



Azimuths to Grid North
 True North: -0.08°
 Magnetic North: 7.09°
 Magnetic Field
 Strength: 48026.2snT
 Dip Angle: 60.00°
 Date: 2/17/2017
 Model: IGRF2010



30-015-44063

PROJECT DETAILS: Forehand Ranch

Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: New Mexico Eastern Zone

System Datum: Mean Sea Level

FORMATION TOP DETAILS

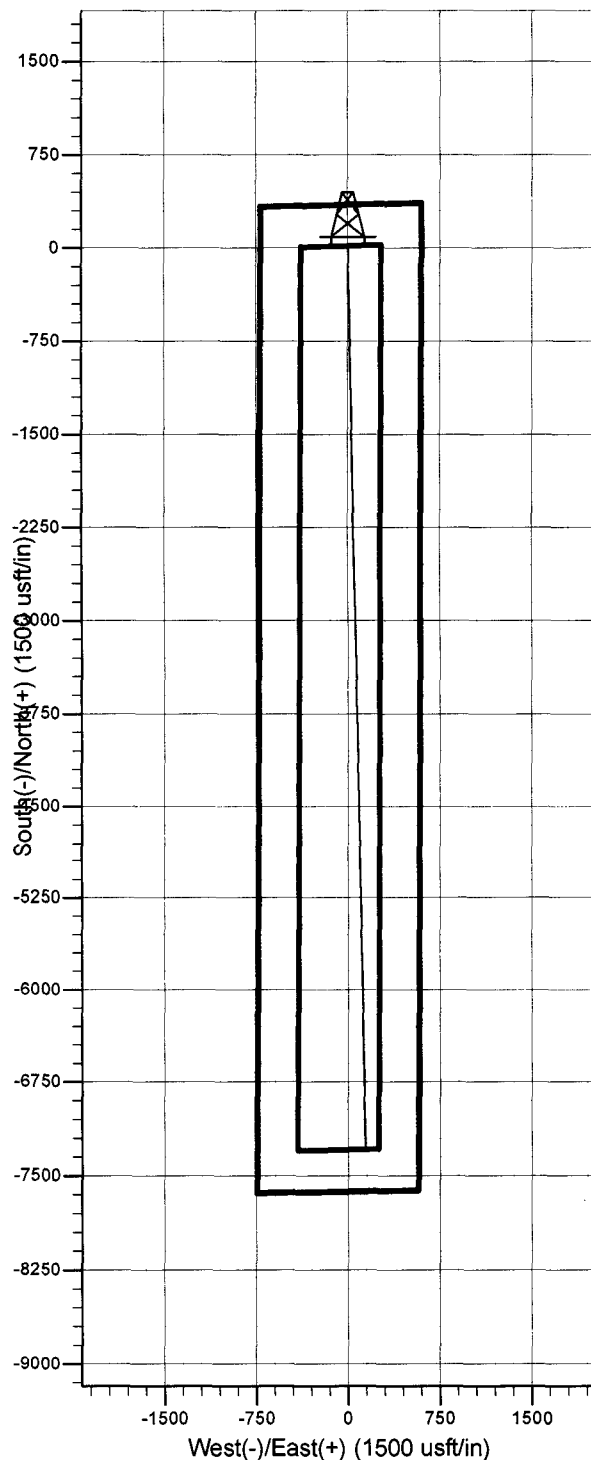
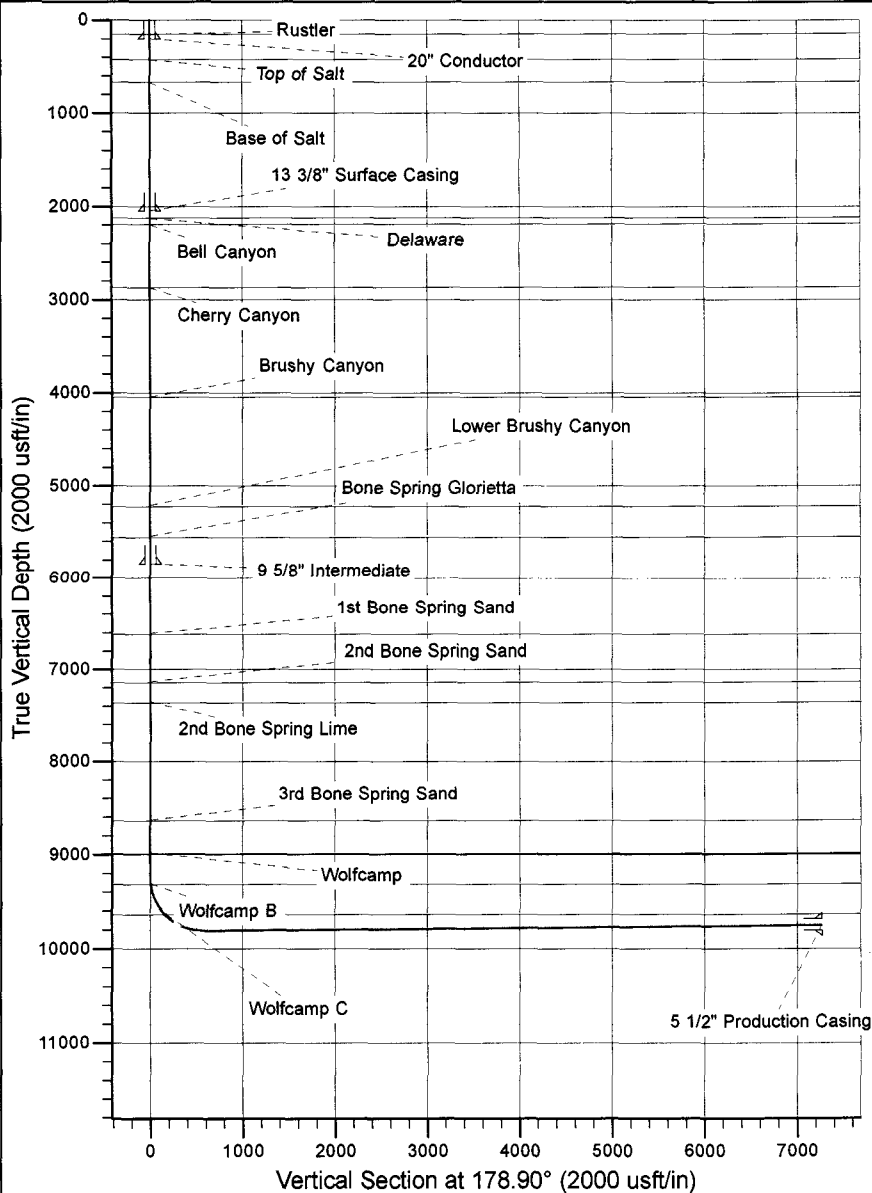
TVDPath	MDPath	Formation
150.0	150.0	Rustler
428.0	428.0	Top of Salt
669.0	669.0	Base of Salt
2129.0	2129.0	Delaware
2198.0	2198.0	Bell Canyon
2875.0	2875.0	Cherry Canyon
4042.0	4042.0	Brushy Canyon
5213.0	5213.0	Lower Brushy Canyon
5546.0	5546.0	Bone Spring Glorietta
6604.0	6604.0	1st Bone Spring Sand
7129.0	7129.0	2nd Bone Spring Sand
7355.0	7355.0	2nd Bone Spring Lime
8636.0	8636.0	3rd Bone Spring Sand
8983.0	8983.0	Wolfcamp
9307.0	9307.3	Wolfcamp B
9628.0	9673.0	Wolfcamp C

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSe	Departure	Annotation
9224.0	9224.0	0.00	0.00	0.0	0.0	0.0	0.0	Start Build 10.05
9794.2	10124.0	90.43	178.90	-574.4	11.0	574.5	574.5	Start 6696.0 hold at 10124.0 MD
9743.9	16820.0	90.43	178.90	-7269.0	139.6	7270.3	7270.3	TD at 16820.0

CASING DETAILS

TVD	MD	Name	Size
200.0	200.0	20" Conductor	20
2050.0	2050.0	13 3/8" Surface Casing	13-3/8
5840.0	5840.0	9 5/8" Intermediate	9-5/8
9743.9	16820.0	5 1/2" Production Casing	5-1/2



MM OIL CONSERVATION
ARTESIA DISTRICT
FEB 24 2017

RECEIVED

Caza Oil and Gas

Forehand Ranch

Forehand Ranch

Forehand Ranch 22 State 9H

Forehand Ranch 22 State 9H

Plan: 20170217 Forehand Ranch 22 State 9H

MOJO Standard Plan

17 February, 2017

30-015-44063

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MOJO Standard Plan

Company: Caiza Oil and Gas
Project: Forehand Ranch
Site: Forehand Ranch
Well: Forehand Ranch 22 State 9H
Wellbore: Forehand Ranch 22 State 9H
Design: 20170217 Forehand Ranch 22 State 9H

Local Co-ordinate Reference: Well Forehand Ranch 22 State 9H
TVD Reference: WELL @ 3172.0usft (Original Well Elev)
MD Reference: WELL @ 3172.0usft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Project	Forehand Ranch	System Datum:	Mean Sea Level
Map System:	US State Plane 1983		
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Forehand Ranch		
Site Position:		Northing:	469,212.46 usft
From:	Lat/Long	Easting:	587,373.46 usft
Position Uncertainty:	1.0 usft	Slot Radius:	16 "
		Latitude:	32° 17' 23.464 N
		Longitude:	104° 11' 3.674 W
		Grid Convergence:	0.08 °

Well	Forehand Ranch 22 State 9H		
Well Position	+N/-S +E/-W	0.0 usft 0.0 usft	469,112.53 usft 588,742.83 usft
Position Uncertainty	1.0 usft	Wellhead Elevation:	0.0 usft
		Latitude:	32° 17' 22.456 N
		Longitude:	104° 10' 47.723 W
		Ground Level:	3,149.0 usft

Wellbore	Forehand Ranch 22 State 9H		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2010	2/17/2017	7.17
		Dip Angle (°)	60.00
		Field Strength (nT)	48,026

Design	20170217 Forehand Ranch 22 State 9H		
Audit Notes:			
Version:	Phase:	Tie On Depth:	0.0
	PLAN		
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.0	0.0	0.0
		Direction (°)	178.90

Survey Tool Program	Date	2/17/2017	
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
0.0	16,820.0	20170217 Forehand Ranch 22 State 9H (F	Description

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MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
0.0	0.00	0.00	0.00	-3,172.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
100.0	0.00	0.00	100.0	-3,072.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
150.0	0.00	0.00	150.0	-3,022.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
Rustler										
200.0	0.00	0.00	200.0	-2,972.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
20" Conductor										
300.0	0.00	0.00	300.0	-2,872.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
400.0	0.00	0.00	400.0	-2,772.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
428.0	0.00	0.00	428.0	-2,744.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
Top of Salt										
500.0	0.00	0.00	500.0	-2,672.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
600.0	0.00	0.00	600.0	-2,572.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
669.0	0.00	0.00	669.0	-2,503.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
Base of Salt										
700.0	0.00	0.00	700.0	-2,472.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
800.0	0.00	0.00	800.0	-2,372.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
900.0	0.00	0.00	900.0	-2,272.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
1,000.0	0.00	0.00	1,000.0	-2,172.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
1,100.0	0.00	0.00	1,100.0	-2,072.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
1,200.0	0.00	0.00	1,200.0	-1,972.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
1,300.0	0.00	0.00	1,300.0	-1,872.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
1,400.0	0.00	0.00	1,400.0	-1,772.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
1,500.0	0.00	0.00	1,500.0	-1,672.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
1,600.0	0.00	0.00	1,600.0	-1,572.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
1,700.0	0.00	0.00	1,700.0	-1,472.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
1,800.0	0.00	0.00	1,800.0	-1,372.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
1,900.0	0.00	0.00	1,900.0	-1,272.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
2,000.0	0.00	0.00	2,000.0	-1,172.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83

MOJO Standard Plan

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2,050.0	0.00	0.00	2,050.0	-1,122.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
13 3/8" Surface Casing										
2,100.0	0.00	0.00	2,100.0	-1,072.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
2,129.0	0.00	0.00	2,129.0	-1,043.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
Delaware										
2,198.0	0.00	0.00	2,198.0	-974.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
Bell Canyon										
2,200.0	0.00	0.00	2,200.0	-972.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
2,300.0	0.00	0.00	2,300.0	-872.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
2,400.0	0.00	0.00	2,400.0	-772.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
2,500.0	0.00	0.00	2,500.0	-672.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
2,600.0	0.00	0.00	2,600.0	-572.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
2,700.0	0.00	0.00	2,700.0	-472.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
2,800.0	0.00	0.00	2,800.0	-372.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
2,875.0	0.00	0.00	2,875.0	-297.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
Cherry Canyon										
2,900.0	0.00	0.00	2,900.0	-272.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
3,000.0	0.00	0.00	3,000.0	-172.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
3,100.0	0.00	0.00	3,100.0	-72.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
3,200.0	0.00	0.00	3,200.0	28.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
3,300.0	0.00	0.00	3,300.0	128.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
3,400.0	0.00	0.00	3,400.0	228.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
3,500.0	0.00	0.00	3,500.0	328.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
3,600.0	0.00	0.00	3,600.0	428.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
3,700.0	0.00	0.00	3,700.0	528.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
3,800.0	0.00	0.00	3,800.0	628.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
3,900.0	0.00	0.00	3,900.0	728.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83

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4,000.0	0.00	0.00	4,000.0	828.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
4,042.0	0.00	0.00	4,042.0	870.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
Brushy Canyon										
4,100.0	0.00	0.00	4,100.0	928.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
4,200.0	0.00	0.00	4,200.0	1,028.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
4,300.0	0.00	0.00	4,300.0	1,128.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
4,400.0	0.00	0.00	4,400.0	1,228.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
4,500.0	0.00	0.00	4,500.0	1,328.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
4,600.0	0.00	0.00	4,600.0	1,428.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
4,700.0	0.00	0.00	4,700.0	1,528.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
4,800.0	0.00	0.00	4,800.0	1,628.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
4,900.0	0.00	0.00	4,900.0	1,728.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
5,000.0	0.00	0.00	5,000.0	1,828.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
5,100.0	0.00	0.00	5,100.0	1,928.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
5,200.0	0.00	0.00	5,200.0	2,028.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
5,213.0	0.00	0.00	5,213.0	2,041.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
Lower Brushy Canyon										
5,300.0	0.00	0.00	5,300.0	2,128.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
5,400.0	0.00	0.00	5,400.0	2,228.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
5,500.0	0.00	0.00	5,500.0	2,328.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
5,546.0	0.00	0.00	5,546.0	2,374.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
Bone Spring Glorietta										
5,600.0	0.00	0.00	5,600.0	2,428.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
5,700.0	0.00	0.00	5,700.0	2,528.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
5,800.0	0.00	0.00	5,800.0	2,628.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
5,840.0	0.00	0.00	5,840.0	2,668.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
9 5/8" Intermediate										

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MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
5,900.0	0.00	0.00	5,900.0	2,728.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
6,000.0	0.00	0.00	6,000.0	2,828.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
6,100.0	0.00	0.00	6,100.0	2,928.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
6,200.0	0.00	0.00	6,200.0	3,028.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
6,300.0	0.00	0.00	6,300.0	3,128.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
6,400.0	0.00	0.00	6,400.0	3,228.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
6,500.0	0.00	0.00	6,500.0	3,328.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
6,600.0	0.00	0.00	6,600.0	3,428.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
6,604.0	0.00	0.00	6,604.0	3,432.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
1st Bone Spring Sand										
6,700.0	0.00	0.00	6,700.0	3,528.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
6,800.0	0.00	0.00	6,800.0	3,628.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
6,900.0	0.00	0.00	6,900.0	3,728.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
7,000.0	0.00	0.00	7,000.0	3,828.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
7,100.0	0.00	0.00	7,100.0	3,928.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
7,129.0	0.00	0.00	7,129.0	3,957.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
2nd Bone Spring Sand										
7,200.0	0.00	0.00	7,200.0	4,028.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
7,300.0	0.00	0.00	7,300.0	4,128.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
7,355.0	0.00	0.00	7,355.0	4,183.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
2nd Bone Spring Lime										
7,400.0	0.00	0.00	7,400.0	4,228.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
7,500.0	0.00	0.00	7,500.0	4,328.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
7,600.0	0.00	0.00	7,600.0	4,428.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
7,700.0	0.00	0.00	7,700.0	4,528.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
7,800.0	0.00	0.00	7,800.0	4,628.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
7,900.0	0.00	0.00	7,900.0	4,728.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
8,000.0	0.00	0.00	8,000.0	4,828.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83

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Wellbore:	Forehand Ranch 22 State 9H	Minimum Curvature	
Design:	20170217 Forehand Ranch 22 State 9H	Survey Calculation Method:	EDM 5000.1 Single User Db
		Database:	

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
3rd Bone Spring Sand										
8,100.0	0.00	0.00	8,100.0	4,928.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
8,200.0	0.00	0.00	8,200.0	5,028.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
8,300.0	0.00	0.00	8,300.0	5,128.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
8,400.0	0.00	0.00	8,400.0	5,228.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
8,500.0	0.00	0.00	8,500.0	5,328.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
8,600.0	0.00	0.00	8,600.0	5,428.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
8,636.0	0.00	0.00	8,636.0	5,464.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
Wolfcamp										
8,700.0	0.00	0.00	8,700.0	5,528.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
8,800.0	0.00	0.00	8,800.0	5,628.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
8,900.0	0.00	0.00	8,900.0	5,728.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
8,983.0	0.00	0.00	8,983.0	5,811.0	0.0	0.0	0.0	0.00	469,112.53	588,742.83
Start Build 10.06										
9,300.0	7.64	178.90	9,299.8	6,127.8	-5.1	0.1	5.1	10.05	469,107.47	588,742.93
9,307.3	8.37	178.90	9,307.0	6,135.0	-6.1	0.1	6.1	10.05	469,106.46	588,742.95
Wolfcamp B										
9,400.0	17.69	178.90	9,397.2	6,225.2	-26.9	0.5	27.0	10.05	469,085.58	588,743.35
9,500.0	27.73	178.90	9,489.3	6,317.4	-65.5	1.3	65.5	10.05	469,047.03	588,744.09
9,600.0	37.78	178.90	9,573.3	6,401.3	-119.5	2.3	119.5	10.05	468,993.00	588,745.13
9,673.0	45.11	178.90	9,628.0	6,456.0	-167.8	3.2	167.8	10.05	468,944.76	588,746.05
Wolfcamp C										
9,700.0	47.83	178.90	9,646.6	6,474.6	-187.4	3.6	187.4	10.05	468,925.15	588,746.43
9,800.0	57.88	178.90	9,706.9	6,534.9	-267.0	5.1	267.0	10.05	468,845.56	588,747.96

MOJO Standard Plan

Company: Caza Oil and Gas
Project: Forehand Ranch
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Wellbore: Forehand Ranch 22 State 9H
Design: 20170217 Forehand Ranch 22 State 9H

Local Co-ordinate Reference: Well Forehand Ranch 22 State 9H
TVD Reference: WELL @ 3172.0usft (Original Well Elev)
MD Reference: WELL @ 3172.0usft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	D Leg (°/100usft)	Northing (usft)	Easting (usft)
9,900.0	67.92	178.90	9,752.4	6,580.4	-355.9	6.8	355.9	10.05	468,756.67	588,749.66
10,000.0	77.97	178.90	9,781.7	6,609.7	-451.3	8.7	451.4	10.05	468,661.20	588,751.50
10,100.0	88.02	178.90	9,793.9	6,621.9	-550.4	10.6	550.5	10.05	468,562.09	588,753.40
10,124.0	90.43	178.90	9,794.2	6,622.2	-574.4	11.0	574.5	10.05	468,538.12	588,753.86
Start 6696.0 hold at 10124.0 MD										
10,200.0	90.43	178.90	9,793.6	6,621.6	-650.4	12.5	650.5	0.00	468,462.12	588,755.32
10,300.0	90.43	178.90	9,792.9	6,620.9	-750.4	14.4	750.5	0.00	468,362.14	588,757.24
10,400.0	90.43	178.90	9,792.1	6,620.1	-850.4	16.3	850.5	0.00	468,262.16	588,759.16
10,500.0	90.43	178.90	9,791.4	6,619.4	-950.3	18.2	950.5	0.00	468,162.18	588,761.08
10,600.0	90.43	178.90	9,790.6	6,618.6	-1,050.3	20.2	1,050.5	0.00	468,062.20	588,763.00
10,700.0	90.43	178.90	9,789.9	6,617.9	-1,150.3	22.1	1,150.5	0.00	467,962.22	588,764.92
10,800.0	90.43	178.90	9,789.1	6,617.1	-1,250.3	24.0	1,250.5	0.00	467,862.25	588,766.84
10,900.0	90.43	178.90	9,788.4	6,616.4	-1,350.3	25.9	1,350.5	0.00	467,762.27	588,768.76
11,000.0	90.43	178.90	9,787.6	6,615.6	-1,450.2	27.8	1,450.5	0.00	467,662.29	588,770.68
11,100.0	90.43	178.90	9,786.9	6,614.9	-1,550.2	29.8	1,550.5	0.00	467,562.31	588,772.60
11,200.0	90.43	178.90	9,786.1	6,614.1	-1,650.2	31.7	1,650.5	0.00	467,462.33	588,774.52
11,300.0	90.43	178.90	9,785.4	6,613.4	-1,750.2	33.6	1,750.5	0.00	467,362.35	588,776.44
11,400.0	90.43	178.90	9,784.6	6,612.6	-1,850.2	35.5	1,850.5	0.00	467,262.37	588,778.36
11,500.0	90.43	178.90	9,783.9	6,611.9	-1,950.1	37.4	1,950.5	0.00	467,162.39	588,780.28
11,600.0	90.43	178.90	9,783.1	6,611.1	-2,050.1	39.4	2,050.5	0.00	467,062.42	588,782.20
11,700.0	90.43	178.90	9,782.4	6,610.4	-2,150.1	41.3	2,150.5	0.00	466,962.44	588,784.11
11,800.0	90.43	178.90	9,781.6	6,609.6	-2,250.1	43.2	2,250.5	0.00	466,862.46	588,786.03
11,900.0	90.43	178.90	9,780.9	6,608.9	-2,350.0	45.1	2,350.5	0.00	466,762.48	588,787.95
12,000.0	90.43	178.90	9,780.1	6,608.1	-2,450.0	47.0	2,450.5	0.00	466,662.50	588,789.87
12,100.0	90.43	178.90	9,779.4	6,607.4	-2,550.0	49.0	2,550.5	0.00	466,562.52	588,791.79
12,200.0	90.43	178.90	9,778.6	6,606.6	-2,650.0	50.9	2,650.5	0.00	466,462.54	588,793.71
12,300.0	90.43	178.90	9,777.9	6,605.9	-2,750.0	52.8	2,750.5	0.00	466,362.56	588,795.63

MOJO Standard Plan

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Local Co-ordinate Reference: Well Forehand Ranch 22 State 9H
TVD Reference: WELL @ 3172.0usft (Original Well Elev)
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North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Planned Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
12,400.0	90.43	178.90	9,777.1	6,605.1	-2,849.9	54.7	2,850.5	0.00	466,262.59	588,797.55
12,500.0	90.43	178.90	9,776.4	6,604.4	-2,949.9	56.6	2,950.5	0.00	466,162.61	588,799.47
12,600.0	90.43	178.90	9,775.6	6,603.6	-3,049.9	58.6	3,050.5	0.00	466,062.63	588,801.39
12,700.0	90.43	178.90	9,774.9	6,602.9	-3,149.9	60.5	3,150.5	0.00	465,962.65	588,803.31
12,800.0	90.43	178.90	9,774.1	6,602.1	-3,249.9	62.4	3,250.5	0.00	465,862.67	588,805.23
12,900.0	90.43	178.90	9,773.4	6,601.4	-3,349.8	64.3	3,350.5	0.00	465,762.69	588,807.15
13,000.0	90.43	178.90	9,772.6	6,600.6	-3,449.8	66.2	3,450.5	0.00	465,662.71	588,809.07
13,100.0	90.43	178.90	9,771.9	6,599.9	-3,549.8	68.2	3,550.4	0.00	465,562.73	588,810.99
13,200.0	90.43	178.90	9,771.1	6,599.1	-3,649.8	70.1	3,650.4	0.00	465,462.76	588,812.91
13,300.0	90.43	178.90	9,770.4	6,598.4	-3,749.8	72.0	3,750.4	0.00	465,362.78	588,814.83
13,400.0	90.43	178.90	9,769.6	6,597.6	-3,849.7	73.9	3,850.4	0.00	465,262.80	588,816.75
13,500.0	90.43	178.90	9,768.9	6,596.9	-3,949.7	75.8	3,950.4	0.00	465,162.82	588,818.67
13,600.0	90.43	178.90	9,768.1	6,596.1	-4,049.7	77.8	4,050.4	0.00	465,062.84	588,820.59
13,700.0	90.43	178.90	9,767.4	6,595.4	-4,149.7	79.7	4,150.4	0.00	464,962.86	588,822.51
13,800.0	90.43	178.90	9,766.6	6,594.6	-4,249.6	81.6	4,250.4	0.00	464,862.88	588,824.43
13,900.0	90.43	178.90	9,765.9	6,593.9	-4,349.6	83.5	4,350.4	0.00	464,762.90	588,826.35
14,000.0	90.43	178.90	9,765.1	6,593.1	-4,449.6	85.4	4,450.4	0.00	464,662.93	588,828.27
14,100.0	90.43	178.90	9,764.4	6,592.4	-4,549.6	87.4	4,550.4	0.00	464,562.95	588,830.19
14,200.0	90.43	178.90	9,763.6	6,591.6	-4,649.6	89.3	4,650.4	0.00	464,462.97	588,832.11
14,300.0	90.43	178.90	9,762.9	6,590.9	-4,749.5	91.2	4,750.4	0.00	464,362.99	588,834.03
14,400.0	90.43	178.90	9,762.1	6,590.1	-4,849.5	93.1	4,850.4	0.00	464,263.01	588,835.95
14,500.0	90.43	178.90	9,761.4	6,589.4	-4,949.5	95.0	4,950.4	0.00	464,163.03	588,837.87
14,600.0	90.43	178.90	9,760.6	6,588.6	-5,049.5	97.0	5,050.4	0.00	464,063.05	588,839.79
14,700.0	90.43	178.90	9,759.9	6,587.9	-5,149.5	98.9	5,150.4	0.00	463,963.07	588,841.71
14,800.0	90.43	178.90	9,759.1	6,587.1	-5,249.4	100.8	5,250.4	0.00	463,863.10	588,843.63
14,900.0	90.43	178.90	9,758.4	6,586.4	-5,349.4	102.7	5,350.4	0.00	463,763.12	588,845.55
15,000.0	90.43	178.90	9,757.6	6,585.6	-5,449.4	104.6	5,450.4	0.00	463,663.14	588,847.46

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Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
15,100.0	90.43	178.90	9,756.9	6,584.9	-5,549.4	106.6	5,550.4	0.00	463,563.16	588,849.38
15,200.0	90.43	178.90	9,756.1	6,584.1	-5,649.3	108.5	5,650.4	0.00	463,463.18	588,851.30
15,300.0	90.43	178.90	9,755.4	6,583.4	-5,749.3	110.4	5,750.4	0.00	463,363.20	588,853.22
15,400.0	90.43	178.90	9,754.6	6,582.6	-5,849.3	112.3	5,850.4	0.00	463,263.22	588,855.14
15,500.0	90.43	178.90	9,753.9	6,581.9	-5,949.3	114.2	5,950.4	0.00	463,163.24	588,857.06
15,600.0	90.43	178.90	9,753.1	6,581.1	-6,049.3	116.2	6,050.4	0.00	463,063.27	588,858.98
15,700.0	90.43	178.90	9,752.4	6,580.4	-6,149.2	118.1	6,150.4	0.00	462,963.29	588,860.90
15,800.0	90.43	178.90	9,751.6	6,579.6	-6,249.2	120.0	6,250.4	0.00	462,863.31	588,862.82
15,900.0	90.43	178.90	9,750.8	6,578.9	-6,349.2	121.9	6,350.4	0.00	462,763.33	588,864.74
16,000.0	90.43	178.90	9,750.1	6,578.1	-6,449.2	123.8	6,450.4	0.00	462,663.35	588,866.66
16,100.0	90.43	178.90	9,749.3	6,577.4	-6,549.2	125.8	6,550.4	0.00	462,563.37	588,868.58
16,200.0	90.43	178.90	9,748.6	6,576.6	-6,649.1	127.7	6,650.4	0.00	462,463.39	588,870.50
16,300.0	90.43	178.90	9,747.8	6,575.9	-6,749.1	129.6	6,750.4	0.00	462,363.41	588,872.42
16,400.0	90.43	178.90	9,747.1	6,575.1	-6,849.1	131.5	6,850.4	0.00	462,263.44	588,874.34
16,500.0	90.43	178.90	9,746.3	6,574.4	-6,949.1	133.4	6,950.4	0.00	462,163.46	588,876.26
16,600.0	90.43	178.90	9,745.6	6,573.6	-7,049.1	135.3	7,050.3	0.00	462,063.48	588,878.18
16,700.0	90.43	178.90	9,744.8	6,572.9	-7,149.0	137.3	7,150.3	0.00	461,963.50	588,880.10
16,800.0	90.43	178.90	9,744.1	6,572.1	-7,249.0	139.2	7,250.3	0.00	461,863.52	588,882.02
16,820.0	90.43	178.90	9,743.9	6,572.0	-7,269.0	139.6	7,270.3	0.00	461,843.56	588,882.40

TD at 16820.0 - 5 1/2" Production Casing

MOJO Standard Plan

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Wellbore: Forehand Ranch 22 State 9H
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Casing Points			
Measured Depth (usft)	Vertical Depth (usft)	Name	
2,050.0	2,050.0	13 3/8" Surface Casing	Casing Diameter (") 13-3/8
5,840.0	5,840.0	9 5/8" Intermediate	Hole Diameter (") 17-1/2
200.0	200.0	20" Conductor	12-1/4
16,820.0	9,743.9	5 1/2" Production Casing	26
			8-3/4

Formations			
Measured Depth (usft)	Vertical Depth (usft)	Name	
2,875.0	2,875.0	Cherry Canyon	Dip Direction (°)
6,604.0	6,604.0	1st Bone Spring Sand	0.00
669.0	669.0	Base of Salt	0.00
428.0	428.0	Top of Salt	0.00
8,983.0	8,983.0	Wolfcamp	0.00
150.0	150.0	Rustler	0.00
2,198.0	2,198.0	Bell Canyon	0.00
9,307.3	9,307.0	Wolfcamp B	0.00
5,546.0	5,546.0	Bone Spring Glorietta	0.00
8,636.0	8,636.0	3rd Bone Spring Sand	0.00
2,129.0	2,129.0	Delaware	0.00
7,355.0	7,355.0	2nd Bone Spring Lime	0.00
7,129.0	7,129.0	2nd Bone Spring Sand	0.00
5,213.0	5,213.0	Lower Brushy Canyon	0.00
4,042.0	4,042.0	Brushy Canyon	0.00
9,673.0	9,628.0	Wolfcamp C	0.00

MOJO Standard Plan

Company:	Caza Oil and Gas	Local Co-ordinate Reference:	Well Forehand Ranch 22 State 9H
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Site:	Forehand Ranch	MD Reference:	WELL @ 3172.0usft (Original Well Elev)
Well:	Forehand Ranch 22 State 9H	North Reference:	Grid
Wellbore:	Forehand Ranch 22 State 9H	Survey Calculation Method:	Minimum Curvature
Design:	20170217 Forehand Ranch 22 State 9H	Database:	EDM 5000.1 Single User Db

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates	
		+N/-S (usft)	+E/-W (usft)
9,224.0	9,224.0	0.0	0.0
10,124.0	9,794.2	-574.5	0.0
16,820.0	9,743.9	-7,270.3	0.0
			Start Build 10.05
			Start 6696.0 hold at 10124.0 MD
			TD at 16820.0

Checked By: _____

Approved By: _____

Date: _____