

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Carlsbad Field Office  
OFFICE APPROVED  
OMB NO. 1004-0137  
Expires: January 31, 2018

**SUNDRY NOTICES AND REPORTS ON WELLS**  
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

**SUBMIT IN TRIPLICATE - Other instructions on page 2**

**HOBBS OCD**  
**AUG 21 2019**  
**RECEIVED**

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		3. Lease Serial No. NMNM43565
2. Name of Operator COG OPERATING LLC		6. If Indian, Allottee or Tribe Name
Contact: MAYTE X REYES E-Mail: mreyes1@concho.com		7. If Unit or CA/Agreement, Name and/or No.
3a. Address ONE CONCHO CENTER 600 W ILLINOIS AVENUE MIDLAND, TX 79701-4287	3b. Phone No. (include area code) Ph: 575-748-6945	8. Well Name and No. SQUINTS FEDERAL COM 7H
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 27 T22S R34E SESW 220FSL 2010FWL		9. API Well No. 30-025-43167-00-X1
		10. Field and Pool or Exploratory Area OJO CHISO
		11. County or Parish, State LEA COUNTY, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original APD
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

COG Operating respectfully requests approval for the following changes to the originally approved APD.

BHL Change

From: 330 FNL & 1980' FWL Section 22. T22S. R34E  
To: 50' FNL & 2310' FWL Section 22. T22S. R34E.

C102 attached.

Directional plan attached.  
AC attached.

*All previous conditions of approval still apply. DR*

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #478032 verified by the BLM Well Information System  
For COG OPERATING LLC, sent to the Hobbs  
Committed to AFMSS for processing by PRISCILLA PEREZ on 08/15/2019 (19PP2860SE)

Name (Printed/Typed) MAYTE X REYES	Title SENIOR REGULATORY ANALYST
Signature (Electronic Submission)	Date 08/14/2019

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved By <u>DYLAN ROSSMANGO</u>	Title <u>PETROLEUM ENGINEER</u>	Date <u>08/16/2019</u>
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office Hobbs

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

**\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\***

*Ka*



C O N C H O

**Concho Resources, Inc.**

Lea County, NM (NAD 27 NME)  
(Squints Federal) Sec-27\_T-22-S\_R-34-E  
Squints Federal Com #7H

OWB  
Plan #1

**Anticollision Report**

06 August, 2019

**INTREPID**



**Intrepid**  
Anticollision Report



**Company:** Concho Resources, Inc.  
**Project:** Lea County, NM (NAD 27 NME)  
**Reference Site:** (Squints Federal) Sec-27\_T-22-S\_R-34-E  
**Site Error:** 0.0 usft  
**Reference Well:** Squints Federal Com #7H  
**Well Error:** 0.0 usft  
**Reference Wellbore:** OWB  
**Reference Design:** Plan #1

**Local Co-ordinate Reference:** Well Squints Federal Com #7H  
**TVD Reference:** KB @ 3435.1usft (Precision 106)  
**MD Reference:** KB @ 3435.1usft (Precision 106)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Output errors are at:** 2.00 sigma  
**Database:** EDM 5000.15 Single User Db  
**Offset TVD Reference:** Offset Datum

Reference	Plan #1
<b>Filter type:</b>	NO GLOBAL FILTER: Using user defined selection & filtering criteria
<b>Interpolation Method:</b>	MD Interval 100.0usft
<b>Depth Range:</b>	Unlimited
<b>Results Limited by:</b>	Maximum center-center distance of 2,434.4 usft
<b>Warning Levels Evaluated at:</b>	2.00 Sigma
<b>Error Model:</b>	ISCWSA
<b>Scan Method:</b>	Closest Approach 3D
<b>Error Surface:</b>	Pedal Curve
<b>Casing Method:</b>	Not applied

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	9,801.6	Plan #1 (OWB)	Standard Keeper 104	Standard Wireline Keeper ver 1.0.4
9,801.6	20,615.4	Plan #1 (OWB)	MWD+IFR1+MS	MWD + IFR1 + Multi-Station Correction

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 (Squints Federal) Sec-27_T-22-S_R-34-E						
Antelope Federal #1 (INC ONLY) - OWB - AWB	13,730.7	10,356.1	16.3	-254.2	0.060	Level 1, CC, ES, SF
Squints Federal Com #3H - OWB - Plan #1	5,500.0	5,500.0	30.0	22.4	3.953	CC, ES, SF

Offset Design:(Squints Federal) Sec-27_T-22-S_R-34-E - Antelope Federal #1 (INC ONLY) - OWB - AWB										Offset Site Error:	0.0 usft		
Survey Program: 335-INC-ONLY										Offset Well Error:	0.0 usft		
Measured Reference Depth (usft)	Vertical Depth (usft)	Measured Offset Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
11,300.0	10,383.9	10,360.8	10,356.6	12.2	242.1	105.99	3,409.8	296.3	2,430.7	2,179.5	251.26	9.674	
11,400.0	10,383.7	10,360.6	10,356.4	12.7	242.1	105.36	3,409.8	296.3	2,330.7	2,079.4	251.31	9.274	
11,500.0	10,383.5	10,360.4	10,356.2	13.3	242.1	104.73	3,409.8	296.3	2,230.8	1,979.4	251.37	8.874	
11,600.0	10,383.3	10,360.2	10,356.0	13.9	242.1	104.10	3,409.8	296.3	2,130.8	1,879.3	251.43	8.475	
11,700.0	10,383.1	10,360.0	10,355.8	14.5	242.1	103.46	3,409.8	296.3	2,030.8	1,779.3	251.49	8.075	
11,800.0	10,382.9	10,359.8	10,355.6	15.1	242.1	102.82	3,409.8	296.3	1,930.8	1,679.2	251.56	7.675	
11,900.0	10,382.7	10,359.6	10,355.4	15.7	242.1	102.18	3,409.8	296.3	1,830.8	1,579.1	251.63	7.276	
12,000.0	10,382.6	10,359.4	10,355.3	16.4	242.1	101.53	3,409.8	296.3	1,730.8	1,479.1	251.70	6.876	
12,100.0	10,382.4	10,359.3	10,355.1	17.0	242.1	100.88	3,409.8	296.3	1,630.8	1,379.0	251.78	6.477	
12,200.0	10,382.2	10,359.1	10,354.9	17.7	242.1	100.23	3,409.8	296.3	1,530.8	1,278.9	251.86	6.078	
12,300.0	10,382.0	10,358.9	10,354.7	18.4	242.1	99.57	3,409.8	296.3	1,430.8	1,178.8	251.94	5.679	
12,400.0	10,381.8	10,358.7	10,354.5	19.1	242.1	98.91	3,409.8	296.3	1,330.8	1,078.8	252.03	5.280	
12,500.0	10,381.6	10,358.5	10,354.3	19.8	242.0	98.25	3,409.8	296.3	1,230.8	978.7	252.12	4.882	
12,600.0	10,381.4	10,358.3	10,354.1	20.4	242.0	97.59	3,409.8	296.3	1,130.8	878.6	252.21	4.484	
12,700.0	10,381.2	10,358.1	10,353.9	21.1	242.0	96.93	3,409.8	296.3	1,030.8	778.5	252.31	4.086	
12,800.0	10,381.0	10,357.9	10,353.7	21.9	242.0	96.26	3,409.8	296.3	930.8	678.4	252.41	3.688	
12,900.0	10,380.8	10,357.7	10,353.5	22.6	242.0	95.59	3,409.8	296.3	830.9	578.3	252.51	3.290	
13,000.0	10,380.6	10,357.5	10,353.3	23.3	242.0	94.92	3,409.8	296.3	730.9	478.3	252.62	2.893	
13,100.0	10,380.4	10,357.3	10,353.1	24.0	242.0	94.25	3,409.8	296.3	630.9	378.2	252.73	2.496	
13,200.0	10,380.2	10,357.1	10,352.9	24.7	242.0	93.58	3,409.8	296.3	530.9	278.1	252.85	2.100	
13,300.0	10,380.1	10,356.9	10,352.8	25.4	242.0	92.91	3,409.8	296.3	431.0	178.0	252.99	1.704	
13,400.0	10,379.9	10,356.8	10,352.6	26.2	242.0	92.23	3,409.8	296.3	331.1	78.0	253.14	1.308	Level 3
13,500.0	10,379.7	10,356.6	10,352.4	26.9	242.0	91.56	3,409.8	296.3	231.3	-22.1	253.36	0.913	Level 1
13,600.0	10,379.5	10,356.4	10,352.2	27.6	242.0	90.88	3,409.8	296.3	131.7	-122.1	253.85	0.519	Level 1



**Intrepid**  
Anticollision Report



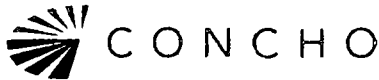
**Company:** Concho Resources, Inc.  
**Project:** Lea County, NM (NAD 27 NME)  
**Reference Site:** (Squints Federal) Sec-27\_T-22-S\_R-34-E  
**Site Error:** 0.0 usft  
**Reference Well:** Squints Federal Com #7H  
**Well Error:** 0.0 usft  
**Reference Wellbore:** OWB  
**Reference Design:** Plan #1

**Local Co-ordinate Reference:** Well Squints Federal Com #7H  
**TVD Reference:** KB @ 3435.1usft (Precision 106)  
**MD Reference:** KB @ 3435.1usft (Precision 106)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Output errors are at:** 2.00 sigma  
**Database:** EDM 5000.15 Single User Db  
**Offset TVD Reference:** Offset Datum

**Offset Design:(Squints Federal) Sec-27\_T-22-S\_R-34-E - Antelope Federal#1 (INC ONLY) - OWB - AWB**

Survey Program:		335-INC-ONLY		Offset			Semi Major Axis		Offset Wellbore Centre		Rule Assigned:				Offset Site Error:
Reference	Offset	Reference	Offset	Reference	Offset	Highside	+N/-S	+E/-W	Between	Between	Minimum	Separation	Warning	0.0 usft	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	(usft)	(usft)	Toolface (°)	(usft)	(usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor		0.0 usft	
13,700.0	10,379.3	10,356.2	10,352.0	28.3	242.0	90.21	3,409.8	296.3	34.8	-224.3	259.10	0.134	Level 1		
13,730.7	10,379.2	10,356.1	10,351.9	28.6	242.0	90.00	3,409.8	296.3	16.3	-254.2	270.54	0.060	Level 1, CC, ES, SF		
13,800.0	10,379.1	10,356.0	10,351.8	29.1	242.0	89.53	3,409.8	296.3	71.2	-183.5	254.65	0.280	Level 1		
13,900.0	10,378.9	10,355.8	10,351.6	29.8	242.0	88.86	3,409.8	296.3	170.1	-83.6	253.72	0.670	Level 1		
14,000.0	10,378.7	10,355.6	10,351.4	30.6	242.0	88.18	3,409.8	296.3	269.8	16.1	253.73	1.063	Level 2		
14,100.0	10,378.5	10,355.4	10,351.2	31.3	242.0	87.51	3,409.8	296.3	369.7	115.8	253.82	1.456	Level 3		
14,200.0	10,378.3	10,355.2	10,351.0	32.0	242.0	86.83	3,409.8	296.3	469.6	215.6	253.94	1.849			
14,300.0	10,378.1	10,355.0	10,350.8	32.8	241.9	86.16	3,409.8	296.3	569.5	315.5	254.06	2.242			
14,400.0	10,377.9	10,354.8	10,350.6	33.5	241.9	85.49	3,409.8	296.3	669.5	415.3	254.19	2.634			
14,500.0	10,377.7	10,354.6	10,350.4	34.3	241.9	84.82	3,409.8	296.3	769.5	515.2	254.32	3.026			
14,600.0	10,377.6	10,354.4	10,350.3	35.0	241.9	84.15	3,409.8	296.3	869.5	615.0	254.46	3.417			
14,700.0	10,377.4	10,354.3	10,350.1	35.7	241.9	83.48	3,409.8	296.3	969.4	714.8	254.59	3.808			
14,800.0	10,377.2	10,354.1	10,349.9	36.5	241.9	82.82	3,409.8	296.3	1,069.4	814.7	254.73	4.198			
14,900.0	10,377.0	10,353.9	10,349.7	37.2	241.9	82.15	3,409.8	296.3	1,169.4	914.6	254.86	4.588			
15,000.0	10,376.8	10,353.7	10,349.5	38.0	241.9	81.49	3,409.8	296.3	1,269.4	1,014.4	255.00	4.978			
15,100.0	10,376.6	10,353.5	10,349.3	38.7	241.9	80.83	3,409.8	296.3	1,369.4	1,114.3	255.14	5.367			
15,200.0	10,376.4	10,353.3	10,349.1	39.5	241.9	80.17	3,409.8	296.3	1,469.4	1,214.1	255.28	5.756			
15,300.0	10,376.2	10,353.1	10,348.9	40.2	241.9	79.52	3,409.8	296.3	1,569.4	1,314.0	255.42	6.144			
15,400.0	10,376.0	10,352.9	10,348.7	41.0	241.9	78.87	3,409.8	296.3	1,669.4	1,413.8	255.57	6.532			
15,500.0	10,375.8	10,352.7	10,348.5	41.7	241.9	78.22	3,409.8	296.3	1,769.4	1,513.7	255.71	6.919			
15,600.0	10,375.6	10,352.5	10,348.3	42.5	241.9	77.57	3,409.8	296.3	1,869.4	1,613.5	255.86	7.306			
15,700.0	10,375.4	10,352.3	10,348.1	43.2	241.9	76.93	3,409.8	296.3	1,969.4	1,713.4	256.00	7.693			
15,800.0	10,375.3	10,352.1	10,348.0	44.0	241.9	76.29	3,409.8	296.3	2,069.4	1,813.2	256.15	8.079			
15,900.0	10,375.1	10,352.0	10,347.8	44.7	241.9	75.66	3,409.8	296.3	2,169.4	1,913.1	256.30	8.464			
16,000.0	10,374.9	10,351.8	10,347.6	45.5	241.8	75.02	3,409.8	296.3	2,269.4	2,012.9	256.45	8.849			
16,100.0	10,374.7	10,351.6	10,347.4	46.3	241.8	74.40	3,409.8	296.3	2,369.4	2,112.8	256.60	9.234			

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



**Intrepid**  
Anticollision Report



**Company:** Concho Resources, Inc.  
**Project:** Lea County, NM (NAD 27 NME)  
**Reference Site:** (Squints Federal) Sec-27\_T-22-S\_R-34-E  
**Site Error:** 0.0 usft  
**Reference Well:** Squints Federal Com #7H  
**Well Error:** 0.0 usft  
**Reference Wellbore:** OWB  
**Reference Design:** Plan #1

**Local Co-ordinate Reference:** Well Squints Federal Com #7H  
**TVD Reference:** KB @ 3435.1usft (Precision 106)  
**MD Reference:** KB @ 3435.1usft (Precision 106)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Output errors are at:** 2.00 sigma  
**Database:** EDM 5000.15 Single User Db  
**Offset TVD Reference:** Offset Datum

**Offset Design:**(Squints Federal) Sec-27\_T-22-S\_R-34-E - Squints Federal Com #3H - OWB - Plan #1

**Offset Site Error:** 0.0 usft  
**Offset Well Error:** 0.0 usft

Survey Program: Reference		0-Standard Keeper 104, 9578-MWD+IFR1+MS Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance				Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	-90.38	-0.2	-30.0	30.0				
100.0	100.0	100.0	100.0	0.0	0.0	-90.38	-0.2	-30.0	30.0	30.0	0.05	622.758	
200.0	200.0	200.0	200.0	0.2	0.2	-90.38	-0.2	-30.0	30.0	29.8	0.19	159.741	
300.0	300.0	300.0	300.0	0.3	0.3	-90.38	-0.2	-30.0	30.0	29.7	0.33	91.621	
400.0	400.0	400.0	400.0	0.4	0.4	-90.38	-0.2	-30.0	30.0	29.5	0.47	64.231	
500.0	500.0	500.0	500.0	0.6	0.6	-90.38	-0.2	-30.0	30.0	29.4	0.61	49.448	
600.0	600.0	600.0	600.0	0.7	0.7	-90.38	-0.2	-30.0	30.0	29.3	0.75	40.197	
700.0	700.0	700.0	700.0	0.8	0.8	-90.38	-0.2	-30.0	30.0	29.1	0.89	33.862	
800.0	800.0	800.0	800.0	1.0	1.0	-90.38	-0.2	-30.0	30.0	29.0	1.03	29.251	
900.0	900.0	900.0	900.0	1.1	1.1	-90.38	-0.2	-30.0	30.0	28.8	1.17	25.746	
1,000.0	1,000.0	1,000.0	1,000.0	1.2	1.2	-90.38	-0.2	-30.0	30.0	28.7	1.30	22.991	
1,100.0	1,100.0	1,100.0	1,100.0	1.4	1.4	-90.38	-0.2	-30.0	30.0	28.6	1.44	20.769	
1,200.0	1,200.0	1,200.0	1,200.0	1.5	1.5	-90.38	-0.2	-30.0	30.0	28.4	1.58	18.938	
1,300.0	1,300.0	1,300.0	1,300.0	1.6	1.6	-90.38	-0.2	-30.0	30.0	28.3	1.72	17.404	
1,400.0	1,400.0	1,400.0	1,400.0	1.8	1.8	-90.38	-0.2	-30.0	30.0	28.1	1.86	16.100	
1,500.0	1,500.0	1,500.0	1,500.0	1.9	1.9	-90.38	-0.2	-30.0	30.0	28.0	2.00	14.977	
1,600.0	1,600.0	1,600.0	1,600.0	2.0	2.0	-90.38	-0.2	-30.0	30.0	27.9	2.14	14.001	
1,700.0	1,700.0	1,700.0	1,700.0	2.2	2.2	-90.38	-0.2	-30.0	30.0	27.7	2.28	13.145	
1,800.0	1,800.0	1,800.0	1,800.0	2.3	2.3	-90.38	-0.2	-30.0	30.0	27.6	2.42	12.387	
1,900.0	1,900.0	1,900.0	1,900.0	2.4	2.4	-90.38	-0.2	-30.0	30.0	27.4	2.56	11.712	
2,000.0	2,000.0	2,000.0	2,000.0	2.6	2.6	-90.38	-0.2	-30.0	30.0	27.3	2.70	11.106	
2,100.0	2,100.0	2,100.0	2,100.0	2.7	2.7	-90.38	-0.2	-30.0	30.0	27.2	2.84	10.560	
2,200.0	2,200.0	2,200.0	2,200.0	2.8	2.8	-90.38	-0.2	-30.0	30.0	27.0	2.98	10.066	
2,300.0	2,300.0	2,300.0	2,300.0	2.9	2.9	-90.38	-0.2	-30.0	30.0	26.9	3.12	9.615	
2,400.0	2,400.0	2,400.0	2,400.0	3.1	3.1	-90.38	-0.2	-30.0	30.0	26.7	3.26	9.203	
2,500.0	2,500.0	2,500.0	2,500.0	3.2	3.2	-90.38	-0.2	-30.0	30.0	26.6	3.40	8.825	
2,600.0	2,600.0	2,600.0	2,600.0	3.3	3.3	-90.38	-0.2	-30.0	30.0	26.5	3.54	8.477	
2,700.0	2,700.0	2,700.0	2,700.0	3.5	3.5	-90.38	-0.2	-30.0	30.0	26.3	3.68	8.155	
2,800.0	2,800.0	2,800.0	2,800.0	3.6	3.6	-90.38	-0.2	-30.0	30.0	26.2	3.82	7.857	
2,900.0	2,900.0	2,900.0	2,900.0	3.7	3.7	-90.38	-0.2	-30.0	30.0	26.0	3.96	7.580	
3,000.0	3,000.0	3,000.0	3,000.0	3.9	3.9	-90.38	-0.2	-30.0	30.0	25.9	4.10	7.322	
3,100.0	3,100.0	3,100.0	3,100.0	4.0	4.0	-90.38	-0.2	-30.0	30.0	25.8	4.24	7.080	
3,200.0	3,200.0	3,200.0	3,200.0	4.1	4.1	-90.38	-0.2	-30.0	30.0	25.6	4.38	6.854	
3,300.0	3,300.0	3,300.0	3,300.0	4.3	4.3	-90.38	-0.2	-30.0	30.0	25.5	4.52	6.643	
3,400.0	3,400.0	3,400.0	3,400.0	4.4	4.4	-90.38	-0.2	-30.0	30.0	25.3	4.66	6.443	
3,500.0	3,500.0	3,500.0	3,500.0	4.5	4.5	-90.38	-0.2	-30.0	30.0	25.2	4.80	6.256	
3,600.0	3,600.0	3,600.0	3,600.0	4.7	4.7	-90.38	-0.2	-30.0	30.0	25.1	4.94	6.079	
3,700.0	3,700.0	3,700.0	3,700.0	4.8	4.8	-90.38	-0.2	-30.0	30.0	24.9	5.08	5.911	
3,800.0	3,800.0	3,800.0	3,800.0	4.9	4.9	-90.38	-0.2	-30.0	30.0	24.8	5.21	5.753	
3,900.0	3,900.0	3,900.0	3,900.0	5.1	5.1	-90.38	-0.2	-30.0	30.0	24.6	5.35	5.603	
4,000.0	4,000.0	4,000.0	4,000.0	5.2	5.2	-90.38	-0.2	-30.0	30.0	24.5	5.49	5.461	
4,100.0	4,100.0	4,100.0	4,100.0	5.3	5.3	-90.38	-0.2	-30.0	30.0	24.4	5.63	5.325	
4,200.0	4,200.0	4,200.0	4,200.0	5.5	5.5	-90.38	-0.2	-30.0	30.0	24.2	5.77	5.197	
4,300.0	4,300.0	4,300.0	4,300.0	5.6	5.6	-90.38	-0.2	-30.0	30.0	24.1	5.91	5.074	
4,400.0	4,400.0	4,400.0	4,400.0	5.7	5.7	-90.38	-0.2	-30.0	30.0	23.9	6.05	4.957	
4,500.0	4,500.0	4,500.0	4,500.0	5.8	5.8	-90.38	-0.2	-30.0	30.0	23.8	6.19	4.845	
4,600.0	4,600.0	4,600.0	4,600.0	6.0	6.0	-90.38	-0.2	-30.0	30.0	23.7	6.33	4.738	
4,700.0	4,700.0	4,700.0	4,700.0	6.1	6.1	-90.38	-0.2	-30.0	30.0	23.5	6.47	4.636	
4,800.0	4,800.0	4,800.0	4,800.0	6.2	6.2	-90.38	-0.2	-30.0	30.0	23.4	6.61	4.538	
4,900.0	4,900.0	4,900.0	4,900.0	6.4	6.4	-90.38	-0.2	-30.0	30.0	23.3	6.75	4.444	
5,000.0	5,000.0	5,000.0	5,000.0	6.5	6.5	-90.38	-0.2	-30.0	30.0	23.1	6.89	4.354	
5,100.0	5,100.0	5,100.0	5,100.0	6.6	6.6	-90.38	-0.2	-30.0	30.0	23.0	7.03	4.268	

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

**Company:** Concho Resources, Inc.  
**Project:** Lea County, NM (NAD 27 NME)  
**Reference Site:** (Squints Federal) Sec-27\_T-22-S\_R-34-E  
**Site Error:** 0.0 usft  
**Reference Well:** Squints Federal Com #7H  
**Well Error:** 0.0 usft  
**Reference Wellbore:** OWB  
**Reference Design:** Plan #1

**Local Co-ordinate Reference:** Well Squints Federal Com #7H  
**TVD Reference:** KB @ 3435.1usft (Precision 106)  
**MD Reference:** KB @ 3435.1usft (Precision 106)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Output errors are at:** 2.00 sigma  
**Database:** EDM 5000.15 Single User Db  
**Offset TVD Reference:** Offset Datum

**Offset Design:**(Squints Federal) Sec-27\_T-22-S\_R-34-E - Squints Federal Com #3H - OWB - Plan #1

Survey Program: 0-Standard Keeper 104, 9578-MWD+IFR1+MS										Rule Assigned:				Offset Site Error:
Reference		Offset		Semi Major Axis		Offset Wellbore Centre		Distance		Warning		Offset Well Error:		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
5,200.0	5,200.0	5,200.0	5,200.0	6.8	6.8	-90.38	-0.2	-30.0	30.0	22.8	7.17	4.184		
5,300.0	5,300.0	5,300.0	5,300.0	6.9	6.9	-90.38	-0.2	-30.0	30.0	22.7	7.31	4.105		
5,400.0	5,400.0	5,400.0	5,400.0	7.0	7.0	-90.38	-0.2	-30.0	30.0	22.6	7.45	4.028		
5,500.0	5,500.0	5,500.0	5,500.0	7.2	7.2	-90.38	-0.2	-30.0	30.0	22.4	7.59	3.953 CC, ES, SF		
5,600.0	5,600.0	5,599.0	5,599.0	7.2	7.2	147.11	-1.1	-31.5	33.0	25.2	7.74	4.258		
5,700.0	5,699.8	5,697.5	5,697.4	7.2	7.2	147.28	-3.7	-35.8	41.8	33.9	7.91	5.280		
5,800.0	5,799.6	5,795.9	5,795.4	7.2	7.2	147.04	-7.9	-42.8	55.1	47.0	8.09	6.808		
5,900.0	5,899.3	5,895.0	5,894.1	7.2	7.2	146.71	-12.3	-50.2	68.8	60.6	8.24	8.347		
6,000.0	5,999.0	5,994.0	5,992.8	7.2	7.2	146.48	-16.8	-57.6	82.5	74.1	8.40	9.826		
6,100.0	6,098.7	6,093.1	6,091.5	7.2	7.2	146.33	-21.2	-65.0	96.3	87.7	8.56	11.245		
6,200.0	6,198.4	6,192.1	6,190.1	7.2	7.2	146.21	-25.7	-72.4	110.0	101.3	8.73	12.608		
6,300.0	6,298.2	6,291.2	6,288.8	7.2	7.2	146.12	-30.1	-79.8	123.7	114.9	8.89	13.915		
6,400.0	6,397.9	6,390.2	6,387.5	7.2	7.2	146.04	-34.6	-87.2	137.5	128.4	9.06	15.169		
6,500.0	6,497.6	6,489.3	6,486.2	7.2	7.2	145.98	-39.0	-94.6	151.2	142.0	9.24	16.371		
6,600.0	6,597.3	6,588.3	6,584.8	7.2	7.3	145.93	-43.4	-102.0	165.0	155.5	9.41	17.524		
6,700.0	6,697.0	6,687.4	6,683.5	7.3	7.3	145.89	-47.9	-109.4	178.7	169.1	9.59	18.629		
6,800.0	6,796.8	6,786.4	6,782.2	7.3	7.3	145.85	-52.3	-116.8	192.4	182.7	9.77	19.689		
6,900.0	6,896.5	6,885.5	6,880.9	7.3	7.3	145.82	-56.8	-124.2	206.2	196.2	9.96	20.705		
7,000.0	6,996.2	6,984.6	6,979.5	7.3	7.3	145.79	-61.2	-131.6	219.9	209.8	10.14	21.679		
7,100.0	7,095.9	7,083.6	7,078.2	7.3	7.4	145.77	-65.7	-139.0	233.6	223.3	10.33	22.613		
7,200.0	7,195.6	7,182.7	7,176.9	7.4	7.4	145.75	-70.1	-146.4	247.4	236.9	10.52	23.509		
7,300.0	7,295.4	7,281.7	7,275.6	7.4	7.4	145.73	-74.6	-153.8	261.1	250.4	10.72	24.368		
7,400.0	7,395.1	7,380.8	7,374.2	7.4	7.5	145.71	-79.0	-161.2	274.9	263.9	10.91	25.193		
7,500.0	7,494.8	7,479.8	7,472.9	7.5	7.5	145.69	-83.5	-168.6	288.6	277.5	11.11	25.984		
7,600.0	7,594.5	7,578.9	7,571.6	7.5	7.5	145.68	-87.9	-176.0	302.3	291.0	11.31	26.743		
7,700.0	7,694.3	7,677.9	7,670.3	7.5	7.6	145.67	-92.3	-183.3	316.1	304.6	11.51	27.472		
7,800.0	7,794.0	7,777.0	7,768.9	7.6	7.6	145.65	-96.8	-190.7	329.8	318.1	11.71	28.172		
7,900.0	7,893.7	7,876.0	7,867.6	7.6	7.7	145.64	-101.2	-198.1	343.5	331.6	11.91	28.844		
8,000.0	7,993.4	7,975.1	7,966.3	7.7	7.7	145.63	-105.7	-205.5	357.3	345.2	12.12	29.490		
8,100.0	8,093.1	8,074.1	8,065.0	7.7	7.8	145.62	-110.1	-212.9	371.0	358.7	12.32	30.111		
8,200.0	8,192.9	8,173.2	8,163.6	7.8	7.8	145.61	-114.6	-220.3	384.8	372.2	12.53	30.708		
8,300.0	8,292.6	8,272.2	8,262.3	7.8	7.9	145.61	-119.0	-227.7	398.5	385.8	12.74	31.282		
8,400.0	8,392.3	8,371.3	8,361.0	7.9	8.0	145.60	-123.5	-235.1	412.2	399.3	12.95	31.834		
8,500.0	8,492.0	8,470.3	8,459.7	7.9	8.0	145.59	-127.9	-242.5	426.0	412.8	13.16	32.366		
8,600.0	8,591.7	8,569.4	8,558.3	8.0	8.1	145.58	-132.4	-249.9	439.7	426.3	13.37	32.877		
8,700.0	8,691.5	8,668.4	8,657.0	8.1	8.1	145.58	-136.8	-257.3	453.4	439.9	13.59	33.370		
8,800.0	8,791.2	8,767.5	8,755.7	8.1	8.2	145.57	-141.2	-264.7	467.2	453.4	13.80	33.844		
8,900.0	8,890.9	8,866.5	8,854.4	8.2	8.3	145.57	-145.7	-272.1	480.9	466.9	14.02	34.301		
9,000.0	8,990.6	8,965.6	8,953.0	8.3	8.3	145.56	-150.1	-279.5	494.7	480.4	14.24	34.741		
9,100.0	9,090.3	9,064.6	9,051.7	8.3	8.4	145.56	-154.6	-286.9	508.4	493.9	14.46	35.166		
9,200.0	9,190.1	9,163.7	9,150.4	8.4	8.5	145.55	-159.0	-294.3	522.1	507.5	14.68	35.575		
9,300.0	9,289.8	9,262.7	9,249.1	8.5	8.6	145.55	-163.5	-301.7	535.9	521.0	14.90	35.970		
9,400.0	9,389.5	9,361.8	9,347.7	8.5	8.7	145.54	-167.9	-309.1	549.6	534.5	15.12	36.351		
9,500.0	9,489.2	9,460.8	9,446.4	8.6	8.7	145.54	-172.4	-316.5	563.3	548.0	15.34	36.718		
9,600.0	9,588.9	9,559.9	9,545.1	8.7	8.8	145.54	-176.8	-323.9	577.1	561.5	15.54	37.141		
9,700.0	9,688.7	9,645.7	9,630.5	8.8	8.8	145.91	-176.8	-331.2	591.7	576.0	15.76	37.541		
9,800.0	9,788.4	9,725.2	9,708.7	8.9	8.8	147.29	-166.0	-340.2	609.3	593.2	16.11	37.832		
9,900.0	9,888.0	9,800.0	9,780.0	9.0	8.9	-111.86	-146.1	-350.6	630.3	613.5	16.78	37.551		
10,000.0	9,985.3	9,874.5	9,847.6	9.0	9.0	-94.46	-117.4	-362.7	653.9	636.5	17.36	37.673		
10,100.0	10,077.4	9,950.0	9,911.5	9.1	9.0	-87.16	-79.8	-376.4	679.0	661.1	17.97	37.784		
10,200.0	10,161.4	10,017.6	9,963.9	9.2	9.1	-82.48	-39.2	-389.8	704.7	686.0	18.72	37.635		
10,300.0	10,234.9	10,087.9	10,012.7	9.3	9.2	-79.01	9.1	-404.5	730.0	710.7	19.37	37.693		

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









**Intrepid**  
Anticollision Report



**Company:** Concho Resources, Inc.  
**Project:** Lea County, NM (NAD 27 NME)  
**Reference Site:** (Squints Federal) Sec-27\_T-22-S\_R-34-E  
**Site Error:** 0.0 usft  
**Reference Well:** Squints Federal Com #7H  
**Well Error:** 0.0 usft  
**Reference Wellbore:** OWB  
**Reference Design:** Plan #1

**Local Co-ordinate Reference:** Well Squints Federal Com #7H  
**TVD Reference:** KB @ 3435.1usft (Precision 106)  
**MD Reference:** KB @ 3435.1usft (Precision 106)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Output errors are at:** 2.00 sigma  
**Database:** EDM 5000.15 Single User Db  
**Offset TVD Reference:** Offset Datum

**Offset Design:**(Squints Federal) Sec-27\_T-22-S\_R-34-E - Squints Federal Com #3H - OWB - Plan #1

**Offset Site Error:** 0.0 usft

**Offset Well Error:** 0.0 usft

Survey Program:		0-Standard Keeper 104, 9578-MWD+IFR1+MS		Reference		Offset		Semi Major Axis		Highside		Vertical		Tooface		Offset Wellbore Centre		Rule Assigned:		Distance		Minimum		Separation		Warning	
Measured	Vertical	Measured	Vertical	Reference	Offset	Reference	Offset	Reference	Offset	Reference	Offset	Reference	Offset	Reference	Offset	Reference	Offset	Reference	Offset	Reference	Offset	Reference	Offset	Reference	Offset	Reference	Offset
Depth	Depth	Depth	Depth	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)
20,615.4	10,366.0	20,412.4	10,131.0	80.6	80.7	-74.10		10,286.5	-586.1	857.9	696.1	161.76	5.303														

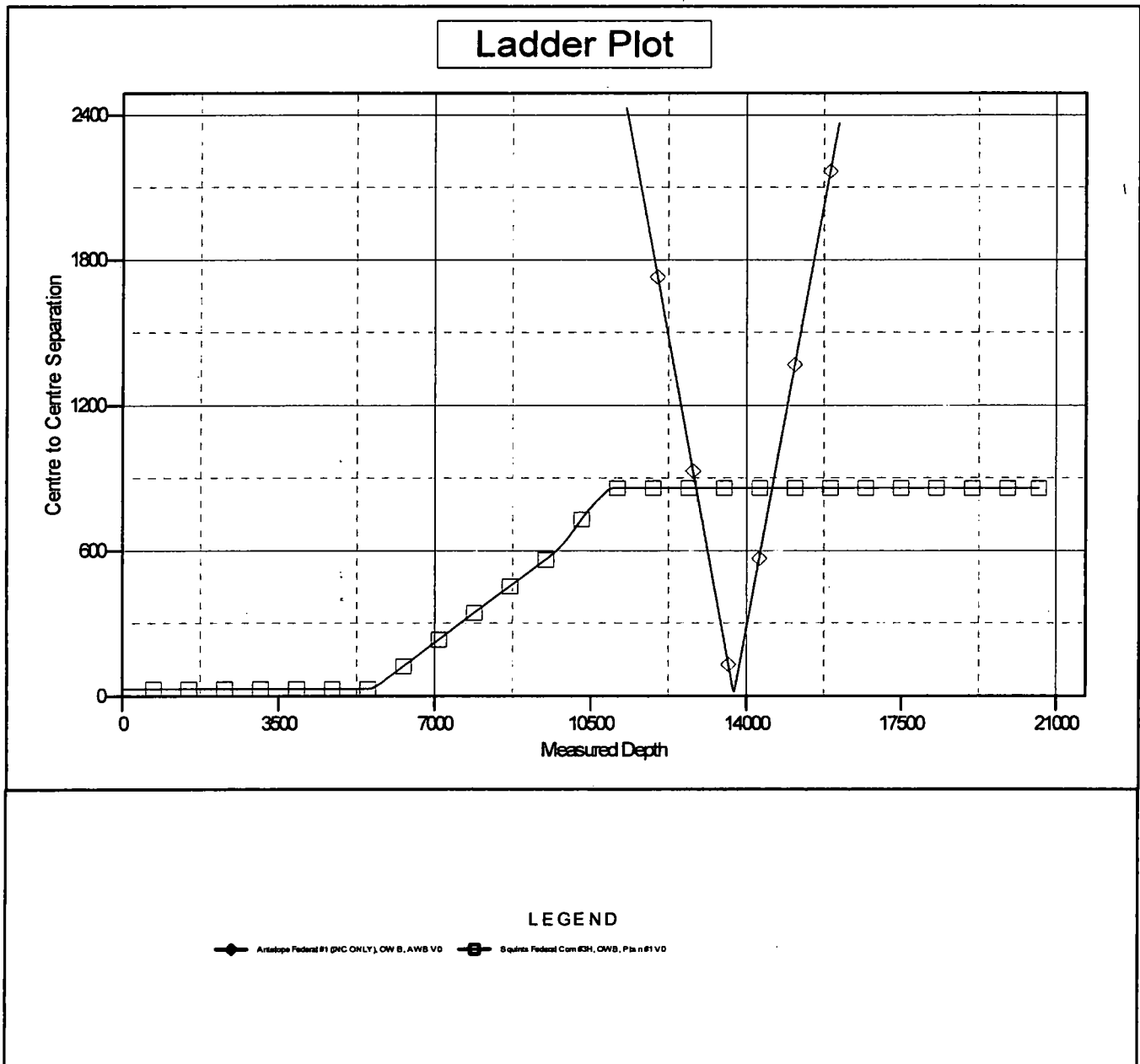
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

**Company:** Concho Resources, Inc.  
**Project:** Lea County, NM (NAD 27 NME)  
**Reference Site:** (Squints Federal) Sec-27\_T-22-S\_R-34-E  
**Site Error:** 0.0 usft  
**Reference Well:** Squints Federal Com #7H  
**Well Error:** 0.0 usft  
**Reference Wellbore:** OWB  
**Reference Design:** Plan #1

**Local Co-ordinate Reference:** Well Squints Federal Com #7H  
**TVD Reference:** KB @ 3435.1usft (Precision 106)  
**MD Reference:** KB @ 3435.1usft (Precision 106)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Output errors are at:** 2.00 sigma  
**Database:** EDM 5000.15 Single User Db  
**Offset TVD Reference:** Offset Datum

Reference Depths are relative to KB @ 3435.1usft (Precision 106)  
 Offset Depths are relative to Offset Datum  
 Central Meridian is 104° 20' 0.000 W

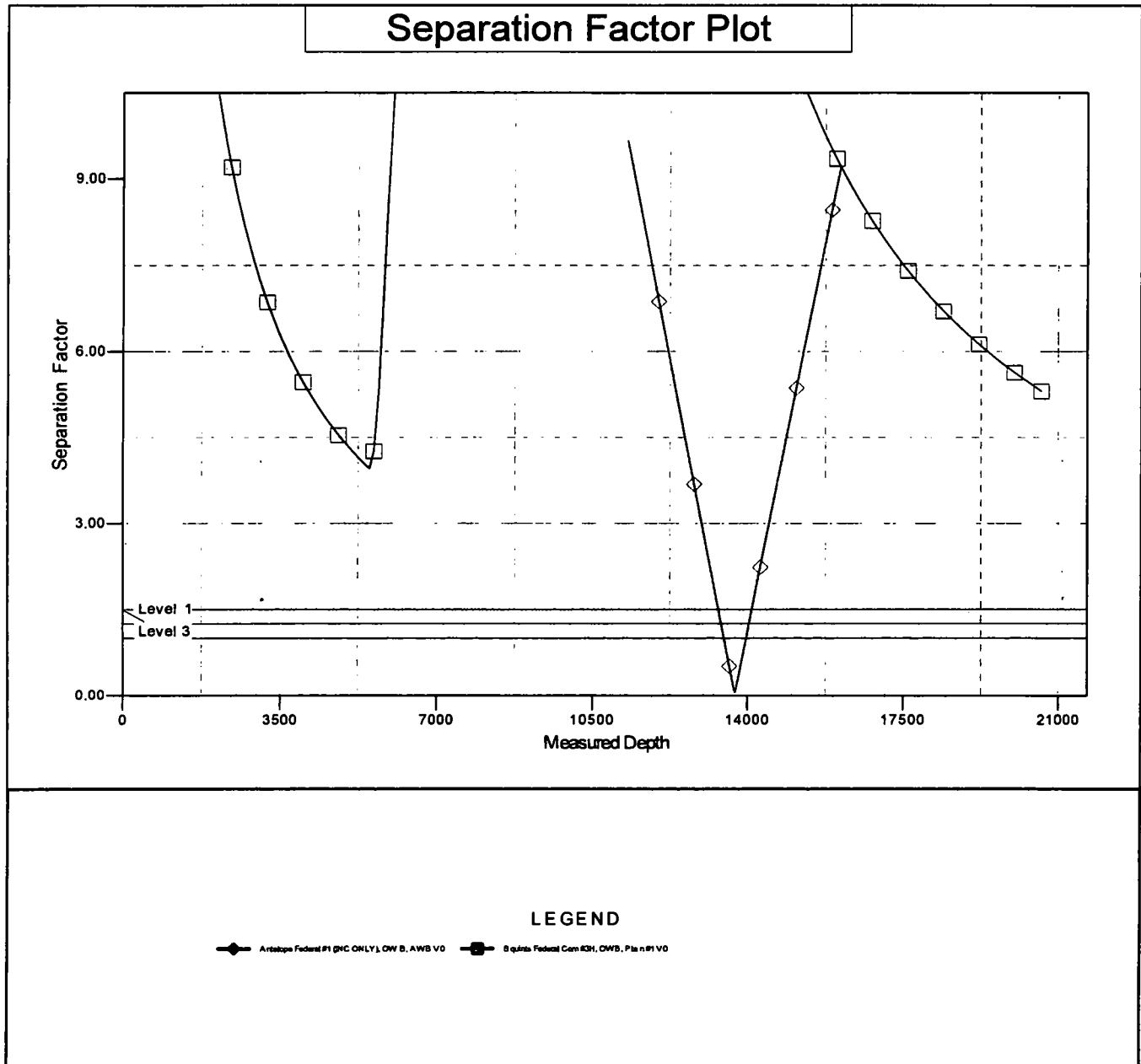
Coordinates are relative to: Squints Federal Com #7H  
 Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30'  
 Grid Convergence at Surface is: 0.47°



Company: Concho Resources, Inc.  
 Project: Lea County, NM (NAD 27 NME)  
 Reference Site: (Squints Federal) Sec-27\_T-22-S\_R-34-E  
 Site Error: 0.0 usft  
 Reference Well: Squints Federal Com #7H  
 Well Error: 0.0 usft  
 Reference Wellbore: OWB  
 Reference Design: Plan #1

Local Co-ordinate Reference: Well Squints Federal Com #7H  
 TVD Reference: KB @ 3435.1usft (Precision 106)  
 MD Reference: KB @ 3435.1usft (Precision 106)  
 North Reference: Grid  
 Survey Calculation Method: Minimum Curvature  
 Output errors are at: 2.00 sigma  
 Database: EDM 5000.15 Single User Db  
 Offset TVD Reference: Offset Datum

Reference Depths are relative to KB @ 3435.1usft (Precision 106)      Coordinates are relative to: Squints Federal Com #7H  
 Offset Depths are relative to Offset Datum      Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30  
 Central Meridian is 104° 20' 0.000 W      Grid Convergence at Surface is: 0.47°





**C O N C H O**

**Concho Resources, Inc.**

**Lea County, NM (NAD 27 NME)  
(Squints Federal) Sec-27\_T-22-S\_R-34-E  
Squints Federal Com #7H**

**OWB**

**Plan: Plan #1**

**Standard Planning Report**

**06 August, 2019**

**INTREPID**

**Database:** EDM 5000.15 Single User Db  
**Company:** Concho Resources, Inc.  
**Project:** Lea County, NM (NAD 27 NME)  
**Site:** (Squints Federal) Sec-27\_T-22-S\_R-34-E  
**Well:** Squints Federal Com #7H  
**Wellbore:** OWB  
**Design:** Plan #1

**Local Co-ordinate Reference:** Well Squints Federal Com #7H  
**TVD Reference:** KB @ 3435.1usft (Precision 106)  
**MD Reference:** KB @ 3435.1usft (Precision 106)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature

<b>Project</b>	Lea County, NM (NAD 27 NME)		
<b>Map System:</b>	US State Plane 1927 (Exact solution)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b>	New Mexico East 3001		

**Site** (Squints Federal) Sec-27\_T-22-S\_R-34-E  
**Site Position:**  
**From:** Map  
**Position Uncertainty:** 0.0 usft  
**Northing:** 494,293.40 usft  
**Easting:** 769,808.60 usft  
**Slot Radius:** 13-3/16 "  
**Latitude:** 32° 21' 21.245 N  
**Longitude:** 103° 27' 34.527 W  
**Grid Convergence:** 0.47 °

**Well** Squints Federal Com #7H  
**Well Position**  
**+N-S** 0.2 usft  
**+E/-W** 30.0 usft  
**Position Uncertainty** 0.0 usft  
**Northing:** 494,293.60 usft  
**Easting:** 769,838.60 usft  
**Wellhead Elevation:**  
**Latitude:** 32° 21' 21.244 N  
**Longitude:** 103° 27' 34.177 W  
**Ground Level:** 3,404.1 usft

**Wellbore** OWB

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	08/06/19	6.68	60.17	47,807.98143920

**Design** Plan #1

**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	1.33

**Plan Survey Tool Program** Date 08/06/19

Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1 0.0	9,801.6	Plan #1 (OWB)	Standard Keeper 104	Standard Wireline Keeper v
2 9,801.6	20,615.4	Plan #1 (OWB)	MWD+IFR1+MS	MWD + IFR1 + Multi-Station

**Plan Sections**

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
5,714.2	4.28	122.60	5,714.0	-4.3	6.7	2.00	2.00	57.24	122.60	
9,801.6	4.28	122.60	9,789.9	-168.8	263.9	0.00	0.00	0.00	0.00	
10,725.9	90.11	359.66	10,385.0	405.0	298.0	10.00	9.28	-13.30	-122.86	
20,615.4	90.11	359.66	10,366.0	10,294.3	238.9	0.00	0.00	0.00	0.00	PBHL (Squints Fed)

**Database:** EDM 5000.15 Single User Db  
**Company:** Concho Resources, Inc.  
**Project:** Lea County, NM (NAD 27 NME)  
**Site:** (Squints Federal) Sec-27\_T-22-S\_R-34-E  
**Well:** Squints Federal Com #7H  
**Wellbore:** OWB  
**Design:** Plan #1

**Local Co-ordinate Reference:** Well Squints Federal Com #7H  
**TVD Reference:** KB @ 3435.1usft (Precision 106)  
**MD Reference:** KB @ 3435.1usft (Precision 106)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature

**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
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
1,630.0	0.00	0.00	1,630.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Rustler</b>									
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
2,083.0	0.00	0.00	2,083.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>TOS</b>									
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,698.0	0.00	0.00	3,698.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Yates</b>									
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,880.0	0.00	0.00	3,880.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Seven Rivers</b>									
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,034.0	0.00	0.00	4,034.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Capitan Reef</b>									
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00

**Database:** EDM 5000.15 Single User Db  
**Company:** Concho Resources, Inc.  
**Project:** Lea County, NM (NAD 27 NME)  
**Site:** (Squints Federal) Sec-27\_T-22-S\_R-34-E  
**Well:** Squints Federal Com #7H  
**Wellbore:** OWB  
**Design:** Plan #1

**Local Co-ordinate Reference:** Well Squints Federal Com #7H  
**TVD Reference:** KB @ 3435.1usft (Precision 106)  
**MD Reference:** KB @ 3435.1usft (Precision 106)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature

**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)	
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,409.0	0.00	0.00	5,409.0	0.0	0.0	0.0	0.00	0.00	0.00	
<b>Base of Reef (BLCN)</b>										
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
<b>NUDGE - DLS 2.00 TFO 122.60</b>										
5,600.0	2.00	122.60	5,600.0	-0.9	1.5	-0.9	2.00	2.00	0.00	
5,700.0	4.00	122.60	5,699.8	-3.8	5.9	-3.6	2.00	2.00	0.00	
5,714.2	4.28	122.60	5,714.0	-4.3	6.7	-4.2	2.00	2.00	0.00	
<b>HOLD - 4087.4 at 5714.2 MD</b>										
5,767.3	4.28	122.60	5,767.0	-6.5	10.1	-6.2	0.00	0.00	0.00	
<b>CYCN</b>										
5,800.0	4.28	122.60	5,799.6	-7.8	12.1	-7.5	0.00	0.00	0.00	
5,900.0	4.28	122.60	5,899.3	-11.8	18.4	-11.4	0.00	0.00	0.00	
6,000.0	4.28	122.60	5,999.0	-15.8	24.7	-15.2	0.00	0.00	0.00	
6,100.0	4.28	122.60	6,098.7	-19.8	31.0	-19.1	0.00	0.00	0.00	
6,200.0	4.28	122.60	6,198.4	-23.9	37.3	-23.0	0.00	0.00	0.00	
6,300.0	4.28	122.60	6,298.2	-27.9	43.6	-26.9	0.00	0.00	0.00	
6,400.0	4.28	122.60	6,397.9	-31.9	49.9	-30.7	0.00	0.00	0.00	
6,500.0	4.28	122.60	6,497.6	-35.9	56.2	-34.6	0.00	0.00	0.00	
6,600.0	4.28	122.60	6,597.3	-40.0	62.5	-38.5	0.00	0.00	0.00	
6,700.0	4.28	122.60	6,697.0	-44.0	68.8	-42.4	0.00	0.00	0.00	
6,800.0	4.28	122.60	6,796.8	-48.0	75.1	-46.3	0.00	0.00	0.00	
6,900.0	4.28	122.60	6,896.5	-52.0	81.4	-50.1	0.00	0.00	0.00	
7,000.0	4.28	122.60	6,996.2	-56.1	87.7	-54.0	0.00	0.00	0.00	
7,100.0	4.28	122.60	7,095.9	-60.1	93.9	-57.9	0.00	0.00	0.00	
7,187.3	4.28	122.60	7,183.0	-63.6	99.4	-61.3	0.00	0.00	0.00	
<b>BYCN</b>										
7,200.0	4.28	122.60	7,195.6	-64.1	100.2	-61.8	0.00	0.00	0.00	
7,300.0	4.28	122.60	7,295.4	-68.1	106.5	-65.6	0.00	0.00	0.00	
7,400.0	4.28	122.60	7,395.1	-72.2	112.8	-69.5	0.00	0.00	0.00	
7,500.0	4.28	122.60	7,494.8	-76.2	119.1	-73.4	0.00	0.00	0.00	
7,600.0	4.28	122.60	7,594.5	-80.2	125.4	-77.3	0.00	0.00	0.00	
7,700.0	4.28	122.60	7,694.3	-84.2	131.7	-81.1	0.00	0.00	0.00	
7,800.0	4.28	122.60	7,794.0	-88.3	138.0	-85.0	0.00	0.00	0.00	
7,900.0	4.28	122.60	7,893.7	-92.3	144.3	-88.9	0.00	0.00	0.00	
8,000.0	4.28	122.60	7,993.4	-96.3	150.6	-92.8	0.00	0.00	0.00	
8,100.0	4.28	122.60	8,093.1	-100.3	156.9	-96.7	0.00	0.00	0.00	
8,200.0	4.28	122.60	8,192.9	-104.3	163.2	-100.5	0.00	0.00	0.00	
8,300.0	4.28	122.60	8,292.6	-108.4	169.5	-104.4	0.00	0.00	0.00	
8,400.0	4.28	122.60	8,392.3	-112.4	175.8	-108.3	0.00	0.00	0.00	
8,500.0	4.28	122.60	8,492.0	-116.4	182.0	-112.2	0.00	0.00	0.00	
8,523.0	4.28	122.60	8,515.0	-117.3	183.5	-113.1	0.00	0.00	0.00	

**Database:** EDM 5000.15 Single User Db  
**Company:** Concho Resources, Inc.  
**Project:** Lea County, NM (NAD 27 NME)  
**Site:** (Squints Federal) Sec-27\_T-22-S\_R-34-E  
**Well:** Squints Federal Com #7H  
**Wellbore:** OWB  
**Design:** Plan #1

**Local Co-ordinate Reference:** Well Squints Federal Com #7H  
**TVD Reference:** KB @ 3435.1usft (Precision 106)  
**MD Reference:** KB @ 3435.1usft (Precision 106)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature

**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)
<b>Bone Spring (BSGL)</b>									
8,600.0	4.28	122.60	8,591.7	-120.4	188.3	-116.0	0.00	0.00	0.00
8,700.0	4.28	122.60	8,691.5	-124.5	194.6	-119.9	0.00	0.00	0.00
8,800.0	4.28	122.60	8,791.2	-128.5	200.9	-123.8	0.00	0.00	0.00
8,900.0	4.28	122.60	8,890.9	-132.5	207.2	-127.7	0.00	0.00	0.00
9,000.0	4.28	122.60	8,990.6	-136.5	213.5	-131.6	0.00	0.00	0.00
9,100.0	4.28	122.60	9,090.3	-140.6	219.8	-135.4	0.00	0.00	0.00
9,200.0	4.28	122.60	9,190.1	-144.6	226.1	-139.3	0.00	0.00	0.00
9,300.0	4.28	122.60	9,289.8	-148.6	232.4	-143.2	0.00	0.00	0.00
9,400.0	4.28	122.60	9,389.5	-152.6	238.7	-147.1	0.00	0.00	0.00
9,500.0	4.28	122.60	9,489.2	-156.7	245.0	-150.9	0.00	0.00	0.00
9,600.0	4.28	122.60	9,588.9	-160.7	251.3	-154.8	0.00	0.00	0.00
9,606.1	4.28	122.60	9,595.0	-160.9	251.6	-155.1	0.00	0.00	0.00
<b>FBSG_sand</b>									
9,700.0	4.28	122.60	9,688.7	-164.7	257.6	-158.7	0.00	0.00	0.00
9,801.6	4.28	122.60	9,789.9	-168.8	263.9	-162.6	0.00	0.00	0.00
<b>KOP - DLS 10.00 TFO -122.86</b>									
9,850.0	4.39	54.66	9,838.3	-168.7	267.0	-162.5	10.00	0.22	-140.27
9,900.0	8.33	25.10	9,888.0	-164.3	270.1	-158.0	10.00	7.88	-59.13
9,950.0	13.01	15.45	9,937.1	-155.6	273.1	-149.2	10.00	9.37	-19.30
10,000.0	17.87	10.91	9,985.3	-142.6	276.1	-136.2	10.00	9.71	-9.08
10,050.0	22.79	8.27	10,032.1	-125.5	278.9	-119.0	10.00	9.83	-5.27
10,075.0	25.26	7.32	10,055.0	-115.4	280.3	-108.9	10.00	9.88	-3.80
<b>SBSG_sand</b>									
10,100.0	27.73	6.53	10,077.4	-104.4	281.6	-97.8	10.00	9.90	-3.16
10,150.0	32.69	5.29	10,120.5	-79.3	284.2	-72.7	10.00	9.92	-2.49
10,200.0	37.66	4.34	10,161.4	-50.6	286.6	-44.0	10.00	9.94	-1.90
10,250.0	42.64	3.58	10,199.6	-18.5	288.8	-11.8	10.00	9.95	-1.51
10,300.0	47.62	2.95	10,234.9	16.9	290.8	23.6	10.00	9.96	-1.25
10,350.0	52.60	2.42	10,266.9	55.2	292.6	62.0	10.00	9.97	-1.07
10,400.0	57.59	1.95	10,295.5	96.1	294.2	102.9	10.00	9.97	-0.93
10,450.0	62.57	1.53	10,320.5	139.5	295.5	146.3	10.00	9.97	-0.84
10,500.0	67.56	1.15	10,341.5	184.8	296.6	191.6	10.00	9.98	-0.76
10,550.0	72.55	0.80	10,358.6	231.7	297.4	238.6	10.00	9.98	-0.71
10,600.0	77.54	0.46	10,371.5	280.0	297.9	286.9	10.00	9.98	-0.67
10,650.0	82.53	0.14	10,380.1	329.3	298.1	336.1	10.00	9.98	-0.65
10,700.0	87.52	359.82	10,384.5	379.1	298.1	385.9	10.00	9.98	-0.63
10,725.9	90.11	359.66	10,385.0	405.0	298.0	411.8	10.00	9.98	-0.63
<b>EOC - 9889.5 hold at 10725.9 MD</b>									
10,800.0	90.11	359.66	10,384.9	479.1	297.6	485.8	0.00	0.00	0.00
10,900.0	90.11	359.66	10,384.7	579.0	297.0	585.8	0.00	0.00	0.00
11,000.0	90.11	359.66	10,384.5	679.0	296.4	685.7	0.00	0.00	0.00
11,100.0	90.11	359.66	10,384.3	779.0	295.8	785.7	0.00	0.00	0.00
11,200.0	90.11	359.66	10,384.1	879.0	295.2	885.7	0.00	0.00	0.00
11,300.0	90.11	359.66	10,383.9	979.0	294.6	985.6	0.00	0.00	0.00
11,400.0	90.11	359.66	10,383.7	1,079.0	294.0	1,085.6	0.00	0.00	0.00
11,500.0	90.11	359.66	10,383.5	1,179.0	293.4	1,185.5	0.00	0.00	0.00
11,600.0	90.11	359.66	10,383.3	1,279.0	292.8	1,285.5	0.00	0.00	0.00
11,700.0	90.11	359.66	10,383.1	1,379.0	292.2	1,385.4	0.00	0.00	0.00
11,800.0	90.11	359.66	10,382.9	1,479.0	291.6	1,485.4	0.00	0.00	0.00
11,900.0	90.11	359.66	10,382.7	1,579.0	291.0	1,585.4	0.00	0.00	0.00
12,000.0	90.11	359.66	10,382.6	1,679.0	290.4	1,685.3	0.00	0.00	0.00
12,100.0	90.11	359.66	10,382.4	1,779.0	289.8	1,785.3	0.00	0.00	0.00
12,200.0	90.11	359.66	10,382.2	1,879.0	289.2	1,885.2	0.00	0.00	0.00



Database: EDM 5000.15 Single User Db  
 Company: Concho Resources, Inc.  
 Project: Lea County, NM (NAD 27 NME)  
 Site: (Squints Federal) Sec-27\_T-22-S\_R-34-E  
 Well: Squints Federal Com #7H  
 Wellbore: OWB  
 Design: Plan #1

Local Co-ordinate Reference: Well Squints Federal Com #7H  
 TVD Reference: KB @ 3435.1usft (Precision 106)  
 MD Reference: KB @ 3435.1usft (Precision 106)  
 North Reference: Grid  
 Survey Calculation Method: Minimum Curvature

**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)
12,300.0	90.11	359.66	10,382.0	1,979.0	288.6	1,985.2	0.00	0.00	0.00
12,400.0	90.11	359.66	10,381.8	2,079.0	288.0	2,085.1	0.00	0.00	0.00
12,500.0	90.11	359.66	10,381.6	2,179.0	287.4	2,185.1	0.00	0.00	0.00
12,600.0	90.11	359.66	10,381.4	2,279.0	286.8	2,285.1	0.00	0.00	0.00
12,700.0	90.11	359.66	10,381.2	2,379.0	286.2	2,385.0	0.00	0.00	0.00
12,800.0	90.11	359.66	10,381.0	2,479.0	285.6	2,485.0	0.00	0.00	0.00
12,900.0	90.11	359.66	10,380.8	2,579.0	285.0	2,584.9	0.00	0.00	0.00
13,000.0	90.11	359.66	10,380.6	2,679.0	284.4	2,684.9	0.00	0.00	0.00
13,100.0	90.11	359.66	10,380.4	2,779.0	283.8	2,784.8	0.00	0.00	0.00
13,200.0	90.11	359.66	10,380.2	2,879.0	283.2	2,884.8	0.00	0.00	0.00
13,300.0	90.11	359.66	10,380.1	2,979.0	282.6	2,984.8	0.00	0.00	0.00
13,400.0	90.11	359.66	10,379.9	3,079.0	282.0	3,084.7	0.00	0.00	0.00
13,500.0	90.11	359.66	10,379.7	3,179.0	281.4	3,184.7	0.00	0.00	0.00
13,600.0	90.11	359.66	10,379.5	3,279.0	280.8	3,284.6	0.00	0.00	0.00
13,700.0	90.11	359.66	10,379.3	3,379.0	280.2	3,384.6	0.00	0.00	0.00
13,800.0	90.11	359.66	10,379.1	3,479.0	279.6	3,484.5	0.00	0.00	0.00
13,900.0	90.11	359.66	10,378.9	3,579.0	279.0	3,584.5	0.00	0.00	0.00
14,000.0	90.11	359.66	10,378.7	3,679.0	278.4	3,684.5	0.00	0.00	0.00
14,100.0	90.11	359.66	10,378.5	3,779.0	277.8	3,784.4	0.00	0.00	0.00
14,200.0	90.11	359.66	10,378.3	3,879.0	277.2	3,884.4	0.00	0.00	0.00
14,300.0	90.11	359.66	10,378.1	3,979.0	276.6	3,984.3	0.00	0.00	0.00
14,400.0	90.11	359.66	10,377.9	4,079.0	276.0	4,084.3	0.00	0.00	0.00
14,500.0	90.11	359.66	10,377.7	4,179.0	275.4	4,184.2	0.00	0.00	0.00
14,600.0	90.11	359.66	10,377.6	4,279.0	274.8	4,284.2	0.00	0.00	0.00
14,700.0	90.11	359.66	10,377.4	4,379.0	274.3	4,384.2	0.00	0.00	0.00
14,800.0	90.11	359.66	10,377.2	4,479.0	273.7	4,484.1	0.00	0.00	0.00
14,900.0	90.11	359.66	10,377.0	4,579.0	273.1	4,584.1	0.00	0.00	0.00
15,000.0	90.11	359.66	10,376.8	4,679.0	272.5	4,684.0	0.00	0.00	0.00
15,100.0	90.11	359.66	10,376.6	4,779.0	271.9	4,784.0	0.00	0.00	0.00
15,200.0	90.11	359.66	10,376.4	4,879.0	271.3	4,883.9	0.00	0.00	0.00
15,300.0	90.11	359.66	10,376.2	4,979.0	270.7	4,983.9	0.00	0.00	0.00
15,400.0	90.11	359.66	10,376.0	5,079.0	270.1	5,083.9	0.00	0.00	0.00
15,500.0	90.11	359.66	10,375.8	5,179.0	269.5	5,183.8	0.00	0.00	0.00
15,600.0	90.11	359.66	10,375.6	5,279.0	268.9	5,283.8	0.00	0.00	0.00
15,700.0	90.11	359.66	10,375.4	5,379.0	268.3	5,383.7	0.00	0.00	0.00
15,800.0	90.11	359.66	10,375.3	5,479.0	267.7	5,483.7	0.00	0.00	0.00
15,900.0	90.11	359.66	10,375.1	5,578.9	267.1	5,583.6	0.00	0.00	0.00
16,000.0	90.11	359.66	10,374.9	5,678.9	266.5	5,683.6	0.00	0.00	0.00
16,100.0	90.11	359.66	10,374.7	5,778.9	265.9	5,783.6	0.00	0.00	0.00
16,200.0	90.11	359.66	10,374.5	5,878.9	265.3	5,883.5	0.00	0.00	0.00
16,300.0	90.11	359.66	10,374.3	5,978.9	264.7	5,983.5	0.00	0.00	0.00
16,400.0	90.11	359.66	10,374.1	6,078.9	264.1	6,083.4	0.00	0.00	0.00
16,500.0	90.11	359.66	10,373.9	6,178.9	263.5	6,183.4	0.00	0.00	0.00
16,600.0	90.11	359.66	10,373.7	6,278.9	262.9	6,283.3	0.00	0.00	0.00
16,700.0	90.11	359.66	10,373.5	6,378.9	262.3	6,383.3	0.00	0.00	0.00
16,800.0	90.11	359.66	10,373.3	6,478.9	261.7	6,483.3	0.00	0.00	0.00
16,900.0	90.11	359.66	10,373.1	6,578.9	261.1	6,583.2	0.00	0.00	0.00
17,000.0	90.11	359.66	10,372.9	6,678.9	260.5	6,683.2	0.00	0.00	0.00
17,100.0	90.11	359.66	10,372.8	6,778.9	259.9	6,783.1	0.00	0.00	0.00
17,200.0	90.11	359.66	10,372.6	6,878.9	259.3	6,883.1	0.00	0.00	0.00
17,300.0	90.11	359.66	10,372.4	6,978.9	258.7	6,983.0	0.00	0.00	0.00
17,400.0	90.11	359.66	10,372.2	7,078.9	258.1	7,083.0	0.00	0.00	0.00
17,500.0	90.11	359.66	10,372.0	7,178.9	257.5	7,183.0	0.00	0.00	0.00
17,600.0	90.11	359.66	10,371.8	7,278.9	256.9	7,282.9	0.00	0.00	0.00

**Database:** EDM 5000.15 Single User Db  
**Company:** Concho Resources, Inc.  
**Project:** Lea County, NM (NAD 27 NME)  
**Site:** (Squints Federal) Sec-27\_T-22-S\_R-34-E  
**Well:** Squints Federal Com #7H  
**Wellbore:** OWB  
**Design:** Plan #1

**Local Co-ordinate Reference:** Well Squints Federal Com #7H  
**TVD Reference:** KB @ 3435.1usft (Precision 106)  
**MD Reference:** KB @ 3435.1usft (Precision 106)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature

**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	90.11	359.66	10,371.6	7,378.9	256.3	7,382.9	0.00	0.00	0.00
17,800.0	90.11	359.66	10,371.4	7,478.9	255.7	7,482.8	0.00	0.00	0.00
17,900.0	90.11	359.66	10,371.2	7,578.9	255.1	7,582.8	0.00	0.00	0.00
18,000.0	90.11	359.66	10,371.0	7,678.9	254.5	7,682.7	0.00	0.00	0.00
18,100.0	90.11	359.66	10,370.8	7,778.9	253.9	7,782.7	0.00	0.00	0.00
18,200.0	90.11	359.66	10,370.6	7,878.9	253.3	7,882.7	0.00	0.00	0.00
18,300.0	90.11	359.66	10,370.4	7,978.9	252.7	7,982.6	0.00	0.00	0.00
18,400.0	90.11	359.66	10,370.3	8,078.9	252.1	8,082.6	0.00	0.00	0.00
18,500.0	90.11	359.66	10,370.1	8,178.9	251.5	8,182.5	0.00	0.00	0.00
18,600.0	90.11	359.66	10,369.9	8,278.9	250.9	8,282.5	0.00	0.00	0.00
18,700.0	90.11	359.66	10,369.7	8,378.9	250.3	8,382.4	0.00	0.00	0.00
18,800.0	90.11	359.66	10,369.5	8,478.9	249.7	8,482.4	0.00	0.00	0.00
18,900.0	90.11	359.66	10,369.3	8,578.9	249.2	8,582.4	0.00	0.00	0.00
19,000.0	90.11	359.66	10,369.1	8,678.9	248.6	8,682.3	0.00	0.00	0.00
19,100.0	90.11	359.66	10,368.9	8,778.9	248.0	8,782.3	0.00	0.00	0.00
19,200.0	90.11	359.66	10,368.7	8,878.9	247.4	8,882.2	0.00	0.00	0.00
19,300.0	90.11	359.66	10,368.5	8,978.9	246.8	8,982.2	0.00	0.00	0.00
19,400.0	90.11	359.66	10,368.3	9,078.9	246.2	9,082.1	0.00	0.00	0.00
19,500.0	90.11	359.66	10,368.1	9,178.9	245.6	9,182.1	0.00	0.00	0.00
19,600.0	90.11	359.66	10,368.0	9,278.9	245.0	9,282.1	0.00	0.00	0.00
19,700.0	90.11	359.66	10,367.8	9,378.9	244.4	9,382.0	0.00	0.00	0.00
19,800.0	90.11	359.66	10,367.6	9,478.9	243.8	9,482.0	0.00	0.00	0.00
19,900.0	90.11	359.66	10,367.4	9,578.9	243.2	9,581.9	0.00	0.00	0.00
20,000.0	90.11	359.66	10,367.2	9,678.9	242.6	9,681.9	0.00	0.00	0.00
20,100.0	90.11	359.66	10,367.0	9,778.9	242.0	9,781.8	0.00	0.00	0.00
20,200.0	90.11	359.66	10,366.8	9,878.9	241.4	9,881.8	0.00	0.00	0.00
20,300.0	90.11	359.66	10,366.6	9,978.9	240.8	9,981.8	0.00	0.00	0.00
20,400.0	90.11	359.66	10,366.4	10,078.9	240.2	10,081.7	0.00	0.00	0.00
20,500.0	90.11	359.66	10,366.2	10,178.9	239.6	10,181.7	0.00	0.00	0.00
20,600.0	90.11	359.66	10,366.0	10,278.9	239.0	10,281.6	0.00	0.00	0.00
20,615.4	90.11	359.66	10,366.0	10,294.3	238.9	10,297.1	0.00	0.00	0.00

TD at 20615.4

**Design Targets**

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
LTP (Squints Federal)	0.00	0.00	10,366.0	10,244.3	239.2	504,537.90	770,077.80	32° 23' 2.592 N	103° 27' 30.413 W
- hit/miss target									
- Shape									
- Point									
- plan misses target center by 0.1usft at 20565.4usft MD (10366.1 TVD, 10244.3 N, 239.2 E)									
PBHL (Squints Feder)	-0.11	359.66	10,366.0	10,294.3	238.9	504,587.90	770,077.50	32° 23' 3.087 N	103° 27' 30.411 W
- plan hits target center									
- Rectangle (sides W60.0 H10,412.0 D20.0)									
FTP (Squints Federal)	0.00	0.00	10,385.0	-117.5	300.6	494,176.10	770,139.20	32° 21' 20.057 N	103° 27' 30.685 W
- plan misses target center by 201.7usft at 10300.0usft MD (10234.9 TVD, 16.9 N, 290.8 E)									
- Point									

**Database:** EDM 5000.15 Single User Db  
**Company:** Concho Resources, Inc.  
**Project:** Lea County, NM (NAD 27 NME)  
**Site:** (Squints Federal) Sec-27\_T-22-S\_R-34-E  
**Well:** Squints Federal Com #7H  
**Wellbore:** OWB  
**Design:** Plan #1

**Local Co-ordinate Reference:** Well Squints Federal Com #7H  
**TVD Reference:** KB @ 3435.1usft (Precision 106)  
**MD Reference:** KB @ 3435.1usft (Precision 106)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature

**Formations**

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,630.0	1,630.0	Rustler			
2,083.0	2,083.0	TOS			
3,698.0	3,698.0	Yates			
3,880.0	3,880.0	Seven Rivers			
4,034.0	4,034.0	Capitan Reef			
5,409.0	5,409.0	Base of Reef (BLCN)			
5,767.3	5,767.0	CYCN			
7,187.3	7,183.0	BYCN			
8,523.0	8,515.0	Bone Spring (BSGL)			
9,606.1	9,595.0	FBSG_sand			
10,075.0	10,055.0	SBSG_sand			

**Plan Annotations**

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
5,500.0	5,500.0	0.0	0.0	NUDGE - DLS 2.00 TFO 122.60
5,714.2	5,714.0	-4.3	6.7	HOLD - 4087.4 at 5714.2 MD
9,801.6	9,789.9	-168.8	263.9	KOP - DLS 10.00 TFO -122.86
10,725.9	10,385.0	405.0	298.0	EOC - 9889.5 hold at 10725.9 MD
20,615.4	10,366.0	10,294.3	238.9	TD at 20615.4