655.0	11.6	34.3	160.25	-448.4	-450.8	1,348.9	1,303.1	45.84	29.426	
9,900.0	9,852.7	9,778.3	9,753.0	11.8	34.7	160.24	-454.6	-456.3	1,367.0	1,320.6	46.33	29.506	

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 ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Reference Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ADMIRAL FEDERAL #804H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design ADMIRAL FEDERAL PROJECT (ATLAS 2529) - ADMIRAL FEDERAL #806H - OWB - PWP1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD+IFR1+FDIR													Offset Well Error:	3.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,000.0	9,952.1	9,876.6	9,851.0	11.9	35.1	160.23		-460.8	-461.7	1,385.0	1,338.2	46.82	29.584	
10,100.0	10,051.4	9,975.0	9,949.0	12.0	35.4	160.22		-467.1	-467.1	1,403.1	1,355.8	47.31	29.660	
10,200.0	10,150.7	10,073.3	10,047.0	12.1	35.8	160.21		-473.3	-472.6	1,421.2	1,373.4	47.79	29.735	
10,300.0	10,250.1	10,171.7	10,145.0	12.3	36.1	160.20		-479.6	-478.0	1,439.2	1,390.9	48.28	29.807	
10,400.0	10,349.4	10,270.0	10,243.0	12.4	36.5	160.19		-485.8	-483.5	1,457.3	1,408.5	48.77	29.878	
10,500.0	10,448.8	10,368.4	10,341.0	12.5	36.8	160.18		-492.1	-488.9	1,475.4	1,426.1	49.26	29.947	
10,607.0	10,555.1	10,473.7	10,445.9	12.7	37.2	160.17		-498.7	-494.7	1,494.7	1,444.9	49.79	30.020	
10,625.0	10,572.9	10,491.3	10,463.5	12.8	37.3	175.88		-499.9	-495.7	1,498.1	1,448.1	50.04	29.939	
10,650.0	10,597.6	11,284.0	10,977.0	12.8	39.0	-151.41		-18.4	-531.7	1,496.1	1,446.4	49.78	30.057	
10,675.0	10,622.2	11,286.6	10,977.0	12.8	39.0	-142.50		-15.8	-531.7	1,493.9	1,444.0	49.86	29.962	
10,700.0	10,646.5	11,290.4	10,977.0	12.8	39.0	-136.61		-12.0	-531.8	1,492.5	1,442.5	49.94	29.884	
10,725.0	10,670.5	11,295.5	10,977.0	12.8	39.0	-132.42		-6.9	-531.9	1,492.0	1,442.0	50.03	29.824	
10,726.5	10,671.9	11,295.8	10,977.0	12.8	39.0	-132.21		-6.6	-531.9	1,492.0	1,442.0	50.03	29.821	
10,750.0	10,694.2	11,301.7	10,976.9	12.8	39.0	-129.23		-0.7	-531.9	1,492.4	1,442.3	50.11	29.781	
10,775.0	10,717.4	11,309.1	10,976.9	12.9	39.0	-126.63		6.7	-532.0	1,493.6	1,443.4	50.20	29.754	
10,800.0	10,740.1	11,317.6	10,976.9	12.9	39.0	-124.40		15.2	-532.2	1,495.7	1,445.4	50.29	29.743	
10,825.0	10,762.3	11,327.3	10,976.9	12.9	39.0	-122.38		24.9	-532.3	1,498.6	1,448.2	50.38	29.748	
10,850.0	10,783.8	11,338.1	10,976.9	12.9	39.1	-120.51		35.7	-532.5	1,502.3	1,451.8	50.47	29.767	
10,875.0	10,804.7	11,349.9	10,976.9	12.9	39.1	-118.71		47.5	-532.6	1,506.7	1,456.1	50.56	29.799	
10,900.0	10,824.8	11,362.8	10,976.8	13.0	39.1	-116.95		60.4	-532.8	1,511.7	1,461.1	50.65	29.845	
10,925.0	10,844.1	11,376.7	10,976.8	13.0	39.1	-115.20		74.3	-533.0	1,517.5	1,466.7	50.75	29.903	
10,950.0	10,862.6	11,391.5	10,976.8	13.0	39.1	-113.46		89.1	-533.2	1,523.8	1,473.0	50.84	29.972	
10,975.0	10,880.2	11,407.3	10,976.8	13.1	39.1	-111.71		104.9	-533.5	1,530.7	1,479.8	50.94	30.050	
11,000.0	10,896.9	11,424.0	10,976.8	13.1	39.1	-109.95		121.5	-533.7	1,538.1	1,487.0	51.04	30.136	
11,025.0	10,912.5	11,441.4	10,976.7	13.1	39.1	-108.19		139.0	-534.0	1,545.9	1,494.7	51.14	30.231	
11,050.0	10,927.2	11,459.7	10,976.7	13.1	39.1	-106.42		157.3	-534.2	1,554.0	1,502.8	51.23	30.333	
11,075.0	10,940.7	11,478.7	10,976.7	13.2	39.2	-104.66		176.3	-534.5	1,562.6	1,511.2	51.33	30.441	
11,100.0	10,953.2	11,498.4	10,976.6	13.2	39.2	-102.92		196.0	-534.8	1,571.3	1,519.9	51.43	30.555	
11,125.0	10,964.5	11,518.7	10,976.6	13.2	39.2	-101.19		216.3	-535.1	1,580.3	1,528.8	51.53	30.671	
11,150.0	10,974.6	11,539.6	10,976.6	13.3	39.2	-99.50		237.2	-535.4	1,589.5	1,537.9	51.62	30.790	
11,175.0	10,983.6	11,561.0	10,976.5	13.3	39.3	-97.85		258.6	-535.7	1,598.8	1,547.0	51.72	30.912	
11,200.0	10,991.3	11,582.9	10,976.5	13.3	39.3	-96.25		280.5	-536.0	1,608.1	1,556.3	51.81	31.036	
11,225.0	10,997.8	11,605.2	10,976.5	13.4	39.3	-94.71		302.7	-536.3	1,617.5	1,565.6	51.91	31.160	
11,250.0	11,003.0	11,627.8	10,976.4	13.4	39.3	-93.24		325.3	-536.6	1,626.9	1,574.9	52.00	31.283	
11,275.0	11,006.9	11,650.7	10,976.4	13.4	39.4	-91.85		348.2	-537.0	1,636.2	1,584.1	52.10	31.406	
11,300.0	11,009.5	11,673.8	10,976.4	13.4	39.4	-90.53		371.3	-537.3	1,645.4	1,593.2	52.19	31.527	
11,325.0	11,010.9	11,697.0	10,976.3	13.5	39.4	-89.30		394.6	-537.6	1,654.5	1,602.2	52.28	31.648	
11,338.8	11,011.0	11,709.9	10,976.3	13.5	39.4	-88.67		407.4	-537.8	1,659.5	1,607.1	52.33	31.712	
11,400.0	11,011.0	11,767.3	10,976.2	13.6	39.5	-88.69		464.8	-538.6	1,680.8	1,628.2	52.56	31.975	
11,500.0	11,010.8	11,861.9	10,976.1	13.7	39.7	-88.74		559.5	-540.0	1,713.0	1,660.0	53.00	32.318	
11,600.0	11,010.7	11,957.7	10,975.9	13.9	39.8	-88.77		655.2	-541.4	1,741.8	1,688.3	53.50	32.556	
11,700.0	11,010.6	12,054.4	10,975.8	14.1	40.0	-88.80		751.9	-542.8	1,767.3	1,713.2	54.06	32.691	
11,800.0	11,010.5	12,151.9	10,975.6	14.5	40.2	-88.83		849.4	-544.2	1,789.4	1,734.7	54.67	32.728	
11,900.0	11,010.3	12,250.1	10,975.5	14.8	40.5	-88.85		947.6	-545.6	1,808.1	1,752.7	55.34	32.671	
12,000.0	11,010.2	12,349.0	10,975.3	15.3	40.7	-88.86		1,046.4	-547.0	1,823.3	1,767.3	56.06	32.525	
12,100.0	11,010.1	12,448.3	10,975.2	15.8	41.0	-88.88		1,145.7	-548.5	1,835.1	1,778.3	56.82	32.296	
12,200.0	11,010.0	12,547.9	10,975.0	16.3	41.2	-88.89		1,245.4	-549.9	1,843.4	1,785.8	57.63	31.989	
12,300.0	11,009.9	12,647.8	10,974.9	16.8	41.5	-88.89		1,345.2	-551.3	1,848.3	1,789.8	58.47	31.609	
12,388.8	11,009.8	12,736.6	10,974.7	17.4	41.8	-88.90		1,434.0	-552.6	1,849.6	1,790.4	59.25	31.216	
12,400.0	11,009.8	12,747.8	10,974.7	17.4	41.8	-88.90		1,445.2	-552.8	1,849.6	1,790.3	59.35	31.164	
12,500.0	11,009.6	12,847.8	10,974.6	18.0	42.2	-88.90		1,545.2	-554.2	1,849.6	1,789.3	60.27	30.689	

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 ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Reference Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ADMIRAL FEDERAL #804H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design ADMIRAL FEDERAL PROJECT (ATLAS 2529) - ADMIRAL FEDERAL #806H - OWB - PWP1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD+IFR1+FDIR													Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
12,600.0	11,009.5	12,947.8	10,974.4	18.6	42.5	-88.89	1,645.2	-555.6	1,849.6	1,788.4	61.22	30.210		
12,700.0	11,009.4	13,047.8	10,974.3	19.3	42.9	-88.89	1,745.2	-557.1	1,849.6	1,787.4	62.21	29.730		
12,800.0	11,009.3	13,147.8	10,974.1	19.9	43.2	-88.89	1,845.2	-558.5	1,849.6	1,786.3	63.23	29.251		
12,900.0	11,009.2	13,247.8	10,974.0	20.6	43.6	-88.89	1,945.1	-560.0	1,849.6	1,785.3	64.28	28.773		
13,000.0	11,009.1	13,347.8	10,973.8	21.3	44.0	-88.89	2,045.1	-561.4	1,849.6	1,784.2	65.36	28.299		
13,100.0	11,008.9	13,447.8	10,973.6	22.0	44.4	-88.89	2,145.1	-562.8	1,849.5	1,783.1	66.46	27.830		
13,200.0	11,008.8	13,547.8	10,973.5	22.7	44.8	-88.89	2,245.1	-564.3	1,849.5	1,782.0	67.59	27.366		
13,300.0	11,008.7	13,647.8	10,973.3	23.4	45.3	-88.89	2,345.1	-565.7	1,849.5	1,780.8	68.74	26.908		
13,400.0	11,008.6	13,747.8	10,973.2	24.1	45.7	-88.88	2,445.1	-567.2	1,849.5	1,779.6	69.91	26.457		
13,500.0	11,008.5	13,847.8	10,973.0	24.9	46.2	-88.88	2,545.1	-568.6	1,849.5	1,778.4	71.10	26.013		
13,600.0	11,008.4	13,947.8	10,972.9	25.6	46.7	-88.88	2,645.1	-570.0	1,849.5	1,777.2	72.31	25.577		
13,700.0	11,008.2	14,047.8	10,972.7	26.4	47.1	-88.88	2,745.1	-571.5	1,849.5	1,775.9	73.54	25.149		
13,800.0	11,008.1	14,147.8	10,972.6	27.1	47.6	-88.88	2,845.0	-572.9	1,849.5	1,774.7	74.79	24.729		
13,900.0	11,008.0	14,247.8	10,972.4	27.9	48.1	-88.88	2,945.0	-574.4	1,849.5	1,773.4	76.05	24.318		
14,000.0	11,007.9	14,347.8	10,972.3	28.6	48.6	-88.88	3,045.0	-575.8	1,849.5	1,772.1	77.33	23.916		
14,100.0	11,007.8	14,447.8	10,972.1	29.4	49.2	-88.88	3,145.0	-577.2	1,849.4	1,770.8	78.63	23.522		
14,200.0	11,007.7	14,547.8	10,972.0	30.2	49.7	-88.88	3,245.0	-578.7	1,849.4	1,769.5	79.94	23.136		
14,300.0	11,007.5	14,647.8	10,971.8	31.0	50.2	-88.87	3,345.0	-580.1	1,849.4	1,768.2	81.26	22.759		
14,400.0	11,007.4	14,747.8	10,971.7	31.8	50.8	-88.87	3,445.0	-581.6	1,849.4	1,766.8	82.60	22.391		
14,500.0	11,007.3	14,847.8	10,971.5	32.6	51.3	-88.87	3,545.0	-583.0	1,849.4	1,765.5	83.94	22.031		
14,600.0	11,007.2	14,947.8	10,971.3	33.3	51.9	-88.87	3,645.0	-584.4	1,849.4	1,764.1	85.30	21.680		
14,700.0	11,007.1	15,047.8	10,971.2	34.1	52.5	-88.87	3,745.0	-585.9	1,849.4	1,762.7	86.68	21.337		
14,800.0	11,007.0	15,147.8	10,971.0	34.9	53.1	-88.87	3,844.9	-587.3	1,849.4	1,761.3	88.06	21.002		
14,900.0	11,006.8	15,247.8	10,970.9	35.8	53.7	-88.87	3,944.9	-588.8	1,849.4	1,759.9	89.45	20.675		
15,000.0	11,006.7	15,347.8	10,970.7	36.6	54.3	-88.87	4,044.9	-590.2	1,849.4	1,758.5	90.85	20.355		
15,100.0	11,006.6	15,447.8	10,970.6	37.4	54.9	-88.86	4,144.9	-591.7	1,849.3	1,757.1	92.27	20.044		
15,200.0	11,006.5	15,547.8	10,970.4	38.2	55.5	-88.86	4,244.9	-593.1	1,849.3	1,755.6	93.69	19.739		
15,300.0	11,006.4	15,647.8	10,970.3	39.0	56.1	-88.86	4,344.9	-594.5	1,849.3	1,754.2	95.12	19.442		
15,400.0	11,006.3	15,747.8	10,970.1	39.8	56.7	-88.86	4,444.9	-596.0	1,849.3	1,752.8	96.56	19.153		
15,458.4	11,006.2	15,806.2	10,970.0	40.3	57.1	-88.86	4,503.3	-596.8	1,849.3	1,751.9	97.40	18.987		
15,458.9	11,006.2	15,806.7	10,970.0	40.3	57.1	-88.86	4,503.8	-596.8	1,849.3	1,751.9	97.41	18.985		
15,496.3	11,006.2	15,856.5	10,970.0	40.6	57.4	-88.86	4,553.6	-597.3	1,849.4	1,751.4	98.03	18.865		
15,500.0	11,006.2	15,872.5	10,969.9	40.6	57.5	-88.86	4,569.6	-597.4	1,849.4	1,751.2	98.17	18.840		
15,600.0	11,006.1	15,972.5	10,969.8	41.4	58.1	-88.86	4,669.6	-597.5	1,849.4	1,749.8	99.62	18.564		
15,700.0	11,006.0	16,072.5	10,969.6	42.3	58.8	-88.86	4,769.6	-597.6	1,849.4	1,748.3	101.08	18.295		
15,800.0	11,005.8	16,172.5	10,969.5	43.1	59.4	-88.85	4,869.6	-597.7	1,849.3	1,746.8	102.55	18.033		
15,900.0	11,005.7	16,272.5	10,969.3	43.9	60.1	-88.85	4,969.6	-597.8	1,849.3	1,745.3	104.03	17.777		
16,000.0	11,005.6	16,372.5	10,969.1	44.7	60.7	-88.85	5,069.6	-597.9	1,849.3	1,743.8	105.51	17.527		
16,100.0	11,005.5	16,472.5	10,969.0	45.6	61.4	-88.85	5,169.6	-598.0	1,849.3	1,742.3	107.00	17.283		
16,200.0	11,005.4	16,572.5	10,968.8	46.4	62.1	-88.85	5,269.6	-598.1	1,849.3	1,740.8	108.50	17.044		
16,300.0	11,005.3	16,672.5	10,968.7	47.2	62.7	-88.85	5,369.6	-598.2	1,849.2	1,739.2	110.00	16.811		
16,400.0	11,005.2	16,772.5	10,968.5	48.0	63.4	-88.84	5,469.6	-598.3	1,849.2	1,737.7	111.51	16.584		
16,500.0	11,005.1	16,872.5	10,968.4	48.9	64.1	-88.84	5,569.6	-598.5	1,849.2	1,736.2	113.02	16.362		
16,600.0	11,005.0	16,972.5	10,968.2	49.7	64.8	-88.84	5,669.6	-598.6	1,849.2	1,734.6	114.54	16.145		
16,700.0	11,004.9	17,072.5	10,968.0	50.5	65.5	-88.84	5,769.6	-598.7	1,849.2	1,733.1	116.06	15.933		
16,800.0	11,004.8	17,172.5	10,967.9	51.4	66.2	-88.84	5,869.6	-598.8	1,849.1	1,731.5	117.59	15.725		
16,900.0	11,004.7	17,272.5	10,967.7	52.2	66.9	-88.84	5,969.6	-598.9	1,849.1	1,730.0	119.12	15.523		
17,000.0	11,004.6	17,372.5	10,967.6	53.0	67.6	-88.83	6,069.6	-599.0	1,849.1	1,728.4	120.66	15.325		
17,100.0	11,004.5	17,472.5	10,967.4	53.9	68.3	-88.83	6,169.6	-599.1	1,849.1	1,726.9	122.20	15.132		
17,200.0	11,004.4	17,572.5	10,967.3	54.7	69.0	-88.83	6,269.6	-599.2	1,849.0	1,725.3	123.75	14.942		
17,300.0	11,004.3	17,672.5	10,967.1	55.6	69.7	-88.83	6,369.6	-599.3	1,849.0	1,723.7	125.30	14.757		

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 ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Reference Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ADMIRAL FEDERAL #804H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design ADMIRAL FEDERAL PROJECT (ATLAS 2529) - ADMIRAL FEDERAL #806H - OWB - PWP1													Offset Site Error:	0.0 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
17,400.0	11,004.2	17,772.5	10,967.0	56.4	70.4	-88.83	-88.83	6,469.6	-599.4	1,849.0	1,722.2	126.85	14.576	
17,500.0	11,004.1	17,872.5	10,966.8	57.2	71.1	-88.82	-88.82	6,569.6	-599.5	1,849.0	1,720.6	128.41	14.399	
17,600.0	11,004.0	17,972.5	10,966.6	58.1	71.9	-88.82	-88.82	6,669.6	-599.6	1,849.0	1,719.0	129.97	14.226	
17,700.0	11,003.9	18,072.5	10,966.5	58.9	72.6	-88.82	-88.82	6,769.6	-599.7	1,848.9	1,717.4	131.53	14.057	
17,800.0	11,003.8	18,172.5	10,966.3	59.8	73.3	-88.82	-88.82	6,869.6	-599.8	1,848.9	1,715.8	133.10	13.891	
17,900.0	11,003.7	18,272.5	10,966.2	60.6	74.0	-88.82	-88.82	6,969.6	-599.9	1,848.9	1,714.2	134.68	13.728	
18,000.0	11,003.6	18,372.5	10,966.0	61.4	74.8	-88.82	-88.82	7,069.6	-600.0	1,848.9	1,712.6	136.25	13.570	
18,100.0	11,003.5	18,472.5	10,965.9	62.3	75.5	-88.81	-88.81	7,169.6	-600.1	1,848.9	1,711.0	137.83	13.414	
18,200.0	11,003.4	18,572.5	10,965.7	63.1	76.2	-88.81	-88.81	7,269.6	-600.2	1,848.8	1,709.4	139.41	13.262	
18,300.0	11,003.3	18,672.5	10,965.5	64.0	77.0	-88.81	-88.81	7,369.6	-600.3	1,848.8	1,707.8	141.00	13.112	
18,400.0	11,003.2	18,772.5	10,965.4	64.8	77.7	-88.81	-88.81	7,469.6	-600.4	1,848.8	1,706.2	142.58	12.966	
18,500.0	11,003.1	18,872.5	10,965.2	65.7	78.5	-88.81	-88.81	7,569.6	-600.5	1,848.8	1,704.6	144.18	12.823	
18,600.0	11,003.0	18,972.5	10,965.1	66.5	79.2	-88.81	-88.81	7,669.6	-600.6	1,848.7	1,703.0	145.77	12.683	
18,700.0	11,002.9	19,072.5	10,964.9	67.3	80.0	-88.80	-88.80	7,769.6	-600.8	1,848.7	1,701.4	147.36	12.545	
18,800.0	11,002.8	19,172.5	10,964.8	68.2	80.7	-88.80	-88.80	7,869.6	-600.9	1,848.7	1,699.7	148.96	12.410	
18,900.0	11,002.7	19,272.5	10,964.6	69.0	81.5	-88.80	-88.80	7,969.6	-601.0	1,848.7	1,698.1	150.56	12.278	
19,000.0	11,002.6	19,372.5	10,964.4	69.9	82.2	-88.80	-88.80	8,069.6	-601.1	1,848.7	1,696.5	152.17	12.149	
19,100.0	11,002.5	19,472.5	10,964.3	70.7	83.0	-88.80	-88.80	8,169.6	-601.2	1,848.6	1,694.9	153.77	12.022	
19,200.0	11,002.4	19,572.5	10,964.1	71.6	83.8	-88.80	-88.80	8,269.6	-601.3	1,848.6	1,693.2	155.38	11.897	
19,300.0	11,002.3	19,672.5	10,964.0	72.4	84.5	-88.79	-88.79	8,369.6	-601.4	1,848.6	1,691.6	156.99	11.775	
19,400.0	11,002.2	19,772.5	10,963.8	73.3	85.3	-88.79	-88.79	8,469.6	-601.5	1,848.6	1,690.0	158.60	11.655	
19,500.0	11,002.1	19,872.5	10,963.7	74.1	86.1	-88.79	-88.79	8,569.6	-601.6	1,848.6	1,688.3	160.22	11.538	
19,600.0	11,002.0	19,972.5	10,963.5	75.0	86.8	-88.79	-88.79	8,669.6	-601.7	1,848.5	1,686.7	161.84	11.422	
19,700.0	11,001.9	20,072.5	10,963.3	75.8	87.6	-88.79	-88.79	8,769.6	-601.8	1,848.5	1,685.1	163.45	11.309	
19,800.0	11,001.8	20,172.5	10,963.2	76.7	88.4	-88.79	-88.79	8,869.6	-601.9	1,848.5	1,683.4	165.08	11.198	
19,900.0	11,001.7	20,272.5	10,963.0	77.5	89.1	-88.78	-88.78	8,969.6	-602.0	1,848.5	1,681.8	166.70	11.089	
20,000.0	11,001.6	20,372.5	10,962.9	78.4	89.9	-88.78	-88.78	9,069.6	-602.1	1,848.5	1,680.1	168.32	10.982	
20,100.0	11,001.5	20,472.5	10,962.7	79.2	90.7	-88.78	-88.78	9,169.6	-602.2	1,848.4	1,678.5	169.95	10.876	
20,200.0	11,001.4	20,572.5	10,962.6	80.1	91.5	-88.78	-88.78	9,269.6	-602.3	1,848.4	1,676.8	171.58	10.773	
20,300.0	11,001.3	20,672.5	10,962.4	80.9	92.3	-88.78	-88.78	9,369.6	-602.4	1,848.4	1,675.2	173.21	10.672	
20,400.0	11,001.2	20,772.5	10,962.2	81.8	93.0	-88.77	-88.77	9,469.6	-602.5	1,848.4	1,673.5	174.84	10.572	
20,500.0	11,001.1	20,872.5	10,962.1	82.6	93.8	-88.77	-88.77	9,569.6	-602.6	1,848.3	1,671.9	176.47	10.474	
20,559.6	11,001.0	20,931.4	10,962.0	83.1	94.3	-88.77	-88.77	9,628.5	-602.7	1,848.3	1,670.9	177.44	10.417	
20,564.8	11,001.0	20,931.4	10,962.0	83.2	94.3	-88.77	-88.77	9,628.5	-602.7	1,848.3	1,670.9	177.48	10.414	

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 ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Reference Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ADMIRAL FEDERAL #804H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 100-Standard Keeper 104, 7829-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Reference				Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	3.0	3.0	177.23	-564.8	27.3	565.5				
100.0	100.0	95.9	95.9	3.0	3.0	177.26	-564.5	27.1	565.1	559.1	6.00	94.179	
200.0	200.0	196.4	196.4	3.0	3.0	177.30	-563.7	26.6	564.4	558.4	6.01	93.915	
300.0	300.0	298.1	298.1	3.0	3.0	177.34	-562.6	26.2	563.3	557.3	6.03	93.422	
400.0	400.0	397.3	397.3	3.0	3.0	177.39	-561.6	25.6	562.2	556.1	6.06	92.773	
500.0	500.0	495.9	495.9	3.1	3.1	177.48	-560.8	24.7	561.4	555.3	6.10	92.077	
574.0	574.0	565.8	565.8	3.1	3.1	177.53	-560.6	24.2	561.1	555.0	6.13	91.581 CC	
600.0	600.0	591.6	591.6	3.1	3.1	177.54	-560.6	24.0	561.1	555.0	6.14	91.440	
700.0	700.0	689.6	689.6	3.1	3.1	177.60	-560.8	23.5	561.3	555.1	6.17	90.894	
800.0	800.0	786.1	786.0	3.2	3.1	177.67	-561.5	22.8	562.0	555.8	6.21	90.436	
900.0	900.0	885.5	885.5	3.2	3.1	177.78	-562.5	21.8	563.0	556.7	6.26	89.914	
1,000.0	1,000.0	982.9	982.8	3.2	3.1	177.93	-563.9	20.4	564.4	558.0	6.32	89.334	
1,100.0	1,100.0	1,082.9	1,082.8	3.3	3.2	178.15	-565.7	18.3	566.1	559.7	6.38	88.699	
1,200.0	1,200.0	1,189.5	1,189.4	3.4	3.2	178.24	-566.6	17.4	566.8	560.4	6.46	87.808	
1,300.0	1,300.0	1,288.2	1,288.1	3.4	3.2	178.26	-567.1	17.3	567.4	560.9	6.54	86.822	
1,400.0	1,400.0	1,387.5	1,387.4	3.5	3.3	178.31	-567.9	16.8	568.2	561.6	6.62	85.783	
1,500.0	1,500.0	1,489.1	1,488.9	3.5	3.3	178.48	-568.6	15.1	568.8	562.1	6.72	84.679	
1,600.0	1,600.0	1,588.7	1,588.5	3.6	3.4	178.72	-569.2	12.7	569.4	562.5	6.81	83.560	
1,700.0	1,700.0	1,687.1	1,686.9	3.7	3.4	179.01	-570.1	9.9	570.2	563.3	6.92	82.447	
1,800.0	1,800.0	1,801.4	1,801.1	3.8	3.5	179.32	-570.5	6.7	570.6	563.6	7.02	81.232	
1,900.0	1,900.0	1,910.8	1,910.5	3.9	3.6	179.43	-567.5	5.6	567.8	560.7	7.13	79.691	
2,000.0	2,000.0	2,012.5	2,012.1	3.9	3.6	179.50	-563.9	4.9	564.3	557.1	7.23	78.017	
2,100.0	2,100.0	2,093.9	2,093.5	4.0	3.6	179.54	-562.0	4.5	562.0	554.7	7.35	76.513	
2,107.8	2,107.8	2,100.0	2,099.6	4.0	3.6	179.54	-562.0	4.5	562.0	554.7	7.35	76.421 ES	
2,200.0	2,200.0	2,187.2	2,186.8	4.1	3.7	179.55	-562.6	4.4	562.7	555.2	7.46	75.385	
2,300.0	2,300.0	2,287.6	2,287.2	4.2	3.7	179.53	-563.4	4.6	563.4	555.8	7.59	74.224	
2,400.0	2,400.0	2,387.6	2,387.2	4.3	3.7	179.24	-564.2	7.5	564.3	556.6	7.72	73.107	
2,500.0	2,500.0	2,475.0	2,474.5	4.4	3.7	178.90	-565.6	10.9	565.9	558.1	7.84	72.151	
2,600.0	2,600.0	2,563.0	2,562.3	4.5	3.7	88.78	-569.4	12.8	570.3	562.3	7.94	71.823	
2,700.0	2,699.8	2,669.3	2,668.5	4.5	3.7	88.89	-574.6	16.5	575.2	567.2	8.02	71.745	
2,800.0	2,799.5	2,772.6	2,771.6	4.5	3.7	89.36	-578.3	20.1	578.7	570.6	8.10	71.466	
2,828.9	2,828.2	2,802.3	2,801.3	4.5	3.7	89.55	-579.3	21.3	579.6	571.5	8.12	71.370	
2,900.0	2,898.8	2,873.3	2,872.2	4.6	3.8	90.06	-581.6	24.2	581.9	573.7	8.18	71.133	
3,000.0	2,998.2	2,972.2	2,971.0	4.6	3.8	90.78	-584.8	28.3	585.2	576.9	8.27	70.780	
3,100.0	3,097.5	3,070.8	3,069.5	4.6	3.8	91.55	-588.1	31.6	588.8	580.4	8.36	70.412	
3,200.0	3,196.8	3,180.3	3,178.9	4.7	3.9	92.71	-590.6	32.2	591.4	582.9	8.48	69.775	
3,300.0	3,296.2	3,265.2	3,263.7	4.7	4.0	93.93	-592.9	29.1	595.0	586.4	8.58	69.383	
3,400.0	3,395.5	3,361.0	3,359.2	4.8	4.0	95.62	-596.5	22.0	600.4	591.7	8.69	69.093	
3,500.0	3,494.9	3,460.7	3,458.4	4.9	4.1	97.57	-600.1	12.3	606.6	597.7	8.81	68.833	
3,600.0	3,594.2	3,563.4	3,560.4	4.9	4.2	99.64	-602.8	1.2	612.5	603.6	8.94	68.505	
3,700.0	3,693.5	3,657.8	3,653.8	5.0	4.2	101.78	-604.4	-11.9	619.1	610.0	9.07	68.247	
3,800.0	3,792.9	3,752.3	3,746.7	5.1	4.3	104.25	-605.7	-29.1	627.4	618.2	9.21	68.106	
3,900.0	3,892.2	3,850.5	3,843.7	5.1	4.4	106.58	-607.4	-45.1	636.8	627.4	9.36	68.023	
4,000.0	3,991.6	3,946.3	3,938.4	5.2	4.5	108.61	-609.6	-58.8	647.0	637.4	9.51	68.007	
4,100.0	4,090.9	4,040.8	4,031.9	5.3	4.6	110.54	-612.0	-72.2	658.2	648.5	9.67	68.062	
4,200.0	4,190.2	4,136.1	4,126.3	5.4	4.6	112.37	-614.9	-85.3	670.4	660.6	9.83	68.171	
4,300.0	4,289.6	4,222.2	4,211.5	5.4	4.7	113.98	-617.9	-97.3	683.9	674.0	10.00	68.410	
4,400.0	4,388.9	4,314.5	4,302.5	5.5	4.8	115.74	-621.9	-112.0	699.7	689.5	10.17	68.774	
4,500.0	4,488.3	4,414.1	4,400.9	5.6	4.9	117.51	-626.3	-127.2	715.9	705.5	10.36	69.114	
4,600.0	4,587.6	4,510.0	4,495.6	5.7	5.0	119.11	-630.8	-141.4	732.6	722.1	10.54	69.484	
4,700.0	4,687.0	4,607.7	4,592.3	5.8	5.1	120.58	-635.8	-154.9	749.9	739.2	10.73	69.861	

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 ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Reference Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ADMIRAL FEDERAL #804H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 usft
Survey Program: 100-Standard Keeper 104, 7829-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		
4,800.0	4,786.3	4,709.9	4,693.5	5.9	5.2	121.93	-641.6	-167.6	767.3	756.3	10.93	70.194		
4,900.0	4,885.6	4,796.2	4,779.0	6.0	5.3	123.03	-646.3	-178.2	784.9	773.8	11.12	70.573		
5,000.0	4,985.0	4,882.8	4,864.3	6.1	5.3	124.31	-650.7	-192.4	804.8	793.4	11.32	71.098		
5,100.0	5,084.3	4,981.3	4,961.3	6.1	5.4	125.73	-655.6	-208.9	825.3	813.7	11.52	71.606		
5,200.0	5,183.7	5,085.9	5,064.5	6.2	5.6	127.11	-660.7	-225.4	845.6	833.9	11.73	72.058		
5,300.0	5,283.0	5,194.8	5,172.1	6.3	5.7	128.36	-666.2	-240.6	865.3	853.4	11.95	72.425		
5,400.0	5,382.3	5,300.7	5,277.2	6.4	5.8	129.42	-671.5	-253.3	884.1	871.9	12.16	72.694		
5,500.0	5,481.7	5,399.6	5,375.3	6.5	5.9	130.30	-676.6	-264.0	902.3	890.0	12.37	72.926		
5,600.0	5,581.0	5,505.0	5,480.0	6.6	6.0	131.16	-682.2	-274.6	920.5	907.9	12.59	73.112		
5,700.0	5,680.4	5,600.9	5,575.3	6.7	6.1	131.92	-686.6	-284.0	938.1	925.3	12.80	73.268		
5,800.0	5,779.7	5,700.0	5,673.8	6.9	6.2	132.71	-691.0	-294.1	956.0	943.0	13.02	73.419		
5,900.0	5,879.1	5,782.1	5,755.4	7.0	6.3	133.40	-694.5	-303.6	974.9	961.7	13.23	73.667		
6,000.0	5,978.4	5,881.2	5,853.5	7.1	6.4	134.22	-698.9	-315.9	994.7	981.2	13.46	73.922		
6,100.0	6,077.7	5,980.0	5,951.6	7.2	6.5	134.97	-703.5	-327.4	1,014.3	1,000.6	13.68	74.152		
6,200.0	6,177.1	6,067.1	6,037.9	7.3	6.6	135.66	-707.1	-338.5	1,034.5	1,020.6	13.90	74.419		
6,300.0	6,276.4	6,169.5	6,139.2	7.4	6.7	136.53	-710.6	-352.9	1,055.3	1,041.2	14.13	74.703		
6,400.0	6,375.8	6,279.9	6,248.7	7.5	6.9	137.34	-714.8	-366.6	1,075.4	1,061.0	14.36	74.906		
6,500.0	6,475.1	6,382.3	6,350.4	7.6	7.0	137.98	-719.0	-377.2	1,094.3	1,079.7	14.58	75.031		
6,600.0	6,574.4	6,467.9	6,435.3	7.7	7.1	138.53	-722.5	-387.1	1,114.2	1,099.4	14.81	75.224		
6,700.0	6,673.8	6,575.0	6,541.8	7.8	7.2	139.17	-726.9	-398.8	1,133.7	1,118.7	15.04	75.363		
6,800.0	6,773.1	6,650.0	6,616.1	7.9	7.3	139.66	-729.6	-408.0	1,154.2	1,138.9	15.27	75.570		
6,900.0	6,872.5	6,723.4	6,688.5	8.1	7.4	140.23	-731.5	-419.7	1,176.8	1,161.3	15.51	75.875		
7,000.0	6,971.8	6,837.9	6,801.2	8.2	7.5	141.24	-732.2	-440.1	1,200.1	1,184.3	15.74	76.239		
7,100.0	7,071.2	7,028.7	6,990.5	8.3	7.7	142.65	-730.2	-463.4	1,217.6	1,201.6	15.98	76.187		
7,200.0	7,170.5	7,118.4	7,079.7	8.4	7.8	143.29	-727.7	-472.3	1,233.1	1,216.9	16.20	76.138		
7,300.0	7,269.8	7,200.0	7,160.9	8.5	7.9	143.83	-726.4	-480.8	1,249.7	1,233.3	16.41	76.136		
7,400.0	7,369.2	7,270.3	7,230.7	8.6	8.0	144.25	-726.5	-488.3	1,267.9	1,251.2	16.64	76.191		
7,500.0	7,468.5	7,360.0	7,319.9	8.8	8.1	144.73	-728.3	-498.6	1,287.7	1,270.8	16.88	76.295		
7,600.0	7,567.9	7,493.7	7,452.9	8.9	8.2	145.35	-731.3	-512.1	1,306.7	1,289.5	17.12	76.333		
7,700.0	7,667.2	7,675.8	7,634.6	9.0	8.4	146.02	-734.4	-522.6	1,322.5	1,305.1	17.41	75.976		
7,800.0	7,766.5	7,760.0	7,718.8	9.1	8.5	146.23	-735.9	-524.0	1,334.4	1,316.7	17.63	75.707		
7,900.0	7,865.9	7,849.7	7,808.4	9.2	8.6	146.50	-737.0	-526.8	1,347.2	1,329.4	17.81	75.646		
8,000.0	7,965.2	8,700.1	8,529.2	9.4	9.4	162.56	-377.9	-533.8	1,334.7	1,314.5	20.13	66.319		
8,100.0	8,064.6	9,012.2	8,617.5	9.5	10.3	176.20	-81.5	-546.3	1,299.3	1,278.5	20.88	62.239		
8,200.0	8,163.9	9,039.4	8,621.1	9.6	10.4	177.46	-54.5	-546.3	1,270.1	1,249.6	20.53	61.859		
8,300.0	8,263.3	9,062.0	8,623.7	9.7	10.5	178.50	-32.1	-546.2	1,248.0	1,227.8	20.22	61.711		
8,400.0	8,362.6	9,075.7	8,625.3	9.8	10.6	179.14	-18.4	-546.1	1,233.5	1,213.5	19.99	61.698		
8,500.0	8,461.9	9,090.3	8,626.8	10.0	10.6	179.82	-3.9	-545.9	1,226.8	1,206.9	19.89	61.691		
8,533.2	8,495.0	9,094.8	8,627.3	10.0	10.7	-179.97	0.6	-545.9	1,226.4	1,206.5	19.88	61.675		
8,600.0	8,561.3	9,103.4	8,628.1	10.1	10.7	-179.58	9.1	-545.8	1,228.2	1,208.2	19.93	61.610		
8,700.0	8,660.6	9,115.2	8,629.2	10.2	10.7	-179.03	20.8	-545.6	1,237.5	1,217.4	20.15	61.412		
8,800.0	8,760.0	9,125.9	8,630.2	10.3	10.8	-178.53	31.5	-545.4	1,254.7	1,234.2	20.53	61.104		
8,900.0	8,859.3	9,135.6	8,631.0	10.5	10.8	-178.08	41.2	-545.3	1,279.5	1,258.4	21.07	60.738		
9,000.0	8,958.6	9,144.5	8,631.7	10.6	10.9	-177.66	50.0	-545.1	1,311.3	1,289.6	21.72	60.386		
9,100.0	9,058.0	9,152.0	8,632.3	10.7	10.9	-177.31	57.5	-545.0	1,349.8	1,327.3	22.45	60.111		
9,200.0	9,157.3	9,159.4	8,632.8	10.8	11.0	-176.97	64.9	-544.8	1,394.3	1,371.1	23.25	59.976 SF		
9,300.0	9,256.7	9,166.5	8,633.4	11.0	11.0	-176.64	71.9	-544.7	1,444.4	1,420.4	24.07	60.011		
9,400.0	9,356.0	9,173.2	8,633.9	11.1	11.0	-176.33	78.6	-544.5	1,499.5	1,474.6	24.90	60.230		
9,500.0	9,455.3	9,179.6	8,634.3	11.2	11.0	-176.03	85.1	-544.4	1,559.0	1,533.3	25.71	60.628		
9,600.0	9,554.7	9,185.8	8,634.7	11.4	11.1	-175.74	91.2	-544.3	1,622.4	1,595.9	26.51	61.196		
9,700.0	9,654.0	9,191.7	8,635.1	11.5	11.1	-175.47	97.1	-544.1	1,689.4	1,662.1	27.29	61.916		

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

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Reference Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ADMIRAL FEDERAL #804H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design ADMIRAL FEDERAL PROJECT (ATLAS 2529) - ADMIRAL FEDERAL COM 501H - OWB - AWP												Offset Site Error:	0.0 usft
Survey Program: 100-Standard Keeper 104, 7829-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	
9,800.0	9,753.4	9,197.4	8,635.5	11.6	11.1	-175.21	102.8	-544.0	1,759.5	1,731.4	28.03	62.772	
9,900.0	9,852.7	9,202.9	8,635.9	11.8	11.2	-174.95	108.2	-543.9	1,832.3	1,803.6	28.74	63.744	
10,000.0	9,952.1	9,208.1	8,636.2	11.9	11.2	-174.71	113.5	-543.8	1,907.6	1,878.2	29.43	64.815	
10,100.0	10,051.4	9,213.2	8,636.5	12.0	11.2	-174.48	118.5	-543.7	1,985.1	1,955.0	30.09	65.970	

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Reference Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ADMIRAL FEDERAL #804H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design ADMIRAL FEDERAL PROJECT (ATLAS 2529) - ADMIRAL FEDERAL COM 502H - OWB - AWP												Offset Site Error:	0.0 usft
Survey Program: 89-MWD, 679-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	3.0	3.0	174.21	-564.7	57.3	567.7				
100.0	100.0	93.1	93.1	3.0	3.0	174.19	-564.5	57.4	567.5	561.5	6.00	94.525	
200.0	200.0	193.3	193.3	3.0	3.1	174.18	-564.1	57.5	567.0	561.0	6.06	93.629	
232.0	232.0	223.4	223.4	3.0	3.1	174.18	-564.1	57.5	567.0	560.9	6.08	93.232	
300.0	300.0	288.9	288.9	3.0	3.2	174.14	-564.2	57.9	567.2	561.0	6.16	92.038	
400.0	400.0	388.0	388.0	3.0	3.3	174.10	-564.7	58.3	567.7	561.4	6.34	89.538	
500.0	500.0	486.8	486.8	3.1	3.5	174.06	-565.3	58.8	568.4	561.8	6.56	86.636	
600.0	600.0	585.4	585.4	3.1	3.7	174.00	-566.2	59.5	569.3	562.5	6.81	83.644	
700.0	700.0	682.8	682.7	3.1	3.8	173.80	-567.2	61.7	570.6	563.7	6.95	82.158	
800.0	800.0	782.5	782.4	3.2	3.9	173.47	-568.3	65.1	572.1	565.1	7.02	81.513	
900.0	900.0	877.2	877.0	3.2	3.9	173.15	-569.9	68.4	574.2	567.1	7.12	80.625	
1,000.0	1,000.0	979.4	979.2	3.2	4.0	172.85	-572.0	71.7	576.6	569.3	7.27	79.327	
1,100.0	1,100.0	1,082.2	1,081.9	3.3	4.2	172.62	-573.5	74.2	578.4	570.9	7.45	77.628	
1,200.0	1,200.0	1,183.1	1,182.8	3.4	4.3	172.35	-574.8	77.2	580.0	572.3	7.66	75.718	
1,300.0	1,300.0	1,284.0	1,283.6	3.4	4.5	172.15	-575.9	79.4	581.4	573.5	7.90	73.616	
1,400.0	1,400.0	1,381.1	1,380.7	3.5	4.7	172.08	-577.2	80.4	582.9	574.7	8.15	71.512	
1,500.0	1,500.0	1,472.9	1,472.5	3.5	4.9	171.97	-579.3	81.7	585.3	576.9	8.41	69.581	
1,600.0	1,600.0	1,567.2	1,566.7	3.6	5.1	171.82	-582.6	83.8	589.1	580.4	8.70	67.742	
1,700.0	1,700.0	1,667.6	1,667.0	3.7	5.3	171.62	-586.6	86.4	593.4	584.4	9.01	65.825	
1,800.0	1,800.0	1,764.3	1,763.6	3.8	5.6	171.49	-590.5	88.3	597.7	588.4	9.34	64.015	
1,900.0	1,900.0	1,865.3	1,864.5	3.9	5.9	171.48	-595.1	89.1	602.3	592.7	9.68	62.202	
2,000.0	2,000.0	1,965.8	1,964.9	3.9	6.1	171.56	-599.6	89.0	606.7	596.7	10.04	60.431	
2,100.0	2,100.0	2,068.2	2,067.2	4.0	6.4	171.63	-603.9	88.9	610.9	600.5	10.41	58.663	
2,200.0	2,200.0	2,169.4	2,168.3	4.1	6.7	171.72	-607.9	88.5	614.8	604.0	10.79	56.956	
2,300.0	2,300.0	2,266.0	2,264.8	4.2	7.0	171.76	-611.8	88.6	618.7	607.6	11.17	55.402	
2,400.0	2,400.0	2,355.6	2,354.2	4.3	7.3	171.61	-616.1	90.9	623.9	612.4	11.53	54.130	
2,500.0	2,500.0	2,455.1	2,453.5	4.4	7.6	171.28	-621.4	95.4	629.8	617.9	11.93	52.814	
2,600.0	2,600.0	2,547.9	2,546.1	4.5	7.9	80.91	-626.7	100.5	636.1	623.8	12.27	51.855	
2,700.0	2,699.8	2,635.0	2,632.7	4.5	8.1	80.66	-632.9	107.2	643.4	630.9	12.55	51.272	
2,800.0	2,799.5	2,733.8	2,730.6	4.5	8.5	80.51	-640.7	117.0	651.4	638.5	12.89	50.555	
2,828.9	2,828.2	2,777.7	2,774.2	4.5	8.6	80.52	-643.5	121.8	653.3	640.2	13.04	50.082	
2,900.0	2,898.8	2,868.2	2,864.2	4.6	8.9	80.66	-646.6	131.0	655.4	642.1	13.36	49.063	
3,000.0	2,998.2	2,972.9	2,968.5	4.6	9.2	80.93	-648.8	140.3	657.0	643.3	13.72	47.879	
3,100.0	3,097.5	3,074.3	3,069.5	4.6	9.6	81.24	-650.6	148.5	658.4	644.3	14.08	46.755	
3,200.0	3,196.8	3,177.4	3,172.3	4.7	9.9	81.60	-652.3	156.5	659.3	644.9	14.45	45.630	
3,300.0	3,296.2	3,278.8	3,273.3	4.7	10.2	81.95	-653.4	164.2	659.9	645.1	14.82	44.540	
3,400.0	3,395.5	3,372.5	3,366.5	4.8	10.5	82.06	-654.6	173.8	661.0	645.8	15.16	43.598	
3,500.0	3,494.9	3,466.9	3,460.0	4.9	10.9	81.88	-656.1	187.0	663.0	647.4	15.51	42.753	
3,600.0	3,594.2	3,569.5	3,561.5	4.9	11.2	81.61	-657.9	202.1	665.1	649.2	15.88	41.877	
3,700.0	3,693.5	3,673.7	3,664.6	5.0	11.6	81.40	-659.2	216.7	666.8	650.5	16.27	40.988	
3,800.0	3,792.9	3,779.3	3,769.3	5.1	11.9	81.23	-660.0	230.9	667.8	651.1	16.66	40.081	
3,900.0	3,892.2	3,886.7	3,876.0	5.1	12.3	81.20	-659.8	243.5	667.7	650.6	17.06	39.131	
4,000.0	3,991.6	3,992.6	3,981.0	5.2	12.7	81.08	-658.5	256.8	666.6	649.2	17.46	38.181	
4,100.0	4,090.9	4,096.7	4,084.1	5.3	13.0	80.86	-656.2	271.0	664.8	646.9	17.85	37.241	
4,200.0	4,190.2	4,199.3	4,185.8	5.4	13.4	80.67	-653.5	284.5	662.5	644.2	18.24	36.317	
4,300.0	4,289.6	4,303.6	4,289.2	5.4	13.7	80.54	-650.4	297.5	659.7	641.0	18.64	35.392	
4,400.0	4,388.9	4,406.5	4,391.4	5.5	14.1	80.51	-646.9	309.0	656.3	637.3	19.04	34.475	
4,500.0	4,488.3	4,509.2	4,493.5	5.6	14.4	80.55	-643.1	319.7	652.5	633.0	19.44	33.567	
4,600.0	4,587.6	4,609.1	4,592.9	5.7	14.8	80.65	-639.3	329.3	648.5	628.6	19.83	32.693	
4,700.0	4,687.0	4,711.2	4,694.5	5.8	15.1	80.87	-635.6	337.9	644.3	624.1	20.24	31.831	
4,800.0	4,786.3	4,814.8	4,797.1	5.9	15.5	80.68	-630.4	351.1	639.6	618.9	20.65	30.974	

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 ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Reference Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ADMIRAL FEDERAL #804H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 89-MWD, 679-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,900.0	4,885.6	4,915.3	4,895.7	6.0	15.8	79.94	-624.2	369.7	634.7	613.7	21.04	30.166	
5,000.0	4,985.0	5,003.5	4,982.0	6.1	16.1	79.22	-618.6	386.8	630.0	608.6	21.40	29.434	
5,059.1	5,043.7	5,043.5	5,021.2	6.1	16.3	78.88	-617.3	394.9	629.1	607.5	21.58	29.150	
5,100.0	5,084.3	5,068.0	5,045.1	6.1	16.4	78.67	-617.1	400.0	629.5	607.9	21.69	29.028	
5,200.0	5,183.7	5,141.7	5,117.1	6.2	16.6	78.05	-618.8	415.7	634.0	612.0	21.99	28.837	
5,300.0	5,283.0	5,243.8	5,216.8	6.3	17.0	77.32	-624.5	436.7	641.4	619.0	22.40	28.631	
5,400.0	5,382.3	5,324.1	5,295.6	6.4	17.3	76.92	-629.4	451.7	649.1	626.4	22.73	28.556	
5,500.0	5,481.7	5,420.5	5,390.0	6.5	17.7	76.54	-638.2	469.0	659.5	636.4	23.14	28.503	
5,600.0	5,581.0	5,539.8	5,507.3	6.6	18.1	76.21	-647.3	488.7	668.2	644.6	23.65	28.254	
5,700.0	5,680.4	5,635.0	5,601.3	6.7	18.4	76.09	-652.8	502.5	674.5	650.5	24.06	28.036	
5,800.0	5,779.7	5,729.0	5,694.2	6.9	18.8	76.08	-660.1	515.1	682.6	658.1	24.47	27.897	
5,900.0	5,879.1	5,806.0	5,770.1	7.0	19.1	76.18	-668.8	524.7	693.6	668.8	24.80	27.963	
6,000.0	5,978.4	5,909.0	5,871.7	7.1	19.4	76.41	-681.2	536.6	705.3	680.1	25.26	27.921	
6,100.0	6,077.7	6,018.0	5,979.3	7.2	19.8	76.66	-693.2	548.7	716.0	690.2	25.75	27.805	
6,200.0	6,177.1	6,123.0	6,083.2	7.3	20.2	76.92	-703.8	559.9	725.6	699.4	26.22	27.675	
6,300.0	6,276.4	6,232.2	6,191.4	7.4	20.6	77.21	-713.8	570.8	734.2	707.5	26.71	27.489	
6,400.0	6,375.8	6,340.9	6,299.2	7.5	21.0	77.55	-722.5	580.7	741.5	714.3	27.20	27.265	
6,500.0	6,475.1	6,446.9	6,404.6	7.6	21.4	77.92	-730.0	589.5	747.8	720.1	27.67	27.022	
6,600.0	6,574.4	6,555.7	6,512.9	7.7	21.8	78.35	-736.9	597.7	753.2	725.1	28.16	26.745	
6,700.0	6,673.8	6,691.5	6,648.3	7.8	22.3	78.85	-741.7	607.5	756.0	727.3	28.74	26.306	
6,800.0	6,773.1	6,780.3	6,736.8	7.9	22.6	79.23	-744.0	613.0	757.4	728.2	29.16	25.971	
6,900.0	6,872.5	6,899.0	6,855.5	8.1	23.0	79.99	-745.9	616.9	757.5	727.8	29.68	25.519	
7,000.0	6,971.8	7,015.3	6,971.8	8.2	23.4	80.93	-746.1	617.6	755.8	725.6	30.19	25.035	
7,100.0	7,071.2	7,132.6	7,089.0	8.3	23.8	81.91	-743.1	617.6	751.6	720.9	30.69	24.494	
7,200.0	7,170.5	7,230.3	7,186.6	8.4	24.1	82.73	-739.6	617.5	746.5	715.3	31.13	23.978	
7,300.0	7,269.8	7,323.3	7,279.6	8.5	24.4	83.61	-737.0	616.3	742.2	710.6	31.57	23.510	
7,400.0	7,369.2	7,417.2	7,373.5	8.6	24.7	84.62	-735.3	613.7	738.9	706.9	32.01	23.084	
7,500.0	7,468.5	7,506.1	7,462.3	8.8	25.0	85.62	-734.6	611.0	736.8	704.4	32.44	22.714	
7,600.0	7,567.9	7,599.3	7,555.4	8.9	25.3	86.61	-734.9	608.8	736.2	703.3	32.88	22.390	
7,619.6	7,587.4	7,617.9	7,574.1	8.9	25.3	86.80	-735.1	608.5	736.2	703.2	32.97	22.330	
7,700.0	7,667.2	7,696.0	7,652.1	9.0	25.6	87.63	-735.7	606.8	736.4	703.0	33.34	22.088	
7,800.0	7,766.5	7,794.5	7,750.5	9.1	25.9	88.77	-736.8	603.5	737.0	703.2	33.80	21.801	
7,900.0	7,865.9	7,895.4	7,851.5	9.2	26.2	89.93	-737.7	600.1	737.8	703.5	34.28	21.522	
8,000.0	7,965.2	9,181.2	8,651.7	9.4	29.3	167.06	-17.7	613.9	695.3	666.2	29.09	23.900	
8,100.0	8,064.6	9,184.4	8,651.8	9.5	29.3	169.38	-14.5	613.9	696.0	666.6	29.42	20.261	
8,200.0	8,163.9	9,187.4	8,651.8	9.6	29.3	171.55	-11.5	613.9	697.1	667.3	29.79	16.688	
8,300.0	8,263.3	9,190.2	8,651.9	9.7	29.3	173.58	-8.7	613.9	698.6	668.4	30.24	13.181	
8,400.0	8,362.6	9,192.8	8,652.0	9.8	29.3	175.48	-6.1	614.0	699.1	669.3	30.70	9.747	
8,500.0	8,461.9	9,195.2	8,652.0	10.0	29.3	177.26	-3.7	614.0	699.1	669.3	31.16	6.416	
8,600.0	8,561.3	9,197.5	8,652.1	10.1	29.3	178.93	-1.4	614.0	699.1	669.3	31.62	3.388	
8,691.2	8,651.8	9,199.4	8,652.1	10.2	29.3	-179.64	0.5	614.0	699.1	669.3	32.08	1.983 Advise and Monitor, CC, ES, SF	
8,700.0	8,660.6	9,199.6	8,652.1	10.2	29.3	-179.51	0.7	614.0	699.1	669.3	32.54	1.998 Advise and Monitor	
8,800.0	8,760.0	9,201.5	8,652.1	10.3	29.3	-178.04	2.6	614.0	699.1	669.3	33.00	3.804	
8,900.0	8,859.3	9,203.4	8,652.2	10.5	29.3	-176.67	4.5	614.0	699.1	669.3	33.46	6.736	
9,000.0	8,958.6	9,205.1	8,652.2	10.6	29.3	-175.38	6.2	614.1	699.1	669.3	33.92	9.785	
9,100.0	9,058.0	9,206.8	8,652.2	10.7	29.3	-174.17	7.9	614.1	699.1	669.3	34.38	12.810	
9,200.0	9,157.3	9,208.3	8,652.3	10.8	29.3	-173.03	9.4	614.1	699.1	669.3	34.84	15.790	
9,300.0	9,256.7	9,209.8	8,652.3	11.0	29.3	-171.95	10.9	614.1	699.1	669.3	35.30	18.718	
9,400.0	9,356.0	9,211.2	8,652.3	11.1	29.3	-170.94	12.3	614.1	699.1	669.3	35.76	21.593	
9,500.0	9,455.3	9,212.5	8,652.3	11.2	29.3	-169.99	13.6	614.1	699.1	669.3	36.22	24.416	
9,600.0	9,554.7	9,213.7	8,652.3	11.4	29.3	-169.08	14.8	614.1	699.1	669.3	36.68	27.187	

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 ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Reference Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ADMIRAL FEDERAL #804H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP1	Offset TVD Reference:	Offset Datum

Offset Design ADMIRAL FEDERAL PROJECT (ATLAS 2529) - ADMIRAL FEDERAL COM 502H - OWB - AWP												Offset Site Error:	0.0 usft
Survey Program: 89-MWD, 679-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,700.0	9,654.0	9,214.9	8,652.4	11.5	29.3	-168.23	16.0	614.2	1,011.6	977.8	33.82	29.907	
9,800.0	9,753.4	9,216.0	8,652.4	11.6	29.3	-167.42	17.2	614.2	1,111.3	1,077.2	34.12	32.575	
9,900.0	9,852.7	9,217.1	8,652.4	11.8	29.3	-166.65	18.2	614.2	1,211.1	1,176.7	34.41	35.193	
10,000.0	9,952.1	9,218.2	8,652.4	11.9	29.3	-165.93	19.3	614.2	1,310.9	1,276.2	34.71	37.762	
10,100.0	10,051.4	9,219.1	8,652.4	12.0	29.3	-165.23	20.3	614.2	1,410.7	1,375.7	35.02	40.281	
10,200.0	10,150.7	9,220.1	8,652.4	12.1	29.3	-164.58	21.2	614.2	1,510.6	1,475.2	35.33	42.753	
10,300.0	10,250.1	9,221.0	8,652.4	12.3	29.3	-163.95	22.1	614.2	1,610.4	1,574.8	35.65	45.177	
10,400.0	10,349.4	9,221.9	8,652.5	12.4	29.3	-163.36	23.0	614.2	1,710.3	1,674.3	35.97	47.554	
10,500.0	10,448.8	9,222.7	8,652.5	12.5	29.3	-162.79	23.8	614.2	1,810.2	1,773.9	36.29	49.885	
10,607.0	10,555.1	9,223.5	8,652.5	12.7	29.4	-162.21	24.6	614.2	1,917.1	1,880.5	36.64	52.330	
10,625.0	10,572.9	9,223.9	8,652.5	12.8	29.4	-103.82	25.0	614.3	1,935.1	1,898.2	36.84	52.523	
10,650.0	10,597.6	9,225.0	8,652.5	12.8	29.4	-65.18	26.1	614.3	1,960.0	1,923.1	36.93	53.080	
10,675.0	10,622.2	9,226.9	8,652.5	12.8	29.4	-47.36	28.0	614.3	1,984.8	1,947.8	37.01	53.629	

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 ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Reference Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ADMIRAL FEDERAL #804H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB=25' @ 3016.5usft (TBD)

Offset Depths are relative to Offset Datum

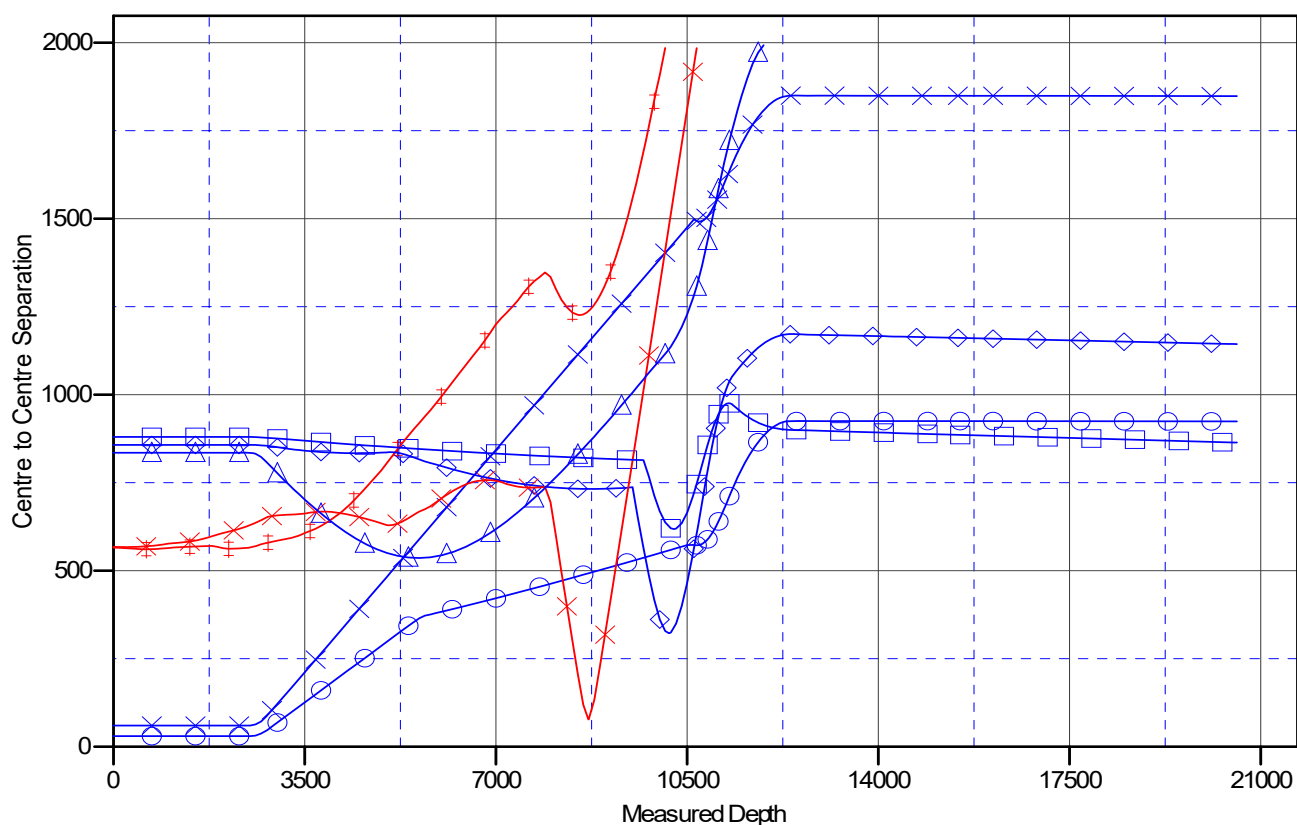
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: ADMIRAL FEDERAL #804H

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

Grid Convergence at Surface is: 0.18°

Ladder Plot



LEGEND

ADMIRAL FEDERAL COM 501H, OWB, AWP V0	ADMIRAL FEDERAL #809H, OWB, PWP1 V0	ADMIRAL FEDERAL #706H, OWB, PWP1 V0
ADMIRAL FEDERAL #804H, OWB, PWP1 V0	ADMIRAL FEDERAL COM 502H, OWB, AWP V0	
ADMIRAL FEDERAL #705H, OWB, PWP1 V0	ADMIRAL FEDERAL #704H, OWB, PWP1 V0	

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 ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Reference Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ADMIRAL FEDERAL #804H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	edm
Reference Design:	PWP1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB=25' @ 3016.5usft (TBD)

Offset Depths are relative to Offset Datum

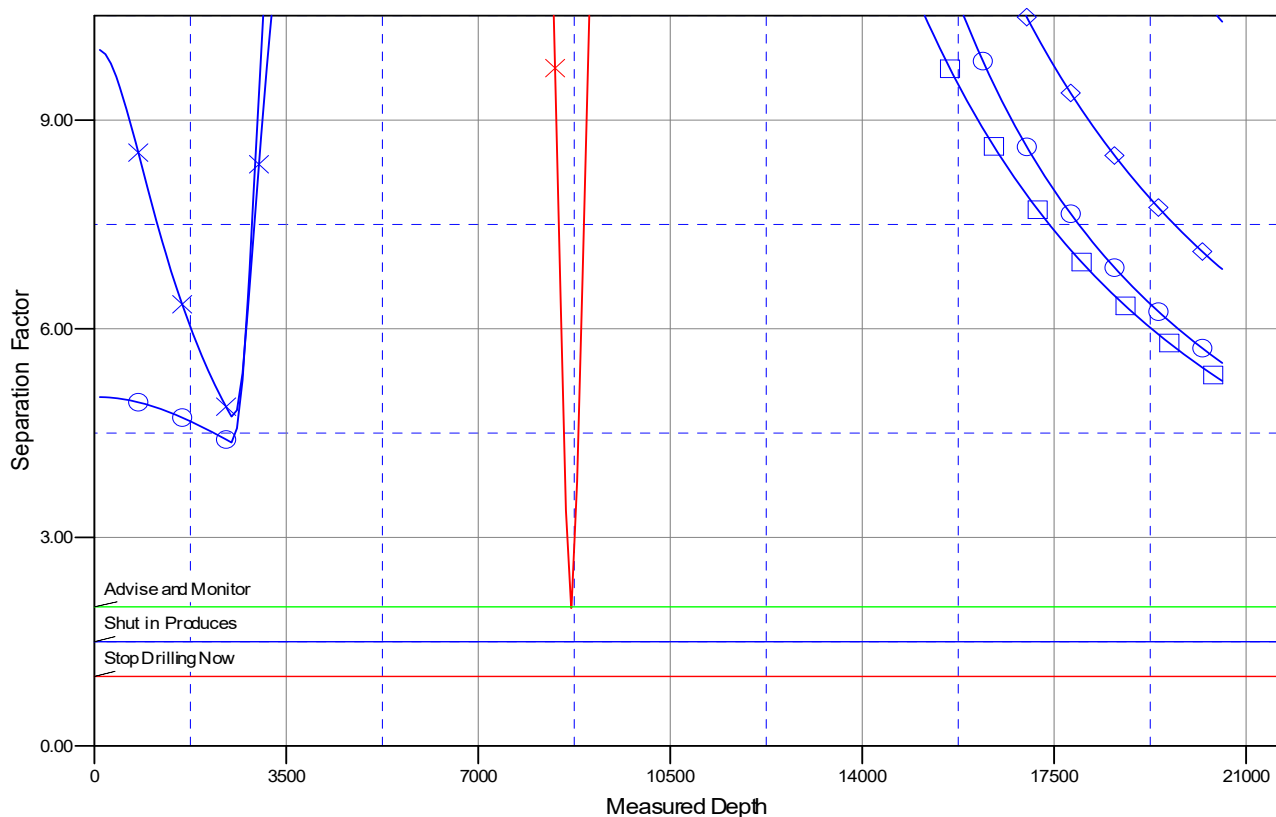
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: ADMIRAL FEDERAL #804H

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

Grid Convergence at Surface is: 0.18°

Separation Factor Plot



LEGEND

ADMIRAL FEDERAL COM 501H, OWB, AWP V0	ADMIRAL FEDERAL #809H, OWB, PWP1 V0	ADMIRAL FEDERAL #708H, OWB, PWP1 V0
ADMIRAL FEDERAL #808H, OWB, PWP1 V0	ADMIRAL FEDERAL COM 502H, OWB, AWP V0	
ADMIRAL FEDERAL #705H, OWB, PWP1 V0	ADMIRAL FEDERAL #704H, OWB, PWP1 V0	

DELAWARE BASIN WEST

ATLAS PROSPECT (NM-E)

ADMIRAL FEDERAL PROJECT (ATLAS 2529)

ADMIRAL FEDERAL #804H

OWB

Plan: PWP1

Standard Survey Report

10 December, 2020

Concho Resources LLC

Survey Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Well:	ADMIRAL FEDERAL #804H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP1	Database:	edm

Project	ATLAS PROSPECT (NM-E)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Well	ADMIRAL FEDERAL #804H				
Well Position	+N/-S	0.0 usft	Northing:	398,658.40 usft	Latitude: 32° 5' 44.070 N
	+E/-W	0.0 usft	Easting:	604,890.10 usft	Longitude: 103° 59' 40.637 W
Position Uncertainty		3.0 usft	Wellhead Elevation:	usft	Ground Level: 2,991.5 usft

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	10/20/2020	6.81	59.74	47,444.67357424

Design	PWP1				
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.0	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	7.36	

Survey Tool Program	Date	12/10/2020			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	10,609.0	PWP1 (OWB)	Standard Keeper 104	Standard Wireline Keeper ver 1.0.4	
10,609.0	20,564.8	PWP1 (OWB)	MWD+IFR1+FDIR	OWSG MWD + IFR1 + FDIR Correction	

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

Concho Resources LLC

Survey Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Well:	ADMIRAL FEDERAL #804H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP1	Database:	edm

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Build 2.00									
2,600.0	2.00	90.00	2,600.0	0.0	1.7	0.2	2.00	2.00	0.00
2,700.0	4.00	90.00	2,699.8	0.0	7.0	0.9	2.00	2.00	0.00
2,800.0	6.00	90.00	2,799.5	0.0	15.7	2.0	2.00	2.00	0.00
2,828.9	6.58	90.00	2,828.2	0.0	18.9	2.4	2.00	2.00	0.00
Start 7778.1 hold at 2828.9 MD									
2,900.0	6.58	90.00	2,898.8	0.0	27.0	3.5	0.00	0.00	0.00
3,000.0	6.58	90.00	2,998.2	0.0	38.5	4.9	0.00	0.00	0.00
3,100.0	6.58	90.00	3,097.5	0.0	49.9	6.4	0.00	0.00	0.00
3,200.0	6.58	90.00	3,196.8	0.0	61.4	7.9	0.00	0.00	0.00
3,300.0	6.58	90.00	3,296.2	0.0	72.8	9.3	0.00	0.00	0.00
3,400.0	6.58	90.00	3,395.5	0.0	84.3	10.8	0.00	0.00	0.00
3,500.0	6.58	90.00	3,494.9	0.0	95.7	12.3	0.00	0.00	0.00
3,600.0	6.58	90.00	3,594.2	0.0	107.2	13.7	0.00	0.00	0.00
3,700.0	6.58	90.00	3,693.5	0.0	118.7	15.2	0.00	0.00	0.00
3,800.0	6.58	90.00	3,792.9	0.0	130.1	16.7	0.00	0.00	0.00
3,900.0	6.58	90.00	3,892.2	0.0	141.6	18.1	0.00	0.00	0.00
4,000.0	6.58	90.00	3,991.6	0.0	153.0	19.6	0.00	0.00	0.00
4,100.0	6.58	90.00	4,090.9	0.0	164.5	21.1	0.00	0.00	0.00
4,200.0	6.58	90.00	4,190.2	0.0	175.9	22.5	0.00	0.00	0.00
4,300.0	6.58	90.00	4,289.6	0.0	187.4	24.0	0.00	0.00	0.00
4,400.0	6.58	90.00	4,388.9	0.0	198.9	25.5	0.00	0.00	0.00
4,500.0	6.58	90.00	4,488.3	0.0	210.3	27.0	0.00	0.00	0.00
4,600.0	6.58	90.00	4,587.6	0.0	221.8	28.4	0.00	0.00	0.00
4,700.0	6.58	90.00	4,687.0	0.0	233.2	29.9	0.00	0.00	0.00
4,800.0	6.58	90.00	4,786.3	0.0	244.7	31.4	0.00	0.00	0.00
4,900.0	6.58	90.00	4,885.6	0.0	256.1	32.8	0.00	0.00	0.00
5,000.0	6.58	90.00	4,985.0	0.0	267.6	34.3	0.00	0.00	0.00
5,100.0	6.58	90.00	5,084.3	0.0	279.1	35.8	0.00	0.00	0.00
5,200.0	6.58	90.00	5,183.7	0.0	290.5	37.2	0.00	0.00	0.00
5,300.0	6.58	90.00	5,283.0	0.0	302.0	38.7	0.00	0.00	0.00
5,400.0	6.58	90.00	5,382.3	0.0	313.4	40.2	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Well:	ADMIRAL FEDERAL #804H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP1	Database:	edm

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5,500.0	6.58	90.00	5,481.7	0.0	324.9	41.6	0.00	0.00	0.00	
5,600.0	6.58	90.00	5,581.0	0.0	336.3	43.1	0.00	0.00	0.00	
5,700.0	6.58	90.00	5,680.4	0.0	347.8	44.6	0.00	0.00	0.00	
5,800.0	6.58	90.00	5,779.7	0.0	359.3	46.0	0.00	0.00	0.00	
5,900.0	6.58	90.00	5,879.1	0.0	370.7	47.5	0.00	0.00	0.00	
6,000.0	6.58	90.00	5,978.4	0.0	382.2	49.0	0.00	0.00	0.00	
6,100.0	6.58	90.00	6,077.7	0.0	393.6	50.4	0.00	0.00	0.00	
6,200.0	6.58	90.00	6,177.1	0.0	405.1	51.9	0.00	0.00	0.00	
6,300.0	6.58	90.00	6,276.4	0.0	416.5	53.4	0.00	0.00	0.00	
6,400.0	6.58	90.00	6,375.8	0.0	428.0	54.8	0.00	0.00	0.00	
6,500.0	6.58	90.00	6,475.1	0.0	439.5	56.3	0.00	0.00	0.00	
6,600.0	6.58	90.00	6,574.4	0.0	450.9	57.8	0.00	0.00	0.00	
6,700.0	6.58	90.00	6,673.8	0.0	462.4	59.3	0.00	0.00	0.00	
6,800.0	6.58	90.00	6,773.1	0.0	473.8	60.7	0.00	0.00	0.00	
6,900.0	6.58	90.00	6,872.5	0.0	485.3	62.2	0.00	0.00	0.00	
7,000.0	6.58	90.00	6,971.8	0.0	496.7	63.7	0.00	0.00	0.00	
7,100.0	6.58	90.00	7,071.2	0.0	508.2	65.1	0.00	0.00	0.00	
7,200.0	6.58	90.00	7,170.5	0.0	519.7	66.6	0.00	0.00	0.00	
7,300.0	6.58	90.00	7,269.8	0.0	531.1	68.1	0.00	0.00	0.00	
7,400.0	6.58	90.00	7,369.2	0.0	542.6	69.5	0.00	0.00	0.00	
7,500.0	6.58	90.00	7,468.5	0.0	554.0	71.0	0.00	0.00	0.00	
7,600.0	6.58	90.00	7,567.9	0.0	565.5	72.5	0.00	0.00	0.00	
7,700.0	6.58	90.00	7,667.2	0.0	576.9	73.9	0.00	0.00	0.00	
7,800.0	6.58	90.00	7,766.5	0.0	588.4	75.4	0.00	0.00	0.00	
7,900.0	6.58	90.00	7,865.9	0.0	599.9	76.9	0.00	0.00	0.00	
8,000.0	6.58	90.00	7,965.2	0.0	611.3	78.3	0.00	0.00	0.00	
8,100.0	6.58	90.00	8,064.6	0.0	622.8	79.8	0.00	0.00	0.00	
8,200.0	6.58	90.00	8,163.9	0.0	634.2	81.3	0.00	0.00	0.00	
8,300.0	6.58	90.00	8,263.3	0.0	645.7	82.7	0.00	0.00	0.00	
8,400.0	6.58	90.00	8,362.6	0.0	657.1	84.2	0.00	0.00	0.00	
8,500.0	6.58	90.00	8,461.9	0.0	668.6	85.7	0.00	0.00	0.00	
8,600.0	6.58	90.00	8,561.3	0.0	680.1	87.2	0.00	0.00	0.00	
8,700.0	6.58	90.00	8,660.6	0.0	691.5	88.6	0.00	0.00	0.00	
8,800.0	6.58	90.00	8,760.0	0.0	703.0	90.1	0.00	0.00	0.00	
8,900.0	6.58	90.00	8,859.3	0.0	714.4	91.6	0.00	0.00	0.00	
9,000.0	6.58	90.00	8,958.6	0.0	725.9	93.0	0.00	0.00	0.00	
9,100.0	6.58	90.00	9,058.0	0.0	737.3	94.5	0.00	0.00	0.00	
9,200.0	6.58	90.00	9,157.3	0.0	748.8	96.0	0.00	0.00	0.00	
9,300.0	6.58	90.00	9,256.7	0.0	760.3	97.4	0.00	0.00	0.00	
9,400.0	6.58	90.00	9,356.0	0.0	771.7	98.9	0.00	0.00	0.00	
9,500.0	6.58	90.00	9,455.3	0.0	783.2	100.4	0.00	0.00	0.00	
9,600.0	6.58	90.00	9,554.7	0.0	794.6	101.8	0.00	0.00	0.00	
9,700.0	6.58	90.00	9,654.0	0.0	806.1	103.3	0.00	0.00	0.00	
9,800.0	6.58	90.00	9,753.4	0.0	817.5	104.8	0.00	0.00	0.00	

Concho Resources LLC

Survey Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Well:	ADMIRAL FEDERAL #804H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP1	Database:	edm

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,900.0	6.58	90.00	9,852.7	0.0	829.0	106.2	0.00	0.00	0.00
10,000.0	6.58	90.00	9,952.1	0.0	840.5	107.7	0.00	0.00	0.00
10,100.0	6.58	90.00	10,051.4	0.0	851.9	109.2	0.00	0.00	0.00
10,200.0	6.58	90.00	10,150.7	0.0	863.4	110.6	0.00	0.00	0.00
10,300.0	6.58	90.00	10,250.1	0.0	874.8	112.1	0.00	0.00	0.00
10,400.0	6.58	90.00	10,349.4	0.0	886.3	113.6	0.00	0.00	0.00
10,500.0	6.58	90.00	10,448.8	0.0	897.7	115.0	0.00	0.00	0.00
10,600.0	6.58	90.00	10,548.1	0.0	909.2	116.5	0.00	0.00	0.00
10,607.0	6.58	90.00	10,555.1	0.0	910.0	116.6	0.00	0.00	0.00
Start DLS 12.00 TFO -69.94									
10,700.0	14.75	44.46	10,646.5	8.5	923.7	126.8	12.00	8.79	-48.99
10,800.0	26.11	32.94	10,740.1	36.1	944.6	156.9	12.00	11.36	-11.52
10,900.0	37.85	28.18	10,824.8	81.8	971.2	205.6	12.00	11.74	-4.75
11,000.0	49.70	25.44	10,896.9	143.5	1,002.2	270.8	12.00	11.85	-2.74
11,100.0	61.60	23.53	10,953.2	218.6	1,036.2	349.5	12.00	11.90	-1.91
11,200.0	73.52	22.01	10,991.3	303.6	1,071.9	438.5	12.00	11.92	-1.52
11,300.0	85.45	20.67	11,009.5	395.1	1,107.6	533.7	12.00	11.93	-1.34
11,338.8	90.07	20.17	11,011.0	431.3	1,121.1	571.5	12.00	11.93	-1.29
Start DLS 2.00 TFO -90.00									
11,400.0	90.07	18.95	11,011.0	489.1	1,141.6	631.3	2.00	0.00	-2.00
11,500.0	90.07	16.95	11,010.8	584.2	1,172.4	729.6	2.00	0.00	-2.00
11,600.0	90.07	14.95	11,010.7	680.3	1,199.9	828.5	2.00	0.00	-2.00
11,700.0	90.07	12.95	11,010.6	777.4	1,224.0	927.8	2.00	0.00	-2.00
11,800.0	90.07	10.95	11,010.5	875.2	1,244.7	1,027.5	2.00	0.00	-2.00
11,900.0	90.07	8.95	11,010.3	973.7	1,261.9	1,127.4	2.00	0.00	-2.00
12,000.0	90.07	6.95	11,010.2	1,072.7	1,275.8	1,227.4	2.00	0.00	-2.00
12,100.0	90.07	4.95	11,010.1	1,172.2	1,286.1	1,327.3	2.00	0.00	-2.00
12,200.0	90.07	2.95	11,010.0	1,271.9	1,293.0	1,427.2	2.00	0.00	-2.00
12,300.0	90.07	0.95	11,009.9	1,371.9	1,296.4	1,526.7	2.00	0.00	-2.00
12,388.8	90.07	359.17	11,009.8	1,460.7	1,296.5	1,614.8	2.00	0.00	-2.00
Start 3069.6 hold at 12388.8 MD									
12,400.0	90.07	359.17	11,009.8	1,471.9	1,296.3	1,625.9	0.00	0.00	0.00
12,500.0	90.07	359.17	11,009.6	1,571.9	1,294.9	1,724.9	0.00	0.00	0.00
12,600.0	90.07	359.17	11,009.5	1,671.9	1,293.4	1,823.8	0.00	0.00	0.00
12,700.0	90.07	359.17	11,009.4	1,771.8	1,292.0	1,922.8	0.00	0.00	0.00
12,800.0	90.07	359.17	11,009.3	1,871.8	1,290.5	2,021.8	0.00	0.00	0.00
12,900.0	90.07	359.17	11,009.2	1,971.8	1,289.1	2,120.8	0.00	0.00	0.00
13,000.0	90.07	359.17	11,009.1	2,071.8	1,287.6	2,219.7	0.00	0.00	0.00
13,100.0	90.07	359.17	11,008.9	2,171.8	1,286.2	2,318.7	0.00	0.00	0.00
13,200.0	90.07	359.17	11,008.8	2,271.8	1,284.7	2,417.7	0.00	0.00	0.00
13,300.0	90.07	359.17	11,008.7	2,371.8	1,283.3	2,516.7	0.00	0.00	0.00
13,400.0	90.07	359.17	11,008.6	2,471.8	1,281.8	2,615.7	0.00	0.00	0.00
13,500.0	90.07	359.17	11,008.5	2,571.8	1,280.4	2,714.6	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Well:	ADMIRAL FEDERAL #804H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP1	Database:	edm

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,600.0	90.07	359.17	11,008.4	2,671.8	1,278.9	2,813.6	0.00	0.00	0.00
13,700.0	90.07	359.17	11,008.2	2,771.7	1,277.5	2,912.6	0.00	0.00	0.00
13,800.0	90.07	359.17	11,008.1	2,871.7	1,276.0	3,011.6	0.00	0.00	0.00
13,900.0	90.07	359.17	11,008.0	2,971.7	1,274.6	3,110.6	0.00	0.00	0.00
14,000.0	90.07	359.17	11,007.9	3,071.7	1,273.1	3,209.5	0.00	0.00	0.00
14,100.0	90.07	359.17	11,007.8	3,171.7	1,271.6	3,308.5	0.00	0.00	0.00
14,200.0	90.07	359.17	11,007.7	3,271.7	1,270.2	3,407.5	0.00	0.00	0.00
14,300.0	90.07	359.17	11,007.5	3,371.7	1,268.7	3,506.5	0.00	0.00	0.00
14,400.0	90.07	359.17	11,007.4	3,471.7	1,267.3	3,605.5	0.00	0.00	0.00
14,500.0	90.07	359.17	11,007.3	3,571.7	1,265.8	3,704.4	0.00	0.00	0.00
14,600.0	90.07	359.17	11,007.2	3,671.6	1,264.4	3,803.4	0.00	0.00	0.00
14,700.0	90.07	359.17	11,007.1	3,771.6	1,262.9	3,902.4	0.00	0.00	0.00
14,800.0	90.07	359.17	11,007.0	3,871.6	1,261.5	4,001.4	0.00	0.00	0.00
14,900.0	90.07	359.17	11,006.8	3,971.6	1,260.0	4,100.3	0.00	0.00	0.00
15,000.0	90.07	359.17	11,006.7	4,071.6	1,258.6	4,199.3	0.00	0.00	0.00
15,100.0	90.07	359.17	11,006.6	4,171.6	1,257.1	4,298.3	0.00	0.00	0.00
15,200.0	90.07	359.17	11,006.5	4,271.6	1,255.7	4,397.3	0.00	0.00	0.00
15,300.0	90.07	359.17	11,006.4	4,371.6	1,254.2	4,496.3	0.00	0.00	0.00
15,400.0	90.07	359.17	11,006.3	4,471.6	1,252.8	4,595.2	0.00	0.00	0.00
15,458.4	90.07	359.17	11,006.2	4,530.0	1,251.9	4,653.1	0.00	0.00	0.00
Start DLS 2.00 TFO 90.62									
15,496.3	90.06	359.93	11,006.2	4,567.9	1,251.6	4,690.6	2.00	-0.02	2.00
Start 5068.4 hold at 15496.4 MD									
15,500.0	90.06	359.93	11,006.2	4,571.6	1,251.6	4,694.3	0.00	0.00	0.00
15,600.0	90.06	359.93	11,006.1	4,671.6	1,251.5	4,793.4	0.00	0.00	0.00
15,700.0	90.06	359.93	11,006.0	4,771.6	1,251.4	4,892.6	0.00	0.00	0.00
15,800.0	90.06	359.93	11,005.8	4,871.6	1,251.3	4,991.7	0.00	0.00	0.00
15,900.0	90.06	359.93	11,005.7	4,971.6	1,251.1	5,090.9	0.00	0.00	0.00
16,000.0	90.06	359.93	11,005.6	5,071.6	1,251.0	5,190.1	0.00	0.00	0.00
16,100.0	90.06	359.93	11,005.5	5,171.6	1,250.9	5,289.2	0.00	0.00	0.00
16,200.0	90.06	359.93	11,005.4	5,271.6	1,250.7	5,388.4	0.00	0.00	0.00
16,300.0	90.06	359.93	11,005.3	5,371.6	1,250.6	5,487.5	0.00	0.00	0.00
16,400.0	90.06	359.93	11,005.2	5,471.6	1,250.5	5,586.7	0.00	0.00	0.00
16,500.0	90.06	359.93	11,005.1	5,571.6	1,250.4	5,685.9	0.00	0.00	0.00
16,600.0	90.06	359.93	11,005.0	5,671.6	1,250.2	5,785.0	0.00	0.00	0.00
16,700.0	90.06	359.93	11,004.9	5,771.6	1,250.1	5,884.2	0.00	0.00	0.00
16,800.0	90.06	359.93	11,004.8	5,871.6	1,250.0	5,983.3	0.00	0.00	0.00
16,900.0	90.06	359.93	11,004.7	5,971.6	1,249.9	6,082.5	0.00	0.00	0.00
17,000.0	90.06	359.93	11,004.6	6,071.6	1,249.7	6,181.6	0.00	0.00	0.00
17,100.0	90.06	359.93	11,004.5	6,171.6	1,249.6	6,280.8	0.00	0.00	0.00
17,200.0	90.06	359.93	11,004.4	6,271.6	1,249.5	6,380.0	0.00	0.00	0.00
17,300.0	90.06	359.93	11,004.3	6,371.6	1,249.3	6,479.1	0.00	0.00	0.00
17,400.0	90.06	359.93	11,004.2	6,471.6	1,249.2	6,578.3	0.00	0.00	0.00
17,500.0	90.06	359.93	11,004.1	6,571.6	1,249.1	6,677.4	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Well:	ADMIRAL FEDERAL #804H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP1	Database:	edm

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
17,600.0	90.06	359.93	11,004.0	6,671.6	1,249.0	6,776.6	0.00	0.00	0.00
17,700.0	90.06	359.93	11,003.9	6,771.6	1,248.8	6,875.8	0.00	0.00	0.00
17,800.0	90.06	359.93	11,003.8	6,871.6	1,248.7	6,974.9	0.00	0.00	0.00
17,900.0	90.06	359.93	11,003.7	6,971.6	1,248.6	7,074.1	0.00	0.00	0.00
18,000.0	90.06	359.93	11,003.6	7,071.6	1,248.5	7,173.2	0.00	0.00	0.00
18,100.0	90.06	359.93	11,003.5	7,171.6	1,248.3	7,272.4	0.00	0.00	0.00
18,200.0	90.06	359.93	11,003.4	7,271.6	1,248.2	7,371.6	0.00	0.00	0.00
18,300.0	90.06	359.93	11,003.3	7,371.6	1,248.1	7,470.7	0.00	0.00	0.00
18,400.0	90.06	359.93	11,003.2	7,471.6	1,248.0	7,569.9	0.00	0.00	0.00
18,500.0	90.06	359.93	11,003.1	7,571.6	1,247.8	7,669.0	0.00	0.00	0.00
18,600.0	90.06	359.93	11,003.0	7,671.6	1,247.7	7,768.2	0.00	0.00	0.00
18,700.0	90.06	359.93	11,002.9	7,771.6	1,247.6	7,867.4	0.00	0.00	0.00
18,800.0	90.06	359.93	11,002.8	7,871.6	1,247.4	7,966.5	0.00	0.00	0.00
18,900.0	90.06	359.93	11,002.7	7,971.6	1,247.3	8,065.7	0.00	0.00	0.00
19,000.0	90.06	359.93	11,002.6	8,071.6	1,247.2	8,164.8	0.00	0.00	0.00
19,100.0	90.06	359.93	11,002.5	8,171.6	1,247.1	8,264.0	0.00	0.00	0.00
19,200.0	90.06	359.93	11,002.4	8,271.6	1,246.9	8,363.1	0.00	0.00	0.00
19,300.0	90.06	359.93	11,002.3	8,371.6	1,246.8	8,462.3	0.00	0.00	0.00
19,400.0	90.06	359.93	11,002.2	8,471.6	1,246.7	8,561.5	0.00	0.00	0.00
19,500.0	90.06	359.93	11,002.1	8,571.6	1,246.6	8,660.6	0.00	0.00	0.00
19,600.0	90.06	359.93	11,002.0	8,671.5	1,246.4	8,759.8	0.00	0.00	0.00
19,700.0	90.06	359.93	11,001.9	8,771.5	1,246.3	8,858.9	0.00	0.00	0.00
19,800.0	90.06	359.93	11,001.8	8,871.5	1,246.2	8,958.1	0.00	0.00	0.00
19,900.0	90.06	359.93	11,001.7	8,971.5	1,246.0	9,057.3	0.00	0.00	0.00
20,000.0	90.06	359.93	11,001.6	9,071.5	1,245.9	9,156.4	0.00	0.00	0.00
20,100.0	90.06	359.93	11,001.5	9,171.5	1,245.8	9,255.6	0.00	0.00	0.00
20,200.0	90.06	359.93	11,001.4	9,271.5	1,245.7	9,354.7	0.00	0.00	0.00
20,300.0	90.06	359.93	11,001.3	9,371.5	1,245.5	9,453.9	0.00	0.00	0.00
20,400.0	90.06	359.93	11,001.2	9,471.5	1,245.4	9,553.1	0.00	0.00	0.00
20,500.0	90.06	359.93	11,001.1	9,571.5	1,245.3	9,652.2	0.00	0.00	0.00
20,564.8	90.06	359.93	11,001.0	9,636.3	1,245.2	9,716.4	0.00	0.00	0.00
TD at 20564.8									

Concho Resources LLC

Survey Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well ADMIRAL FEDERAL #804H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=25' @ 3016.5usft (TBD)
Site:	ADMIRAL FEDERAL PROJECT (ATLAS 2529)	MD Reference:	KB=25' @ 3016.5usft (TBD)
Well:	ADMIRAL FEDERAL #804H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP1	Database:	edm

Design Targets

Target Name

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
LTP (ADMIRAL FED C - plan misses target center by 0.8usft at 20434.8usft MD (11001.1 TVD, 9506.3 N, 1245.4 E) - Point	0.00	0.01	11,001.0	9,506.3	1,246.2	408,164.70	606,136.30	32° 7' 18.109 N	103° 59' 25.799 W
PBHL (ADMIRAL FED - plan hits target center - Rectangle (sides W100.0 H5,121.0 D20.0)	0.06	179.94	11,001.0	9,636.3	1,245.2	408,294.70	606,135.30	32° 7' 19.396 N	103° 59' 25.805 W
POI 1 (ADMIRAL FED - plan hits target center - Rectangle (sides W100.0 H4,973.0 D20.0)	0.06	179.17	11,006.2	4,530.0	1,251.9	403,188.38	606,142.04	32° 6' 28.862 N	103° 59' 25.916 W
FTP (ADMIRAL FED # - plan misses target center by 664.0usft at 10900.0usft MD (10824.8 TVD, 81.8 N, 971.2 E) - Circle (radius 50.0)	0.00	0.00	11,011.0	-449.1	1,323.9	398,209.30	606,214.00	32° 5' 39.584 N	103° 59' 25.263 W

Plan Annotations

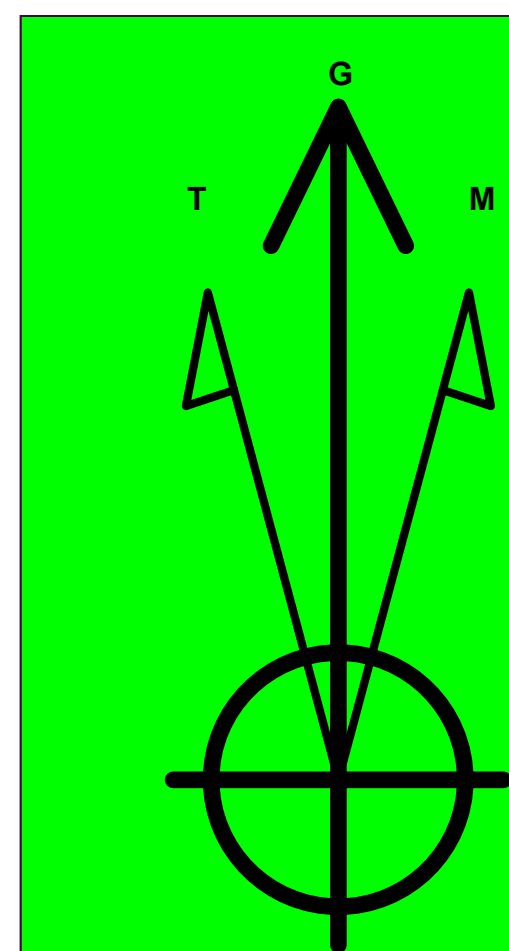
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2500	2500	0	0	Start Build 2.00
2829	2828	0	19	Start 7778.1 hold at 2828.9 MD
10,607	10,555	0	910	Start DLS 12.00 TFO -69.94
11,339	11,011	431	1121	Start DLS 2.00 TFO -90.00
12,389	11,010	1461	1296	Start 3069.6 hold at 12388.8 MD
15,458	11,006	4530	1252	Start DLS 2.00 TFO 90.62
15,496	11,006	4568	1252	Start 5068.4 hold at 15496.4 MD
20,565	11,001	9636	1245	TD at 20564.8

Checked By: _____ Approved By: _____ Date: _____



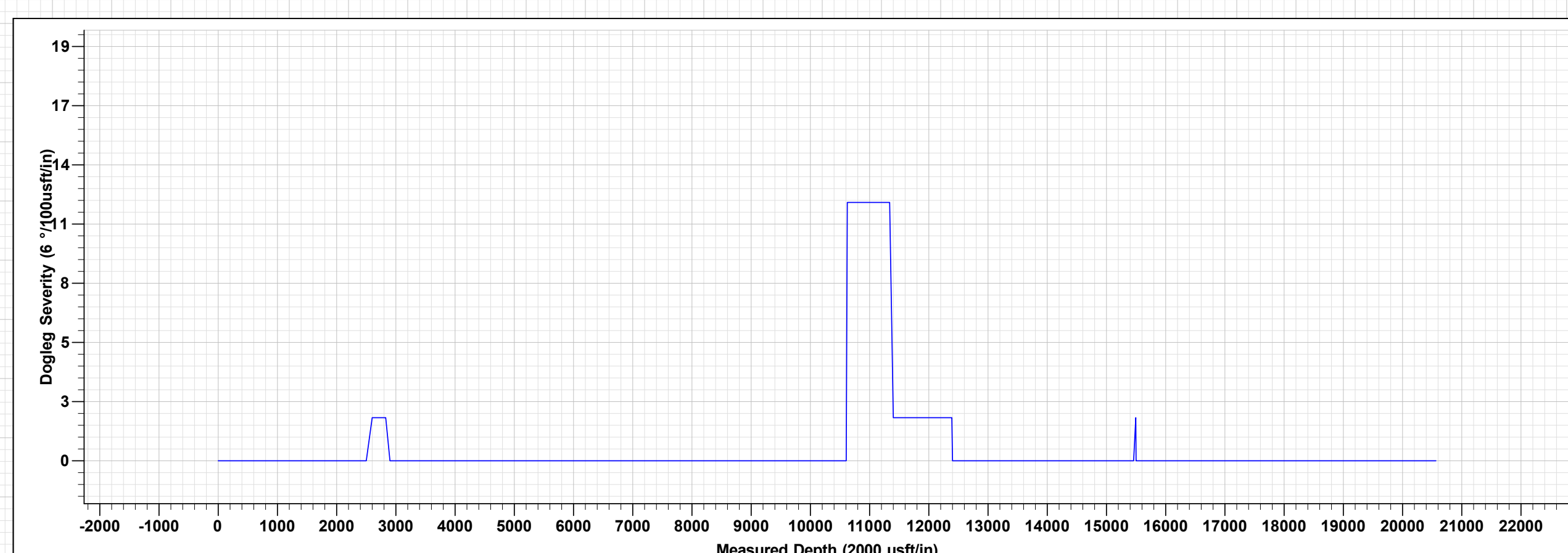
WELL DETAILS: ADMIRAL FEDERAL #804H

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	398658.40	604890.10	32° 5' 44.070 N	103° 59' 40.637 W

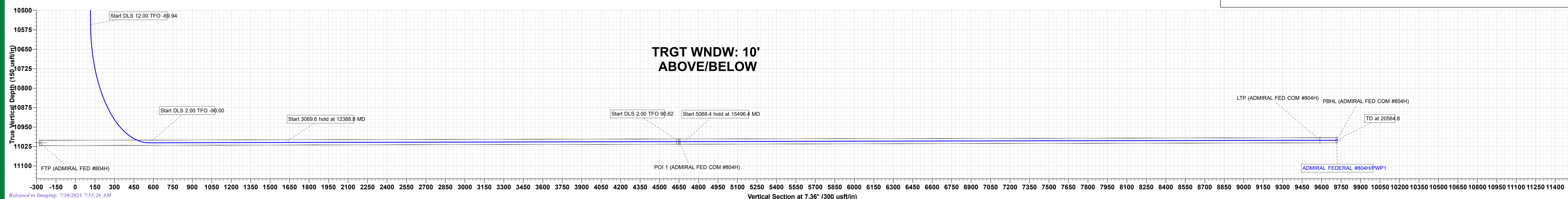
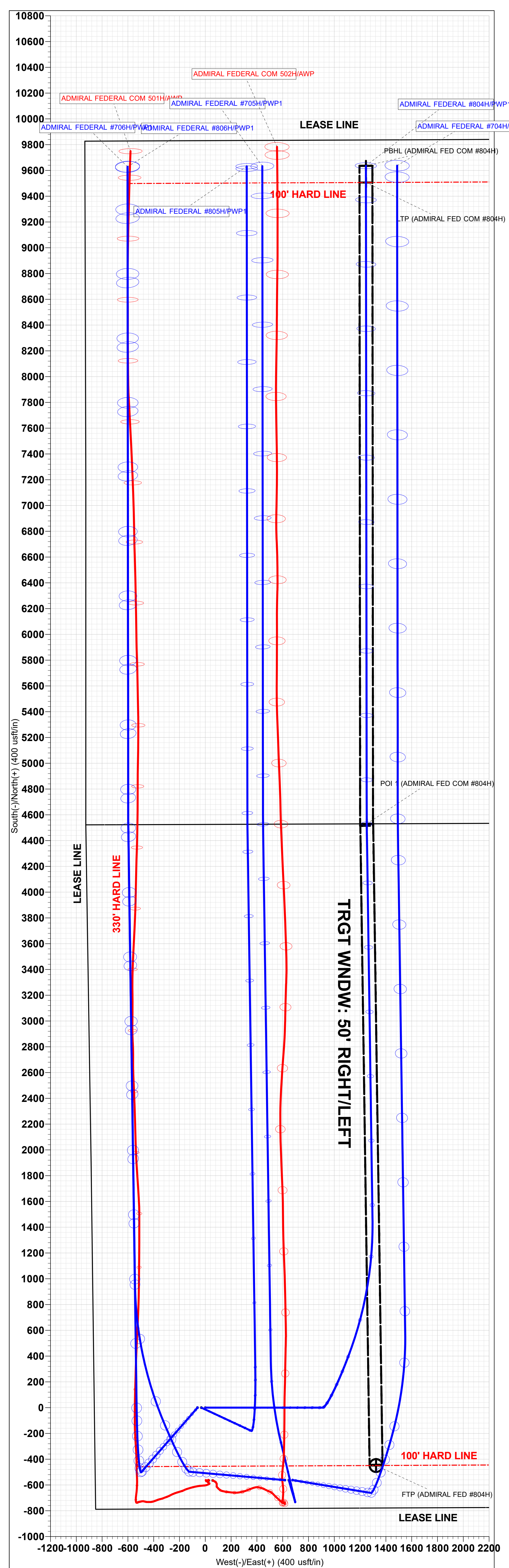
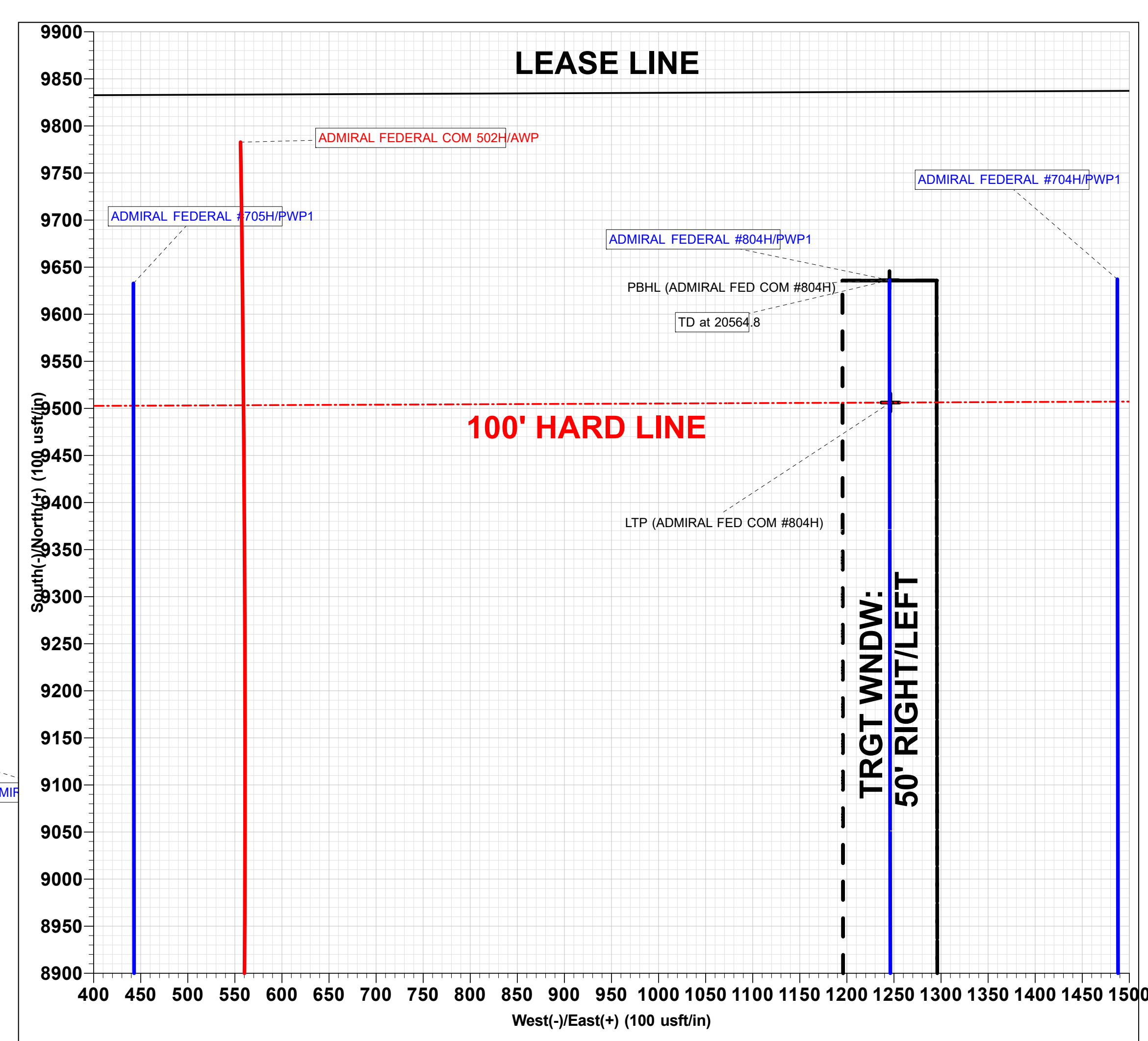
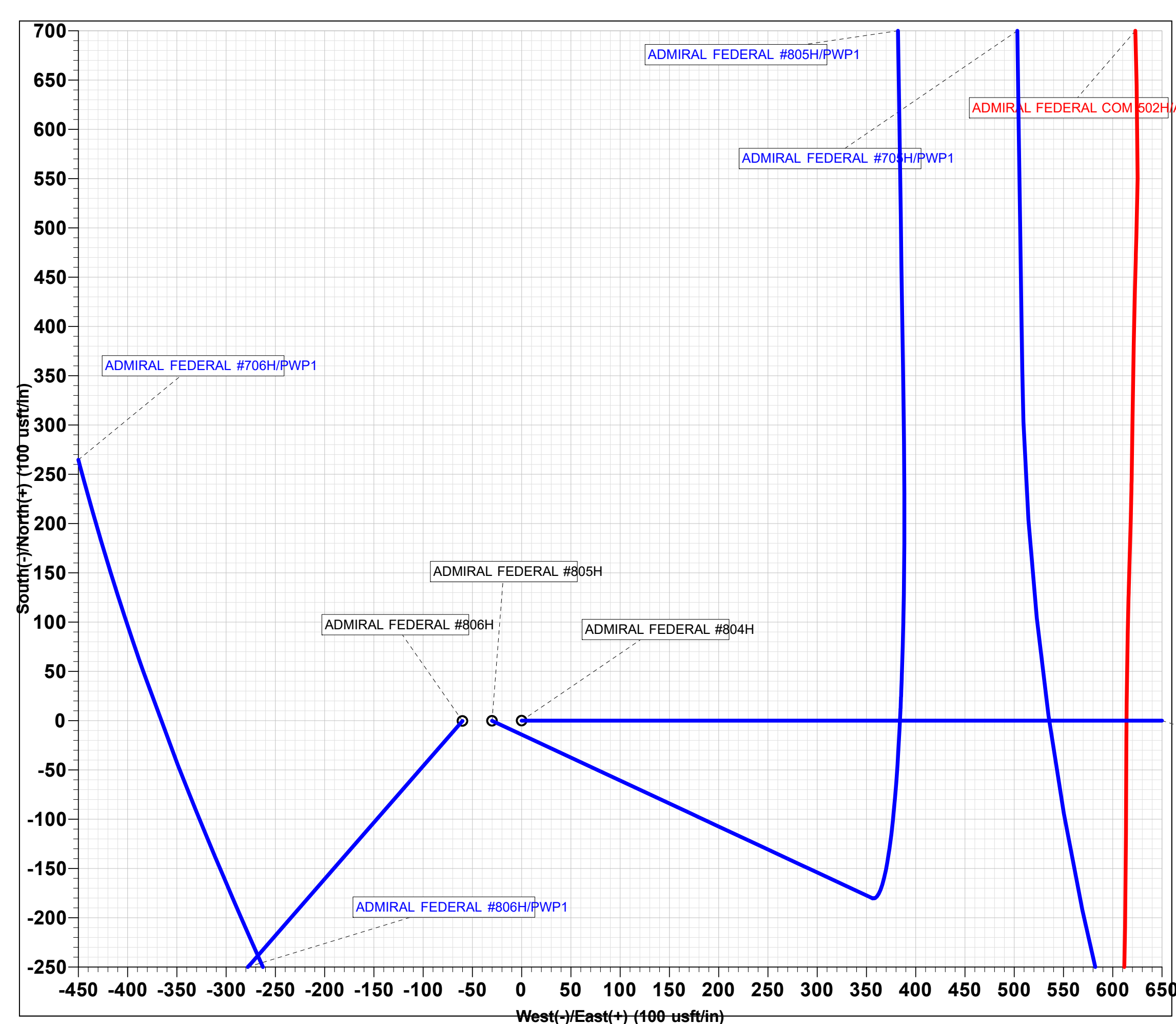
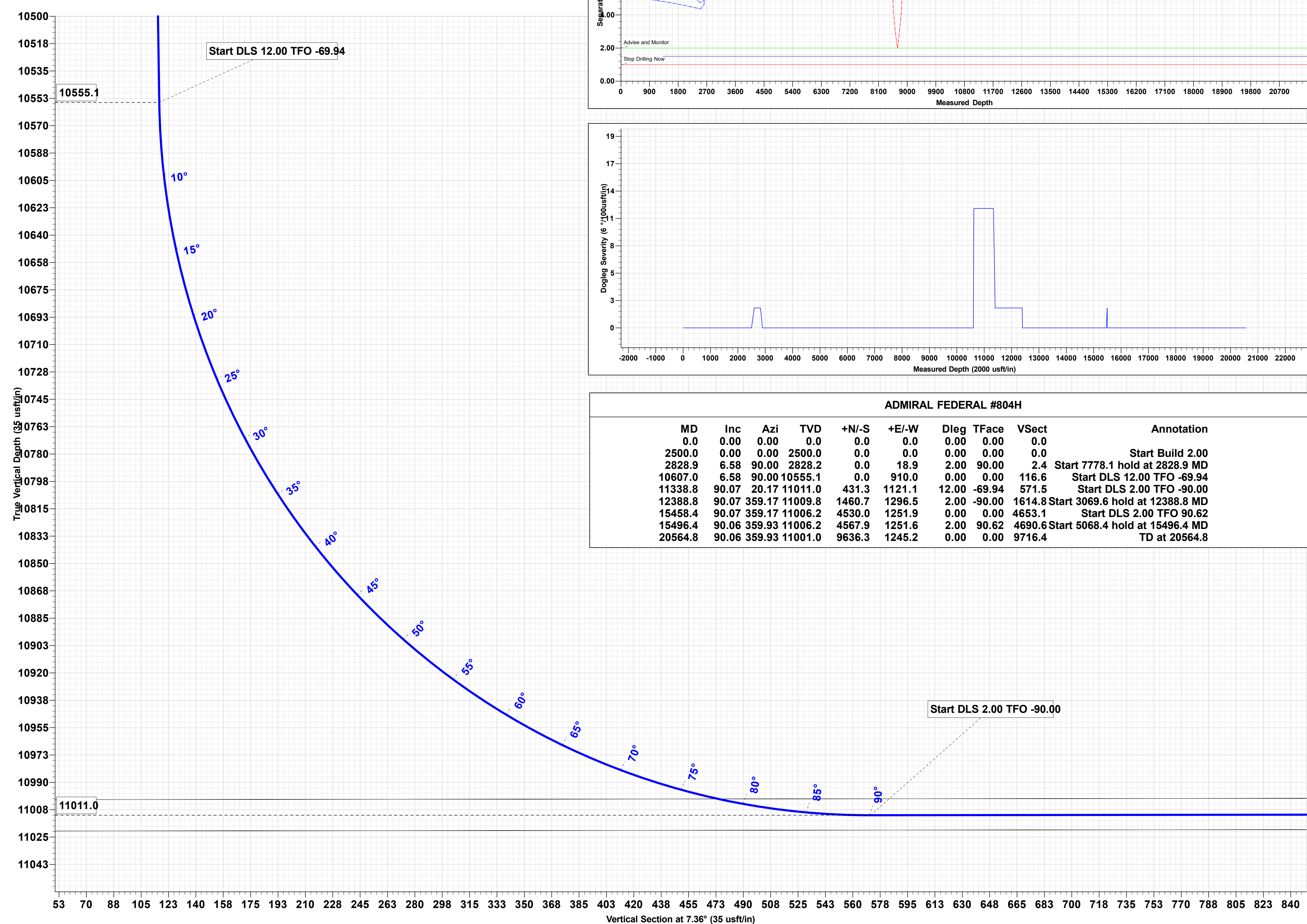


**Magnetic Field
Strength: 47444.7nT
Dip Angle: 59.74°
Date: 10/20/2020
Model: IGRF2020**

DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
LTP (ADMIRAL FED COM #804H)	11001.0	9506.3	1246.2	408614.70	606136.30	32° 7' 18.109 N	103° 59' 25.799 W
PBHL (ADMIRAL FED COM #804H)	11001.0	9636.3	1245.2	406294.70	606135.30	32° 7' 19.396 N	103° 59' 25.805 W
POI 1 (ADMIRAL FED COM #804H)	11006.2	4530.0	1251.9	403168.38	606142.04	32° 6' 28.862 N	103° 59' 25.916 W
FED (ADMIRAL FED #804H)	11011.0	-449.1	1323.9	398209.30	606214.00	32° 5' 39.554 N	103° 59' 25.263 W



ADMIRAL FEDERAL #804H									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
0.0	0.00	0.00	0.00	0.0	0.0	0.00	0.00	0.0	
2500.0	0.00	0.00	2500.0	0.0	0.0	0.00	0.00	0.0	
2628.9	6.58	90.00	2628.2	0.0	18.1	2.4	0.00	0.0	Start 7778.1 hold at 2628.9 M D
10607.0	6.58	90.00	10555.1	0.0	910.0	0.00	0.00	116.6	Start DLS 12.00 TFO -69.94
11338.8	90.07	20.17	11011.0	431.3	1121.1	12.00	-69.94	571.5	Start DLS 2.00 TFO -90.00
12388.8	90.07	359.17	11009.8	1460.7	1296.5	2.00	0.00	1614.8	Start 3069.6 hold at 12388.8 M D
15458.4	90.07	359.17	11006.2	4530.0	1251.9	0.00	0.00	4653.1	Start DLS 2.00 TFO 90.62
15496.4	90.06	359.93	11006.2	4567.9	1251.5	2.00	90.62	4690.6	Start 5068.4 hold at 15496.4 M D
20564.8	90.06	359.93	11001.0	9636.3	1245.2	0.00	0.00	9716.4	TD at 20564.8



TRGT WNDW: 10'
ABOVE/BELOW

The diagram shows a horizontal timeline with a vertical line indicating a specific point in time. Labels include 'LTP (ADMIRAL FED COM #804H)', 'PBHL (ADMIRAL FED COM #804H)', 'TD at 20564.8', and 'ADMIRAL FEDERAL #804H/WP1'.

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	COG
LEASE NO.:	NMNM115414
LOCATION:	Section 28, T.25 S., R.29 E., NMPM
COUNTY:	Eddy County, New Mexico

WELL NAME & NO.:	Admiral Fed Com 804H
SURFACE HOLE FOOTAGE:	785'/S & 860'/W
BOTTOM HOLE FOOTAGE:	200'/N & 2178'/W

COA

H2S	☐ Yes	☒ No	
Potash	☒ None	☐ Secretary	☐ R-111-P
Cave/Karst Potential	☐ Low	☒ Medium	☐ High
Cave/Karst Potential	☐ Critical		
Variance	☐ None	☒ Flex Hose	☐ Other
Wellhead	☐ Conventional	☒ Multibowl	☐ Both
Other	☐ 4 String Area	☐ Capitan Reef	☐ WIPP
Other	☐ Fluid Filled	☐ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	☒ COM	☐ Unit

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **10-3/4** inch surface casing shall be set at approximately **610** feet (a minimum of **70 feet (Eddy County)** into the Rustler Anhydrite and above the salt) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8**

hours or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)

- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the 7-5/8 inch intermediate casing is:
- Cement to surface. If cement does not circulate see B.1.a, c-d above.
- Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**
- ❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
- Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

1. **Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).**
2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M) psi**.
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

D. SPECIAL REQUIREMENT (S)**Communitization Agreement**

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

☒ Eddy County

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
(575) 361-2822

☒ Lea County

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)
393-3612

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.

- Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
 3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. 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. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.

- c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
 - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
- a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).
 - c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
 - d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
 - e. The results of the test shall be reported to the appropriate BLM office.

- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

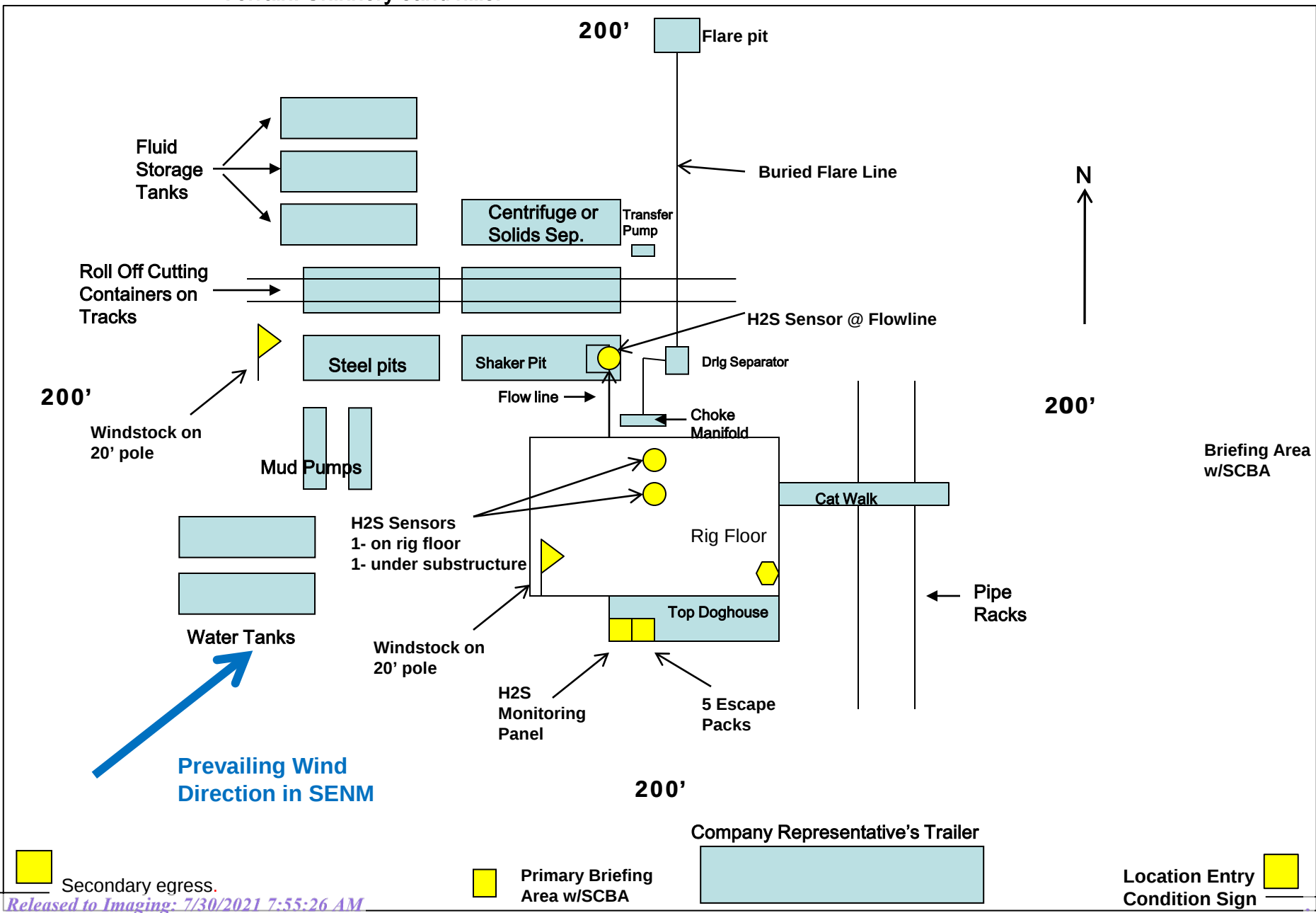
All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

ZS 063021

COC Operating LLC
H₂S Equipment Schematic
Terrain: Shinnery sand hills.

Well pad will be 400' x 400'
with cellar in center of pad



COG OPERATING LLC
HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. HYDROGEN SULFIDE TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

- a. The hazards and characteristics of hydrogen sulfide (H₂S).
- b. The proper use and maintenance of personal protective equipment and life support systems.
- c. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
- d. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

- a. The effects of H₂S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
- b. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
- c. The contents and requirements of the H₂S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H₂S zone (within 3 days or 500 feet) and weekly H₂S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

2. H₂S SAFETY EQUIPMENT AND SYSTEMS

Note: All H₂S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H₂S. If H₂S greater than 100 ppm is encountered in the gas stream we will shut in and install H₂S equipment.

- a. Well Control Equipment:
 - Flare line.
 - Choke manifold with remotely operated choke.
 - Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
 - Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head.

- b. Protective equipment for essential personnel:
Mark II Surviveair 30-minute units located in the dog house and at briefing areas.
- c. H2S detection and monitoring equipment:
2 - portable H2S monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 ppm are reached.
- d. Visual warning systems:
Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.
- e. Mud Program:
The mud program has been designed to minimize the volume of H2S circulated to the surface.
- f. Metallurgy:
All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.
- g. Communication:
Company vehicles equipped with cellular telephone.

COG OPERATING LLC has conducted a review to determine if an H2S contingency plan is required for the above referenced well. We were able to conclude that any potential hazardous volume would be minimal. H2S concentrations of wells in this area from surface to TD are low enough; therefore, we do not believe that an H2S contingency plan is necessary.

W A R N I N G

**YOU ARE ENTERING AN H₂S AREA
AUTHORIZED PERSONNEL ONLY**

- 1. BEARDS OR CONTACT LENSES NOT ALLOWED***
- 2. HARD HATS REQUIRED***
- 3. SMOKING IN DESIGNATED AREAS ONLY***
- 4. BE WIND CONSCIOUS AT ALL TIMES***
- 5. CK WITH COG OPERATING LLC FOREMAN AT MAIN OFFICE***

COG OPERATING LLC

1-575-748-6940

EMERGENCY CALL LIST

	<u>OFFICE</u>	<u>MOBILE</u>
COG OPERATING LLC OFFICE	575-748-6940	
SETH WILD	432-683-7443	432-528-3633
WALTER ROYE	575-748-6940	432-934-1886

EMERGENCY RESPONSE NUMBERS

	<u>OFFICE</u>
STATE POLICE	575-748-9718
EDDY COUNTY SHERIFF	575-746-2701
EMERGENCY MEDICAL SERVICES (AMBULANCE)	911 or 575-746-2701
EDDY COUNTY EMERGENCY MANAGEMENT (HARRY BURGESS)	575-887-9511
STATE EMERGENCY RESPONSE CENTER (SERC)	575-476-9620
CARLSBAD POLICE DEPARTMENT	575-885-2111
CARLSBAD FIRE DEPARTMENT	575-885-3125
NEW MEXICO OIL CONSERVATION DIVISION	575-748-1283
INDIAN FIRE & SAFETY	800-530-8693
HALLIBURTON SERVICES	800-844-8451

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 38747

COMMENTS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 38747
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

COMMENTS

Created By	Comment	Comment Date
kpickford	KP GEO Review 7/29/2021	7/29/2021

District I

1625 N. French Dr., Hobbs, NM 88240
 Phone:(575) 393-6161 Fax:(575) 393-0720

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CONDITIONS

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Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 38747
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
kpickford	Notify OCD 24 hours prior to casing & cement	7/29/2021
kpickford	Will require a File As Drilled C-102 and a Directional Survey with the C-104	7/29/2021
kpickford	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	7/29/2021
kpickford	Cement is required to circulate on both surface and intermediate1 strings of casing	7/29/2021
kpickford	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	7/29/2021