

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

Form C-101
August 1, 2011

Permit 285670

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701		2. OGRID Number 229137
		3. API Number 30-015-47347
4. Property Code 328970	5. Property Name Boo Radley Com	6. Well No. 701H

7. Surface Location

UL - Lot O	Section 16	Township 26S	Range 28E	Lot Idn O	Feet From 200	N/S Line S	Feet From 1490	E/W Line E	County Eddy
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8. Proposed Bottom Hole Location

UL - Lot H	Section 33	Township 26S	Range 28E	Lot Idn 4	Feet From 200	N/S Line S	Feet From 330	E/W Line E	County Eddy
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9. Pool Information

PURPLE SAGE;WOLFCAMP (GAS)	98220
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Additional Well Information

11. Work Type New Well	12. Well Type GAS	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 2994
16. Multiple N	17. Proposed Depth 22142	18. Formation Wolfcamp	19. Contractor	20. Spud Date 1/1/2021
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	14.375	10.375	45.5	610	510	0
Int1	9.875	7.625	29.7	8730	1050	0
Prod	6.375	5.5	23	22142	1750	8230

Casing/Cement Program: Additional Comments

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22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5000	5000	Cameron

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒ if applicable.	OIL CONSERVATION DIVISION	
Signature:		
Printed Name: Electronically filed by Diane Kuykendall	Approved By: Scott Cox	
Title: Production Accounting Director	Title: Petroleum Engineer Supervisor	
Email Address: dkuykendall@concho.com	Approved Date: 9/25/2020	Expiration Date: 9/25/2022
Date: 8/18/2020	Phone: 432-685-4372	Conditions of Approval Attached

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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 BOO RADLEY COM	Well Number 701H
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 2993.9'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	16	26-S	28-E		200	SOUTH	1490	EAST	EDDY

Bottom Hole Location If Different From Surface

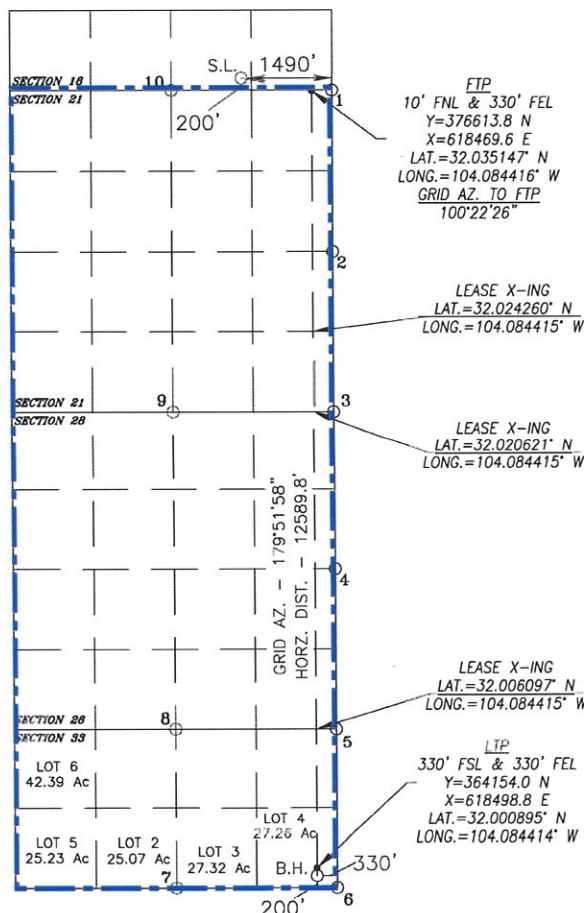
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
4	33	26-S	28-E		200	SOUTH	330	EAST	EDDY
Dedicated Acres 1547.24	Joint or Infill	Consolidation Code	Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

NAD 83 NME
SURFACE LOCATION
Y=376827.7 N
X=617301.3 E
LAT.=32.035742° N
LONG.=104.088185° W

POINT LEGEND	
1	Y=376622.7 N X=618799.6 E
2	Y=373976.1 N X=618810.7 E
3	Y=371328.9 N X=618821.8 E
4	Y=368688.3 N X=618819.8 E
5	Y=366046.7 N X=618824.5 E
6	Y=363825.7 N X=618829.5 E
7	Y=363813.8 N X=615965.2 E
8	Y=366042.7 N X=615960.0 E
9	Y=371335.2 N X=616078.1 E
10	Y=376631.8 N X=616063.7 E

NAD 83 NME
PROPOSED BOTTOM
HOLE LOCATION
Y=364024.0 N
X=618499.1 E
LAT.=32.000538° N
LONG.=104.084414° 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.

Signature: Stan Wagner Date: 8/18/20

Printed Name: Stan Wagner

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.

JULY 17, 2020

Date of Survey

Signature & Seal of Professional Surveyor



7/28/20

Certificate No. CHAD HARCROW 17777
W.O. # 20-959 DRAWN BY: AH

Intent ☒ As Drilled ☐API #
30-015

Operator Name:	Property Name:	Well Number
COG Operating LLC	Boo Radley Com	701H

Kick Off Point (KOP)

UL O	Section 16	Township 26S	Range 28E	Lot	Feet	From N/S	Feet	From E/W	County Eddy
Latitude					Longitude			NAD 83	

First Take Point (FTP)

UL A	Section 21	Township 26S	Range 28E	Lot	Feet 10	From N/S North	Feet 330	From E/W East	County Eddy
Latitude 32.035147					Longitude -104.084416			NAD NAD 83	

Last Take Point (LTP)

UL	Section 33	Township 26S	Range 28E	Lot 4	Feet 330	From N/S South	Feet 330	From E/W East	County Eddy
Latitude 32.000895					Longitude -104.084414			NAD 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:	Property Name:		Well Number
COG Operating LLC	Boo Radley Com		704H

KZ 06/29/2018

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

GAS CAPTURE PLAN

Date: 9/25/2020

☒ Original

Operator & OGRID No.: [229137] COG OPERATING LLC

☐ Amended - Reason for
Amendment: _____

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomple to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
Boo Radley Com #701H	30-015-47347	O-16-26S-28E	0200S 1490E	5700	None	Plant Located in Sec 35 Blk 57 T2 Cullberson County Texas

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to ETC FIELD SERVICES LLC and will be connected to ETC FIELD SERVICES LLC Low Pressure gathering system located in Eddy County, New Mexico. It will require 0' of pipeline to connect the facility to Low Pressure gathering system. COG OPERATING LLC provides (periodically) to ETC FIELD SERVICES LLC a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, COG OPERATING LLC and ETC FIELD SERVICES LLC have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at ETC FIELD SERVICES LLC Processing Plant located in Sec. 16, Twn. 26S, Rng. 28E, Eddy County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on ETC FIELD SERVICES LLC system at that time. Based on current information, it is COG OPERATING LLC's belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
 - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease
 - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
 - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

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Form APD Comments

Permit 285670

PERMIT COMMENTS

Operator Name and Address: COG OPERATING LLC [229137] 600 W Illinois Ave Midland, TX 79701		API Number: 30-015-47347
		Well: Boo Radley Com #701H
Created By	Comment	Comment Date

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Form APD Conditions

Permit 285670

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: COG OPERATING LLC [229137] 600 W Illinois Ave Midland, TX 79701	API Number: 30-015-47347
	Well: Boo Radley Com #701H

OCD Reviewer	Condition
ksimmons	Will require a directional survey with the C-104
ksimmons	Cement is required to circulate on both surface and intermediate1 strings of casing
ksimmons	Will require a administrative order for non-standard location prior to placing the well on production.
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
kpickford	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud 2)- Drilling Sundries Form C-103 (Casing and Cement test are to be submitted within 10 days 3)- Completion Reports & Logs are to be submitted within 45 days
kpickford	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud
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.

Boo Radley Com 701H

Casing and Cement

<u>String</u>	<u>Hole Size</u>	<u>Csg OD</u>	<u>PPE</u>	<u>Depth</u>	<u>Sx Cement</u>	<u>TOC</u>
Surface	14 3/4"	10 3/4"	45.5#	610'	510	0'
Intermediate	9-7/8"	7-5/8"	29.7#	8,730'	1,050	0'
Production	6-3/4"	5-1/2"	23#	22,142'	1,750	8,230'

Well Plan

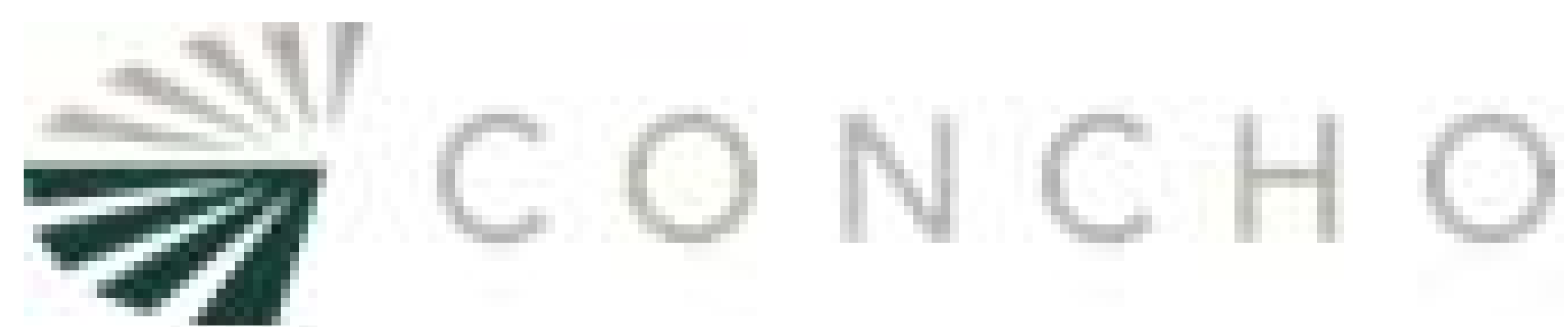
Drill 14-3/4" hole to ~610' w/ fresh water. Run 10-3/4" 45.5# J-55 BTC casing to TD and cement to surface in one stage.

Drill 9-7/8" hole to ~8,730' with cut brine emulsion. Run 7-5/8 29.7# L-80 BTC to TD and cement to surface in one stage.

Drill 6-3/4" vertical hole, curve & lateral to 22,142' with OBM. Run 5-1/2" 23# P110 Talon HTQ casing from TD to surface and cement to 8,230' in one stage.

Well Control

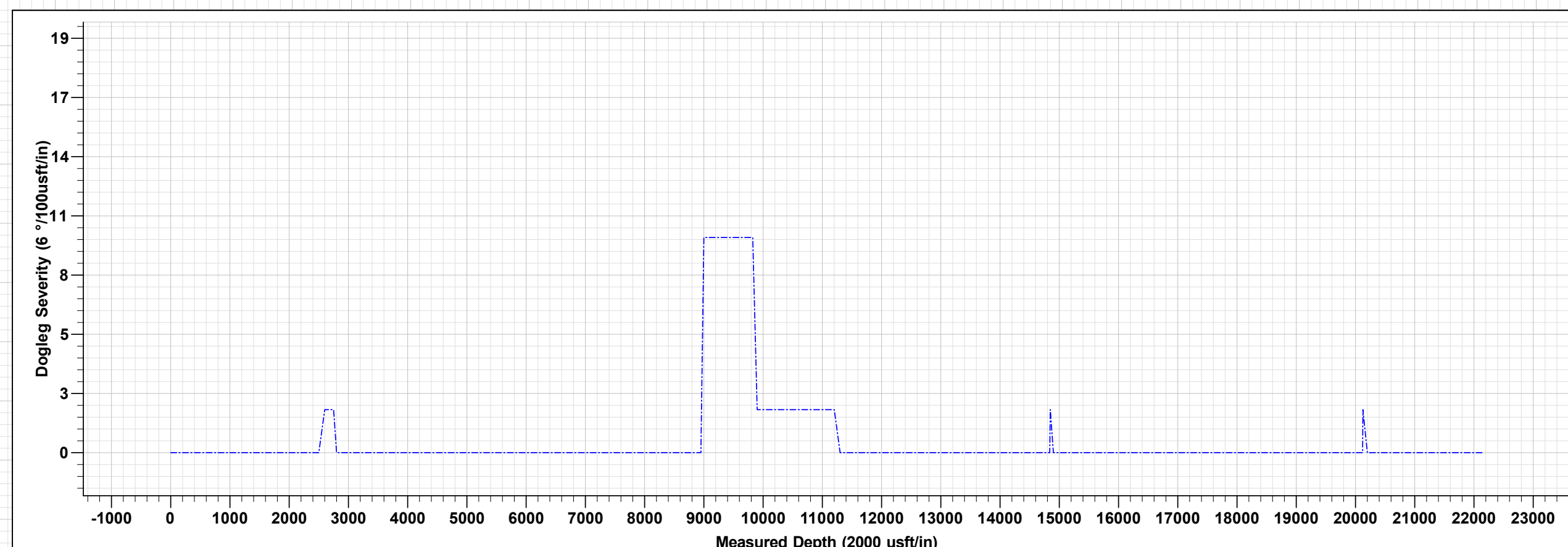
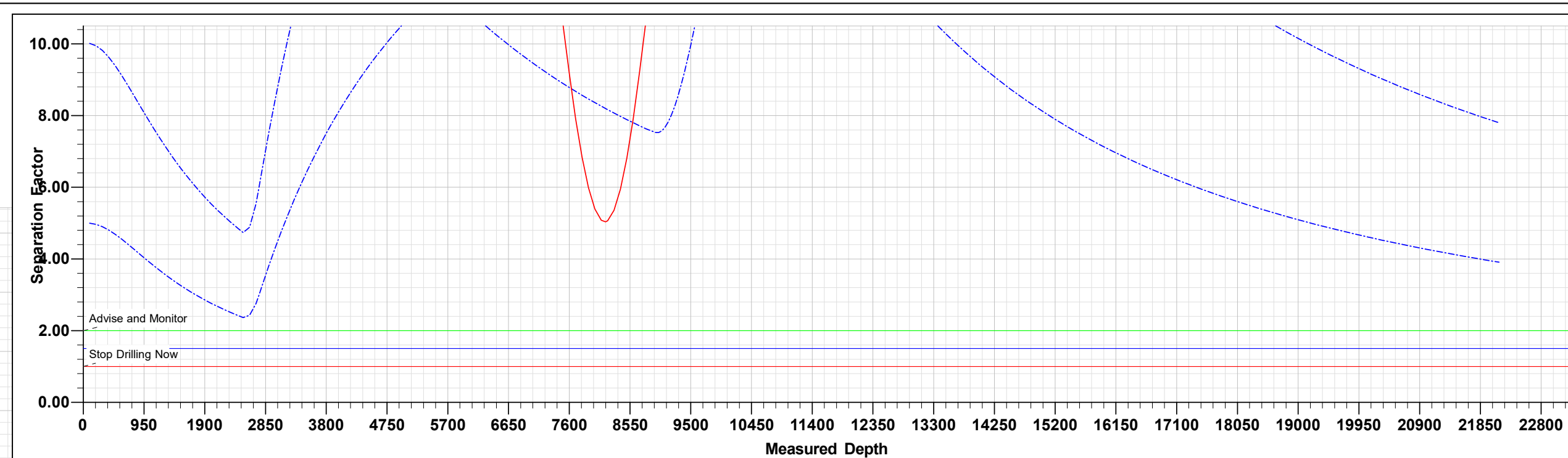
<u>Type</u>	<u>Working Pressure</u>	<u>Test Pressure</u>	<u>Manufacture</u>
Double Ram	5000 psi	5000 psi	Cameron



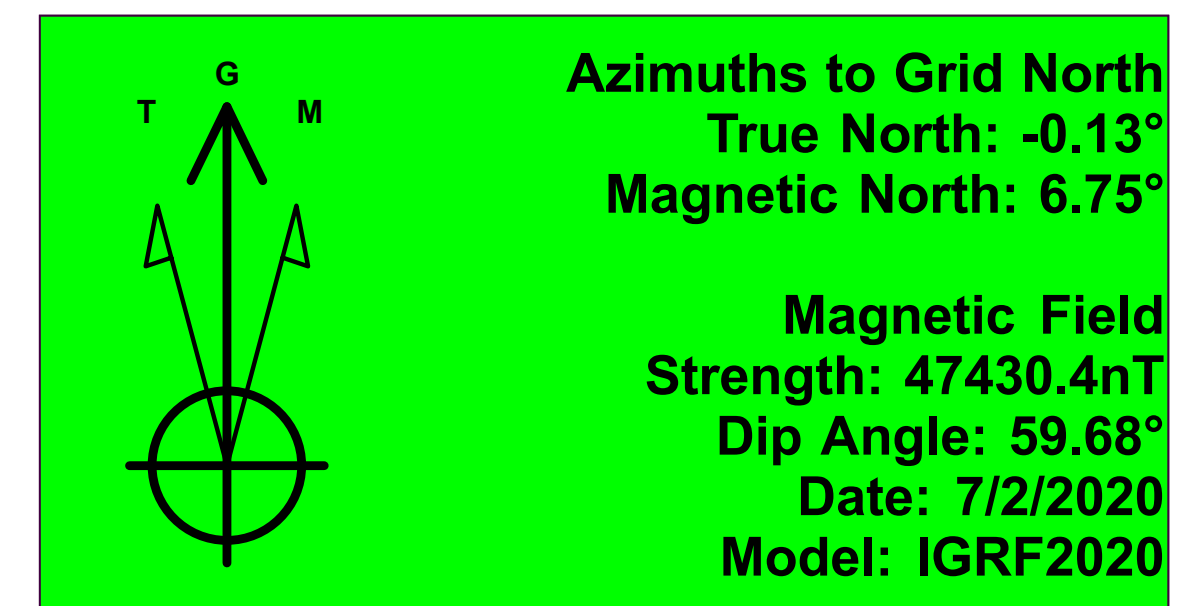
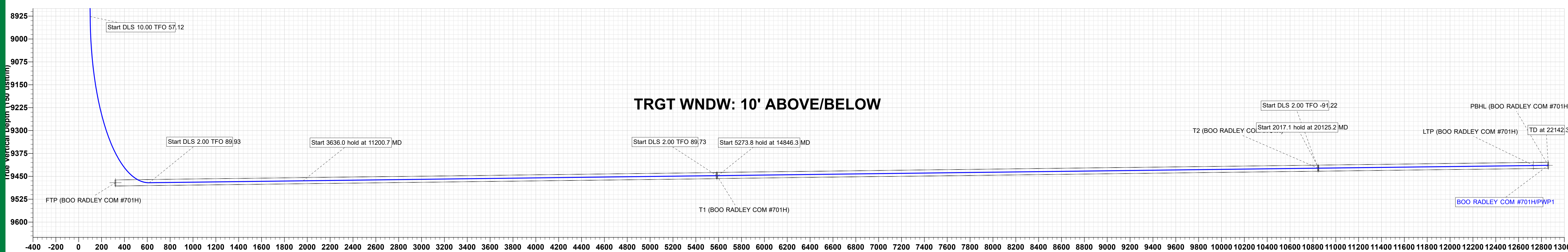
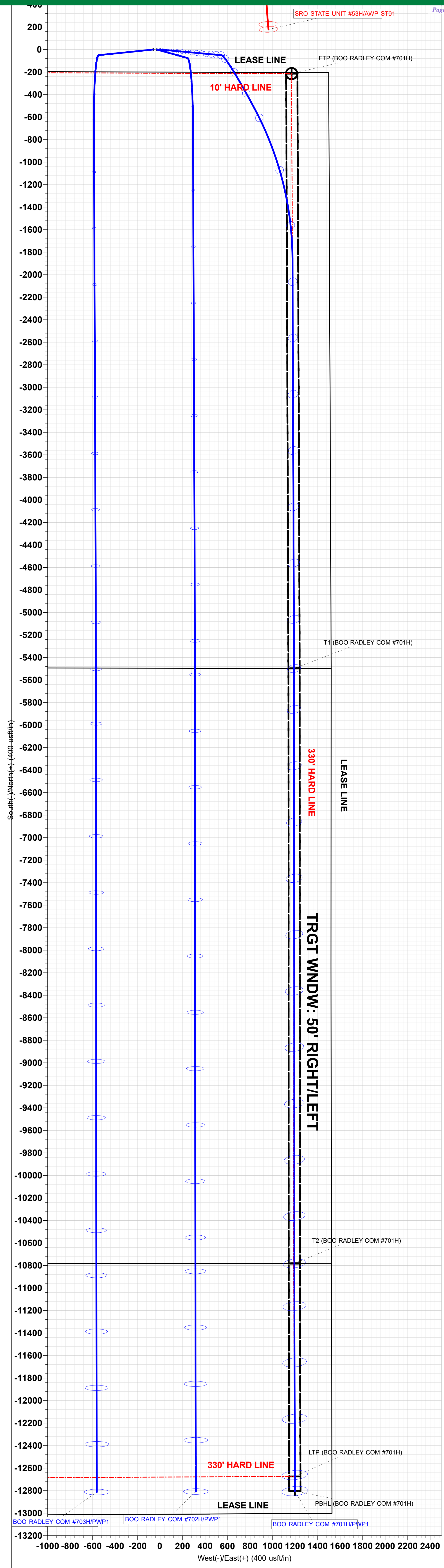
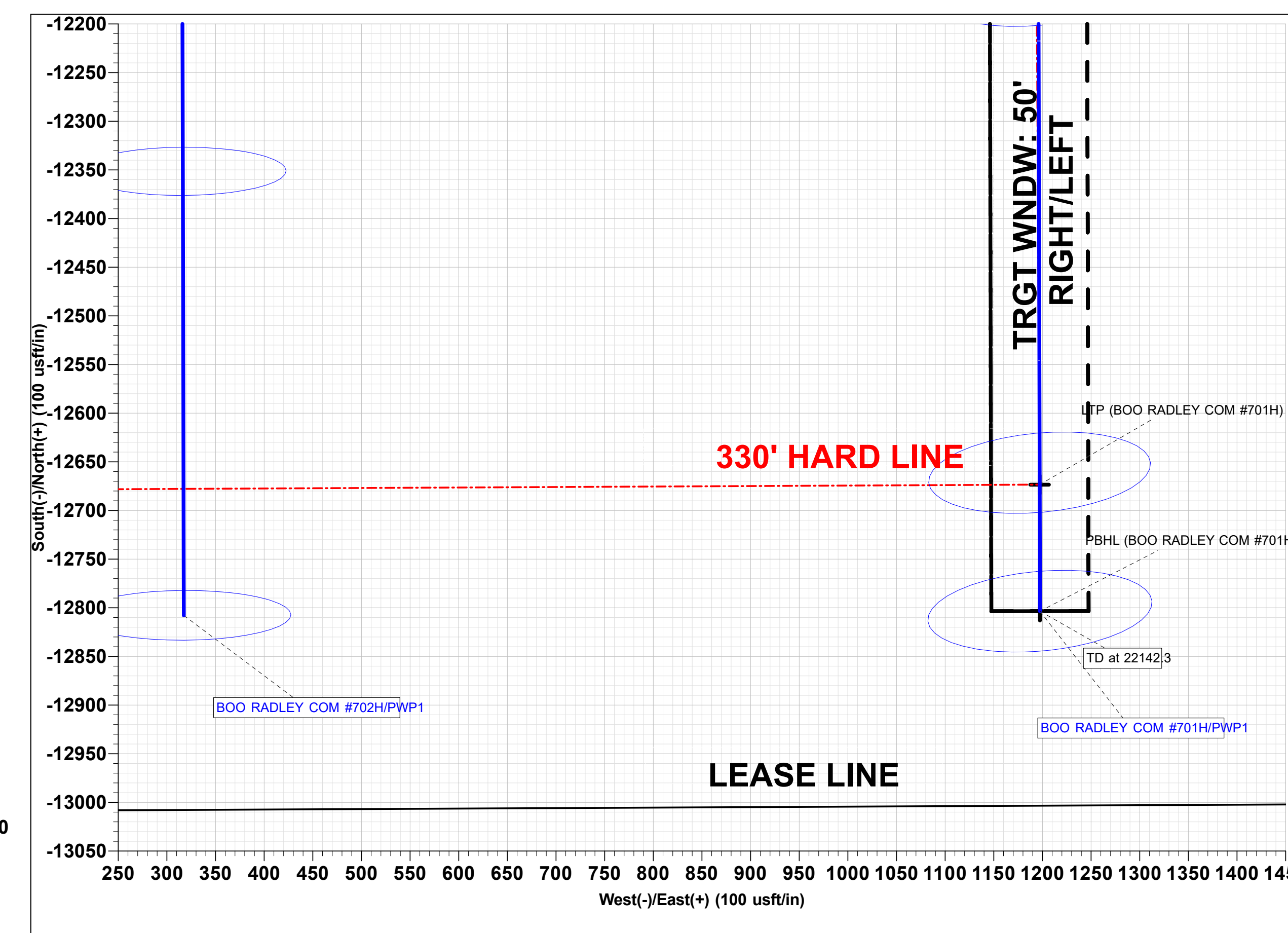
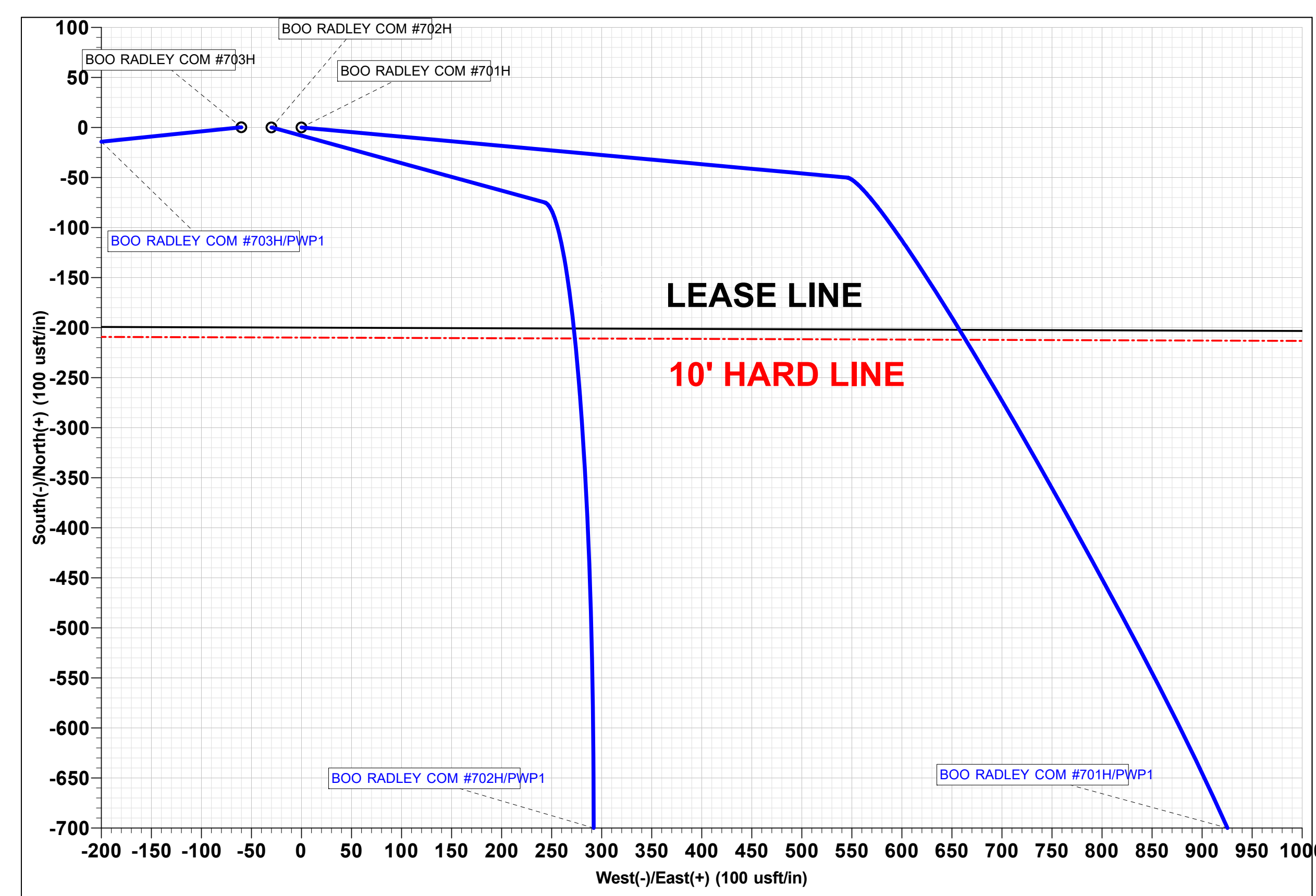
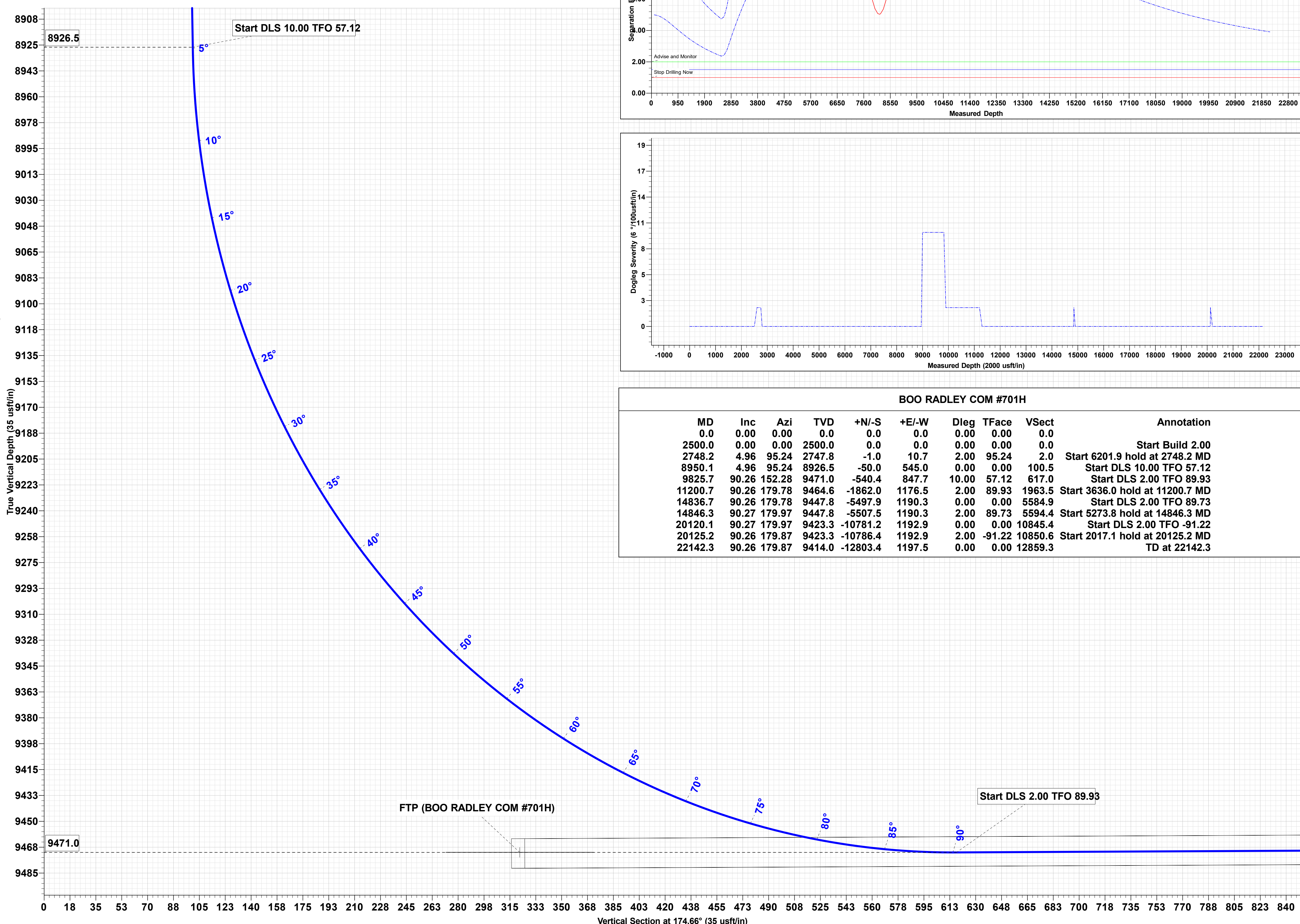
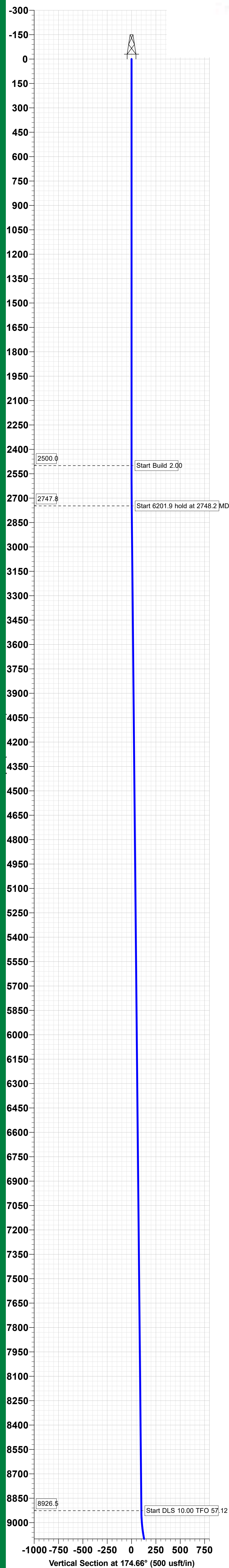
Project: ATLAS PROSPECT (NM-E)
Site: BOO RADLEY COM PROJECT
Well: BOO RADLEY COM #701H
Wellbore: OWP
Design: PWP1
SL: 2993.9
*KB=30' @ 3019.9usft (TBD)

WELL DETAILS: BOO RADLEY COM #701H					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	376770.40	576116.50	32° 2' 8.226 N	104° 5' 15.710 W

DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
LTP (BOO RADLEY COM #701H)	9414.0	-12673.4	1197.2	364097.00	577313.70	32° 0' 2.776 N	104° 5' 2.142 W
PBHL (BOO RADLEY COM #701H)	9414.0	-12803.4	1197.5	363967.00	577314.00	32° 0' 1.489 N	104° 5' 2.142 W
T2 (BOO RADLEY COM #701H)	9423.3	-10781.2	1192.9	365989.20	577309.38	32° 0' 21.502 N	104° 5' 2.141 W
T1 (BOO RADLEY COM #701H)	9447.8	-5497.9	1190.3	371272.47	577306.82	32° 1' 13.789 N	104° 5' 2.029 W
FTP (BOO RADLEY COM #701H)	9471.0	-213.8	1168.3	376556.60	577284.80	32° 2' 6.084 N	104° 5' 2.143 W



BOO RADLEY COM #701H									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2500.0	0.00	0.00	2500.0	0.0	0.0	0.00	0.00	0.0	Start Build 2.00
2748.2	4.96	95.24	2747.8	-1.0	10.7	2.00	95.24	2.0	Start 6201.9 hold at 2748.2 MD
8950.1	4.96	95.24	8926.5	-50.0	545.0	0.00	0.00	100.5	Start DLS 10.00 TFO 57.12
9825.7	90.26	152.28	9471.0	-540.4	847.7	10.00	57.12	617.0	Start DLS 2.00 TFO 89.93
11200.7	90.26	179.78	9464.6	-1862.0	1176.5	2.00	89.93	1963.5	Start 3636.0 hold at 11200.7 MD
14836.7	90.26	179.78	9447.8	-5497.9	1190.3	0.00	0.00	5594.9	Start DLS 2.00 TFO 89.73
14846.3	90.27	179.97	9447.8	-5507.5	1190.3	2.00	89.73	5594.4	Start 5273.8 hold at 14846.3 MD
20120.1	90.27	179.97	9423.3	-10781.2	1192.9	0.00	0.00	10845.4	Start DLS 2.00 TFO -91.22
20125.2	90.26	179.87	9423.3	-10786.4	1192.9	2.00	-91.22	10850.6	Start 2017.1 hold at 20125.2 MD
22142.3	90.26	179.87	9414.0	-12803.4	1197.5	0.00	0.00	12859.3	TD at 22142.3



DELAWARE BASIN WEST

**ATLAS PROSPECT (NM-E)
BOO RADLEY COM PROJECT
BOO RADLEY COM #701H**

OWB

Plan: PWP1

Standard Survey Report

12 August, 2020

Concho Resources LLC

Survey Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well BOO RADLEY COM #701H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30' @ 3019.9usft (TBD)
Site:	BOO RADLEY COM PROJECT	MD Reference:	*KB=30' @ 3019.9usft (TBD)
Well:	BOO RADLEY COM #701H	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	BOO RADLEY COM #701H				
Well Position	+N/-S	0.0 usft	Northing:	376,770.40 usft	Latitude: 32° 2' 8.226 N
	+E/-W	0.0 usft	Easting:	576,116.50 usft	Longitude: 104° 5' 15.710 W
Position Uncertainty		3.0 usft	Wellhead Elevation:	usft	Ground Level: 2,993.9 usft

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	7/2/2020	6.88	59.68	47,430.43317980

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	174.66	

Survey Tool Program	Date	8/11/2020			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	22,142.3	PWP1 (OWB)	MWD+IFR1+FDIR	OWSG MWD + IFR1 + FDIR Correction	

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00	
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 BOO RADLEY COM #701H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30' @ 3019.9usft (TBD)
Site:	BOO RADLEY COM PROJECT	MD Reference:	*KB=30' @ 3019.9usft (TBD)
Well:	BOO RADLEY COM #701H	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	95.24	2,600.0	-0.2	1.7	0.3	2.00	2.00	0.00
2,700.0	4.00	95.24	2,699.8	-0.6	6.9	1.3	2.00	2.00	0.00
2,748.2	4.96	95.24	2,747.8	-1.0	10.7	2.0	2.00	2.00	0.00
Start 6201.9 hold at 2748.2 MD									
2,800.0	4.96	95.24	2,799.5	-1.4	15.2	2.8	0.00	0.00	0.00
2,900.0	4.96	95.24	2,899.1	-2.2	23.8	4.4	0.00	0.00	0.00
3,000.0	4.96	95.24	2,998.7	-3.0	32.4	6.0	0.00	0.00	0.00
3,100.0	4.96	95.24	3,098.4	-3.8	41.0	7.6	0.00	0.00	0.00
3,200.0	4.96	95.24	3,198.0	-4.6	49.6	9.2	0.00	0.00	0.00
3,300.0	4.96	95.24	3,297.6	-5.3	58.2	10.7	0.00	0.00	0.00
3,400.0	4.96	95.24	3,397.2	-6.1	66.9	12.3	0.00	0.00	0.00
3,500.0	4.96	95.24	3,496.9	-6.9	75.5	13.9	0.00	0.00	0.00
3,600.0	4.96	95.24	3,596.5	-7.7	84.1	15.5	0.00	0.00	0.00
3,700.0	4.96	95.24	3,696.1	-8.5	92.7	17.1	0.00	0.00	0.00
3,800.0	4.96	95.24	3,795.7	-9.3	101.3	18.7	0.00	0.00	0.00
3,900.0	4.96	95.24	3,895.4	-10.1	109.9	20.3	0.00	0.00	0.00
4,000.0	4.96	95.24	3,995.0	-10.9	118.5	21.9	0.00	0.00	0.00
4,100.0	4.96	95.24	4,094.6	-11.7	127.2	23.5	0.00	0.00	0.00
4,200.0	4.96	95.24	4,194.2	-12.5	135.8	25.0	0.00	0.00	0.00
4,300.0	4.96	95.24	4,293.9	-13.2	144.4	26.6	0.00	0.00	0.00
4,400.0	4.96	95.24	4,393.5	-14.0	153.0	28.2	0.00	0.00	0.00
4,500.0	4.96	95.24	4,493.1	-14.8	161.6	29.8	0.00	0.00	0.00
4,600.0	4.96	95.24	4,592.7	-15.6	170.2	31.4	0.00	0.00	0.00
4,700.0	4.96	95.24	4,692.4	-16.4	178.9	33.0	0.00	0.00	0.00
4,800.0	4.96	95.24	4,792.0	-17.2	187.5	34.6	0.00	0.00	0.00
4,900.0	4.96	95.24	4,891.6	-18.0	196.1	36.2	0.00	0.00	0.00
5,000.0	4.96	95.24	4,991.2	-18.8	204.7	37.8	0.00	0.00	0.00
5,100.0	4.96	95.24	5,090.9	-19.6	213.3	39.3	0.00	0.00	0.00
5,200.0	4.96	95.24	5,190.5	-20.4	221.9	40.9	0.00	0.00	0.00
5,300.0	4.96	95.24	5,290.1	-21.2	230.5	42.5	0.00	0.00	0.00
5,400.0	4.96	95.24	5,389.7	-21.9	239.2	44.1	0.00	0.00	0.00
5,500.0	4.96	95.24	5,489.4	-22.7	247.8	45.7	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well BOO RADLEY COM #701H
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Site:	BOO RADLEY COM PROJECT	MD Reference:	*KB=30' @ 3019.9usft (TBD)
Well:	BOO RADLEY COM #701H	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)
5,600.0	4.96	95.24	5,589.0	-23.5	256.4	47.3	0.00	0.00	0.00
5,700.0	4.96	95.24	5,688.6	-24.3	265.0	48.9	0.00	0.00	0.00
5,800.0	4.96	95.24	5,788.2	-25.1	273.6	50.5	0.00	0.00	0.00
5,900.0	4.96	95.24	5,887.9	-25.9	282.2	52.1	0.00	0.00	0.00
6,000.0	4.96	95.24	5,987.5	-26.7	290.8	53.7	0.00	0.00	0.00
6,100.0	4.96	95.24	6,087.1	-27.5	299.5	55.2	0.00	0.00	0.00
6,200.0	4.96	95.24	6,186.7	-28.3	308.1	56.8	0.00	0.00	0.00
6,300.0	4.96	95.24	6,286.4	-29.1	316.7	58.4	0.00	0.00	0.00
6,400.0	4.96	95.24	6,386.0	-29.8	325.3	60.0	0.00	0.00	0.00
6,500.0	4.96	95.24	6,485.6	-30.6	333.9	61.6	0.00	0.00	0.00
6,600.0	4.96	95.24	6,585.2	-31.4	342.5	63.2	0.00	0.00	0.00
6,700.0	4.96	95.24	6,684.9	-32.2	351.2	64.8	0.00	0.00	0.00
6,800.0	4.96	95.24	6,784.5	-33.0	359.8	66.4	0.00	0.00	0.00
6,900.0	4.96	95.24	6,884.1	-33.8	368.4	68.0	0.00	0.00	0.00
7,000.0	4.96	95.24	6,983.7	-34.6	377.0	69.5	0.00	0.00	0.00
7,100.0	4.96	95.24	7,083.4	-35.4	385.6	71.1	0.00	0.00	0.00
7,200.0	4.96	95.24	7,183.0	-36.2	394.2	72.7	0.00	0.00	0.00
7,300.0	4.96	95.24	7,282.6	-37.0	402.8	74.3	0.00	0.00	0.00
7,400.0	4.96	95.24	7,382.2	-37.7	411.5	75.9	0.00	0.00	0.00
7,500.0	4.96	95.24	7,481.9	-38.5	420.1	77.5	0.00	0.00	0.00
7,600.0	4.96	95.24	7,581.5	-39.3	428.7	79.1	0.00	0.00	0.00
7,700.0	4.96	95.24	7,681.1	-40.1	437.3	80.7	0.00	0.00	0.00
7,800.0	4.96	95.24	7,780.7	-40.9	445.9	82.3	0.00	0.00	0.00
7,900.0	4.96	95.24	7,880.4	-41.7	454.5	83.8	0.00	0.00	0.00
8,000.0	4.96	95.24	7,980.0	-42.5	463.2	85.4	0.00	0.00	0.00
8,100.0	4.96	95.24	8,079.6	-43.3	471.8	87.0	0.00	0.00	0.00
8,200.0	4.96	95.24	8,179.2	-44.1	480.4	88.6	0.00	0.00	0.00
8,300.0	4.96	95.24	8,278.9	-44.9	489.0	90.2	0.00	0.00	0.00
8,400.0	4.96	95.24	8,378.5	-45.7	497.6	91.8	0.00	0.00	0.00
8,500.0	4.96	95.24	8,478.1	-46.4	506.2	93.4	0.00	0.00	0.00
8,600.0	4.96	95.24	8,577.7	-47.2	514.8	95.0	0.00	0.00	0.00
8,700.0	4.96	95.24	8,677.4	-48.0	523.5	96.6	0.00	0.00	0.00
8,800.0	4.96	95.24	8,777.0	-48.8	532.1	98.2	0.00	0.00	0.00
8,900.0	4.96	95.24	8,876.6	-49.6	540.7	99.7	0.00	0.00	0.00
8,950.1	4.96	95.24	8,926.5	-50.0	545.0	100.5	0.00	0.00	0.00
Start DLS 10.00 TFO 57.12									
9,000.0	8.74	123.99	8,976.1	-52.3	550.3	103.3	10.00	7.57	57.56
9,100.0	18.16	139.43	9,073.3	-68.4	566.8	120.9	10.00	9.42	15.44
9,200.0	27.98	144.38	9,165.2	-99.4	590.6	154.0	10.00	9.82	4.95
9,300.0	37.89	146.89	9,249.0	-144.3	621.2	201.6	10.00	9.91	2.51
9,400.0	47.83	148.48	9,322.2	-201.8	657.4	262.1	10.00	9.94	1.59
9,500.0	57.79	149.63	9,382.6	-270.1	698.3	333.9	10.00	9.96	1.15
9,600.0	67.76	150.55	9,428.3	-347.1	742.5	414.7	10.00	9.97	0.92
9,700.0	77.73	151.35	9,457.9	-430.4	788.8	502.0	10.00	9.97	0.80

Concho Resources LLC

Survey Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well BOO RADLEY COM #701H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30' @ 3019.9usft (TBD)
Site:	BOO RADLEY COM PROJECT	MD Reference:	*KB=30' @ 3019.9usft (TBD)
Well:	BOO RADLEY COM #701H	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)
9,800.0	87.70	152.09	9,470.6	-517.7	835.7	593.3	10.00	9.97	0.74
9,825.7	90.26	152.28	9,471.0	-540.4	847.7	617.0	10.00	9.97	0.73
Start DLS 2.00 TFO 89.93									
9,900.0	90.26	153.77	9,470.7	-606.6	881.4	686.1	2.00	0.00	2.00
10,000.0	90.26	155.77	9,470.2	-697.1	924.0	780.1	2.00	0.00	2.00
10,100.0	90.27	157.77	9,469.8	-789.0	963.5	875.3	2.00	0.00	2.00
10,200.0	90.27	159.77	9,469.3	-882.2	999.7	971.4	2.00	0.00	2.00
10,300.0	90.27	161.77	9,468.8	-976.6	1,032.6	1,068.5	2.00	0.00	2.00
10,400.0	90.27	163.77	9,468.4	-1,072.1	1,062.3	1,166.4	2.00	0.00	2.00
10,500.0	90.27	165.77	9,467.9	-1,168.6	1,088.5	1,264.9	2.00	0.00	2.00
10,600.0	90.27	167.77	9,467.4	-1,265.9	1,111.4	1,363.9	2.00	0.00	2.00
10,700.0	90.27	169.77	9,466.9	-1,364.0	1,130.9	1,463.4	2.00	0.00	2.00
10,800.0	90.27	171.77	9,466.5	-1,462.7	1,147.0	1,563.1	2.00	0.00	2.00
10,900.0	90.27	173.77	9,466.0	-1,561.9	1,159.5	1,663.1	2.00	0.00	2.00
11,000.0	90.27	175.77	9,465.5	-1,661.5	1,168.7	1,763.1	2.00	0.00	2.00
11,100.0	90.27	177.77	9,465.1	-1,761.3	1,174.3	1,863.0	2.00	0.00	2.00
11,200.0	90.26	179.77	9,464.6	-1,861.3	1,176.5	1,962.7	2.00	0.00	2.00
11,200.7	90.26	179.78	9,464.6	-1,862.0	1,176.5	1,963.5	2.00	0.00	2.00
Start 3636.0 hold at 11200.7 MD									
11,300.0	90.26	179.78	9,464.1	-1,961.3	1,176.8	2,062.3	0.00	0.00	0.00
11,400.0	90.26	179.78	9,463.7	-2,061.3	1,177.2	2,161.9	0.00	0.00	0.00
11,500.0	90.26	179.78	9,463.2	-2,161.3	1,177.6	2,261.5	0.00	0.00	0.00
11,600.0	90.26	179.78	9,462.8	-2,261.3	1,178.0	2,361.1	0.00	0.00	0.00
11,700.0	90.26	179.78	9,462.3	-2,361.3	1,178.4	2,460.7	0.00	0.00	0.00
11,800.0	90.26	179.78	9,461.8	-2,461.3	1,178.7	2,560.3	0.00	0.00	0.00
11,900.0	90.26	179.78	9,461.4	-2,561.3	1,179.1	2,659.9	0.00	0.00	0.00
12,000.0	90.26	179.78	9,460.9	-2,661.2	1,179.5	2,759.5	0.00	0.00	0.00
12,100.0	90.26	179.78	9,460.4	-2,761.2	1,179.9	2,859.1	0.00	0.00	0.00
12,200.0	90.26	179.78	9,460.0	-2,861.2	1,180.3	2,958.7	0.00	0.00	0.00
12,300.0	90.26	179.78	9,459.5	-2,961.2	1,180.7	3,058.3	0.00	0.00	0.00
12,400.0	90.26	179.78	9,459.1	-3,061.2	1,181.0	3,157.9	0.00	0.00	0.00
12,500.0	90.26	179.78	9,458.6	-3,161.2	1,181.4	3,257.5	0.00	0.00	0.00
12,600.0	90.26	179.78	9,458.1	-3,261.2	1,181.8	3,357.1	0.00	0.00	0.00
12,700.0	90.26	179.78	9,457.7	-3,361.2	1,182.2	3,456.7	0.00	0.00	0.00
12,800.0	90.26	179.78	9,457.2	-3,461.2	1,182.6	3,556.3	0.00	0.00	0.00
12,900.0	90.26	179.78	9,456.8	-3,561.2	1,182.9	3,655.9	0.00	0.00	0.00
13,000.0	90.26	179.78	9,456.3	-3,661.2	1,183.3	3,755.5	0.00	0.00	0.00
13,100.0	90.26	179.78	9,455.8	-3,761.2	1,183.7	3,855.1	0.00	0.00	0.00
13,200.0	90.26	179.78	9,455.4	-3,861.2	1,184.1	3,954.7	0.00	0.00	0.00
13,300.0	90.26	179.78	9,454.9	-3,961.2	1,184.5	4,054.3	0.00	0.00	0.00
13,400.0	90.26	179.78	9,454.4	-4,061.2	1,184.8	4,153.9	0.00	0.00	0.00
13,500.0	90.26	179.78	9,454.0	-4,161.2	1,185.2	4,253.5	0.00	0.00	0.00
13,600.0	90.26	179.78	9,453.5	-4,261.2	1,185.6	4,353.1	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well BOO RADLEY COM #701H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30' @ 3019.9usft (TBD)
Site:	BOO RADLEY COM PROJECT	MD Reference:	*KB=30' @ 3019.9usft (TBD)
Well:	BOO RADLEY COM #701H	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)
13,700.0	90.26	179.78	9,453.1	-4,361.2	1,186.0	4,452.7	0.00	0.00	0.00
13,800.0	90.26	179.78	9,452.6	-4,461.2	1,186.4	4,552.3	0.00	0.00	0.00
13,900.0	90.26	179.78	9,452.1	-4,561.2	1,186.8	4,651.9	0.00	0.00	0.00
14,000.0	90.26	179.78	9,451.7	-4,661.2	1,187.1	4,751.5	0.00	0.00	0.00
14,100.0	90.26	179.78	9,451.2	-4,761.2	1,187.5	4,851.1	0.00	0.00	0.00
14,200.0	90.26	179.78	9,450.7	-4,861.2	1,187.9	4,950.7	0.00	0.00	0.00
14,300.0	90.26	179.78	9,450.3	-4,961.2	1,188.3	5,050.3	0.00	0.00	0.00
14,400.0	90.26	179.78	9,449.8	-5,061.2	1,188.7	5,149.9	0.00	0.00	0.00
14,500.0	90.26	179.78	9,449.4	-5,161.2	1,189.0	5,249.5	0.00	0.00	0.00
14,600.0	90.26	179.78	9,448.9	-5,261.2	1,189.4	5,349.1	0.00	0.00	0.00
14,700.0	90.26	179.78	9,448.4	-5,361.2	1,189.8	5,448.7	0.00	0.00	0.00
14,800.0	90.26	179.78	9,448.0	-5,461.2	1,190.2	5,548.3	0.00	0.00	0.00
14,836.7	90.26	179.78	9,447.8	-5,497.9	1,190.3	5,584.9	0.00	0.00	0.00
Start DLS 2.00 TFO 89.73									
14,846.3	90.27	179.97	9,447.8	-5,507.5	1,190.3	5,594.4	2.00	0.01	2.00
Start 5273.8 hold at 14846.3 MD									
14,900.0	90.27	179.97	9,447.5	-5,561.2	1,190.4	5,647.9	0.00	0.00	0.00
15,000.0	90.27	179.97	9,447.0	-5,661.2	1,190.4	5,747.5	0.00	0.00	0.00
15,100.0	90.27	179.97	9,446.6	-5,761.2	1,190.5	5,847.0	0.00	0.00	0.00
15,200.0	90.27	179.97	9,446.1	-5,861.2	1,190.5	5,946.6	0.00	0.00	0.00
15,300.0	90.27	179.97	9,445.7	-5,961.2	1,190.6	6,046.2	0.00	0.00	0.00
15,400.0	90.27	179.97	9,445.2	-6,061.2	1,190.6	6,145.7	0.00	0.00	0.00
15,500.0	90.27	179.97	9,444.7	-6,161.2	1,190.7	6,245.3	0.00	0.00	0.00
15,600.0	90.27	179.97	9,444.3	-6,261.2	1,190.7	6,344.9	0.00	0.00	0.00
15,700.0	90.27	179.97	9,443.8	-6,361.2	1,190.8	6,444.4	0.00	0.00	0.00
15,800.0	90.27	179.97	9,443.3	-6,461.2	1,190.8	6,544.0	0.00	0.00	0.00
15,900.0	90.27	179.97	9,442.9	-6,561.2	1,190.9	6,643.6	0.00	0.00	0.00
16,000.0	90.27	179.97	9,442.4	-6,661.2	1,190.9	6,743.1	0.00	0.00	0.00
16,100.0	90.27	179.97	9,441.9	-6,761.2	1,190.9	6,842.7	0.00	0.00	0.00
16,200.0	90.27	179.97	9,441.5	-6,861.2	1,191.0	6,942.3	0.00	0.00	0.00
16,300.0	90.27	179.97	9,441.0	-6,961.2	1,191.0	7,041.8	0.00	0.00	0.00
16,400.0	90.27	179.97	9,440.6	-7,061.2	1,191.1	7,141.4	0.00	0.00	0.00
16,500.0	90.27	179.97	9,440.1	-7,161.2	1,191.1	7,241.0	0.00	0.00	0.00
16,600.0	90.27	179.97	9,439.6	-7,261.2	1,191.2	7,340.6	0.00	0.00	0.00
16,700.0	90.27	179.97	9,439.2	-7,361.2	1,191.2	7,440.1	0.00	0.00	0.00
16,800.0	90.27	179.97	9,438.7	-7,461.2	1,191.3	7,539.7	0.00	0.00	0.00
16,900.0	90.27	179.97	9,438.2	-7,561.2	1,191.3	7,639.3	0.00	0.00	0.00
17,000.0	90.27	179.97	9,437.8	-7,661.2	1,191.4	7,738.8	0.00	0.00	0.00
17,100.0	90.27	179.97	9,437.3	-7,761.2	1,191.4	7,838.4	0.00	0.00	0.00
17,200.0	90.27	179.97	9,436.8	-7,861.2	1,191.5	7,938.0	0.00	0.00	0.00
17,300.0	90.27	179.97	9,436.4	-7,961.2	1,191.5	8,037.5	0.00	0.00	0.00
17,400.0	90.27	179.97	9,435.9	-8,061.2	1,191.6	8,137.1	0.00	0.00	0.00
17,500.0	90.27	179.97	9,435.4	-8,161.2	1,191.6	8,236.7	0.00	0.00	0.00
17,600.0	90.27	179.97	9,435.0	-8,261.2	1,191.7	8,336.2	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well BOO RADLEY COM #701H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30' @ 3019.9usft (TBD)
Site:	BOO RADLEY COM PROJECT	MD Reference:	*KB=30' @ 3019.9usft (TBD)
Well:	BOO RADLEY COM #701H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	PWP1	Database:	edm

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
17,700.0	90.27	179.97	9,434.5	-8,361.2	1,191.7	8,435.8	0.00	0.00	0.00
17,800.0	90.27	179.97	9,434.1	-8,461.2	1,191.8	8,535.4	0.00	0.00	0.00
17,900.0	90.27	179.97	9,433.6	-8,561.2	1,191.8	8,634.9	0.00	0.00	0.00
18,000.0	90.27	179.97	9,433.1	-8,661.2	1,191.9	8,734.5	0.00	0.00	0.00
18,100.0	90.27	179.97	9,432.7	-8,761.2	1,191.9	8,834.1	0.00	0.00	0.00
18,200.0	90.27	179.97	9,432.2	-8,861.2	1,192.0	8,933.7	0.00	0.00	0.00
18,300.0	90.27	179.97	9,431.7	-8,961.2	1,192.0	9,033.2	0.00	0.00	0.00
18,400.0	90.27	179.97	9,431.3	-9,061.2	1,192.1	9,132.8	0.00	0.00	0.00
18,500.0	90.27	179.97	9,430.8	-9,161.2	1,192.1	9,232.4	0.00	0.00	0.00
18,600.0	90.27	179.97	9,430.3	-9,261.2	1,192.2	9,331.9	0.00	0.00	0.00
18,700.0	90.27	179.97	9,429.9	-9,361.2	1,192.2	9,431.5	0.00	0.00	0.00
18,800.0	90.27	179.97	9,429.4	-9,461.2	1,192.2	9,531.1	0.00	0.00	0.00
18,900.0	90.27	179.97	9,429.0	-9,561.2	1,192.3	9,630.6	0.00	0.00	0.00
19,000.0	90.27	179.97	9,428.5	-9,661.2	1,192.3	9,730.2	0.00	0.00	0.00
19,100.0	90.27	179.97	9,428.0	-9,761.2	1,192.4	9,829.8	0.00	0.00	0.00
19,200.0	90.27	179.97	9,427.6	-9,861.2	1,192.4	9,929.3	0.00	0.00	0.00
19,300.0	90.27	179.97	9,427.1	-9,961.1	1,192.5	10,028.9	0.00	0.00	0.00
19,400.0	90.27	179.97	9,426.6	-10,061.1	1,192.5	10,128.5	0.00	0.00	0.00
19,500.0	90.27	179.97	9,426.2	-10,161.1	1,192.6	10,228.1	0.00	0.00	0.00
19,600.0	90.27	179.97	9,425.7	-10,261.1	1,192.6	10,327.6	0.00	0.00	0.00
19,700.0	90.27	179.97	9,425.2	-10,361.1	1,192.7	10,427.2	0.00	0.00	0.00
19,800.0	90.27	179.97	9,424.8	-10,461.1	1,192.7	10,526.8	0.00	0.00	0.00
19,900.0	90.27	179.97	9,424.3	-10,561.1	1,192.8	10,626.3	0.00	0.00	0.00
20,000.0	90.27	179.97	9,423.9	-10,661.1	1,192.8	10,725.9	0.00	0.00	0.00
20,100.0	90.27	179.97	9,423.4	-10,761.1	1,192.9	10,825.5	0.00	0.00	0.00
20,120.1	90.27	179.97	9,423.3	-10,781.2	1,192.9	10,845.4	0.00	0.00	0.00
Start DLS 2.00 TFO -91.22									
20,125.2	90.26	179.87	9,423.3	-10,786.4	1,192.9	10,850.6	2.00	-0.04	-2.00
Start 2017.1 hold at 20125.2 MD									
20,200.0	90.26	179.87	9,422.9	-10,861.1	1,193.1	10,925.0	0.00	0.00	0.00
20,300.0	90.26	179.87	9,422.5	-10,961.1	1,193.3	11,024.6	0.00	0.00	0.00
20,400.0	90.26	179.87	9,422.0	-11,061.1	1,193.5	11,124.2	0.00	0.00	0.00
20,500.0	90.26	179.87	9,421.6	-11,161.1	1,193.7	11,223.8	0.00	0.00	0.00
20,600.0	90.26	179.87	9,421.1	-11,261.1	1,194.0	11,323.4	0.00	0.00	0.00
20,700.0	90.26	179.87	9,420.6	-11,361.1	1,194.2	11,423.0	0.00	0.00	0.00
20,800.0	90.26	179.87	9,420.2	-11,461.1	1,194.4	11,522.6	0.00	0.00	0.00
20,900.0	90.26	179.87	9,419.7	-11,561.1	1,194.7	11,622.1	0.00	0.00	0.00
21,000.0	90.26	179.87	9,419.3	-11,661.1	1,194.9	11,721.7	0.00	0.00	0.00
21,100.0	90.26	179.87	9,418.8	-11,761.1	1,195.1	11,821.3	0.00	0.00	0.00
21,200.0	90.26	179.87	9,418.3	-11,861.1	1,195.3	11,920.9	0.00	0.00	0.00
21,300.0	90.26	179.87	9,417.9	-11,961.1	1,195.6	12,020.5	0.00	0.00	0.00
21,400.0	90.26	179.87	9,417.4	-12,061.1	1,195.8	12,120.1	0.00	0.00	0.00
21,500.0	90.26	179.87	9,417.0	-12,161.1	1,196.0	12,219.7	0.00	0.00	0.00
21,600.0	90.26	179.87	9,416.5	-12,261.1	1,196.3	12,319.2	0.00	0.00	0.00

Concho Resources LLC

Survey Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well BOO RADLEY COM #701H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30' @ 3019.9usft (TBD)
Site:	BOO RADLEY COM PROJECT	MD Reference:	*KB=30' @ 3019.9usft (TBD)
Well:	BOO RADLEY COM #701H	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)
21,700.0	90.26	179.87	9,416.0	-12,361.1	1,196.5	12,418.8	0.00	0.00	0.00
21,800.0	90.26	179.87	9,415.6	-12,461.1	1,196.7	12,518.4	0.00	0.00	0.00
21,900.0	90.26	179.87	9,415.1	-12,561.1	1,196.9	12,618.0	0.00	0.00	0.00
22,000.0	90.26	179.87	9,414.7	-12,661.1	1,197.2	12,717.6	0.00	0.00	0.00
22,100.0	90.26	179.87	9,414.2	-12,761.1	1,197.4	12,817.2	0.00	0.00	0.00
22,142.3	90.26	179.87	9,414.0	-12,803.4	1,197.5	12,859.3	0.00	0.00	0.00
TD at 22142.3									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
LTP (BOO RADLEY C - hit/miss target - Shape - plan misses target center by 0.6usft at 22012.3usft MD (9414.6 TVD, -12673.4 N, 1197.2 E) - Point	0.00	0.00	9,414.0	-12,673.4	1,197.2	364,097.00	577,313.70	32° 0' 2.776 N	104° 5' 2.142 W
PBHL (BOO RADLEY - plan hits target center - Rectangle (sides W100.0 H2,020.0 D20.0)	0.26	359.78	9,414.0	-12,803.4	1,197.5	363,967.00	577,314.00	32° 0' 1.489 N	104° 5' 2.142 W
T2 (BOO RADLEY CC - plan hits target center - Rectangle (sides W100.0 H5,286.0 D20.0)	0.26	359.97	9,423.3	-10,781.2	1,192.9	365,989.20	577,309.39	32° 0' 21.502 N	104° 5' 2.141 W
T1 (BOO RADLEY CC - plan hits target center - Rectangle (sides W100.0 H5,285.0 D20.0)	0.26	359.78	9,447.8	-5,497.9	1,190.3	371,272.47	577,306.83	32° 1' 13.789 N	104° 5' 2.029 W
FTP (BOO RADLEY C - plan misses target center by 437.2usft at 9698.9usft MD (9457.7 TVD, -429.5 N, 788.3 E) - Circle (radius 50.0)	0.00	0.00	9,471.0	-213.8	1,168.3	376,556.60	577,284.80	32° 2' 6.084 N	104° 5' 2.143 W

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
2500	2500	0	0	Start Build 2.00
2748	2748	-1	11	Start 6201.9 hold at 2748.2 MD
8950	8927	-50	545	Start DLS 10.00 TFO 57.12
9826	9471	-540	848	Start DLS 2.00 TFO 89.93
11,201	9465	-1862	1176	Start 3636.0 hold at 11200.7 MD
14,837	9448	-5498	1190	Start DLS 2.00 TFO 89.73
14,846	9448	-5507	1190	Start 5273.8 hold at 14846.3 MD
20,120	9423	-10,781	1193	Start DLS 2.00 TFO -91.22
20,125	9423	-10,786	1193	Start 2017.1 hold at 20125.2 MD
22,142	9414	-12,803	1197	TD at 22142.3

Checked By: _____	Approved By: _____	Date: _____
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DELAWARE BASIN WEST

**ATLAS PROSPECT (NM-E)
BOO RADLEY COM PROJECT
BOO RADLEY COM #701H**

**OWB
PWP1**

Anticollision Report

12 August, 2020

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well BOO RADLEY COM #701H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30' @ 3019.9usft (TBD)
Reference Site:	BOO RADLEY COM PROJECT	MD Reference:	*KB=30' @ 3019.9usft (TBD)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	BOO RADLEY COM #701H	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:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum ellipse separation of 1,000.0 usft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	8/11/2020		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	22,142.3	PWP1 (OWB)	MWD+IFR1+FDIR	OWSG MWD + IFR1 + FDIR Correction	

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
BOO RADLEY COM PROJECT						
BOO RADLEY COM #702H - OWB - PWP1	2,500.0	2,504.8	30.0	17.3	2.365	CC, ES, SF
BOO RADLEY COM #703H - OWB - PWP1	2,414.9	2,420.0	60.1	47.7	4.859	CC
BOO RADLEY COM #703H - OWB - PWP1	2,500.0	2,505.0	60.1	47.4	4.738	ES, SF
SRO STATE PROJECT (ATLAS 2628)						
SRO STATE UNIT #53H - ST01 - AWP ST01	8,167.7	12,617.0	535.7	429.3	5.036	CC, ES, SF

Offset Design	BOO RADLEY COM PROJECT - BOO RADLEY COM #702H - OWB - PWP1											Offset Site Error:	3.0 usft
Survey Program:	0-Standard Keeper 104, 8904-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	4.8	4.8	3.0	3.0	-89.81	0.1	-30.0	30.0				
100.0	100.0	104.8	104.8	3.0	3.0	-89.81	0.1	-30.0	30.0	24.0	6.00	4.997	
200.0	200.0	204.8	204.8	3.0	3.0	-89.81	0.1	-30.0	30.0	24.0	6.04	4.966	
300.0	300.0	304.8	304.8	3.1	3.0	-89.81	0.1	-30.0	30.0	23.9	6.12	4.900	
400.0	400.0	404.8	404.8	3.2	3.0	-89.81	0.1	-30.0	30.0	23.8	6.24	4.805	
500.0	500.0	504.8	504.8	3.4	3.1	-89.81	0.1	-30.0	30.0	23.6	6.40	4.687	
600.0	600.0	604.8	604.8	3.6	3.1	-89.81	0.1	-30.0	30.0	23.4	6.59	4.554	
700.0	700.0	704.8	704.8	3.8	3.1	-89.81	0.1	-30.0	30.0	23.2	6.80	4.410	
800.0	800.0	804.8	804.8	4.0	3.2	-89.81	0.1	-30.0	30.0	23.0	7.04	4.260	
900.0	900.0	904.8	904.8	4.2	3.2	-89.81	0.1	-30.0	30.0	22.7	7.30	4.110	
1,000.0	1,000.0	1,004.8	1,004.8	4.5	3.2	-89.81	0.1	-30.0	30.0	22.4	7.57	3.961	
1,100.0	1,100.0	1,104.8	1,104.8	4.8	3.3	-89.81	0.1	-30.0	30.0	22.1	7.86	3.815	
1,200.0	1,200.0	1,204.8	1,204.8	5.1	3.4	-89.81	0.1	-30.0	30.0	21.8	8.16	3.674	
1,300.0	1,300.0	1,304.8	1,304.8	5.4	3.4	-89.81	0.1	-30.0	30.0	21.5	8.48	3.539	
1,400.0	1,400.0	1,404.8	1,404.8	5.7	3.5	-89.81	0.1	-30.0	30.0	21.2	8.80	3.410	
1,500.0	1,500.0	1,504.8	1,504.8	6.0	3.6	-89.81	0.1	-30.0	30.0	20.9	9.13	3.288	
1,600.0	1,600.0	1,604.8	1,604.8	6.3	3.6	-89.81	0.1	-30.0	30.0	20.5	9.46	3.171	
1,700.0	1,700.0	1,704.8	1,704.8	6.6	3.7	-89.81	0.1	-30.0	30.0	20.2	9.80	3.061	
1,800.0	1,800.0	1,804.8	1,804.8	6.9	3.8	-89.81	0.1	-30.0	30.0	19.9	10.15	2.956	
1,900.0	1,900.0	1,904.8	1,904.8	7.2	3.9	-89.81	0.1	-30.0	30.0	19.5	10.50	2.857	
2,000.0	2,000.0	2,004.8	2,004.8	7.6	3.9	-89.81	0.1	-30.0	30.0	19.1	10.86	2.764	

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

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well BOO RADLEY COM #701H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30' @ 3019.9usft (TBD)
Reference Site:	BOO RADLEY COM PROJECT	MD Reference:	*KB=30' @ 3019.9usft (TBD)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	BOO RADLEY COM #701H	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 BOO RADLEY COM PROJECT - BOO RADLEY COM #702H - OWB - PWP1													Offset Site Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 8904-MWD+IFR1+FDIR													Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
2,100.0	2,100.0	2,104.8	2,104.8	7.9	4.0	-89.81	0.1	-30.0	30.0	18.8	11.22	2.675		
2,200.0	2,200.0	2,204.8	2,204.8	8.2	4.1	-89.81	0.1	-30.0	30.0	18.4	11.58	2.591		
2,300.0	2,300.0	2,304.8	2,304.8	8.6	4.2	-89.81	0.1	-30.0	30.0	18.1	11.94	2.512		
2,400.0	2,400.0	2,404.8	2,404.8	8.9	4.3	-89.81	0.1	-30.0	30.0	17.7	12.31	2.436		
2,500.0	2,500.0	2,504.8	2,504.8	9.2	4.4	-89.81	0.1	-30.0	30.0	17.3	12.69	2.365 CC, ES, SF		
2,600.0	2,600.0	2,604.8	2,604.8	9.6	4.5	175.22	0.1	-30.0	31.7	18.7	13.05	2.432		
2,700.0	2,699.8	2,704.6	2,704.6	9.9	4.6	175.89	0.1	-30.0	37.0	23.5	13.41	2.756		
2,748.2	2,747.8	2,752.6	2,752.6	10.0	4.6	176.27	0.1	-30.0	40.7	27.1	13.59	2.996		
2,800.0	2,799.5	2,804.3	2,804.3	10.2	4.7	176.64	0.1	-30.0	45.2	31.4	13.77	3.280		
2,900.0	2,899.1	2,903.9	2,903.9	10.5	4.8	177.18	0.1	-30.0	53.8	39.7	14.14	3.807		
3,000.0	2,998.7	3,003.5	3,003.5	10.9	4.9	177.57	0.1	-30.0	62.5	48.0	14.51	4.306		
3,100.0	3,098.4	3,103.2	3,103.2	11.2	5.0	177.86	0.1	-30.0	71.1	56.2	14.88	4.779		
3,200.0	3,198.0	3,202.8	3,202.8	11.5	5.1	178.10	0.1	-30.0	79.8	64.5	15.25	5.229		
3,300.0	3,297.6	3,302.4	3,302.4	11.9	5.2	178.28	0.1	-30.0	88.4	72.8	15.63	5.656		
3,400.0	3,397.2	3,402.0	3,402.0	12.2	5.3	178.43	0.1	-30.0	97.1	81.0	16.01	6.062		
3,500.0	3,496.9	3,501.7	3,501.7	12.6	5.4	178.56	0.1	-30.0	105.7	89.3	16.39	6.449		
3,600.0	3,596.5	3,601.3	3,601.3	12.9	5.5	178.67	0.1	-30.0	114.4	97.6	16.77	6.817		
3,700.0	3,696.1	3,700.9	3,700.9	13.3	5.7	178.76	0.1	-30.0	123.0	105.8	17.16	7.168		
3,800.0	3,795.7	3,800.5	3,800.5	13.6	5.8	178.85	0.1	-30.0	131.6	114.1	17.55	7.503		
3,900.0	3,895.4	3,900.2	3,900.2	13.9	5.9	178.92	0.1	-30.0	140.3	122.4	17.94	7.822		
4,000.0	3,995.0	3,999.8	3,999.8	14.3	6.0	178.98	0.1	-30.0	148.9	130.6	18.33	8.128		
4,100.0	4,094.6	4,099.4	4,099.4	14.6	6.1	179.04	0.1	-30.0	157.6	138.9	18.72	8.419		
4,200.0	4,194.2	4,199.0	4,199.0	15.0	6.2	179.09	0.1	-30.0	166.2	147.1	19.11	8.698		
4,300.0	4,293.9	4,298.7	4,298.7	15.3	6.3	179.13	0.1	-30.0	174.9	155.4	19.51	8.966		
4,400.0	4,393.5	4,398.3	4,398.3	15.7	6.5	179.17	0.1	-30.0	183.6	163.6	19.90	9.222		
4,500.0	4,493.1	4,497.9	4,497.9	16.0	6.6	179.21	0.1	-30.0	192.2	171.9	20.30	9.467		
4,600.0	4,592.7	4,597.5	4,597.5	16.4	6.7	179.24	0.1	-30.0	200.9	180.2	20.70	9.702		
4,700.0	4,692.4	4,697.2	4,697.2	16.7	6.8	179.27	0.1	-30.0	209.5	188.4	21.10	9.928		
4,800.0	4,792.0	4,796.8	4,796.8	17.1	6.9	179.30	0.1	-30.0	218.2	196.6	21.50	10.145		
4,900.0	4,891.6	4,896.4	4,896.4	17.4	7.0	179.33	0.1	-30.0	226.8	204.9	21.91	10.354		
5,000.0	4,991.2	4,996.0	4,996.0	17.8	7.2	179.35	0.1	-30.0	235.5	213.1	22.31	10.554		
5,100.0	5,090.9	5,095.7	5,095.7	18.1	7.3	179.38	0.1	-30.0	244.1	221.4	22.71	10.747		
5,200.0	5,190.5	5,195.3	5,195.3	18.5	7.4	179.40	0.1	-30.0	252.8	229.6	23.12	10.933		
5,300.0	5,290.1	5,294.9	5,294.9	18.8	7.5	179.42	0.1	-30.0	261.4	237.9	23.52	11.112		
5,400.0	5,389.7	5,394.5	5,394.5	19.2	7.6	179.44	0.1	-30.0	270.1	246.1	23.93	11.285		
5,500.0	5,489.4	5,494.2	5,494.2	19.6	7.8	179.45	0.1	-30.0	278.7	254.4	24.34	11.451		
5,600.0	5,589.0	5,604.0	5,604.0	19.9	7.8	179.40	-0.4	-28.2	285.7	260.9	24.77	11.535		
5,700.0	5,688.6	5,714.9	5,714.7	20.3	7.9	179.20	-2.0	-22.2	288.9	263.7	25.18	11.472		
5,800.0	5,788.2	5,818.1	5,817.5	20.6	7.9	178.89	-4.3	-13.8	289.2	263.6	25.59	11.304		
5,900.0	5,887.9	5,918.1	5,917.1	21.0	7.9	178.59	-6.6	-5.5	289.4	263.4	26.00	11.134		
6,000.0	5,987.5	6,018.0	6,016.7	21.3	7.9	178.30	-8.9	2.8	289.6	263.2	26.41	10.968		
6,100.0	6,087.1	6,118.0	6,116.3	21.7	7.9	178.00	-11.2	11.1	289.9	263.0	26.83	10.806		
6,200.0	6,186.7	6,218.0	6,216.0	22.0	8.0	177.70	-13.5	19.4	290.1	262.8	27.25	10.647		
6,300.0	6,286.4	6,318.0	6,315.6	22.4	8.0	177.40	-15.8	27.7	290.3	262.7	27.67	10.492		
6,400.0	6,386.0	6,418.0	6,415.2	22.8	8.0	177.11	-18.0	36.0	290.6	262.5	28.10	10.340		
6,500.0	6,485.6	6,518.0	6,514.8	23.1	8.0	176.81	-20.3	44.3	290.8	262.3	28.53	10.192		
6,600.0	6,585.2	6,618.0	6,614.4	23.5	8.1	176.51	-22.6	52.6	291.1	262.1	28.97	10.048		
6,700.0	6,684.9	6,718.0	6,714.0	23.8	8.1	176.22	-24.9	60.9	291.3	261.9	29.41	9.907		
6,800.0	6,784.5	6,817.9	6,813.7	24.2	8.2	175.92	-27.2	69.2	291.6	261.8	29.85	9.770		
6,900.0	6,884.1	6,917.9	6,913.3	24.5	8.2	175.63	-29.4	77.5	291.9	261.6	30.29	9.635		
7,000.0	6,983.7	7,017.9	7,012.9	24.9	8.2	175.34	-31.7	85.9	292.2	261.4	30.74	9.504		
7,100.0	7,083.4	7,117.9	7,112.5	25.3	8.3	175.04	-34.0	94.2	292.5	261.3	31.19	9.377		

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 BOO RADLEY COM #701H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30' @ 3019.9usft (TBD)
Reference Site:	BOO RADLEY COM PROJECT	MD Reference:	*KB=30' @ 3019.9usft (TBD)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	BOO RADLEY COM #701H	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 BOO RADLEY COM PROJECT - BOO RADLEY COM #702H - OWB - PWP1												Offset Site Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 8904-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,200.0	7,183.0	7,217.9	7,212.1	25.6	8.3	174.75	-36.3	102.5	292.8	261.1	31.64	9.252	
7,300.0	7,282.6	7,317.9	7,311.7	26.0	8.4	174.46	-38.6	110.8	293.1	261.0	32.10	9.131	
7,400.0	7,382.2	7,417.9	7,411.4	26.3	8.4	174.17	-40.9	119.1	293.4	260.8	32.56	9.012	
7,500.0	7,481.9	7,517.9	7,511.0	26.7	8.5	173.88	-43.1	127.4	293.7	260.7	33.01	8.897	
7,600.0	7,581.5	7,617.9	7,610.6	27.1	8.5	173.59	-45.4	135.7	294.1	260.6	33.48	8.784	
7,700.0	7,681.1	7,717.8	7,710.2	27.4	8.6	173.30	-47.7	144.0	294.4	260.5	33.94	8.674	
7,800.0	7,780.7	7,817.8	7,809.8	27.8	8.7	173.01	-50.0	152.3	294.7	260.3	34.40	8.567	
7,900.0	7,880.4	7,917.8	7,909.4	28.1	8.7	172.72	-52.3	160.6	295.1	260.2	34.87	8.463	
8,000.0	7,980.0	8,017.8	8,009.1	28.5	8.8	172.44	-54.6	168.9	295.5	260.1	35.34	8.361	
8,100.0	8,079.6	8,117.8	8,108.7	28.9	8.8	172.15	-56.8	177.2	295.8	260.0	35.81	8.261	
8,200.0	8,179.2	8,217.8	8,208.3	29.2	8.9	171.86	-59.1	185.5	296.2	259.9	36.28	8.165	
8,300.0	8,278.9	8,317.8	8,307.9	29.6	9.0	171.58	-61.4	193.9	296.6	259.8	36.75	8.070	
8,400.0	8,378.5	8,417.8	8,407.5	29.9	9.1	171.30	-63.7	202.2	297.0	259.8	37.23	7.978	
8,500.0	8,478.1	8,517.8	8,507.1	30.3	9.1	171.01	-66.0	210.5	297.4	259.7	37.70	7.888	
8,600.0	8,577.7	8,617.7	8,606.8	30.7	9.2	170.73	-68.2	218.8	297.8	259.6	38.18	7.800	
8,700.0	8,677.4	8,717.7	8,706.4	31.0	9.3	170.45	-70.5	227.1	298.2	259.6	38.65	7.715	
8,800.0	8,777.0	8,817.7	8,806.0	31.4	9.3	170.17	-72.8	235.4	298.6	259.5	39.13	7.633	
8,900.0	8,876.6	8,917.4	8,905.3	31.7	9.4	169.88	-75.1	243.7	299.1	259.5	39.55	7.562	
8,950.1	8,926.5	8,965.1	8,952.7	31.9	9.4	169.24	-78.9	247.6	299.5	259.8	39.77	7.531	
9,000.0	8,976.1	9,012.2	8,999.0	32.1	9.4	139.51	-86.5	251.5	301.3	261.2	40.02	7.528	
9,050.0	9,025.1	9,058.8	9,044.0	32.3	9.4	127.96	-97.7	255.3	305.1	264.8	40.26	7.578	
9,100.0	9,073.3	9,104.7	9,087.4	32.5	9.4	121.62	-112.3	259.0	311.0	270.5	40.51	7.678	
9,150.0	9,120.0	9,150.0	9,128.9	32.6	9.5	117.24	-130.1	262.5	318.9	278.2	40.75	7.827	
9,200.0	9,165.2	9,194.6	9,168.3	32.8	9.5	113.77	-150.7	265.9	328.8	287.8	40.98	8.022	
9,250.0	9,208.2	9,238.5	9,205.3	33.0	9.6	110.79	-174.0	269.1	340.4	299.2	41.21	8.260	
9,300.0	9,249.0	9,281.6	9,239.9	33.2	9.6	108.10	-199.6	272.1	353.7	312.3	41.43	8.537	
9,350.0	9,287.1	9,324.0	9,271.9	33.3	9.7	105.61	-227.2	274.9	368.5	326.9	41.64	8.850	
9,400.0	9,322.2	9,365.8	9,301.4	33.5	9.7	103.25	-256.6	277.4	384.8	342.9	41.84	9.195	
9,450.0	9,354.1	9,406.9	9,328.3	33.6	9.8	100.99	-287.7	279.8	402.2	360.2	42.04	9.568	
9,500.0	9,382.6	9,450.0	9,354.0	33.8	9.8	98.84	-322.2	282.1	420.8	378.5	42.25	9.960	
9,550.0	9,407.4	9,487.4	9,374.1	33.9	9.9	96.73	-353.7	283.9	440.2	397.8	42.42	10.378	
9,600.0	9,428.3	9,527.1	9,393.2	34.1	10.0	94.72	-388.4	285.6	460.5	417.9	42.60	10.808	
9,650.0	9,445.2	9,566.3	9,409.7	34.2	10.0	92.78	-423.9	287.1	481.4	438.6	42.79	11.250	
9,700.0	9,457.9	9,605.3	9,423.6	34.3	10.1	90.91	-460.4	288.5	502.8	459.8	42.97	11.700	
9,750.0	9,466.4	9,644.2	9,435.0	34.5	10.2	89.14	-497.5	289.6	524.5	481.3	43.16	12.154	
9,800.0	9,470.6	9,683.0	9,443.9	34.6	10.3	87.45	-535.3	290.5	546.5	503.1	43.34	12.607	
9,825.7	9,471.0	9,703.0	9,447.4	34.6	10.3	86.62	-554.9	290.8	557.8	514.3	43.44	12.840	
9,900.0	9,470.7	9,761.8	9,453.9	34.8	10.4	87.55	-613.3	291.6	590.2	546.5	43.75	13.491	
10,000.0	9,470.2	9,847.9	9,454.7	35.0	10.6	87.87	-699.4	292.1	632.3	588.0	44.28	14.279	
10,100.0	9,469.8	9,939.9	9,454.3	35.3	10.9	88.03	-791.4	292.4	671.4	626.5	44.92	14.945	
10,200.0	9,469.3	10,033.3	9,453.9	35.6	11.3	88.16	-884.8	292.8	707.2	661.6	45.63	15.499	
10,300.0	9,468.8	10,127.8	9,453.5	35.8	11.8	88.27	-979.3	293.1	739.8	693.4	46.40	15.943	
10,400.0	9,468.4	10,223.4	9,453.0	36.1	12.3	88.36	-1,074.9	293.5	769.1	721.8	47.23	16.283	
10,500.0	9,467.9	10,320.0	9,452.6	36.5	12.8	88.44	-1,171.5	293.8	795.0	746.8	48.11	16.524	
10,600.0	9,467.4	10,417.4	9,452.2	36.8	13.5	88.50	-1,268.9	294.2	817.5	768.4	49.03	16.672	
10,700.0	9,466.9	10,515.6	9,451.7	37.1	14.1	88.56	-1,367.1	294.6	836.6	786.6	50.00	16.731	
10,800.0	9,466.5	10,614.3	9,451.3	37.5	14.8	88.60	-1,465.8	295.0	852.2	801.2	51.01	16.709	
10,900.0	9,466.0	10,713.6	9,450.8	37.8	15.5	88.64	-1,565.1	295.3	864.4	812.4	52.04	16.610	
11,000.0	9,465.5	10,813.2	9,450.4	38.2	16.2	88.67	-1,664.7	295.7	873.2	820.1	53.11	16.440	
11,100.0	9,465.1	10,913.0	9,449.9	38.5	17.0	88.69	-1,764.5	296.1	878.4	824.2	54.21	16.205	
11,200.7	9,464.6	11,013.8	9,449.5	38.9	17.7	88.70	-1,865.3	296.5	880.2	824.9	55.33	15.907	
11,300.0	9,464.1	11,113.0	9,449.0	39.2	18.5	88.70	-1,964.5	296.9	880.2	823.7	56.46	15.589	

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 BOO RADLEY COM #701H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30' @ 3019.9usft (TBD)
Reference Site:	BOO RADLEY COM PROJECT	MD Reference:	*KB=30' @ 3019.9usft (TBD)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	BOO RADLEY COM #701H	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 BOO RADLEY COM PROJECT - BOO RADLEY COM #702H - OWB - PWP1												Offset Site Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 8904-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
11,400.0	9,463.7	11,213.0	9,448.6	39.6	19.2	88.70	-2,064.5	297.2	880.2	822.6	57.63	15.274	
11,500.0	9,463.2	11,313.0	9,448.1	40.0	20.0	88.70	-2,164.5	297.6	880.2	821.4	58.81	14.966	
11,600.0	9,462.8	11,413.0	9,447.7	40.4	20.8	88.70	-2,264.5	298.0	880.2	820.2	60.02	14.666	
11,700.0	9,462.3	11,513.0	9,447.2	40.9	21.6	88.71	-2,364.5	298.4	880.2	819.0	61.24	14.372	
11,800.0	9,461.8	11,613.0	9,446.8	41.3	22.4	88.71	-2,464.5	298.8	880.2	817.7	62.49	14.086	
11,900.0	9,461.4	11,713.0	9,446.3	41.7	23.2	88.71	-2,564.5	299.2	880.2	816.5	63.75	13.807	
12,000.0	9,460.9	11,813.0	9,445.9	42.2	24.0	88.71	-2,664.5	299.5	880.2	815.2	65.03	13.536	
12,100.0	9,460.4	11,913.0	9,445.4	42.7	24.8	88.71	-2,764.5	299.9	880.2	813.9	66.32	13.272	
12,200.0	9,460.0	12,013.0	9,445.0	43.2	25.6	88.71	-2,864.5	300.3	880.2	812.6	67.63	13.015	
12,300.0	9,459.5	12,113.0	9,444.5	43.7	26.4	88.71	-2,964.5	300.7	880.2	811.3	68.96	12.765	
12,400.0	9,459.1	12,213.0	9,444.1	44.2	27.3	88.71	-3,064.5	301.1	880.2	809.9	70.29	12.522	
12,500.0	9,458.6	12,313.0	9,443.6	44.7	28.1	88.71	-3,164.5	301.4	880.2	808.6	71.65	12.286	
12,600.0	9,458.1	12,413.0	9,443.2	45.2	28.9	88.71	-3,264.5	301.8	880.2	807.2	73.01	12.056	
12,700.0	9,457.7	12,513.0	9,442.7	45.8	29.7	88.71	-3,364.5	302.2	880.2	805.8	74.39	11.833	
12,800.0	9,457.2	12,613.0	9,442.3	46.3	30.6	88.71	-3,464.5	302.6	880.2	804.4	75.77	11.616	
12,900.0	9,456.8	12,713.0	9,441.8	46.9	31.4	88.71	-3,564.5	303.0	880.2	803.0	77.17	11.406	
13,000.0	9,456.3	12,813.0	9,441.4	47.4	32.2	88.72	-3,664.5	303.3	880.2	801.6	78.58	11.201	
13,100.0	9,455.8	12,913.0	9,440.9	48.0	33.1	88.72	-3,764.5	303.7	880.2	800.2	80.00	11.003	
13,200.0	9,455.4	13,013.0	9,440.5	48.6	33.9	88.72	-3,864.5	304.1	880.2	798.8	81.43	10.810	
13,300.0	9,454.9	13,113.0	9,440.0	49.2	34.7	88.72	-3,964.5	304.5	880.2	797.3	82.87	10.622	
13,400.0	9,454.4	13,213.0	9,439.6	49.8	35.6	88.72	-4,064.5	304.9	880.2	795.9	84.31	10.440	
13,500.0	9,454.0	13,313.0	9,439.1	50.4	36.4	88.72	-4,164.5	305.2	880.2	794.4	85.77	10.263	
13,600.0	9,453.5	13,413.0	9,438.7	51.0	37.2	88.72	-4,264.5	305.6	880.2	793.0	87.23	10.091	
13,700.0	9,453.1	13,513.0	9,438.2	51.6	38.1	88.72	-4,364.5	306.0	880.2	791.5	88.70	9.923	
13,800.0	9,452.6	13,613.0	9,437.7	52.3	38.9	88.72	-4,464.5	306.4	880.2	790.0	90.18	9.760	
13,900.0	9,452.1	13,713.0	9,437.3	52.9	39.8	88.72	-4,564.5	306.8	880.2	788.5	91.67	9.602	
14,000.0	9,451.7	13,813.0	9,436.8	53.5	40.6	88.72	-4,664.5	307.1	880.2	787.1	93.16	9.448	
14,100.0	9,451.2	13,913.0	9,436.4	54.2	41.4	88.72	-4,764.5	307.5	880.2	785.6	94.66	9.299	
14,200.0	9,450.7	14,013.0	9,435.9	54.8	42.3	88.72	-4,864.5	307.9	880.2	784.1	96.17	9.153	
14,300.0	9,450.3	14,113.0	9,435.5	55.5	43.1	88.73	-4,964.5	308.3	880.2	782.5	97.68	9.011	
14,400.0	9,449.8	14,213.0	9,435.0	56.2	44.0	88.73	-5,064.5	308.7	880.2	781.0	99.20	8.874	
14,500.0	9,449.4	14,313.0	9,434.6	56.8	44.8	88.73	-5,164.5	309.0	880.2	779.5	100.72	8.739	
14,600.0	9,448.9	14,413.0	9,434.1	57.5	45.7	88.73	-5,264.5	309.4	880.2	778.0	102.25	8.609	
14,700.0	9,448.4	14,513.0	9,433.7	58.2	46.5	88.73	-5,364.5	309.8	880.2	776.4	103.78	8.481	
14,800.0	9,448.0	14,613.0	9,433.2	58.9	47.4	88.73	-5,464.5	310.2	880.2	774.9	105.32	8.357	
14,802.0	9,448.0	14,615.0	9,433.2	58.9	47.4	88.73	-5,466.4	310.2	880.2	774.9	105.35	8.355	
14,836.7	9,447.8	14,648.5	9,433.1	59.1	47.7	88.73	-5,499.9	310.3	880.2	774.4	105.87	8.315	
14,846.3	9,447.8	14,656.4	9,433.0	59.2	47.7	88.73	-5,507.8	310.3	880.2	774.2	105.98	8.305	
14,900.0	9,447.5	14,710.1	9,432.8	59.5	48.2	88.73	-5,561.5	310.4	880.2	773.4	106.81	8.241	
15,000.0	9,447.0	14,810.1	9,432.4	60.2	49.0	88.73	-5,661.5	310.4	880.2	771.9	108.36	8.123	
15,100.0	9,446.6	14,910.1	9,431.9	60.9	49.9	88.73	-5,761.5	310.5	880.2	770.3	109.91	8.009	
15,200.0	9,446.1	15,010.1	9,431.4	61.6	50.7	88.73	-5,861.5	310.5	880.2	768.8	111.47	7.897	
15,300.0	9,445.7	15,110.1	9,431.0	62.3	51.6	88.73	-5,961.5	310.5	880.2	767.2	113.03	7.788	
15,400.0	9,445.2	15,210.1	9,430.5	63.0	52.4	88.73	-6,061.5	310.6	880.2	765.6	114.59	7.681	
15,500.0	9,444.7	15,310.1	9,430.1	63.8	53.3	88.73	-6,161.5	310.6	880.2	764.1	116.16	7.577	
15,600.0	9,444.3	15,410.1	9,429.6	64.5	54.1	88.74	-6,261.5	310.7	880.2	762.5	117.74	7.476	
15,700.0	9,443.8	15,510.1	9,429.2	65.2	55.0	88.74	-6,361.5	310.7	880.2	760.9	119.31	7.377	
15,800.0	9,443.3	15,610.1	9,428.7	65.9	55.8	88.74	-6,461.5	310.8	880.2	759.3	120.89	7.281	
15,900.0	9,442.9	15,710.1	9,428.3	66.6	56.7	88.74	-6,561.5	310.8	880.2	757.7	122.48	7.187	
16,000.0	9,442.4	15,810.1	9,427.8	67.4	57.5	88.74	-6,661.5	310.9	880.2	756.2	124.06	7.095	
16,100.0	9,441.9	15,910.1	9,427.4	68.1	58.4	88.74	-6,761.5	310.9	880.2	754.6	125.65	7.005	
16,200.0	9,441.5	16,010.1	9,426.9	68.8	59.2	88.74	-6,861.5	311.0	880.2	753.0	127.25	6.917	

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 BOO RADLEY COM #701H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30' @ 3019.9usft (TBD)
Reference Site:	BOO RADLEY COM PROJECT	MD Reference:	*KB=30' @ 3019.9usft (TBD)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	BOO RADLEY COM #701H	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 BOO RADLEY COM PROJECT - BOO RADLEY COM #702H - OWB - PWP1												Offset Site Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 8904-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
16,300.0	9,441.0	16,110.1	9,426.5	69.6	60.1	88.74	-6,961.5	311.0	880.2	751.4	128.84	6.832	
16,400.0	9,440.6	16,210.1	9,426.0	70.3	60.9	88.74	-7,061.5	311.1	880.2	749.8	130.44	6.748	
16,500.0	9,440.1	16,310.1	9,425.6	71.1	61.8	88.74	-7,161.5	311.1	880.2	748.2	132.04	6.666	
16,600.0	9,439.6	16,410.1	9,425.1	71.8	62.6	88.74	-7,261.5	311.2	880.2	746.6	133.65	6.586	
16,700.0	9,439.2	16,510.1	9,424.7	72.5	63.5	88.74	-7,361.5	311.2	880.2	745.0	135.25	6.508	
16,800.0	9,438.7	16,610.1	9,424.2	73.3	64.3	88.74	-7,461.5	311.3	880.2	743.4	136.86	6.431	
16,900.0	9,438.2	16,710.1	9,423.8	74.1	65.2	88.75	-7,561.5	311.3	880.2	741.7	138.48	6.357	
17,000.0	9,437.8	16,810.1	9,423.3	74.8	66.0	88.75	-7,661.5	311.4	880.2	740.1	140.09	6.283	
17,100.0	9,437.3	16,910.1	9,422.9	75.6	66.9	88.75	-7,761.5	311.4	880.2	738.5	141.71	6.212	
17,200.0	9,436.8	17,010.1	9,422.4	76.3	67.7	88.75	-7,861.5	311.5	880.2	736.9	143.32	6.141	
17,300.0	9,436.4	17,110.1	9,422.0	77.1	68.6	88.75	-7,961.5	311.5	880.2	735.3	144.95	6.073	
17,400.0	9,435.9	17,210.1	9,421.5	77.8	69.4	88.75	-8,061.5	311.6	880.2	733.6	146.57	6.006	
17,500.0	9,435.4	17,310.1	9,421.0	78.6	70.3	88.75	-8,161.5	311.6	880.2	732.0	148.19	5.940	
17,600.0	9,435.0	17,410.1	9,420.6	79.4	71.2	88.75	-8,261.5	311.7	880.2	730.4	149.82	5.875	
17,700.0	9,434.5	17,510.1	9,420.1	80.1	72.0	88.75	-8,361.5	311.7	880.2	728.8	151.45	5.812	
17,800.0	9,434.1	17,610.1	9,419.7	80.9	72.9	88.75	-8,461.5	311.8	880.2	727.1	153.08	5.750	
17,900.0	9,433.6	17,710.1	9,419.2	81.7	73.7	88.75	-8,561.5	311.8	880.2	725.5	154.71	5.689	
18,000.0	9,433.1	17,810.1	9,418.8	82.5	74.6	88.75	-8,661.5	311.9	880.2	723.9	156.35	5.630	
18,100.0	9,432.7	17,910.1	9,418.3	83.2	75.4	88.75	-8,761.5	311.9	880.2	722.2	157.98	5.572	
18,200.0	9,432.2	18,010.1	9,417.9	84.0	76.3	88.76	-8,861.5	312.0	880.2	720.6	159.62	5.514	
18,300.0	9,431.7	18,110.1	9,417.4	84.8	77.1	88.76	-8,961.5	312.0	880.2	719.0	161.26	5.458	
18,400.0	9,431.3	18,210.1	9,417.0	85.6	78.0	88.76	-9,061.5	312.1	880.2	717.3	162.90	5.403	
18,500.0	9,430.8	18,310.1	9,416.5	86.4	78.8	88.76	-9,161.5	312.1	880.2	715.7	164.54	5.349	
18,600.0	9,430.3	18,410.1	9,416.1	87.1	79.7	88.76	-9,261.5	312.1	880.2	714.0	166.18	5.297	
18,700.0	9,429.9	18,510.1	9,415.6	87.9	80.6	88.76	-9,361.5	312.2	880.2	712.4	167.83	5.245	
18,800.0	9,429.4	18,610.1	9,415.2	88.7	81.4	88.76	-9,461.5	312.2	880.2	710.7	169.48	5.194	
18,900.0	9,429.0	18,710.1	9,414.7	89.5	82.3	88.76	-9,561.5	312.3	880.2	709.1	171.12	5.144	
19,000.0	9,428.5	18,810.1	9,414.3	90.3	83.1	88.76	-9,661.5	312.3	880.2	707.4	172.77	5.095	
19,100.0	9,428.0	18,910.1	9,413.8	91.1	84.0	88.76	-9,761.5	312.4	880.2	705.8	174.42	5.046	
19,200.0	9,427.6	19,010.1	9,413.4	91.9	84.8	88.76	-9,861.5	312.4	880.2	704.1	176.07	4.999	
19,300.0	9,427.1	19,110.1	9,412.9	92.7	85.7	88.76	-9,961.5	312.5	880.2	702.5	177.73	4.953	
19,400.0	9,426.6	19,210.1	9,412.5	93.5	86.5	88.76	-10,061.5	312.5	880.2	700.8	179.38	4.907	
19,500.0	9,426.2	19,310.1	9,412.0	94.3	87.4	88.77	-10,161.5	312.6	880.2	699.2	181.04	4.862	
19,600.0	9,425.7	19,410.1	9,411.6	95.1	88.2	88.77	-10,261.5	312.6	880.2	697.5	182.69	4.818	
19,700.0	9,425.2	19,510.1	9,411.1	95.9	89.1	88.77	-10,361.5	312.7	880.2	695.9	184.35	4.775	
19,800.0	9,424.8	19,610.1	9,410.7	96.7	90.0	88.77	-10,461.5	312.7	880.2	694.2	186.01	4.732	
19,900.0	9,424.3	19,710.1	9,410.2	97.5	90.8	88.77	-10,561.5	312.8	880.2	692.5	187.67	4.690	
20,000.0	9,423.9	19,810.1	9,409.7	98.3	91.7	88.77	-10,661.5	312.8	880.2	690.9	189.33	4.649	
20,100.0	9,423.4	19,910.1	9,409.3	99.1	92.5	88.77	-10,761.5	312.9	880.2	689.2	190.99	4.609	
20,120.1	9,423.3	19,930.2	9,409.2	99.2	92.7	88.77	-10,781.5	312.9	880.2	688.9	191.32	4.601	
20,120.1	9,423.3	19,930.2	9,409.2	99.2	92.7	88.77	-10,781.6	312.9	880.2	688.9	191.32	4.601	
20,125.2	9,423.3	19,937.0	9,409.2	99.3	92.8	88.77	-10,788.4	312.9	880.2	688.8	191.44	4.598	
20,125.3	9,423.3	19,937.1	9,409.2	99.3	92.8	88.77	-10,788.5	312.9	880.2	688.8	191.44	4.598	
20,200.0	9,422.9	20,011.7	9,408.8	99.9	93.4	88.77	-10,863.1	313.1	880.2	687.5	192.68	4.568	
20,300.0	9,422.5	20,111.7	9,408.4	100.7	94.3	88.77	-10,963.1	313.3	880.2	685.9	194.35	4.529	
20,400.0	9,422.0	20,211.7	9,407.9	101.5	95.1	88.77	-11,063.1	313.5	880.2	684.2	196.01	4.491	
20,500.0	9,421.6	20,311.7	9,407.5	102.3	96.0	88.77	-11,163.1	313.7	880.2	682.5	197.68	4.453	
20,600.0	9,421.1	20,411.7	9,407.0	103.1	96.8	88.77	-11,263.1	314.0	880.2	680.9	199.34	4.416	
20,700.0	9,420.6	20,511.7	9,406.6	103.9	97.7	88.77	-11,363.1	314.2	880.2	679.2	201.01	4.379	
20,800.0	9,420.2	20,611.7	9,406.1	104.7	98.5	88.77	-11,463.1	314.4	880.2	677.5	202.68	4.343	
20,900.0	9,419.7	20,711.7	9,405.7	105.5	99.4	88.77	-11,563.1	314.7	880.2	675.9	204.35	4.307	
21,000.0	9,419.3	20,811.7	9,405.2	106.3	100.2	88.77	-11,663.1	314.9	880.2	674.2	206.02	4.273	

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 BOO RADLEY COM #701H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30' @ 3019.9usft (TBD)
Reference Site:	BOO RADLEY COM PROJECT	MD Reference:	*KB=30' @ 3019.9usft (TBD)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	BOO RADLEY COM #701H	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 BOO RADLEY COM PROJECT - BOO RADLEY COM #702H - OWB - PWP1													Offset Site Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 8904-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		
21,100.0	9,418.8	20,911.7	9,404.7	107.1	101.1	88.77	-11,763.0	315.1	880.2	672.5	207.69	4.238		
21,200.0	9,418.3	21,011.7	9,404.3	107.9	102.0	88.77	-11,863.0	315.3	880.2	670.8	209.36	4.204		
21,300.0	9,417.9	21,111.7	9,403.8	108.8	102.8	88.77	-11,963.0	315.6	880.2	669.2	211.03	4.171		
21,400.0	9,417.4	21,211.7	9,403.4	109.6	103.7	88.77	-12,063.0	315.8	880.2	667.5	212.70	4.138		
21,500.0	9,417.0	21,311.7	9,402.9	110.4	104.5	88.77	-12,163.0	316.0	880.2	665.8	214.38	4.106		
21,600.0	9,416.5	21,411.7	9,402.5	111.2	105.4	88.77	-12,263.0	316.3	880.2	664.2	216.05	4.074		
21,700.0	9,416.0	21,511.7	9,402.0	112.0	106.2	88.78	-12,363.0	316.5	880.2	662.5	217.72	4.043		
21,800.0	9,415.6	21,611.7	9,401.6	112.8	107.1	88.78	-12,463.0	316.7	880.2	660.8	219.40	4.012		
21,900.0	9,415.1	21,711.7	9,401.1	113.6	108.0	88.78	-12,563.0	316.9	880.2	659.1	221.08	3.981		
22,000.0	9,414.7	21,811.7	9,400.7	114.5	108.8	88.78	-12,663.0	317.2	880.2	657.5	222.75	3.952		
22,100.0	9,414.2	21,911.7	9,400.2	115.3	109.7	88.78	-12,763.0	317.4	880.2	655.8	224.43	3.922		
22,142.3	9,414.0	21,954.0	9,400.0	115.6	110.0	88.78	-12,805.3	317.5	880.2	655.1	225.14	3.910		

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well BOO RADLEY COM #701H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30' @ 3019.9usft (TBD)
Reference Site:	BOO RADLEY COM PROJECT	MD Reference:	*KB=30' @ 3019.9usft (TBD)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	BOO RADLEY COM #701H	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 BOO RADLEY COM PROJECT - BOO RADLEY COM #703H - OWB - PWP1												Offset Site Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 8903-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	5.1	5.1	3.0	3.0	-89.81	0.2	-60.1	60.1				
100.0	100.0	105.1	105.1	3.0	3.0	-89.81	0.2	-60.1	60.1	54.1	6.00	10.012	
200.0	200.0	205.1	205.1	3.0	3.0	-89.81	0.2	-60.1	60.1	54.1	6.04	9.948	
300.0	300.0	305.1	305.1	3.1	3.0	-89.81	0.2	-60.1	60.1	54.0	6.12	9.816	
400.0	400.0	405.1	405.1	3.2	3.0	-89.81	0.2	-60.1	60.1	53.9	6.24	9.626	
500.0	500.0	505.1	505.1	3.4	3.1	-89.81	0.2	-60.1	60.1	53.7	6.40	9.391	
600.0	600.0	605.1	605.1	3.6	3.1	-89.81	0.2	-60.1	60.1	53.5	6.59	9.123	
700.0	700.0	705.1	705.1	3.8	3.1	-89.81	0.2	-60.1	60.1	53.3	6.80	8.834	
800.0	800.0	805.1	805.1	4.0	3.2	-89.81	0.2	-60.1	60.1	53.1	7.04	8.535	
900.0	900.0	905.1	905.1	4.2	3.2	-89.81	0.2	-60.1	60.1	52.8	7.30	8.233	
1,000.0	1,000.0	1,005.1	1,005.1	4.5	3.2	-89.81	0.2	-60.1	60.1	52.5	7.57	7.935	
1,100.0	1,100.0	1,105.1	1,105.1	4.8	3.3	-89.81	0.2	-60.1	60.1	52.2	7.86	7.643	
1,200.0	1,200.0	1,205.1	1,205.1	5.1	3.4	-89.81	0.2	-60.1	60.1	51.9	8.16	7.361	
1,300.0	1,300.0	1,305.1	1,305.1	5.4	3.4	-89.81	0.2	-60.1	60.1	51.6	8.48	7.090	
1,400.0	1,400.0	1,405.1	1,405.1	5.7	3.5	-89.81	0.2	-60.1	60.1	51.3	8.80	6.832	
1,500.0	1,500.0	1,505.1	1,505.1	6.0	3.6	-89.81	0.2	-60.1	60.1	51.0	9.13	6.586	
1,600.0	1,600.0	1,605.1	1,605.1	6.3	3.6	-89.81	0.2	-60.1	60.1	50.6	9.46	6.353	
1,700.0	1,700.0	1,705.1	1,705.1	6.6	3.7	-89.81	0.2	-60.1	60.1	50.3	9.80	6.132	
1,800.0	1,800.0	1,805.1	1,805.1	6.9	3.8	-89.81	0.2	-60.1	60.1	50.0	10.15	5.922	
1,900.0	1,900.0	1,905.1	1,905.1	7.2	3.9	-89.81	0.2	-60.1	60.1	49.6	10.50	5.724	
2,000.0	2,000.0	2,005.1	2,005.1	7.6	3.9	-89.81	0.2	-60.1	60.1	49.2	10.86	5.536	
2,100.0	2,100.0	2,105.1	2,105.1	7.9	4.0	-89.81	0.2	-60.1	60.1	48.9	11.22	5.359	
2,200.0	2,200.0	2,205.1	2,205.1	8.2	4.1	-89.81	0.2	-60.1	60.1	48.5	11.58	5.191	
2,300.0	2,300.0	2,305.1	2,305.1	8.6	4.2	-89.81	0.2	-60.1	60.1	48.2	11.94	5.031	
2,400.0	2,400.0	2,405.1	2,405.1	8.9	4.3	-89.81	0.2	-60.1	60.1	47.8	12.31	4.880	
2,414.9	2,414.9	2,420.0	2,420.0	8.9	4.3	-89.81	0.2	-60.1	60.1	47.7	12.37	4.859 CC	
2,500.0	2,500.0	2,505.0	2,505.0	9.2	4.4	-89.81	0.2	-60.1	60.1	47.4	12.69	4.738 ES, SF	
2,600.0	2,600.0	2,602.8	2,602.8	9.6	4.5	174.90	0.0	-61.9	63.7	50.7	13.05	4.884	
2,700.0	2,699.8	2,700.0	2,699.8	9.9	4.5	174.82	-0.5	-67.0	74.2	60.8	13.39	5.538	
2,748.2	2,747.8	2,747.0	2,746.7	10.0	4.5	174.78	-0.9	-70.6	81.5	67.9	13.56	6.009	
2,800.0	2,799.5	2,798.1	2,797.7	10.2	4.5	174.77	-1.3	-74.5	89.9	76.2	13.75	6.539	
2,900.0	2,899.1	2,896.8	2,896.1	10.5	4.5	174.77	-2.1	-82.1	106.2	92.1	14.12	7.518	
3,000.0	2,998.7	2,995.5	2,994.4	10.9	4.6	174.77	-2.8	-89.7	122.4	107.9	14.50	8.444	
3,100.0	3,098.4	3,094.1	3,092.8	11.2	4.6	174.76	-3.6	-97.3	138.7	123.8	14.88	9.319	
3,200.0	3,198.0	3,192.8	3,191.2	11.5	4.6	174.76	-4.4	-104.8	154.9	139.7	15.27	10.147	
3,300.0	3,297.6	3,291.5	3,289.6	11.9	4.7	174.76	-5.2	-112.4	171.2	155.5	15.66	10.930	
3,400.0	3,397.2	3,390.2	3,387.9	12.2	4.7	174.76	-6.0	-120.0	187.4	171.4	16.06	11.671	
3,500.0	3,496.9	3,488.8	3,486.3	12.6	4.8	174.76	-6.7	-127.6	203.7	187.2	16.46	12.374	
3,600.0	3,596.5	3,587.5	3,584.7	12.9	4.8	174.76	-7.5	-135.2	219.9	203.0	16.87	13.039	
3,700.0	3,696.1	3,686.2	3,683.1	13.3	4.9	174.75	-8.3	-142.8	236.2	218.9	17.28	13.670	
3,800.0	3,795.7	3,784.8	3,781.4	13.6	5.0	174.75	-9.1	-150.3	252.4	234.7	17.69	14.269	
3,900.0	3,895.4	3,883.5	3,879.8	13.9	5.0	174.75	-9.9	-157.9	268.7	250.6	18.11	14.838	
4,000.0	3,995.0	3,982.2	3,978.2	14.3	5.1	174.75	-10.6	-165.5	284.9	266.4	18.53	15.378	
4,100.0	4,094.6	4,080.9	4,076.6	14.6	5.2	174.75	-11.4	-173.1	301.2	282.2	18.95	15.892	
4,200.0	4,194.2	4,179.5	4,175.0	15.0	5.2	174.75	-12.2	-180.7	317.4	298.0	19.38	16.380	
4,300.0	4,293.9	4,278.2	4,273.3	15.3	5.3	174.75	-13.0	-188.3	333.6	313.8	19.81	16.846	
4,400.0	4,393.5	4,376.9	4,371.7	15.7	5.4	174.75	-13.8	-195.9	349.9	329.7	20.24	17.289	
4,500.0	4,493.1	4,475.5	4,470.1	16.0	5.4	174.75	-14.5	-203.4	366.1	345.5	20.67	17.712	
4,600.0	4,592.7	4,574.2	4,568.5	16.4	5.5	174.75	-15.3	-211.0	382.4	361.3	21.11	18.115	
4,700.0	4,692.4	4,672.9	4,666.8	16.7	5.6	174.75	-16.1	-218.6	398.6	377.1	21.55	18.500	
4,800.0	4,792.0	4,771.6	4,765.2	17.1	5.7	174.75	-16.9	-226.2	414.9	392.9	21.99	18.868	
4,900.0	4,891.6	4,870.2	4,863.6	17.4	5.8	174.75	-17.6	-233.8	431.1	408.7	22.43	19.219	

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 BOO RADLEY COM #701H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30' @ 3019.9usft (TBD)
Reference Site:	BOO RADLEY COM PROJECT	MD Reference:	*KB=30' @ 3019.9usft (TBD)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	BOO RADLEY COM #701H	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 BOO RADLEY COM PROJECT - BOO RADLEY COM #703H - OWB - PWP1												Offset Site Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 8903-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.0	4,991.2	4,968.9	4,962.0	17.8	5.9	174.75	-18.4	-241.4	447.4	424.5	22.88	19.556	
5,100.0	5,090.9	5,067.6	5,060.3	18.1	5.9	174.75	-19.2	-248.9	463.6	440.3	23.32	19.878	
5,200.0	5,190.5	5,166.2	5,158.7	18.5	6.0	174.75	-20.0	-256.5	479.9	456.1	23.77	20.187	
5,300.0	5,290.1	5,264.9	5,257.1	18.8	6.1	174.75	-20.8	-264.1	496.1	471.9	24.22	20.482	
5,400.0	5,389.7	5,363.6	5,355.5	19.2	6.2	174.75	-21.5	-271.7	512.4	487.7	24.67	20.766	
5,500.0	5,489.4	5,462.3	5,453.8	19.6	6.3	174.75	-22.3	-279.3	528.6	503.5	25.13	21.039	
5,600.0	5,589.0	5,560.9	5,552.2	19.9	6.4	174.75	-23.1	-286.9	544.9	519.3	25.58	21.300	
5,700.0	5,688.6	5,659.6	5,650.6	20.3	6.5	174.75	-23.9	-294.5	561.1	535.1	26.04	21.552	
5,800.0	5,788.2	5,758.3	5,749.0	20.6	6.6	174.75	-24.7	-302.0	577.4	550.9	26.49	21.794	
5,900.0	5,887.9	5,856.9	5,847.3	21.0	6.7	174.75	-25.4	-309.6	593.6	566.7	26.95	22.027	
6,000.0	5,987.5	5,955.6	5,945.7	21.3	6.8	174.75	-26.2	-317.2	609.9	582.4	27.41	22.251	
6,100.0	6,087.1	6,054.3	6,044.1	21.7	6.9	174.75	-27.0	-324.8	626.1	598.2	27.87	22.467	
6,200.0	6,186.7	6,153.0	6,142.5	22.0	7.0	174.75	-27.8	-332.4	642.4	614.0	28.33	22.675	
6,300.0	6,286.4	6,251.6	6,240.9	22.4	7.1	174.75	-28.6	-340.0	658.6	629.8	28.79	22.875	
6,400.0	6,386.0	6,350.3	6,339.2	22.8	7.2	174.75	-29.3	-347.5	674.8	645.6	29.25	23.069	
6,500.0	6,485.6	6,449.0	6,437.6	23.1	7.3	174.75	-30.1	-355.1	691.1	661.4	29.72	23.256	
6,600.0	6,585.2	6,547.6	6,536.0	23.5	7.4	174.75	-30.9	-362.7	707.3	677.2	30.18	23.436	
6,700.0	6,684.9	6,646.3	6,634.4	23.8	7.5	174.75	-31.7	-370.3	723.6	692.9	30.65	23.611	
6,800.0	6,784.5	6,745.0	6,732.7	24.2	7.6	174.75	-32.5	-377.9	739.8	708.7	31.11	23.779	
6,900.0	6,884.1	6,843.7	6,831.1	24.5	7.7	174.75	-33.2	-385.5	756.1	724.5	31.58	23.942	
7,000.0	6,983.7	6,942.3	6,929.5	24.9	7.8	174.75	-34.0	-393.0	772.3	740.3	32.05	24.100	
7,100.0	7,083.4	7,041.0	7,027.9	25.3	7.9	174.75	-34.8	-400.6	788.6	756.1	32.51	24.253	
7,200.0	7,183.0	7,139.7	7,126.2	25.6	8.0	174.75	-35.6	-408.2	804.8	771.8	32.98	24.401	
7,300.0	7,282.6	7,238.3	7,224.6	26.0	8.1	174.75	-36.4	-415.8	821.1	787.6	33.45	24.545	
7,400.0	7,382.2	7,337.0	7,323.0	26.3	8.3	174.75	-37.1	-423.4	837.3	803.4	33.92	24.684	
7,500.0	7,481.9	7,435.7	7,421.4	26.7	8.4	174.75	-37.9	-431.0	853.6	819.2	34.39	24.818	
7,600.0	7,581.5	7,534.4	7,519.7	27.1	8.5	174.75	-38.7	-438.6	869.8	835.0	34.86	24.949	
7,700.0	7,681.1	7,633.0	7,618.1	27.4	8.6	174.75	-39.5	-446.1	886.1	850.7	35.33	25.076	
7,800.0	7,780.7	7,731.7	7,716.5	27.8	8.7	174.75	-40.3	-453.7	902.3	866.5	35.81	25.199	
7,900.0	7,880.4	7,830.4	7,814.9	28.1	8.8	174.75	-41.0	-461.3	918.6	882.3	36.28	25.319	
8,000.0	7,980.0	7,929.0	7,913.2	28.5	8.9	174.75	-41.8	-468.9	934.8	898.1	36.75	25.435	
8,100.0	8,079.6	8,027.7	8,011.6	28.9	9.0	174.75	-42.6	-476.5	951.1	913.8	37.23	25.549	
8,200.0	8,179.2	8,126.4	8,110.0	29.2	9.1	174.75	-43.4	-484.1	967.3	929.6	37.70	25.658	
8,300.0	8,278.9	8,225.1	8,208.4	29.6	9.3	174.75	-44.2	-491.6	983.6	945.4	38.17	25.765	
8,400.0	8,378.5	8,323.7	8,306.8	29.9	9.4	174.75	-44.9	-499.2	999.8	961.1	38.65	25.869	
8,500.0	8,478.1	8,422.4	8,405.1	30.3	9.5	174.74	-45.7	-506.8	1,016.0	976.9	39.12	25.971	
8,600.0	8,577.7	8,521.1	8,503.5	30.7	9.6	174.74	-46.5	-514.4	1,032.3	992.7	39.60	26.069	
8,700.0	8,677.4	8,619.7	8,601.9	31.0	9.7	174.74	-47.3	-522.0	1,048.5	1,008.5	40.07	26.165	
8,800.0	8,777.0	8,718.4	8,700.3	31.4	9.8	174.74	-48.0	-529.6	1,064.8	1,024.2	40.55	26.258	
8,900.0	8,876.6	8,817.1	8,798.6	31.7	10.0	174.74	-48.8	-537.2	1,081.0	1,040.0	41.03	26.350	
8,950.1	8,926.5	8,866.5	8,847.9	31.9	10.0	174.74	-49.2	-540.9	1,089.2	1,047.9	41.27	26.394	
9,000.0	8,976.1	8,915.5	8,896.8	32.1	10.1	145.46	-49.6	-544.7	1,098.3	1,056.8	41.50	26.466	
9,050.0	9,025.1	8,964.4	8,945.5	32.3	10.1	134.51	-50.5	-548.5	1,109.3	1,067.6	41.70	26.603	
9,100.0	9,073.3	9,013.7	8,994.4	32.5	10.1	128.74	-51.1	-552.2	1,122.2	1,080.3	41.89	26.789	
9,150.0	9,120.0	9,062.9	9,042.7	32.6	10.1	124.84	-51.9	-555.9	1,136.9	1,094.8	42.09	27.013	
9,200.0	9,165.2	9,112.1	9,090.0	32.8	10.1	121.74	-52.6	-559.5	1,153.2	1,110.9	42.28	27.273	
9,250.0	9,208.2	9,161.2	9,136.0	33.0	10.1	119.01	-53.3	-563.0	1,171.0	1,128.5	42.48	27.566	
9,300.0	9,249.0	9,210.2	9,180.2	33.2	10.2	116.44	-54.0	-566.4	1,190.2	1,147.5	42.68	27.888	
9,350.0	9,287.1	9,259.1	9,222.5	33.3	10.2	113.92	-54.7	-569.5	1,210.6	1,167.7	42.88	28.285	
9,400.0	9,322.2	9,308.0	9,262.5	33.5	10.2	111.40	-55.4	-572.5	1,232.1	1,189.0	43.08	28.603	
9,450.0	9,354.1	9,356.8	9,300.0	33.6	10.3	108.87	-56.1	-575.3	1,254.6	1,211.3	43.28	28.986	
9,500.0	9,382.6	9,405.8	9,334.7	33.8	10.3	106.31	-56.8	-577.9	1,277.8	1,234.3	43.49	29.380	

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 BOO RADLEY COM #701H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30' @ 3019.9usft (TBD)
Reference Site:	BOO RADLEY COM PROJECT	MD Reference:	*KB=30' @ 3019.9usft (TBD)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	BOO RADLEY COM #701H	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 BOO RADLEY COM PROJECT - BOO RADLEY COM #703H - OWB - PWP1												Offset Site Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 8903-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Distance		Warning							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,550.0	9,407.4	9,455.0	9,366.6	33.9	10.4	103.73	-269.6	-580.2	1,301.6	1,257.9	43.71	29.780	
9,600.0	9,428.3	9,504.6	9,395.4	34.1	10.5	101.14	-309.9	-582.3	1,325.8	1,281.9	43.93	30.180	
9,650.0	9,445.2	9,554.7	9,420.8	34.2	10.6	98.57	-353.0	-584.1	1,350.4	1,306.2	44.16	30.576	
9,700.0	9,457.9	9,605.5	9,442.6	34.3	10.7	96.04	-398.9	-585.6	1,374.9	1,330.5	44.41	30.963	
9,750.0	9,466.4	9,657.3	9,460.7	34.5	10.9	93.58	-447.4	-586.8	1,399.4	1,354.7	44.66	31.336	
9,800.0	9,470.6	9,710.3	9,474.5	34.6	11.0	91.20	-498.5	-587.7	1,423.6	1,378.7	44.92	31.691	
9,825.7	9,471.0	9,738.0	9,479.8	34.6	11.1	90.03	-525.7	-588.0	1,435.8	1,390.8	45.06	31.866	
9,900.0	9,470.7	9,821.3	9,487.9	34.8	11.4	90.40	-608.6	-588.4	1,469.9	1,424.4	45.48	32.318	
10,000.0	9,470.2	9,915.7	9,487.7	35.0	11.8	90.40	-702.9	-588.0	1,512.1	1,466.1	46.02	32.858	
10,100.0	9,469.8	10,007.7	9,487.3	35.3	12.1	90.39	-795.0	-587.7	1,551.2	1,504.6	46.61	33.278	
10,200.0	9,469.3	10,101.1	9,486.8	35.6	12.6	90.38	-888.3	-587.3	1,587.1	1,539.8	47.27	33.574	
10,300.0	9,468.8	10,195.6	9,486.3	35.8	13.1	90.37	-982.8	-587.0	1,619.7	1,571.7	47.99	33.749	
10,400.0	9,468.4	10,291.2	9,485.9	36.1	13.6	90.37	-1,078.5	-586.6	1,648.9	1,600.2	48.77	33.811	
10,500.0	9,467.9	10,387.8	9,485.4	36.5	14.2	90.37	-1,175.0	-586.2	1,674.8	1,625.2	49.60	33.768	
10,600.0	9,467.4	10,485.2	9,484.9	36.8	14.8	90.37	-1,272.5	-585.9	1,697.4	1,646.9	50.48	33.627	
10,700.0	9,466.9	10,583.4	9,484.4	37.1	15.4	90.37	-1,370.6	-585.5	1,716.5	1,665.1	51.40	33.396	
10,800.0	9,466.5	10,682.1	9,483.9	37.5	16.0	90.37	-1,469.4	-585.1	1,732.1	1,679.8	52.36	33.082	
10,900.0	9,466.0	10,781.4	9,483.4	37.8	16.7	90.38	-1,568.6	-584.7	1,744.3	1,691.0	53.36	32.692	
11,000.0	9,465.5	10,881.0	9,482.9	38.2	17.4	90.38	-1,668.2	-584.3	1,753.1	1,698.7	54.39	32.234	
11,100.0	9,465.1	10,980.9	9,482.4	38.5	18.1	90.39	-1,768.1	-584.0	1,758.3	1,702.9	55.45	31.713	
11,200.7	9,464.6	11,081.6	9,481.9	38.9	18.8	90.40	-1,868.8	-583.6	1,760.1	1,703.6	56.54	31.132	
11,300.0	9,464.1	11,180.8	9,481.4	39.2	19.5	90.40	-1,968.1	-583.2	1,760.1	1,702.5	57.64	30.538	
11,400.0	9,463.7	11,280.8	9,481.0	39.6	20.3	90.40	-2,068.1	-582.8	1,760.1	1,701.3	58.77	29.948	
11,500.0	9,463.2	11,380.8	9,480.5	40.0	21.0	90.40	-2,168.1	-582.4	1,760.1	1,700.2	59.93	29.370	
11,600.0	9,462.8	11,480.8	9,480.0	40.4	21.8	90.39	-2,268.1	-582.1	1,760.1	1,699.0	61.11	28.803	
11,700.0	9,462.3	11,580.8	9,479.5	40.9	22.6	90.39	-2,368.0	-581.7	1,760.1	1,697.8	62.31	28.247	
11,800.0	9,461.8	11,680.8	9,479.0	41.3	23.3	90.39	-2,468.0	-581.3	1,760.1	1,696.6	63.53	27.704	
11,900.0	9,461.4	11,780.8	9,478.5	41.7	24.1	90.39	-2,568.0	-580.9	1,760.1	1,695.3	64.77	27.174	
12,000.0	9,460.9	11,880.8	9,478.0	42.2	24.9	90.39	-2,668.0	-580.5	1,760.1	1,694.1	66.03	26.656	
12,100.0	9,460.4	11,980.8	9,477.5	42.7	25.7	90.39	-2,768.0	-580.1	1,760.1	1,692.8	67.31	26.150	
12,200.0	9,460.0	12,080.8	9,477.0	43.2	26.5	90.39	-2,868.0	-579.8	1,760.1	1,691.5	68.60	25.658	
12,300.0	9,459.5	12,180.8	9,476.5	43.7	27.3	90.39	-2,968.0	-579.4	1,760.1	1,690.2	69.91	25.178	
12,400.0	9,459.1	12,280.8	9,476.0	44.2	28.1	90.39	-3,068.0	-579.0	1,760.1	1,688.9	71.23	24.710	
12,500.0	9,458.6	12,380.8	9,475.5	44.7	28.9	90.38	-3,168.0	-578.6	1,760.1	1,687.5	72.56	24.255	
12,600.0	9,458.1	12,480.8	9,475.0	45.2	29.7	90.38	-3,268.0	-578.2	1,760.1	1,686.2	73.91	23.812	
12,700.0	9,457.7	12,580.8	9,474.5	45.8	30.5	90.38	-3,368.0	-577.8	1,760.1	1,684.8	75.28	23.381	
12,800.0	9,457.2	12,680.8	9,474.0	46.3	31.3	90.38	-3,468.0	-577.5	1,760.1	1,683.4	76.65	22.962	
12,900.0	9,456.8	12,780.8	9,473.5	46.9	32.1	90.38	-3,568.0	-577.1	1,760.1	1,682.0	78.04	22.554	
13,000.0	9,456.3	12,880.8	9,473.0	47.4	32.9	90.38	-3,668.0	-576.7	1,760.1	1,680.6	79.43	22.157	
13,100.0	9,455.8	12,980.8	9,472.5	48.0	33.8	90.38	-3,768.0	-576.3	1,760.1	1,679.2	80.84	21.772	
13,200.0	9,455.4	13,080.8	9,472.0	48.6	34.6	90.38	-3,868.0	-575.9	1,760.1	1,677.8	82.26	21.396	
13,300.0	9,454.9	13,180.8	9,471.6	49.2	35.4	90.38	-3,968.0	-575.5	1,760.1	1,676.4	83.69	21.031	
13,400.0	9,454.4	13,280.8	9,471.1	49.8	36.2	90.37	-4,068.0	-575.2	1,760.1	1,674.9	85.13	20.676	
13,500.0	9,454.0	13,380.8	9,470.6	50.4	37.1	90.37	-4,168.0	-574.8	1,760.1	1,673.5	86.57	20.331	
13,600.0	9,453.5	13,480.8	9,470.1	51.0	37.9	90.37	-4,268.0	-574.4	1,760.1	1,672.0	88.03	19.995	
13,700.0	9,453.1	13,580.8	9,469.6	51.6	38.7	90.37	-4,368.0	-574.0	1,760.1	1,670.6	89.49	19.668	
13,800.0	9,452.6	13,680.8	9,469.1	52.3	39.6	90.37	-4,468.0	-573.6	1,760.1	1,669.1	90.96	19.350	
13,900.0	9,452.1	13,780.8	9,468.6	52.9	40.4	90.37	-4,568.0	-573.3	1,760.1	1,667.6	92.44	19.041	
14,000.0	9,451.7	13,880.8	9,468.1	53.5	41.2	90.37	-4,668.0	-572.9	1,760.1	1,666.1	93.92	18.739	
14,100.0	9,451.2	13,980.8	9,467.6	54.2	42.1	90.37	-4,768.0	-572.5	1,760.1	1,664.6	95.41	18.446	
14,200.0	9,450.7	14,080.8	9,467.1	54.8	42.9	90.37	-4,868.0	-572.1	1,760.0	1,663.1	96.91	18.161	
14,300.0	9,450.3	14,180.8	9,466.6	55.5	43.7	90.37	-4,968.0	-571.7	1,760.0	1,661.6	98.42	17.883	

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 BOO RADLEY COM #701H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30' @ 3019.9usft (TBD)
Reference Site:	BOO RADLEY COM PROJECT	MD Reference:	*KB=30' @ 3019.9usft (TBD)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	BOO RADLEY COM #701H	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 BOO RADLEY COM PROJECT - BOO RADLEY COM #703H - OWB - PWP1												Offset Site Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 8903-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,400.0	9,449.8	14,280.8	9,466.1	56.2	44.6	90.36	-5,068.0	-571.3	1,760.0	1,660.1	99.93	17.613	
14,500.0	9,449.4	14,380.8	9,465.6	56.8	45.4	90.36	-5,168.0	-571.0	1,760.0	1,658.6	101.45	17.349	
14,600.0	9,448.9	14,480.8	9,465.1	57.5	46.2	90.36	-5,268.0	-570.6	1,760.0	1,657.1	102.97	17.093	
14,700.0	9,448.4	14,580.8	9,464.6	58.2	47.1	90.36	-5,368.0	-570.2	1,760.0	1,655.5	104.50	16.843	
14,800.0	9,448.0	14,680.8	9,464.1	58.9	47.9	90.36	-5,468.0	-569.8	1,760.0	1,654.0	106.03	16.599	
14,824.7	9,447.9	14,705.5	9,464.0	59.0	48.1	90.36	-5,492.7	-569.7	1,760.0	1,653.6	106.41	16.540	
14,836.7	9,447.8	14,713.4	9,464.0	59.1	48.2	90.36	-5,500.6	-569.7	1,760.1	1,653.5	106.54	16.519	
14,846.3	9,447.8	14,721.2	9,463.9	59.2	48.3	90.36	-5,508.4	-569.7	1,760.1	1,653.4	106.67	16.500	
14,900.0	9,447.5	14,775.0	9,463.7	59.5	48.7	90.36	-5,562.1	-569.7	1,760.1	1,652.6	107.50	16.373	
15,000.0	9,447.0	14,875.0	9,463.2	60.2	49.6	90.36	-5,662.1	-569.6	1,760.1	1,651.0	109.04	16.142	
15,100.0	9,446.6	14,975.0	9,462.7	60.9	50.4	90.36	-5,762.1	-569.6	1,760.1	1,649.5	110.59	15.916	
15,200.0	9,446.1	15,075.0	9,462.2	61.6	51.2	90.36	-5,862.1	-569.5	1,760.1	1,647.9	112.14	15.696	
15,300.0	9,445.7	15,175.0	9,461.7	62.3	52.1	90.36	-5,962.1	-569.5	1,760.1	1,646.4	113.69	15.481	
15,400.0	9,445.2	15,275.0	9,461.2	63.0	52.9	90.36	-6,062.1	-569.4	1,760.1	1,644.8	115.25	15.271	
15,500.0	9,444.7	15,375.0	9,460.7	63.8	53.8	90.35	-6,162.1	-569.4	1,760.1	1,643.2	116.82	15.067	
15,600.0	9,444.3	15,475.0	9,460.2	64.5	54.6	90.35	-6,262.1	-569.3	1,760.1	1,641.7	118.39	14.867	
15,700.0	9,443.8	15,575.0	9,459.7	65.2	55.5	90.35	-6,362.1	-569.3	1,760.1	1,640.1	119.96	14.672	
15,800.0	9,443.3	15,675.0	9,459.2	65.9	56.3	90.35	-6,462.1	-569.2	1,760.1	1,638.5	121.53	14.482	
15,900.0	9,442.9	15,775.0	9,458.7	66.6	57.1	90.35	-6,562.1	-569.2	1,760.1	1,636.9	123.11	14.296	
16,000.0	9,442.4	15,875.0	9,458.3	67.4	58.0	90.35	-6,662.1	-569.1	1,760.1	1,635.4	124.70	14.115	
16,100.0	9,441.9	15,975.0	9,457.8	68.1	58.8	90.35	-6,762.1	-569.1	1,760.1	1,633.8	126.28	13.937	
16,200.0	9,441.5	16,075.0	9,457.3	68.8	59.7	90.35	-6,862.1	-569.0	1,760.1	1,632.2	127.87	13.764	
16,300.0	9,441.0	16,175.0	9,456.8	69.6	60.5	90.35	-6,962.1	-569.0	1,760.1	1,630.6	129.46	13.595	
16,400.0	9,440.6	16,275.0	9,456.3	70.3	61.4	90.35	-7,062.1	-568.9	1,760.1	1,629.0	131.06	13.429	
16,500.0	9,440.1	16,375.0	9,455.8	71.1	62.2	90.35	-7,162.1	-568.9	1,760.1	1,627.4	132.66	13.268	
16,600.0	9,439.6	16,475.0	9,455.3	71.8	63.1	90.34	-7,262.1	-568.8	1,760.1	1,625.8	134.26	13.109	
16,700.0	9,439.2	16,575.0	9,454.8	72.5	63.9	90.34	-7,362.1	-568.8	1,760.1	1,624.2	135.86	12.955	
16,800.0	9,438.7	16,675.0	9,454.3	73.3	64.8	90.34	-7,462.1	-568.7	1,760.1	1,622.6	137.47	12.803	
16,900.0	9,438.2	16,775.0	9,453.8	74.1	65.6	90.34	-7,562.1	-568.7	1,760.0	1,621.0	139.08	12.655	
17,000.0	9,437.8	16,875.0	9,453.3	74.8	66.5	90.34	-7,662.1	-568.6	1,760.0	1,619.4	140.69	12.510	
17,100.0	9,437.3	16,975.0	9,452.9	75.6	67.3	90.34	-7,762.1	-568.6	1,760.0	1,617.7	142.30	12.368	
17,200.0	9,436.8	17,075.0	9,452.4	76.3	68.2	90.34	-7,862.1	-568.5	1,760.0	1,616.1	143.92	12.230	
17,300.0	9,436.4	17,175.0	9,451.9	77.1	69.0	90.34	-7,962.1	-568.5	1,760.0	1,614.5	145.54	12.094	
17,400.0	9,435.9	17,275.0	9,451.4	77.8	69.9	90.34	-8,062.1	-568.4	1,760.0	1,612.9	147.16	11.960	
17,500.0	9,435.4	17,375.0	9,450.9	78.6	70.7	90.34	-8,162.1	-568.4	1,760.0	1,611.3	148.78	11.830	
17,600.0	9,435.0	17,475.0	9,450.4	79.4	71.6	90.34	-8,262.1	-568.3	1,760.0	1,609.6	150.40	11.702	
17,700.0	9,434.5	17,575.0	9,449.9	80.1	72.4	90.33	-8,362.1	-568.3	1,760.0	1,608.0	152.03	11.577	
17,800.0	9,434.1	17,675.0	9,449.4	80.9	73.3	90.33	-8,462.1	-568.2	1,760.0	1,606.4	153.66	11.454	
17,900.0	9,433.6	17,775.0	9,448.9	81.7	74.1	90.33	-8,562.1	-568.2	1,760.0	1,604.8	155.29	11.334	
18,000.0	9,433.1	17,875.0	9,448.4	82.5	75.0	90.33	-8,662.1	-568.1	1,760.0	1,603.1	156.92	11.216	
18,100.0	9,432.7	17,975.0	9,447.9	83.2	75.8	90.33	-8,762.1	-568.1	1,760.0	1,601.5	158.55	11.101	
18,200.0	9,432.2	18,075.0	9,447.4	84.0	76.7	90.33	-8,862.1	-568.1	1,760.0	1,599.9	160.19	10.987	
18,300.0	9,431.7	18,175.0	9,447.0	84.8	77.5	90.33	-8,962.1	-568.0	1,760.0	1,598.2	161.82	10.876	
18,400.0	9,431.3	18,275.0	9,446.5	85.6	78.4	90.33	-9,062.1	-568.0	1,760.0	1,596.6	163.46	10.767	
18,500.0	9,430.8	18,375.0	9,446.0	86.4	79.2	90.33	-9,162.1	-567.9	1,760.0	1,594.9	165.10	10.660	
18,600.0	9,430.3	18,475.0	9,445.5	87.1	80.1	90.33	-9,262.1	-567.9	1,760.0	1,593.3	166.74	10.555	
18,700.0	9,429.9	18,575.0	9,445.0	87.9	80.9	90.33	-9,362.1	-567.8	1,760.0	1,591.7	168.39	10.452	
18,800.0	9,429.4	18,675.0	9,444.5	88.7	81.8	90.32	-9,462.1	-567.8	1,760.0	1,590.0	170.03	10.351	
18,900.0	9,429.0	18,775.0	9,444.0	89.5	82.7	90.32	-9,562.1	-567.7	1,760.0	1,588.4	171.68	10.252	
19,000.0	9,428.5	18,875.0	9,443.5	90.3	83.5	90.32	-9,662.1	-567.7	1,760.0	1,586.7	173.32	10.155	
19,100.0	9,428.0	18,975.0	9,443.0	91.1	84.4	90.32	-9,762.1	-567.6	1,760.0	1,585.1	174.97	10.059	
19,200.0	9,427.6	19,075.0	9,442.5	91.9	85.2	90.32	-9,862.1	-567.6	1,760.0	1,583.4	176.62	9.965	

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 BOO RADLEY COM #701H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30' @ 3019.9usft (TBD)
Reference Site:	BOO RADLEY COM PROJECT	MD Reference:	*KB=30' @ 3019.9usft (TBD)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	BOO RADLEY COM #701H	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 BOO RADLEY COM PROJECT - BOO RADLEY COM #703H - OWB - PWP1												Offset Site Error:	3.0 usft
Survey Program: 0-Standard Keeper 104, 8903-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
19,300.0	9,427.1	19,175.0	9,442.0	92.7	86.1	90.32	-9,962.1	-567.5	1,760.0	1,581.8	178.27	9.873	
19,400.0	9,426.6	19,275.0	9,441.5	93.5	86.9	90.32	-10,062.1	-567.5	1,760.0	1,580.1	179.92	9.782	
19,500.0	9,426.2	19,375.0	9,441.1	94.3	87.8	90.32	-10,162.1	-567.4	1,760.0	1,578.5	181.58	9.693	
19,600.0	9,425.7	19,475.0	9,440.6	95.1	88.6	90.32	-10,262.1	-567.4	1,760.0	1,576.8	183.23	9.606	
19,700.0	9,425.2	19,575.0	9,440.1	95.9	89.5	90.32	-10,362.1	-567.3	1,760.0	1,575.1	184.89	9.520	
19,800.0	9,424.8	19,675.0	9,439.6	96.7	90.3	90.32	-10,462.0	-567.3	1,760.0	1,573.5	186.54	9.435	
19,900.0	9,424.3	19,775.0	9,439.1	97.5	91.2	90.31	-10,562.0	-567.2	1,760.0	1,571.8	188.20	9.352	
20,000.0	9,423.9	19,875.0	9,438.6	98.3	92.0	90.31	-10,662.0	-567.2	1,760.0	1,570.2	189.86	9.270	
20,100.0	9,423.4	19,975.0	9,438.1	99.1	92.9	90.31	-10,762.0	-567.1	1,760.0	1,568.5	191.52	9.190	
20,120.1	9,423.3	19,995.0	9,438.0	99.2	93.1	90.31	-10,782.1	-567.1	1,760.0	1,568.2	191.85	9.174	
20,124.0	9,423.3	20,000.5	9,438.0	99.3	93.1	90.31	-10,787.6	-567.1	1,760.0	1,568.1	191.94	9.170	
20,125.2	9,423.3	20,003.3	9,438.0	99.3	93.1	90.31	-10,790.4	-567.1	1,760.0	1,568.0	191.98	9.168	
20,200.0	9,422.9	20,078.1	9,437.6	99.9	93.8	90.31	-10,865.2	-566.9	1,760.0	1,566.8	193.22	9.109	
20,300.0	9,422.5	20,178.1	9,437.1	100.7	94.6	90.31	-10,965.2	-566.7	1,760.0	1,565.1	194.88	9.031	
20,400.0	9,422.0	20,278.1	9,436.6	101.5	95.5	90.31	-11,065.2	-566.5	1,760.0	1,563.5	196.55	8.955	
20,500.0	9,421.6	20,378.1	9,436.1	102.3	96.3	90.31	-11,165.2	-566.2	1,760.0	1,561.8	198.21	8.880	
20,600.0	9,421.1	20,478.1	9,435.6	103.1	97.2	90.31	-11,265.2	-566.0	1,760.0	1,560.2	199.88	8.806	
20,700.0	9,420.6	20,578.1	9,435.1	103.9	98.1	90.31	-11,365.2	-565.8	1,760.0	1,558.5	201.54	8.733	
20,800.0	9,420.2	20,678.1	9,434.6	104.7	98.9	90.30	-11,465.2	-565.6	1,760.0	1,556.8	203.21	8.661	
20,900.0	9,419.7	20,778.1	9,434.1	105.5	99.8	90.30	-11,565.2	-565.3	1,760.0	1,555.2	204.88	8.591	
21,000.0	9,419.3	20,878.1	9,433.7	106.3	100.6	90.30	-11,665.2	-565.1	1,760.0	1,553.5	206.54	8.521	
21,100.0	9,418.8	20,978.1	9,433.2	107.1	101.5	90.30	-11,765.2	-564.9	1,760.0	1,551.8	208.21	8.453	
21,200.0	9,418.3	21,078.1	9,432.7	107.9	102.3	90.30	-11,865.2	-564.7	1,760.0	1,550.1	209.88	8.386	
21,300.0	9,417.9	21,178.1	9,432.2	108.8	103.2	90.30	-11,965.2	-564.4	1,760.0	1,548.5	211.55	8.320	
21,400.0	9,417.4	21,278.1	9,431.7	109.6	104.0	90.30	-12,065.2	-564.2	1,760.0	1,546.8	213.22	8.254	
21,500.0	9,417.0	21,378.1	9,431.2	110.4	104.9	90.30	-12,165.2	-564.0	1,760.0	1,545.1	214.90	8.190	
21,600.0	9,416.5	21,478.1	9,430.7	111.2	105.7	90.30	-12,265.2	-563.7	1,760.0	1,543.5	216.57	8.127	
21,700.0	9,416.0	21,578.1	9,430.2	112.0	106.6	90.30	-12,365.2	-563.5	1,760.0	1,541.8	218.24	8.065	
21,800.0	9,415.6	21,678.1	9,429.7	112.8	107.5	90.29	-12,465.2	-563.3	1,760.0	1,540.1	219.92	8.003	
21,900.0	9,415.1	21,778.1	9,429.2	113.6	108.3	90.29	-12,565.2	-563.1	1,760.0	1,538.4	221.59	7.943	
22,000.0	9,414.7	21,878.1	9,428.7	114.5	109.2	90.29	-12,665.2	-562.8	1,760.0	1,536.8	223.27	7.883	
22,100.0	9,414.2	21,978.1	9,428.2	115.3	110.0	90.29	-12,765.2	-562.6	1,760.0	1,535.1	224.94	7.824	
22,142.3	9,414.0	22,020.4	9,428.0	115.6	110.4	90.29	-12,807.5	-562.5	1,760.0	1,534.4	225.65	7.800	

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well BOO RADLEY COM #701H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30' @ 3019.9usft (TBD)
Reference Site:	BOO RADLEY COM PROJECT	MD Reference:	*KB=30' @ 3019.9usft (TBD)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	BOO RADLEY COM #701H	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-GYRO-NS, 6468-MWD												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.0	0.0	62.8	62.8	4.2	3.0	8.67	4,940.4	753.5	4,997.6				
100.0	100.0	173.5	173.5	4.2	3.1	8.67	4,939.7	753.0	4,996.9	4,989.6	7.28	686.590	
200.0	200.0	262.0	262.0	4.3	3.2	8.66	4,939.2	752.3	4,996.2	4,988.9	7.36	678.538	
300.0	300.0	337.5	337.5	4.3	3.4	8.66	4,939.0	751.8	4,995.9	4,988.4	7.50	665.909	
304.1	304.1	340.2	340.2	4.3	3.4	8.66	4,939.0	751.8	4,995.9	4,988.4	7.51	665.299	
400.0	400.0	408.8	408.8	4.4	3.5	8.65	4,939.3	751.3	4,996.2	4,988.5	7.71	648.357	
500.0	500.0	532.0	532.0	4.5	3.7	8.64	4,939.7	750.9	4,996.4	4,988.3	8.12	615.672	
600.0	600.0	625.4	625.4	4.7	3.9	8.64	4,939.8	750.8	4,996.6	4,988.1	8.50	587.990	
700.0	700.0	719.7	719.7	4.8	4.1	8.64	4,940.1	750.7	4,996.8	4,987.9	8.91	560.841	
800.0	800.0	816.7	816.6	5.0	4.3	8.64	4,940.4	750.8	4,997.2	4,987.9	9.32	536.289	
900.0	900.0	914.8	914.7	5.2	4.5	8.65	4,940.8	751.3	4,997.6	4,987.9	9.74	513.270	
1,000.0	1,000.0	1,026.3	1,026.3	5.4	4.9	8.66	4,941.0	752.3	4,997.9	4,987.7	10.23	488.474	
1,100.0	1,100.0	1,124.4	1,124.3	5.6	5.2	8.67	4,941.0	753.1	4,998.1	4,987.4	10.72	466.066	
1,200.0	1,200.0	1,214.3	1,214.3	5.9	5.5	8.67	4,941.2	753.8	4,998.4	4,987.2	11.21	445.931	
1,300.0	1,300.0	1,310.6	1,310.5	6.1	5.8	8.68	4,941.6	754.5	4,998.9	4,987.2	11.72	426.360	
1,400.0	1,400.0	1,424.7	1,424.6	6.4	6.2	8.69	4,941.8	755.5	4,999.3	4,987.0	12.31	405.963	
1,500.0	1,500.0	1,523.6	1,523.6	6.7	6.5	8.70	4,942.0	756.3	4,999.5	4,986.6	12.88	388.171	
1,600.0	1,600.0	1,630.9	1,630.9	7.0	6.8	8.70	4,942.1	756.7	4,999.7	4,986.2	13.48	370.868	
1,700.0	1,700.0	1,736.5	1,736.4	7.2	7.2	8.71	4,942.1	757.1	4,999.7	4,985.6	14.10	354.609	
1,800.0	1,800.0	1,846.2	1,846.1	7.5	7.5	8.72	4,941.9	757.8	4,999.7	4,984.9	14.76	338.838	
1,900.0	1,900.0	1,952.9	1,952.8	7.8	7.9	8.73	4,941.4	758.7	4,999.4	4,983.9	15.42	324.278	
2,000.0	2,000.0	2,041.6	2,041.5	8.1	8.2	8.74	4,941.0	759.6	4,999.1	4,983.1	16.02	312.049	
2,027.7	2,027.7	2,063.9	2,063.8	8.2	8.3	8.74	4,941.0	759.8	4,999.1	4,982.9	16.18	308.979	
2,100.0	2,100.0	2,123.4	2,123.3	8.4	8.5	8.75	4,941.0	760.5	4,999.2	4,982.6	16.60	301.200	
2,200.0	2,200.0	2,211.2	2,211.1	8.8	8.8	8.77	4,941.1	762.0	4,999.6	4,982.4	17.19	290.788	
2,300.0	2,300.0	2,329.0	2,328.9	9.1	9.2	8.80	4,941.1	764.7	5,000.0	4,982.1	17.90	279.399	
2,400.0	2,400.0	2,464.4	2,464.2	9.4	9.6	8.83	4,940.4	767.1	4,999.7	4,981.0	18.67	267.726	
2,500.0	2,500.0	2,540.7	2,540.5	9.7	9.9	8.84	4,939.8	768.3	4,999.2	4,980.0	19.25	259.655	
2,514.3	2,514.3	2,548.9	2,548.8	9.8	9.9	-86.40	4,939.8	768.4	4,999.2	4,979.9	19.33	258.687	
2,600.0	2,600.0	2,600.0	2,599.9	10.0	10.1	-86.40	4,939.9	769.1	4,999.4	4,979.7	19.76	252.961	
2,700.0	2,699.8	2,692.1	2,691.9	10.3	10.4	-86.44	4,940.6	769.6	4,999.9	4,979.6	20.37	245.426	
2,748.2	2,747.8	2,793.2	2,793.1	10.5	10.7	-86.54	4,941.0	769.4	4,999.9	4,979.1	20.85	239.811	
2,800.0	2,799.5	2,846.2	2,846.0	10.7	10.8	-86.59	4,940.9	769.4	4,999.5	4,978.3	21.19	235.991	
2,900.0	2,899.1	2,942.5	2,942.4	11.0	11.2	-86.68	4,940.8	769.3	4,998.9	4,977.0	21.82	229.120	
3,000.0	2,998.7	3,044.4	3,044.3	11.3	11.5	-86.79	4,940.6	769.2	4,998.2	4,975.7	22.48	222.353	
3,100.0	3,098.4	3,142.9	3,142.8	11.6	11.8	-86.88	4,940.4	769.3	4,997.5	4,974.4	23.14	215.923	
3,200.0	3,198.0	12,617.0	8,142.9	11.9	82.9	-29.76	178.7	963.3	4,996.5	4,950.1	46.41	107.653	
3,300.0	3,297.6	12,617.0	8,142.9	12.3	82.9	-29.76	178.7	963.3	4,897.1	4,850.5	46.60	105.098	
3,400.0	3,397.2	12,617.0	8,142.9	12.6	82.9	-29.76	178.7	963.3	4,797.7	4,750.9	46.78	102.550	
3,500.0	3,496.9	12,617.0	8,142.9	12.9	82.9	-29.76	178.7	963.3	4,698.3	4,651.4	46.98	100.011	
3,600.0	3,596.5	12,617.0	8,142.9	13.3	82.9	-29.76	178.7	963.3	4,599.0	4,551.8	47.18	97.480	
3,700.0	3,696.1	12,617.0	8,142.9	13.6	82.9	-29.76	178.7	963.3	4,499.7	4,452.3	47.39	94.958	
3,800.0	3,795.7	12,617.0	8,142.9	13.9	82.9	-29.76	178.7	963.3	4,400.4	4,352.8	47.60	92.446	
3,900.0	3,895.4	12,617.0	8,142.9	14.3	82.9	-29.76	178.7	963.3	4,301.2	4,253.4	47.82	89.943	
4,000.0	3,995.0	12,617.0	8,142.9	14.6	82.9	-29.76	178.7	963.3	4,202.0	4,153.9	48.05	87.450	
4,100.0	4,094.6	12,617.0	8,142.9	14.9	82.9	-29.76	178.7	963.3	4,102.8	4,054.5	48.29	84.967	
4,200.0	4,194.2	12,617.0	8,142.9	15.3	82.9	-29.76	178.7	963.3	4,003.7	3,955.2	48.53	82.495	
4,300.0	4,293.9	12,617.0	8,142.9	15.6	82.9	-29.76	178.7	963.3	3,904.6	3,855.8	48.79	80.034	
4,400.0	4,393.5	12,617.0	8,142.9	16.0	82.9	-29.76	178.7	963.3	3,805.6	3,756.5	49.05	77.584	
4,500.0	4,493.1	12,617.0	8,142.9	16.3	82.9	-29.76	178.7	963.3	3,706.6	3,657.3	49.33	75.145	
4,600.0	4,592.7	12,617.0	8,142.9	16.6	82.9	-29.76	178.7	963.3	3,607.7	3,558.1	49.61	72.718	
4,700.0	4,692.4	12,617.0	8,142.9	17.0	82.9	-29.76	178.7	963.3	3,508.8	3,458.9	49.91	70.304	

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 BOO RADLEY COM #701H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30' @ 3019.9usft (TBD)
Reference Site:	BOO RADLEY COM PROJECT	MD Reference:	*KB=30' @ 3019.9usft (TBD)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	BOO RADLEY COM #701H	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-GYRO-NS, 6468-MWD												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
4,800.0	4,792.0	12,617.0	8,142.9	17.3	82.9	-29.76	178.7	963.3	3,410.0	3,359.8	50.22	67.902	
4,900.0	4,891.6	12,617.0	8,142.9	17.7	82.9	-29.76	178.7	963.3	3,311.3	3,260.8	50.54	65.513	
5,000.0	4,991.2	12,617.0	8,142.9	18.0	82.9	-29.76	178.7	963.3	3,212.7	3,161.8	50.88	63.137	
5,100.0	5,090.9	12,617.0	8,142.9	18.4	82.9	-29.76	178.7	963.3	3,114.1	3,062.9	51.24	60.774	
5,200.0	5,190.5	12,617.0	8,142.9	18.7	82.9	-29.76	178.7	963.3	3,015.7	2,964.1	51.62	58.425	
5,300.0	5,290.1	12,617.0	8,142.9	19.1	82.9	-29.76	178.7	963.3	2,917.3	2,865.3	52.01	56.091	
5,400.0	5,389.7	12,617.0	8,142.9	19.4	82.9	-29.76	178.7	963.3	2,819.1	2,766.6	52.43	53.771	
5,500.0	5,489.4	12,617.0	8,142.9	19.8	82.9	-29.76	178.7	963.3	2,721.0	2,668.1	52.87	51.465	
5,600.0	5,589.0	12,617.0	8,142.9	20.1	82.9	-29.76	178.7	963.3	2,623.0	2,569.7	53.34	49.176	
5,700.0	5,688.6	12,617.0	8,142.9	20.5	82.9	-29.76	178.7	963.3	2,525.2	2,471.3	53.84	46.902	
5,800.0	5,788.2	12,617.0	8,142.9	20.8	82.9	-29.76	178.7	963.3	2,427.6	2,373.2	54.38	44.644	
5,900.0	5,887.9	12,617.0	8,142.9	21.2	82.9	-29.76	178.7	963.3	2,330.1	2,275.2	54.95	42.404	
6,000.0	5,987.5	12,617.0	8,142.9	21.5	82.9	-29.76	178.7	963.3	2,232.9	2,177.3	55.57	40.181	
6,100.0	6,087.1	12,617.0	8,142.9	21.9	82.9	-29.76	178.7	963.3	2,136.0	2,079.7	56.24	37.978	
6,200.0	6,186.7	12,617.0	8,142.9	22.2	82.9	-29.76	178.7	963.3	2,039.3	1,982.4	56.97	35.794	
6,300.0	6,286.4	12,617.0	8,142.9	22.6	82.9	-29.76	178.7	963.3	1,943.0	1,885.2	57.77	33.631	
6,400.0	6,386.0	12,617.0	8,142.9	23.0	82.9	-29.76	178.7	963.3	1,847.1	1,788.4	58.65	31.491	
6,500.0	6,485.6	12,617.0	8,142.9	23.3	82.9	-29.76	178.7	963.3	1,751.6	1,692.0	59.63	29.376	
6,600.0	6,585.2	12,617.0	8,142.9	23.7	82.9	-29.76	178.7	963.3	1,656.7	1,596.0	60.71	27.287	
6,700.0	6,684.9	12,617.0	8,142.9	24.0	82.9	-29.76	178.7	963.3	1,562.4	1,500.5	61.93	25.229	
6,800.0	6,784.5	12,617.0	8,142.9	24.4	82.9	-29.76	178.7	963.3	1,468.9	1,405.6	63.30	23.205	
6,900.0	6,884.1	12,617.0	8,142.9	24.7	82.9	-29.76	178.7	963.3	1,376.2	1,311.4	64.86	21.219	
7,000.0	6,983.7	12,617.0	8,142.9	25.1	82.9	-29.76	178.7	963.3	1,284.7	1,218.1	66.64	19.278	
7,100.0	7,083.4	12,617.0	8,142.9	25.4	82.9	-29.76	178.7	963.3	1,194.6	1,125.9	68.69	17.390	
7,200.0	7,183.0	12,617.0	8,142.9	25.8	82.9	-29.76	178.7	963.3	1,106.1	1,035.0	71.07	15.564	
7,300.0	7,282.6	12,617.0	8,142.9	26.2	82.9	-29.76	178.7	963.3	1,019.8	945.9	73.83	13.812	
7,400.0	7,382.2	12,617.0	8,142.9	26.5	82.9	-29.76	178.7	963.3	936.1	859.1	77.05	12.150	
7,500.0	7,481.9	12,617.0	8,142.9	26.9	82.9	-29.76	178.7	963.3	856.0	775.3	80.78	10.598	
7,600.0	7,581.5	12,617.0	8,142.9	27.2	82.9	-29.76	178.7	963.3	780.6	695.5	85.06	9.177	
7,700.0	7,681.1	12,617.0	8,142.9	27.6	82.9	-29.76	178.7	963.3	711.1	621.3	89.85	7.914	
7,800.0	7,780.7	12,617.0	8,142.9	27.9	82.9	-29.76	178.7	963.3	649.8	554.8	94.97	6.842	
7,900.0	7,880.4	12,617.0	8,142.9	28.3	82.9	-29.76	178.7	963.3	598.9	498.9	99.96	5.991	
8,000.0	7,980.0	12,617.0	8,142.9	28.7	82.9	-29.76	178.7	963.3	561.3	457.3	104.07	5.394	
8,100.0	8,079.6	12,617.0	8,142.9	29.0	82.9	-29.76	178.7	963.3	540.0	433.6	106.31	5.079	
8,167.7	8,147.1	12,617.0	8,142.9	29.3	82.9	-29.76	178.7	963.3	535.7	429.3	106.38	5.036 CC, ES, SF	
8,200.0	8,179.2	12,617.0	8,142.9	29.4	82.9	-29.76	178.7	963.3	536.7	430.7	105.97	5.065	
8,300.0	8,278.9	12,617.0	8,142.9	29.7	82.9	-29.76	178.7	963.3	551.8	448.8	103.00	5.357	
8,400.0	8,378.5	12,617.0	8,142.9	30.1	82.9	-29.76	178.7	963.3	583.9	485.7	98.16	5.948	
8,500.0	8,478.1	12,617.0	8,142.9	30.4	82.9	-29.76	178.7	963.3	630.4	537.9	92.52	6.814	
8,600.0	8,577.7	12,617.0	8,142.9	30.8	82.9	-29.76	178.7	963.3	688.4	601.4	86.92	7.919	
8,700.0	8,677.4	12,617.0	8,142.9	31.2	82.9	-29.76	178.7	963.3	755.2	673.3	81.88	9.223	
8,800.0	8,777.0	12,617.0	8,142.9	31.5	82.9	-29.76	178.7	963.3	828.7	751.1	77.58	10.683	
8,900.0	8,876.6	12,617.0	8,142.9	31.9	82.9	-29.76	178.7	963.3	907.3	833.3	74.02	12.257	
8,950.1	8,926.5	12,617.0	8,142.9	32.1	82.9	-29.76	178.7	963.3	948.2	875.7	72.51	13.077	
9,000.0	8,976.1	12,617.0	8,142.9	32.2	82.9	-50.93	178.7	963.3	989.7	918.6	71.10	13.920	
9,050.0	9,025.1	12,617.0	8,142.9	32.4	82.9	-53.72	178.7	963.3	1,031.5	961.8	69.76	14.787	
9,100.0	9,073.3	12,617.0	8,142.9	32.6	82.9	-51.46	178.7	963.3	1,073.4	1,004.9	68.49	15.671	
9,150.0	9,120.0	12,617.0	8,142.9	32.8	82.9	-47.68	178.7	963.3	1,115.0	1,047.6	67.32	16.563	
9,200.0	9,165.2	12,617.0	8,142.9	32.9	82.9	-43.58	178.7	963.3	1,155.9	1,089.7	66.23	17.454	
9,250.0	9,208.2	12,617.0	8,142.9	33.1	82.9	-39.65	178.7	963.3	1,196.1	1,130.9	65.23	18.338	
9,300.0	9,249.0	12,617.0	8,142.9	33.3	82.9	-36.08	178.7	963.3	1,235.3	1,170.9	64.32	19.205	
9,350.0	9,287.1	12,617.0	8,142.9	33.5	82.9	-32.93	178.7	963.3	1,273.2	1,209.7	63.50	20.051	

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 BOO RADLEY COM #701H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30' @ 3019.9usft (TBD)
Reference Site:	BOO RADLEY COM PROJECT	MD Reference:	*KB=30' @ 3019.9usft (TBD)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	BOO RADLEY COM #701H	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-GYRO-NS, 6468-MWD												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,400.0	9,322.2	12,617.0	8,142.9	33.6	82.9	-30.18	178.7	963.3	1,309.7	1,247.0	62.77	20.867	
9,450.0	9,354.1	12,617.0	8,142.9	33.8	82.9	-27.80	178.7	963.3	1,344.7	1,282.6	62.12	21.648	
9,500.0	9,382.6	12,617.0	8,142.9	33.9	82.9	-25.75	178.7	963.3	1,378.1	1,316.5	61.55	22.388	
9,550.0	9,407.4	12,617.0	8,142.9	34.1	82.9	-23.98	178.7	963.3	1,409.6	1,348.5	61.07	23.081	
9,600.0	9,428.3	12,617.0	8,142.9	34.2	82.9	-22.45	178.7	963.3	1,439.2	1,378.5	60.66	23.724	
9,650.0	9,445.2	12,617.0	8,142.9	34.3	82.9	-21.12	178.7	963.3	1,466.8	1,406.4	60.33	24.313	
9,700.0	9,457.9	12,617.0	8,142.9	34.5	82.9	-19.98	178.7	963.3	1,492.2	1,432.2	60.06	24.845	
9,750.0	9,466.4	12,617.0	8,142.9	34.6	82.9	-18.98	178.7	963.3	1,515.5	1,455.7	59.86	25.316	
9,800.0	9,470.6	12,617.0	8,142.9	34.7	82.9	-18.12	178.7	963.3	1,536.5	1,476.8	59.73	25.726	
9,825.7	9,471.0	12,617.0	8,142.9	34.8	82.9	-17.72	178.7	963.3	1,546.4	1,486.7	59.68	25.913	
9,900.0	9,470.7	12,617.0	8,142.9	34.9	82.9	-17.10	178.7	963.3	1,575.9	1,516.3	59.62	26.433	
10,000.0	9,470.2	12,617.0	8,142.9	35.2	82.9	-16.13	178.7	963.3	1,620.9	1,561.2	59.68	27.160	
10,100.0	9,469.8	12,617.0	8,142.9	35.4	82.9	-14.98	178.7	963.3	1,671.5	1,611.6	59.85	27.927	
10,200.0	9,469.3	12,617.0	8,142.9	35.7	82.9	-13.68	178.7	963.3	1,727.1	1,667.0	60.09	28.743	
10,300.0	9,468.8	12,617.0	8,142.9	36.0	82.9	-12.20	178.7	963.3	1,787.3	1,726.9	60.36	29.611	
10,400.0	9,468.4	12,617.0	8,142.9	36.3	82.9	-10.55	178.7	963.3	1,851.5	1,790.8	60.64	30.534	
10,500.0	9,467.9	12,617.0	8,142.9	36.6	82.9	-8.72	178.7	963.3	1,919.2	1,858.3	60.90	31.514	
10,600.0	9,467.4	12,617.0	8,142.9	36.9	82.9	-6.73	178.7	963.3	1,990.0	1,928.8	61.14	32.548	
10,700.0	9,466.9	12,617.0	8,142.9	37.2	82.9	-4.56	178.7	963.3	2,063.4	2,002.1	61.35	33.636	
10,800.0	9,466.5	12,617.0	8,142.9	37.6	82.9	-2.23	178.7	963.3	2,139.2	2,077.7	61.52	34.774	
10,900.0	9,466.0	12,617.0	8,142.9	37.9	82.9	0.26	178.7	963.3	2,217.1	2,155.4	61.66	35.958	
11,000.0	9,465.5	12,617.0	8,142.9	38.3	82.9	2.89	178.7	963.3	2,296.6	2,234.8	61.76	37.183	
11,100.0	9,465.1	12,617.0	8,142.9	38.6	82.9	5.65	178.7	963.3	2,377.6	2,315.7	61.84	38.445	
11,200.7	9,464.6	12,617.0	8,142.9	39.0	82.9	8.55	178.7	963.3	2,460.4	2,398.5	61.90	39.748	
11,300.0	9,464.1	12,617.0	8,142.9	39.4	82.9	8.55	178.7	963.3	2,543.1	2,481.1	61.94	41.057	
11,400.0	9,463.7	12,617.0	8,142.9	39.7	82.9	8.55	178.7	963.3	2,627.6	2,565.6	61.98	42.395	
11,500.0	9,463.2	12,617.0	8,142.9	40.1	82.9	8.55	178.7	963.3	2,713.1	2,651.1	62.01	43.751	
11,600.0	9,462.8	12,617.0	8,142.9	40.5	82.9	8.55	178.7	963.3	2,799.6	2,737.6	62.04	45.123	
11,700.0	9,462.3	12,617.0	8,142.9	41.0	82.9	8.55	178.7	963.3	2,887.0	2,824.9	62.07	46.509	
11,800.0	9,461.8	12,617.0	8,142.9	41.4	82.9	8.55	178.7	963.3	2,975.2	2,913.1	62.10	47.908	
11,900.0	9,461.4	12,617.0	8,142.9	41.9	82.9	8.55	178.7	963.3	3,064.1	3,001.9	62.13	49.317	
12,000.0	9,460.9	12,617.0	8,142.9	42.3	82.9	8.55	178.7	963.3	3,153.6	3,091.5	62.16	50.736	
12,100.0	9,460.4	12,617.0	8,142.9	42.8	82.9	8.55	178.7	963.3	3,243.8	3,181.6	62.19	52.164	
12,200.0	9,460.0	12,617.0	8,142.9	43.3	82.9	8.55	178.7	963.3	3,334.5	3,272.3	62.21	53.599	
12,300.0	9,459.5	12,617.0	8,142.9	43.8	82.9	8.55	178.7	963.3	3,425.8	3,363.6	62.24	55.040	
12,400.0	9,459.1	12,617.0	8,142.9	44.3	82.9	8.55	178.7	963.3	3,517.5	3,455.2	62.27	56.488	
12,500.0	9,458.6	12,617.0	8,142.9	44.8	82.9	8.55	178.7	963.3	3,609.7	3,547.4	62.30	57.941	
12,600.0	9,458.1	12,617.0	8,142.9	45.3	82.9	8.55	178.7	963.3	3,702.3	3,639.9	62.33	59.398	
12,700.0	9,457.7	12,617.0	8,142.9	45.9	82.9	8.55	178.7	963.3	3,795.2	3,732.8	62.36	60.859	
12,800.0	9,457.2	12,617.0	8,142.9	46.4	82.9	8.55	178.7	963.3	3,888.5	3,826.1	62.39	62.323	
12,900.0	9,456.8	12,617.0	8,142.9	47.0	82.9	8.55	178.7	963.3	3,982.1	3,919.7	62.43	63.790	
13,000.0	9,456.3	12,617.0	8,142.9	47.5	82.9	8.55	178.7	963.3	4,076.1	4,013.6	62.46	65.259	
13,100.0	9,455.8	12,617.0	8,142.9	48.1	82.9	8.55	178.7	963.3	4,170.3	4,107.8	62.49	66.730	
13,200.0	9,455.4	12,617.0	8,142.9	48.7	82.9	8.55	178.7	963.3	4,264.7	4,202.2	62.53	68.203	
13,300.0	9,454.9	12,617.0	8,142.9	49.3	82.9	8.55	178.7	963.3	4,359.5	4,296.9	62.57	69.677	
13,400.0	9,454.4	12,617.0	8,142.9	49.9	82.9	8.55	178.7	963.3	4,454.4	4,391.8	62.60	71.152	
13,500.0	9,454.0	12,617.0	8,142.9	50.5	82.9	8.55	178.7	963.3	4,549.6	4,486.9	62.64	72.627	
13,600.0	9,453.5	12,617.0	8,142.9	51.1	82.9	8.55	178.7	963.3	4,645.0	4,582.3	62.68	74.103	
13,700.0	9,453.1	12,617.0	8,142.9	51.7	82.9	8.55	178.7	963.3	4,740.5	4,677.8	62.72	75.579	
13,800.0	9,452.6	12,617.0	8,142.9	52.3	82.9	8.55	178.7	963.3	4,836.3	4,773.5	62.76	77.054	
13,900.0	9,452.1	12,617.0	8,142.9	53.0	82.9	8.55	178.7	963.3	4,932.2	4,869.4	62.81	78.529	
14,000.0	9,451.7	12,617.0	8,142.9	53.6	82.9	8.55	178.7	963.3	5,028.2	4,965.4	62.85	80.004	

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 BOO RADLEY COM #701H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30' @ 3019.9usft (TBD)
Reference Site:	BOO RADLEY COM PROJECT	MD Reference:	*KB=30' @ 3019.9usft (TBD)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	BOO RADLEY COM #701H	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-GYRO-NS, 6468-MWD												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,100.0	9,451.2	12,617.0	8,142.9	54.3	82.9	8.55	178.7	963.3	5,124.5	5,061.6	62.89	81.477	
14,200.0	9,450.7	12,617.0	8,142.9	54.9	82.9	8.55	178.7	963.3	5,220.8	5,157.9	62.94	82.950	
14,300.0	9,450.3	12,617.0	8,142.9	55.6	82.9	8.55	178.7	963.3	5,317.3	5,254.3	62.99	84.421	
14,400.0	9,449.8	12,617.0	8,142.9	56.2	82.9	8.55	178.7	963.3	5,413.9	5,350.9	63.03	85.892	
14,500.0	9,449.4	12,617.0	8,142.9	56.9	82.9	8.55	178.7	963.3	5,510.7	5,447.6	63.08	87.360	
14,600.0	9,448.9	12,617.0	8,142.9	57.6	82.9	8.55	178.7	963.3	5,607.5	5,544.4	63.13	88.827	
14,700.0	9,448.4	12,617.0	8,142.9	58.3	82.9	8.55	178.7	963.3	5,704.5	5,641.3	63.18	90.292	
14,800.0	9,448.0	12,617.0	8,142.9	58.9	82.9	8.55	178.7	963.3	5,801.6	5,738.3	63.23	91.756	
14,836.7	9,447.8	12,617.0	8,142.9	59.2	82.9	8.55	178.7	963.3	5,837.3	5,774.0	63.25	92.293	
14,846.3	9,447.8	12,617.0	8,142.9	59.3	82.9	9.32	178.7	963.3	5,846.5	5,783.3	63.25	92.432	
14,900.0	9,447.5	12,617.0	8,142.9	59.6	82.9	9.32	178.7	963.3	5,898.7	5,835.5	63.28	93.217	
15,000.0	9,447.0	12,617.0	8,142.9	60.3	82.9	9.32	178.7	963.3	5,996.0	5,932.6	63.33	94.675	
15,100.0	9,446.6	12,617.0	8,142.9	61.0	82.9	9.32	178.7	963.3	6,093.3	6,029.9	63.38	96.132	
15,200.0	9,446.1	12,617.0	8,142.9	61.7	82.9	9.32	178.7	963.3	6,190.7	6,127.3	63.44	97.586	
15,300.0	9,445.7	12,617.0	8,142.9	62.4	82.9	9.32	178.7	963.3	6,288.2	6,224.7	63.49	99.038	
15,400.0	9,445.2	12,617.0	8,142.9	63.1	82.9	9.32	178.7	963.3	6,385.8	6,322.3	63.55	100.487	
15,500.0	9,444.7	12,617.0	8,142.9	63.8	82.9	9.32	178.7	963.3	6,483.5	6,419.9	63.61	101.933	
15,600.0	9,444.3	12,617.0	8,142.9	64.5	82.9	9.32	178.7	963.3	6,581.2	6,517.5	63.66	103.377	
15,700.0	9,443.8	12,617.0	8,142.9	65.3	82.9	9.32	178.7	963.3	6,679.0	6,615.3	63.72	104.817	
15,800.0	9,443.3	12,617.0	8,142.9	66.0	82.9	9.32	178.7	963.3	6,776.8	6,713.1	63.78	106.255	
15,900.0	9,442.9	12,617.0	8,142.9	66.7	82.9	9.32	178.7	963.3	6,874.8	6,810.9	63.84	107.690	
16,000.0	9,442.4	12,617.0	8,142.9	67.4	82.9	9.32	178.7	963.3	6,972.7	6,908.8	63.90	109.122	
16,100.0	9,441.9	12,617.0	8,142.9	68.2	82.9	9.32	178.7	963.3	7,070.8	7,006.8	63.96	110.551	
16,200.0	9,441.5	12,617.0	8,142.9	68.9	82.9	9.32	178.7	963.3	7,168.9	7,104.8	64.02	111.976	
16,300.0	9,441.0	12,617.0	8,142.9	69.6	82.9	9.32	178.7	963.3	7,267.0	7,202.9	64.08	113.399	
16,400.0	9,440.6	12,617.0	8,142.9	70.4	82.9	9.32	178.7	963.3	7,365.2	7,301.0	64.15	114.817	
16,500.0	9,440.1	12,617.0	8,142.9	71.1	82.9	9.32	178.7	963.3	7,463.4	7,399.2	64.21	116.233	
16,600.0	9,439.6	12,617.0	8,142.9	71.9	82.9	9.32	178.7	963.3	7,561.7	7,497.4	64.28	117.645	
16,700.0	9,439.2	12,617.0	8,142.9	72.6	82.9	9.32	178.7	963.3	7,660.0	7,595.7	64.34	119.054	
16,800.0	9,438.7	12,617.0	8,142.9	73.4	82.9	9.32	178.7	963.3	7,758.4	7,694.0	64.41	120.459	
16,900.0	9,438.2	12,617.0	8,142.9	74.1	82.9	9.32	178.7	963.3	7,856.8	7,792.4	64.47	121.860	
17,000.0	9,437.8	12,617.0	8,142.9	74.9	82.9	9.32	178.7	963.3	7,955.3	7,890.7	64.54	123.258	
17,100.0	9,437.3	12,617.0	8,142.9	75.6	82.9	9.32	178.7	963.3	8,053.8	7,989.2	64.61	124.652	
17,200.0	9,436.8	12,617.0	8,142.9	76.4	82.9	9.32	178.7	963.3	8,152.3	8,087.6	64.68	126.042	
17,300.0	9,436.4	12,617.0	8,142.9	77.1	82.9	9.32	178.7	963.3	8,250.9	8,186.1	64.75	127.428	
17,400.0	9,435.9	12,617.0	8,142.9	77.9	82.9	9.32	178.7	963.3	8,349.5	8,284.6	64.82	128.811	
17,500.0	9,435.4	12,617.0	8,142.9	78.7	82.9	9.32	178.7	963.3	8,448.1	8,383.2	64.89	130.190	
17,600.0	9,435.0	12,617.0	8,142.9	79.4	82.9	9.32	178.7	963.3	8,546.8	8,481.8	64.96	131.565	
17,700.0	9,434.5	12,617.0	8,142.9	80.2	82.9	9.32	178.7	963.3	8,645.4	8,580.4	65.03	132.935	
17,800.0	9,434.1	12,617.0	8,142.9	81.0	82.9	9.32	178.7	963.3	8,744.2	8,679.1	65.11	134.302	
17,900.0	9,433.6	12,617.0	8,142.9	81.7	82.9	9.32	178.7	963.3	8,842.9	8,777.7	65.18	135.665	
18,000.0	9,433.1	12,617.0	8,142.9	82.5	82.9	9.32	178.7	963.3	8,941.7	8,876.4	65.26	137.024	
18,100.0	9,432.7	12,617.0	8,142.9	83.3	82.9	9.32	178.7	963.3	9,040.5	8,975.2	65.33	138.379	
18,200.0	9,432.2	12,617.0	8,142.9	84.1	82.9	9.32	178.7	963.3	9,139.3	9,073.9	65.41	139.729	
18,300.0	9,431.7	12,617.0	8,142.9	84.9	82.9	9.32	178.7	963.3	9,238.2	9,172.7	65.48	141.075	
18,400.0	9,431.3	12,617.0	8,142.9	85.6	82.9	9.32	178.7	963.3	9,337.1	9,271.5	65.56	142.418	
18,500.0	9,430.8	12,617.0	8,142.9	86.4	82.9	9.32	178.7	963.3	9,436.0	9,370.3	65.64	143.756	
18,600.0	9,430.3	12,617.0	8,142.9	87.2	82.9	9.32	178.7	963.3	9,534.9	9,469.2	65.72	145.089	
18,700.0	9,429.9	12,617.0	8,142.9	88.0	82.9	9.32	178.7	963.3	9,633.9	9,568.1	65.80	146.419	
18,800.0	9,429.4	12,617.0	8,142.9	88.8	82.9	9.32	178.7	963.3	9,732.8	9,666.9	65.88	147.744	
18,900.0	9,429.0	12,617.0	8,142.9	89.6	82.9	9.32	178.7	963.3	9,831.8	9,765.9	65.96	149.065	
19,000.0	9,428.5	12,617.0	8,142.9	90.3	82.9	9.32	178.7	963.3	9,930.8	9,864.8	66.04	150.381	

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 BOO RADLEY COM #701H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30' @ 3019.9usft (TBD)
Reference Site:	BOO RADLEY COM PROJECT	MD Reference:	*KB=30' @ 3019.9usft (TBD)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	BOO RADLEY COM #701H	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=30' @ 3019.9usft (TBD)

Offset Depths are relative to Offset Datum

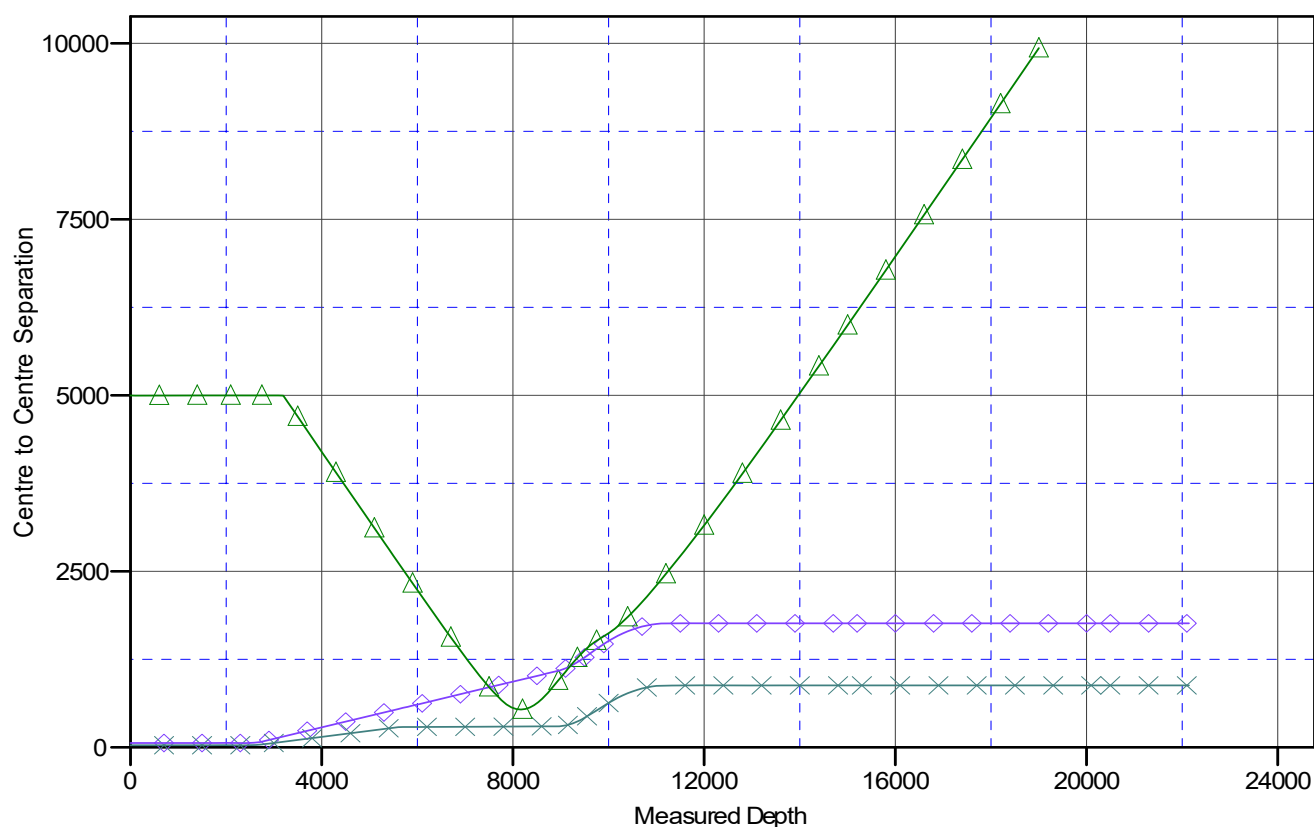
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: BOO RADLEY COM #701H

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

Grid Convergence at Surface is: 0.13°

Ladder Plot



LEGEND

◆ BOO RADLEY COM #703H, QWB, PWP1 V0
 ✕ BOO RADLEY COM #702H, QWB, PWP1 V0
 ▲ SRO STATE UNIT #53H, STD1 AWP STD1 V0

Concho Resources LLC

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well BOO RADLEY COM #701H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30' @ 3019.9usft (TBD)
Reference Site:	BOO RADLEY COM PROJECT	MD Reference:	*KB=30' @ 3019.9usft (TBD)
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	BOO RADLEY COM #701H	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=30' @ 3019.9usft (TBD)

Offset Depths are relative to Offset Datum

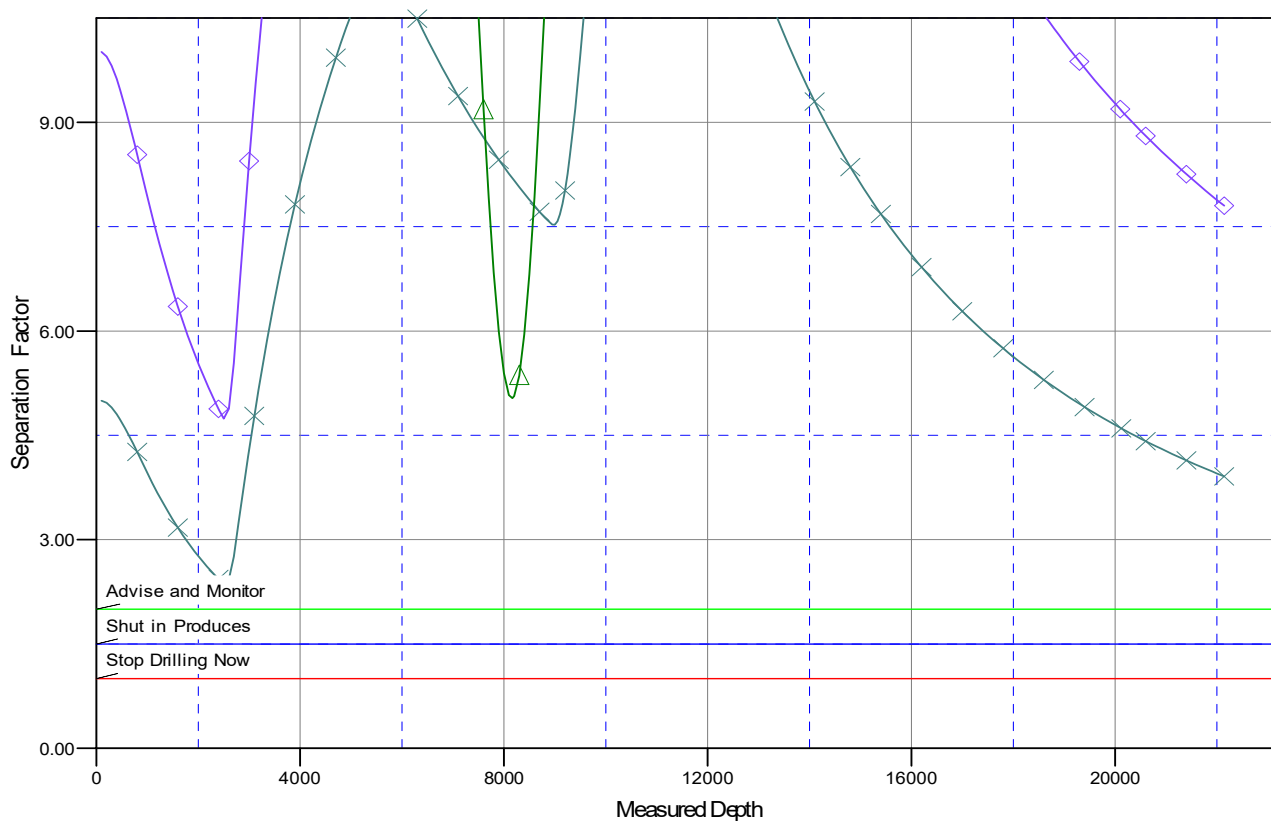
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: BOO RADLEY COM #701H

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

Grid Convergence at Surface is: 0.13°

Separation Factor Plot



LEGEND

◆ BOO RADLEY COM #703H, OWB, PWP1 V0
 ✕ BOO RADLEY COM #702H, OWB, PWP1 V0
 ▲ SRO STATE UNIT #53H, STD1 AWP STD1 V0

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

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

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

