

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

Form C-104
Revised August 1, 2011

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

Submit one copy to appropriate District Office

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address Caza Operating LLC 200 N. Lorraine St. #1550, Midland, TX 79701		² OGRID Number 249099
		³ Reason for Filing Code/ Effective Date NW
⁴ API Number 30 - 0 25-46908	⁵ Pool Name Lea; Bone Spring	⁶ Pool Code 37570
⁷ Property Code 313780	⁸ Property Name Igloo 19-24 State Fed Com	⁹ Well Number 14Y

II. ¹⁰ Surface Location

UI or lot no. O	Section 19	Township 20S	Range 35E	Lot Idn	Feet from the 1315	North/South Line South	Feet from the 2365	East/West line East	County Lea
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¹¹ Bottom Hole Location

UL or lot no. M	Section 24	Township 20S	Range 35E	Lot Idn	Feet from the 445	North/South line South	Feet from the 100	East/West line West	County Lea
¹² Lse Code S	¹³ Producing Method Code 13	¹⁴ Gas Connection Date 2/10/2021	¹⁵ C-129 Permit Number		¹⁶ C-129 Effective Date		¹⁷ C-129 Expiration Date		

III. Oil and Gas Transporters

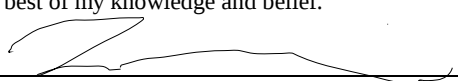
¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
214984	Plains Marketing LP 3705 TX-158, Midland TX 79706	O
159160	Versado Gas Processors LLC 6 Desta Dr #300, Midland TX 79705	G
329179	ARM Midstream Management LLC 6 Desta Dr #3400, Midland TX 79705	W

IV. Well Completion Data

²¹ Spud Date 2/29/2020	²² Ready Date 2/3/2021	²³ TD 18065	²⁴ PBTD 18046	²⁵ Perforations 10385 - 18046	²⁶ DHC, MC
²⁷ Hole Size		²⁸ Casing & Tubing Size	²⁹ Depth Set		³⁰ Sacks Cement
17.5		13.375	1925		1400
12.25		9.625	5280		2330
8.75		5.5	18065		2530
		2.875	10389		

V. Well Test Data

³¹ Date New Oil 2/3/2021	³² Gas Delivery Date 2/3/2021	³³ Test Date 2/28/2021	³⁴ Test Length 24	³⁵ Tbg. Pressure	³⁶ Csg. Pressure
³⁷ Choke Size 64	³⁸ Oil 939	³⁹ Water 718	⁴⁰ Gas 944		⁴¹ Test Method gas lift

⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief. Signature: 	OIL CONSERVATION DIVISION
Printed name: Steve Morris	Approved by: KURT SIMMONS
Title: Engineer	Title: NMOCD, SANTA FE
E-mail Address: steve.morris@morcorengineering.com	Approval Date: 06/11/2021
Date: 3/4/2021	
Phone: 985-415-9729	

1625 N. French Dr., Hobbs, NM 88240
 Phone: (575) 393-6161 Fax: (575) 393-0720
District II
 811 S. First St., Artesia, NM 88210
 Phone: (575) 748-1283 Fax: (575) 748-9720
District III
 1000 Rio Brazos Road, Aztec, NM 87410
 Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
 1220 S. St. Francis Dr., Santa Fe, NM 87505
 Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
 Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
 1220 South St. Francis Dr.
 Santa Fe, NM 87505

Revised August 1, 2011
 Submit one copy to appropriate
 District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION AS-DRILLED PLAT

¹ API Number 30-025-46411	² Pool Code 37570	³ Pool Name LEA; BONE SPRING
⁴ Property Code 313780	Property Name IGLOO 19-24 STATE FED COM	⁶ Well Number 12H
⁷ OGRID No. 299049	⁸ Operator Name CAZA OPERATING, LLC	⁹ Elevation 3695'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	19	20S	35E		401	SOUTH	2514	EAST	LEA
¹¹ Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	24	20S	34E		383	SOUTH	316	WEST	LEA
¹² Dedicated Acres 240	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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.

¹⁶ SEC. 14 SEC. 13 SEC. 23 CORNER COORDINATES NAD 83, SPCS NM EAST A - X: 791217.69' / Y: 566581.81' B - X: 799143.70' / Y: 566653.49' C - X: 799154.08' / Y: 565333.74' D - X: 791226.95' / Y: 565264.59'		SEC. 13 SEC. 24 CORNER COORDINATES NAD 27, SPCS NM EAST A - X: 750036.42' / Y: 566519.37' B - X: 757962.33' / Y: 566591.02' C - X: 757972.68' / Y: 565271.31' D - X: 750045.65' / Y: 565202.20'		SEC. 18 SEC. 19 SURFACE HOLE LOCATION 401' FSL 2514' FEL SECTION 19 NAD 83, SPCS NM EAST X: 799275.49' / Y: 565735.86' LAT: 32.55247726N / LON: 103.49619726W NAD 27, SPCS NM EAST X: 758094.09' / Y: 565673.42' LAT: 32.55235346N / LON: 103.49570993W		¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Date 05/01/2020 Signature Steve Morris Printed Name steve.morris@morcoreengineering.com E-mail Address
SEC. 23 LAST TAKE POINT/BHL NEAREST FROM THE LEASE MD=18,035' SEC. 26 LAST TAKE POINT/BOTTOM HOLE LOCATION 18,660' MEASURED DEPTH IN FEET NAD 83, SPCS NM EAST X: 791540.37' / Y: 565649.90' LAT: 32.55240564N / LON: 103.52130146W NAD 27, SPCS NM EAST X: 750359.07' / Y: 565558.749' LAT: 32.55228202N / LON: 103.52081323W		SEC. 24 SEC. 25 KICK OFF POINT/FIRST TAKE POINT 11,190' MEASURED DEPTH IN FEET NAD 83, SPCS NM EAST X: 798994.52' / Y: 565719.35' LAT: 32.55243795N / LON: 103.49710948W NAD 27, SPCS NM EAST X: 757813.13' / Y: 565656.91' LAT: 32.55231415N / LON: 103.49662211W		¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well surface location shown on this plat was plotted from field notes of the as-staked surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Data used for underground measurements were provided by others for reference only and does not constitute field measurements performed by R. Squared Global. JANUARY 24, 2020 Date of Survey Signature and Seal of Professional Surveyor DAVID W. MYERS 11403 Certificate Number DAVID W. MYERS 11403		

DISTANCES/AREAS RELATIVE TO NAD83 COMBINED SCALE FACTOR: 0.99981205
 CONVERGENCE ANGLE: 0.44922778; NOTE: ALL DIMENSIONS ARE IN U.S. FEET
 AND BASED ON GRID DATA.

1	01/23/2020	DEF
REV.	DATE	BY

SHEET 1 OF 1
 R4021_007



Caza Operating, LLC

Lea County, New Mexico (NAD83)

Igloo 19-24 State Fed Com

12H

OH / 65460

Survey: Phoenix MWD Surveys

Standard Survey Report

20 November, 2019





Survey Report



Company:	Caza Operating, LLC	Local Co-ordinate Reference:	Well 12H
Project:	Lea County, New Mexico (NAD83)	TVD Reference:	RKB @ 3715.00usft (Nabors M51)
Site:	Igloo 19-24 State Fed Com	MD Reference:	RKB @ 3715.00usft (Nabors M51)
Well:	12H	North Reference:	Grid
Wellbore:	OH / 65460	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Nabors M51)	Database:	USA Compass

Project	Lea County, New Mexico (NAD83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site		Igloo 19-24 State Fed Com			
Site Position:		Northing:	565,735.77 usft	Latitude:	32° 33' 8.917176 N
From:	Map	Easting:	799,276.50 usft	Longitude:	103° 29' 46.298362 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.45 °

Well	12H					
Well Position	+N/-S	0.00 usft	Northing:	565,735.77 usft	Latitude:	32° 33' 8.917176 N
	+E/-W	0.00 usft	Easting:	799,276.50 usft	Longitude:	103° 29' 46.298362 W
Position Uncertainty		1.00 usft	Wellhead Elevation:	usft	Ground Level:	3,693.00 usft

Wellbore	OH / 65460				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	MVHD	10/31/2019	6.57	60.45	48,066.89665690

Design	Surveys (Nabors M51)				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00		269.48

Survey Program	Date	11/20/2019			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
62.10	5,198.00	VES Gyro Surveys (OH / 65460)	NS-GYRO-MS	North sensing gyrocompassing m/s	
5,375.00	18,660.00	Phoenix MWD Surveys (OH / 65460)	MWD+HDGM	OWSG Rev.2 MWD + HDGM	

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)	
5,198.00	2.12	176.36	5,195.99	-62.70	11.99	-11.42	0.00	0.00	0.00	
Tie In										
5,375.00	1.97	168.85	5,372.88	-68.95	12.78	-12.16	0.17	-0.08	-4.24	
First Phoenix MWD Survey										
5,469.00	2.04	164.03	5,466.82	-72.15	13.56	-12.90	0.19	0.07	-5.13	
5,564.00	1.54	147.18	5,561.77	-74.85	14.71	-14.03	0.76	-0.53	-17.74	
5,658.00	0.47	88.77	5,655.76	-75.90	15.78	-15.10	1.44	-1.14	-62.14	
5,752.00	2.01	58.50	5,749.73	-75.03	17.58	-16.89	1.72	1.64	-32.20	
5,846.00	1.82	53.33	5,843.68	-73.28	20.18	-19.51	0.27	-0.20	-5.50	



Survey Report



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Site:	Igloo 19-24 State Fed Com	MD Reference:	RKB @ 3715.00usft (Nabors M51)
Well:	12H	North Reference:	Grid
Wellbore:	OH / 65460	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Nabors M51)	Database:	USA Compass

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)	
5,941.00	2.90	60.19	5,938.60	-71.18	23.47	-22.83	1.17	1.14	7.22	
6,035.00	3.44	62.26	6,032.46	-68.69	28.03	-27.41	0.59	0.57	2.20	
6,128.00	3.23	59.74	6,125.30	-66.07	32.77	-32.16	0.28	-0.23	-2.71	
6,222.00	3.28	62.55	6,219.15	-63.49	37.44	-36.86	0.18	0.05	2.99	
6,316.00	3.00	61.75	6,313.01	-61.09	41.99	-41.44	0.30	-0.30	-0.85	
6,411.00	2.90	59.20	6,407.88	-58.68	46.25	-45.71	0.17	-0.11	-2.68	
6,505.00	4.18	66.66	6,501.70	-56.11	51.44	-50.92	1.44	1.36	7.94	
6,599.00	4.04	66.14	6,595.46	-53.41	57.61	-57.12	0.15	-0.15	-0.55	
6,693.00	3.74	63.50	6,689.24	-50.70	63.38	-62.92	0.37	-0.32	-2.81	
6,788.00	3.26	62.83	6,784.06	-48.09	68.56	-68.12	0.51	-0.51	-0.71	
6,882.00	3.26	60.44	6,877.91	-45.55	73.26	-72.84	0.14	0.00	-2.54	
6,977.00	3.82	73.78	6,972.73	-43.33	78.65	-78.25	1.04	0.59	14.04	
7,071.00	3.84	74.09	7,066.52	-41.59	84.68	-84.30	0.03	0.02	0.33	
7,165.00	3.48	75.98	7,160.33	-40.04	90.48	-90.11	0.40	-0.38	2.01	
7,259.00	4.74	75.14	7,254.09	-38.35	97.00	-96.65	1.34	1.34	-0.89	
7,353.00	6.40	76.08	7,347.64	-36.10	105.84	-105.51	1.77	1.77	1.00	
7,448.00	6.05	78.02	7,442.08	-33.78	115.87	-115.56	0.43	-0.37	2.04	
7,542.00	5.90	77.36	7,535.57	-31.70	125.43	-125.14	0.18	-0.16	-0.70	
7,636.00	5.46	78.23	7,629.11	-29.73	134.53	-134.25	0.48	-0.47	0.93	
7,730.00	6.15	79.25	7,722.62	-27.88	143.85	-143.59	0.74	0.73	1.09	
7,824.00	6.36	78.61	7,816.06	-25.91	153.90	-153.66	0.24	0.22	-0.68	
7,918.00	5.78	78.41	7,909.54	-23.93	163.64	-163.42	0.62	-0.62	-0.21	
8,012.00	6.51	79.58	8,003.00	-22.02	173.52	-173.31	0.79	0.78	1.24	
8,106.00	6.40	78.38	8,096.40	-20.00	183.89	-183.70	0.19	-0.12	-1.28	
8,201.00	6.27	79.16	8,190.82	-17.95	194.18	-194.00	0.16	-0.14	0.82	
8,295.00	5.81	78.61	8,284.30	-16.05	203.88	-203.73	0.49	-0.49	-0.59	
8,390.00	6.36	77.97	8,378.76	-14.00	213.74	-213.60	0.58	0.58	-0.67	
8,483.00	6.30	77.09	8,471.19	-11.79	223.75	-223.64	0.12	-0.06	-0.95	
8,578.00	5.77	79.10	8,565.67	-9.72	233.52	-233.42	0.60	-0.56	2.12	
8,672.00	6.33	78.12	8,659.14	-7.76	243.23	-243.15	0.61	0.60	-1.04	
8,766.00	5.98	78.09	8,752.60	-5.68	253.10	-253.03	0.37	-0.37	-0.03	
8,860.00	4.69	79.09	8,846.19	-3.95	261.66	-261.61	1.38	-1.37	1.06	
8,955.00	4.12	82.81	8,940.91	-2.78	268.86	-268.82	0.67	-0.60	3.92	
9,049.00	3.65	82.04	9,034.70	-1.95	275.17	-275.14	0.50	-0.50	-0.82	
9,144.00	3.34	81.00	9,129.52	-1.10	280.90	-280.88	0.33	-0.33	-1.09	
9,238.00	2.94	76.63	9,223.38	-0.11	285.95	-285.94	0.50	-0.43	-4.65	
9,333.00	2.63	75.46	9,318.27	1.00	290.43	-290.43	0.33	-0.33	-1.23	
9,427.00	2.66	77.42	9,412.17	2.02	294.65	-294.65	0.10	0.03	2.09	
9,544.00	1.98	82.88	9,529.07	2.86	299.30	-299.32	0.61	-0.58	4.67	
9,639.00	1.58	83.02	9,624.02	3.22	302.23	-302.25	0.42	-0.42	0.15	
9,733.00	1.13	119.26	9,718.00	2.93	304.33	-304.34	1.01	-0.48	38.55	
9,827.00	1.23	174.76	9,811.98	1.47	305.23	-305.23	1.17	0.11	59.04	
9,921.00	1.44	190.00	9,905.96	-0.70	305.11	-305.10	0.44	0.22	16.21	



Survey Report



Company:	Caza Operating, LLC	Local Co-ordinate Reference:	Well 12H
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Well:	12H	North Reference:	Grid
Wellbore:	OH / 65460	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Nabors M51)	Database:	USA Compass

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)	
10,014.00	0.97	157.11	9,998.94	-2.58	305.22	-305.18	0.88	-0.51	-35.37	
10,109.00	0.78	158.27	10,093.92	-3.92	305.77	-305.72	0.20	-0.20	1.22	
10,203.00	1.09	243.47	10,187.92	-4.91	305.21	-305.15	1.37	0.33	90.64	
10,297.00	3.32	261.59	10,281.84	-5.71	301.71	-301.65	2.46	2.37	19.28	
10,328.00	6.42	267.58	10,312.73	-5.91	299.09	-299.03	10.12	10.00	19.32	
10,359.00	9.92	267.76	10,343.41	-6.09	294.69	-294.63	11.29	11.29	0.58	
10,390.00	12.63	268.19	10,373.81	-6.30	288.64	-288.57	8.75	8.74	1.39	
10,437.00	17.09	266.17	10,419.22	-6.93	276.60	-276.53	9.55	9.49	-4.30	
10,483.00	19.27	265.05	10,462.92	-8.03	262.30	-262.21	4.80	4.74	-2.43	
10,530.00	21.89	263.02	10,506.92	-9.77	245.87	-245.77	5.78	5.57	-4.32	
10,577.00	26.47	265.23	10,549.79	-11.70	226.72	-226.61	9.93	9.74	4.70	
10,624.00	31.09	267.66	10,590.97	-13.07	204.15	-204.02	10.14	9.83	5.17	
10,672.00	36.92	270.71	10,630.75	-13.40	177.32	-177.20	12.65	12.15	6.35	
10,719.00	42.04	269.77	10,667.01	-13.29	147.45	-147.33	10.97	10.89	-2.00	
10,766.00	48.79	269.82	10,699.99	-13.41	114.00	-113.87	14.36	14.36	0.11	
10,813.00	55.75	269.13	10,728.73	-13.76	76.85	-76.72	14.85	14.81	-1.47	
10,861.00	62.91	268.91	10,753.20	-14.47	35.60	-35.46	14.92	14.92	-0.46	
10,908.00	68.28	269.04	10,772.61	-15.23	-7.18	7.32	11.43	11.43	0.28	
10,955.00	72.19	269.08	10,788.50	-15.95	-51.40	51.54	8.32	8.32	0.09	
11,002.00	74.73	269.18	10,801.88	-16.64	-96.44	96.59	5.41	5.40	0.21	
11,050.00	75.94	269.42	10,814.03	-17.21	-142.88	143.03	2.57	2.52	0.50	
11,097.00	79.01	270.15	10,824.22	-17.38	-188.75	188.90	6.71	6.53	1.55	
11,143.00	83.18	270.70	10,831.34	-17.04	-234.18	234.33	9.14	9.07	1.20	
11,190.00	85.85	270.63	10,835.84	-16.50	-280.96	281.10	5.68	5.68	-0.15	
11,238.00	90.28	269.34	10,837.46	-16.51	-328.92	329.06	9.61	9.23	-2.69	
11,332.00	94.17	269.64	10,833.81	-17.34	-422.83	422.97	4.15	4.14	0.32	
11,367.00	94.60	269.20	10,831.13	-17.70	-457.72	457.87	1.76	1.23	-1.26	
11,461.00	96.18	269.96	10,822.30	-18.38	-551.30	551.45	1.86	1.68	0.81	
11,555.00	96.26	270.41	10,812.12	-18.08	-644.75	644.89	0.48	0.09	0.48	
11,647.00	95.19	271.55	10,802.94	-16.52	-736.27	736.39	1.69	-1.16	1.24	
11,660.00	94.28	269.96	10,801.87	-16.35	-749.23	749.35	14.06	-7.00	-12.23	
11,741.00	93.95	271.37	10,796.05	-15.41	-830.01	830.12	1.78	-0.41	1.74	
11,835.00	92.80	271.71	10,790.52	-12.89	-923.81	923.89	1.28	-1.22	0.36	
11,928.00	93.53	272.90	10,785.39	-9.15	-1,016.59	1,016.63	1.50	0.78	1.28	
12,023.00	94.90	273.91	10,778.40	-3.53	-1,111.17	1,111.15	1.79	1.44	1.06	
12,117.00	95.30	273.18	10,770.05	2.26	-1,204.61	1,204.54	0.88	0.43	-0.78	
12,211.00	92.38	270.98	10,763.75	5.66	-1,298.32	1,298.22	3.89	-3.11	-2.34	
12,305.00	92.33	269.15	10,759.89	5.77	-1,392.24	1,392.13	1.95	-0.05	-1.95	
12,399.00	93.17	268.18	10,755.38	3.58	-1,486.11	1,486.01	1.36	0.89	-1.03	
12,492.00	94.71	268.55	10,748.99	0.94	-1,578.85	1,578.77	1.70	1.66	0.40	
12,587.00	94.41	268.31	10,741.44	-1.66	-1,673.51	1,673.45	0.40	-0.32	-0.25	
12,681.00	94.01	269.70	10,734.53	-3.29	-1,767.24	1,767.20	1.53	-0.43	1.48	
12,775.00	95.27	269.75	10,726.93	-3.74	-1,860.93	1,860.88	1.34	1.34	0.05	
12,869.00	95.78	267.56	10,717.88	-5.93	-1,954.46	1,954.43	2.38	0.54	-2.33	



Survey Report



Company:	Caza Operating, LLC	Local Co-ordinate Reference:	Well 12H
Project:	Lea County, New Mexico (NAD83)	TVD Reference:	RKB @ 3715.00usft (Nabors M51)
Site:	Igloo 19-24 State Fed Com	MD Reference:	RKB @ 3715.00usft (Nabors M51)
Well:	12H	North Reference:	Grid
Wellbore:	OH / 65460	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Nabors M51)	Database:	USA Compass

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)	
12,964.00	94.90	266.54	10,709.04	-10.80	-2,048.92	2,048.93	1.41	-0.93	-1.07	
13,058.00	93.59	267.40	10,702.08	-15.75	-2,142.53	2,142.58	1.67	-1.39	0.91	
13,152.00	93.05	268.92	10,696.64	-18.77	-2,236.32	2,236.40	1.71	-0.57	1.62	
13,246.00	93.19	268.71	10,691.52	-20.71	-2,330.16	2,330.25	0.27	0.15	-0.22	
13,340.00	94.60	268.71	10,685.13	-22.82	-2,423.92	2,424.02	1.50	1.50	0.00	
13,434.00	93.95	268.87	10,678.13	-24.80	-2,517.63	2,517.75	0.71	-0.69	0.17	
13,528.00	93.53	269.90	10,672.00	-25.80	-2,611.43	2,611.55	1.18	-0.45	1.10	
13,623.00	92.88	270.32	10,666.68	-25.62	-2,706.28	2,706.40	0.81	-0.68	0.44	
13,718.00	94.52	270.48	10,660.55	-24.96	-2,801.07	2,801.18	1.73	1.73	0.17	
13,813.00	96.11	271.40	10,651.75	-23.41	-2,895.65	2,895.74	1.93	1.67	0.97	
13,907.00	95.10	271.28	10,642.57	-21.22	-2,989.17	2,989.24	1.08	-1.07	-0.13	
14,001.00	94.17	271.77	10,634.98	-18.73	-3,082.83	3,082.87	1.12	-0.99	0.52	
14,096.00	93.03	270.69	10,629.01	-16.69	-3,177.62	3,177.64	1.65	-1.20	-1.14	
14,191.00	94.12	269.30	10,623.09	-16.70	-3,272.43	3,272.44	1.86	1.15	-1.46	
14,284.00	94.86	268.77	10,615.81	-18.26	-3,365.13	3,365.16	0.98	0.80	-0.57	
14,379.00	95.13	268.56	10,607.54	-20.47	-3,459.74	3,459.78	0.36	0.28	-0.22	
14,472.00	93.61	268.37	10,600.45	-22.95	-3,552.44	3,552.50	1.65	-1.63	-0.20	
14,566.00	94.04	268.27	10,594.18	-25.70	-3,646.19	3,646.27	0.47	0.46	-0.11	
14,659.00	95.81	268.69	10,586.20	-28.16	-3,738.81	3,738.91	1.96	1.90	0.45	
14,753.00	95.19	269.30	10,577.19	-29.80	-3,832.36	3,832.47	0.92	-0.66	0.65	
14,847.00	93.00	270.88	10,570.47	-29.65	-3,926.11	3,926.22	2.87	-2.33	1.68	
14,941.00	92.24	271.32	10,566.18	-27.85	-4,019.99	4,020.08	0.93	-0.81	0.47	
15,035.00	90.70	268.45	10,563.76	-28.04	-4,113.95	4,114.03	3.46	-1.64	-3.05	
15,119.00	91.59	267.82	10,562.09	-30.77	-4,197.89	4,197.99	1.30	1.06	-0.75	
15,213.00	90.31	268.83	10,560.53	-33.52	-4,291.83	4,291.96	1.73	-1.36	1.07	
15,308.00	89.78	269.98	10,560.45	-34.50	-4,386.82	4,386.95	1.33	-0.56	1.21	
15,403.00	90.84	271.40	10,559.94	-33.36	-4,481.81	4,481.93	1.87	1.12	1.49	
15,497.00	91.32	270.26	10,558.17	-32.00	-4,575.78	4,575.88	1.32	0.51	-1.21	
15,591.00	92.69	270.52	10,554.88	-31.36	-4,669.72	4,669.81	1.48	1.46	0.28	
15,686.00	92.55	269.80	10,550.54	-31.10	-4,764.62	4,764.71	0.77	-0.15	-0.76	
15,781.00	91.51	270.30	10,547.17	-31.01	-4,859.56	4,859.64	1.21	-1.09	0.53	
15,875.00	90.17	270.55	10,545.79	-30.32	-4,953.54	4,953.61	1.45	-1.43	0.27	
15,969.00	90.17	269.16	10,545.51	-30.55	-5,047.54	5,047.61	1.48	0.00	-1.48	
16,064.00	91.32	269.21	10,544.28	-31.90	-5,142.52	5,142.60	1.21	1.21	0.05	
16,159.00	90.95	269.08	10,542.40	-33.32	-5,237.49	5,237.58	0.41	-0.39	-0.14	
16,253.00	91.65	268.58	10,540.26	-35.24	-5,331.45	5,331.55	0.92	0.74	-0.53	
16,347.00	92.97	269.50	10,536.48	-36.81	-5,425.35	5,425.47	1.71	1.40	0.98	
16,440.00	91.93	268.77	10,532.50	-38.22	-5,518.26	5,518.38	1.37	-1.12	-0.78	
16,535.00	91.26	267.57	10,529.86	-41.25	-5,613.17	5,613.31	1.45	-0.71	-1.26	
16,629.00	90.76	268.00	10,528.20	-44.88	-5,707.08	5,707.26	0.70	-0.53	0.46	
16,724.00	91.76	268.31	10,526.11	-47.94	-5,802.01	5,802.21	1.10	1.05	0.33	
16,819.00	92.86	268.33	10,522.28	-50.72	-5,896.89	5,897.11	1.16	1.16	0.02	
16,913.00	94.20	268.24	10,516.49	-53.53	-5,990.67	5,990.91	1.43	1.43	-0.10	



Survey Report



Company:	Caza Operating, LLC	Local Co-ordinate Reference:	Well 12H
Project:	Lea County, New Mexico (NAD83)	TVD Reference:	RKB @ 3715.00usft (Nabors M51)
Site:	Igloo 19-24 State Fed Com	MD Reference:	RKB @ 3715.00usft (Nabors M51)
Well:	12H	North Reference:	Grid
Wellbore:	OH / 65460	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Nabors M51)	Database:	USA Compass

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)	
17,007.00	92.83	268.02	10,510.73	-56.59	-6,084.44	6,084.70	1.48	-1.46	-0.23	
17,101.00	93.33	267.70	10,505.68	-60.10	-6,178.24	6,178.53	0.63	0.53	-0.34	
17,196.00	94.62	266.46	10,499.09	-64.92	-6,272.88	6,273.21	1.88	1.36	-1.31	
17,290.00	95.24	267.61	10,491.02	-69.77	-6,366.41	6,366.78	1.39	0.66	1.22	
17,384.00	93.75	268.36	10,483.65	-73.06	-6,460.06	6,460.45	1.77	-1.59	0.80	
17,477.00	91.99	268.63	10,478.99	-75.50	-6,552.90	6,553.32	1.91	-1.89	0.29	
17,572.00	90.95	269.02	10,476.56	-77.45	-6,647.85	6,648.28	1.17	-1.09	0.41	
17,666.00	91.12	269.34	10,474.86	-78.79	-6,741.83	6,742.26	0.39	0.18	0.34	
17,751.00	91.03	268.60	10,473.26	-80.32	-6,826.80	6,827.25	0.88	-0.11	-0.87	
17,846.00	90.70	269.04	10,471.83	-82.28	-6,921.77	6,922.23	0.58	-0.35	0.46	
17,940.00	91.96	268.18	10,469.65	-84.56	-7,015.71	7,016.19	1.62	1.34	-0.91	
18,035.00	91.48	269.54	10,466.79	-86.45	-7,110.65	7,111.14	1.52	-0.51	1.43	
18,129.00	90.20	270.19	10,465.42	-86.67	-7,204.63	7,205.12	1.53	-1.36	0.69	
18,222.00	90.48	269.98	10,464.87	-86.53	-7,297.63	7,298.12	0.38	0.30	-0.23	
18,317.00	91.09	270.14	10,463.56	-86.43	-7,392.62	7,393.10	0.66	0.64	0.17	
18,411.00	91.99	270.16	10,461.04	-86.18	-7,486.59	7,487.06	0.96	0.96	0.02	
18,506.00	93.22	270.12	10,456.72	-85.95	-7,581.49	7,581.95	1.30	1.29	-0.04	
18,588.00	94.28	269.96	10,451.36	-85.90	-7,663.31	7,663.77	1.31	1.29	-0.20	
Final Phoenix MWD Survey										
18,660.00	94.28	269.96	10,445.98	-85.95	-7,735.11	7,735.57	0.00	0.00	0.00	
Projection to TD										

Survey Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
5,198.00	5,195.99	-62.70	11.99	Tie In	
5,375.00	5,372.88	-68.95	12.78	First Phoenix MWD Survey	
18,588.00	10,451.36	-85.90	-7,663.31	Final Phoenix MWD Survey	
18,660.00	10,445.98	-85.95	-7,735.11	Projection to TD	

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

ACKNOWLEDGMENTS

Action 20719

ACKNOWLEDGMENTS

Operator: CAZA OPERATING, LLC 200 N Loraine St Midland, TX 79701	OGRID: 249099
	Action Number: 20719
	Action Type: [C-104] Completion Packet (C-104C)

ACKNOWLEDGMENTS

☐	I hereby certify that the required Water Use Report has been, or will be, submitted for this wells completion.
☐	I hereby certify that the required FracFocus disclosure has been, or will be, submitted for this wells completion.

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

CONDITIONS

Action 20719

CONDITIONS

Operator: CAZA OPERATING, LLC 200 N Loraine St Midland, TX 79701	OGRID: 249099
	Action Number: 20719
	Action Type: [C-104] Completion Packet (C-104C)

CONDITIONS

Created By	Condition	Condition Date
ksimmons	Submit all drilling and completion sundries and completion report.	6/11/2021