

BTA Oil Producers, LLC

Lea County, NM

Mesa Sec 1 & 12, T26S, R32E

Mesa #31H

Wellbore #1

Plan: Design #1

Standard Planning Report

16 June, 2016

HOBBS OCD
MAR 27 2017
RECEIVED

BTA

Planning Report

Database: EDM 5000.1 Single User Db
Company: BTA Oil Producers, LLC
Project: Lea County, NM
Site: Mesa Sec 1 & 12, T26S, R32E
Well: Mesa #31H
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference: Well Mesa #31H
TVD Reference: WELL @ 3354.0usft (Original Well Elev)
MD Reference: WELL @ 3354.0usft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Project	Lea County, NM, Lea County, NM		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Ground Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		Using geodetic scale factor

Site Mesa Sec 1 & 12, T26S, R32E

Site Position:		Northing:	388,357.80 usft	Latitude:	32° 3' 56.723 N
From:	Map	Easting:	718,031.00 usft	Longitude:	103° 37' 46.202 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.37 °

Well Mesa #31H

Well Position	+N/-S	4,684.1 usft	Northing:	393,041.70 usft	Latitude:	32° 4' 42.997 N
	+E/-W	1,195.7 usft	Easting:	719,226.70 usft	Longitude:	103° 37' 31.950 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	3,354.0 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	7.76	60.10	48,700

Design Design #1

Audit Notes:

Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
-----------------	---------------	-----------	----------------------	-----

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	179.96

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	
8,947.0	0.00	0.00	8,947.0	0.0	0.0	0.00	0.00	0.00	0.00	
9,847.0	90.00	179.96	9,520.0	-573.0	0.4	10.00	10.00	0.00	179.96	
19,395.7	90.00	179.96	9,520.0	-10,121.7	7.6	0.00	0.00	0.00	0.00	Mesa #31 BHL target

BTA Planning Report

Database: EDM 5000.1 Single User Db
 Company: BTA Oil Producers, LLC
 Project: Lea County, NM
 Site: Mesa Sec 1 & 12, T26S, R32E
 Well: Mesa #31H
 Wellbore: Wellbore #1
 Design: Design #1

Local Co-ordinate Reference: Well Mesa #31H
 TVD Reference: WELL @ 3354.0usft (Original Well Elev)
 MD Reference: WELL @ 3354.0usft (Original Well Elev)
 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
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
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
3,700.0	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
3,900.0	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
4,100.0	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
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

BTA

Planning Report

Database: EDM 5000.1 Single User Db
Company: BTA Oil Producers, LLC
Project: Lea County, NM
Site: Mesa Sec 1 & 12, T26S, R32E
Well: Mesa #31H
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference: Well Mesa #31H
TVD Reference: WELL @ 3354.0usft (Original Well Elev)
MD Reference: WELL @ 3354.0usft (Original Well Elev)
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)
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00
7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,100.0	0.0	0.0	0.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,200.0	0.0	0.0	0.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,300.0	0.0	0.0	0.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,400.0	0.0	0.0	0.0	0.00	0.00	0.00
7,500.0	0.00	0.00	7,500.0	0.0	0.0	0.0	0.00	0.00	0.00
7,600.0	0.00	0.00	7,600.0	0.0	0.0	0.0	0.00	0.00	0.00
7,700.0	0.00	0.00	7,700.0	0.0	0.0	0.0	0.00	0.00	0.00
7,800.0	0.00	0.00	7,800.0	0.0	0.0	0.0	0.00	0.00	0.00
7,900.0	0.00	0.00	7,900.0	0.0	0.0	0.0	0.00	0.00	0.00
8,000.0	0.00	0.00	8,000.0	0.0	0.0	0.0	0.00	0.00	0.00
8,100.0	0.00	0.00	8,100.0	0.0	0.0	0.0	0.00	0.00	0.00
8,200.0	0.00	0.00	8,200.0	0.0	0.0	0.0	0.00	0.00	0.00
8,300.0	0.00	0.00	8,300.0	0.0	0.0	0.0	0.00	0.00	0.00
8,400.0	0.00	0.00	8,400.0	0.0	0.0	0.0	0.00	0.00	0.00
8,500.0	0.00	0.00	8,500.0	0.0	0.0	0.0	0.00	0.00	0.00
8,600.0	0.00	0.00	8,600.0	0.0	0.0	0.0	0.00	0.00	0.00
8,700.0	0.00	0.00	8,700.0	0.0	0.0	0.0	0.00	0.00	0.00
8,800.0	0.00	0.00	8,800.0	0.0	0.0	0.0	0.00	0.00	0.00
8,900.0	0.00	0.00	8,900.0	0.0	0.0	0.0	0.00	0.00	0.00
8,947.0	0.00	0.00	8,947.0	0.0	0.0	0.0	0.00	0.00	0.00
9,000.0	5.30	179.96	8,999.9	-2.4	0.0	2.4	10.00	10.00	0.00
9,100.0	15.30	179.96	9,098.2	-20.3	0.0	20.3	10.00	10.00	0.00
9,200.0	25.30	179.96	9,191.9	-54.9	0.0	54.9	10.00	10.00	0.00
9,300.0	35.30	179.96	9,278.1	-105.3	0.1	105.3	10.00	10.00	0.00
9,400.0	45.30	179.96	9,354.3	-169.9	0.1	169.9	10.00	10.00	0.00
9,500.0	55.30	179.96	9,418.1	-246.7	0.2	246.7	10.00	10.00	0.00
9,600.0	65.30	179.96	9,467.6	-333.5	0.3	333.5	10.00	10.00	0.00
9,700.0	75.30	179.96	9,501.2	-427.5	0.3	427.5	10.00	10.00	0.00
9,800.0	85.30	179.96	9,518.1	-526.0	0.4	526.0	10.00	10.00	0.00
9,847.0	90.00	179.96	9,520.0	-573.0	0.4	573.0	10.00	10.00	0.00
9,900.0	90.00	179.96	9,520.0	-625.9	0.5	625.9	0.00	0.00	0.00
10,000.0	90.00	179.96	9,520.0	-725.9	0.5	725.9	0.00	0.00	0.00
10,100.0	90.00	179.96	9,520.0	-825.9	0.6	825.9	0.00	0.00	0.00
10,200.0	90.00	179.96	9,520.0	-925.9	0.7	925.9	0.00	0.00	0.00
10,300.0	90.00	179.96	9,520.0	-1,025.9	0.8	1,025.9	0.00	0.00	0.00
10,400.0	90.00	179.96	9,520.0	-1,125.9	0.8	1,125.9	0.00	0.00	0.00
10,500.0	90.00	179.96	9,520.0	-1,225.9	0.9	1,225.9	0.00	0.00	0.00

BTA Planning Report

Database: EDM 5000.1 Single User Db
Company: BTA Oil Producers, LLC
Project: Lea County, NM
Site: Mesa Sec 1 & 12, T26S, R32E
Well: Mesa #31H
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference: Well Mesa #31H
TVD Reference: WELL @ 3354.0usft (Original Well Elev)
MD Reference: WELL @ 3354.0usft (Original Well Elev)
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)
10,600.0	90.00	179.96	9,520.0	-1,325.9	1.0	1,325.9	0.00	0.00	0.00
10,700.0	90.00	179.96	9,520.0	-1,425.9	1.1	1,425.9	0.00	0.00	0.00
10,800.0	90.00	179.96	9,520.0	-1,525.9	1.1	1,525.9	0.00	0.00	0.00
10,900.0	90.00	179.96	9,520.0	-1,625.9	1.2	1,625.9	0.00	0.00	0.00
11,000.0	90.00	179.96	9,520.0	-1,725.9	1.3	1,725.9	0.00	0.00	0.00
11,100.0	90.00	179.96	9,520.0	-1,825.9	1.4	1,825.9	0.00	0.00	0.00
11,200.0	90.00	179.96	9,520.0	-1,925.9	1.4	1,925.9	0.00	0.00	0.00
11,300.0	90.00	179.96	9,520.0	-2,025.9	1.5	2,025.9	0.00	0.00	0.00
11,400.0	90.00	179.96	9,520.0	-2,125.9	1.6	2,125.9	0.00	0.00	0.00
11,500.0	90.00	179.96	9,520.0	-2,225.9	1.7	2,225.9	0.00	0.00	0.00
11,600.0	90.00	179.96	9,520.0	-2,325.9	1.7	2,325.9	0.00	0.00	0.00
11,700.0	90.00	179.96	9,520.0	-2,425.9	1.8	2,425.9	0.00	0.00	0.00
11,800.0	90.00	179.96	9,520.0	-2,525.9	1.9	2,525.9	0.00	0.00	0.00
11,900.0	90.00	179.96	9,520.0	-2,625.9	2.0	2,625.9	0.00	0.00	0.00
12,000.0	90.00	179.96	9,520.0	-2,725.9	2.0	2,725.9	0.00	0.00	0.00
12,100.0	90.00	179.96	9,520.0	-2,825.9	2.1	2,825.9	0.00	0.00	0.00
12,200.0	90.00	179.96	9,520.0	-2,925.9	2.2	2,925.9	0.00	0.00	0.00
12,300.0	90.00	179.96	9,520.0	-3,025.9	2.3	3,025.9	0.00	0.00	0.00
12,400.0	90.00	179.96	9,520.0	-3,125.9	2.3	3,125.9	0.00	0.00	0.00
12,500.0	90.00	179.96	9,520.0	-3,225.9	2.4	3,225.9	0.00	0.00	0.00
12,600.0	90.00	179.96	9,520.0	-3,325.9	2.5	3,325.9	0.00	0.00	0.00
12,700.0	90.00	179.96	9,520.0	-3,425.9	2.6	3,425.9	0.00	0.00	0.00
12,800.0	90.00	179.96	9,520.0	-3,525.9	2.6	3,525.9	0.00	0.00	0.00
12,900.0	90.00	179.96	9,520.0	-3,625.9	2.7	3,625.9	0.00	0.00	0.00
13,000.0	90.00	179.96	9,520.0	-3,725.9	2.8	3,725.9	0.00	0.00	0.00
13,100.0	90.00	179.96	9,520.0	-3,825.9	2.9	3,825.9	0.00	0.00	0.00
13,200.0	90.00	179.96	9,520.0	-3,925.9	2.9	3,925.9	0.00	0.00	0.00
13,300.0	90.00	179.96	9,520.0	-4,025.9	3.0	4,025.9	0.00	0.00	0.00
13,400.0	90.00	179.96	9,520.0	-4,125.9	3.1	4,125.9	0.00	0.00	0.00
13,500.0	90.00	179.96	9,520.0	-4,225.9	3.2	4,225.9	0.00	0.00	0.00
13,600.0	90.00	179.96	9,520.0	-4,325.9	3.2	4,325.9	0.00	0.00	0.00
13,700.0	90.00	179.96	9,520.0	-4,425.9	3.3	4,425.9	0.00	0.00	0.00
13,800.0	90.00	179.96	9,520.0	-4,525.9	3.4	4,525.9	0.00	0.00	0.00
13,900.0	90.00	179.96	9,520.0	-4,625.9	3.5	4,625.9	0.00	0.00	0.00
14,000.0	90.00	179.96	9,520.0	-4,725.9	3.5	4,725.9	0.00	0.00	0.00
14,100.0	90.00	179.96	9,520.0	-4,825.9	3.6	4,825.9	0.00	0.00	0.00
14,200.0	90.00	179.96	9,520.0	-4,925.9	3.7	4,925.9	0.00	0.00	0.00
14,300.0	90.00	179.96	9,520.0	-5,025.9	3.8	5,025.9	0.00	0.00	0.00
14,400.0	90.00	179.96	9,520.0	-5,125.9	3.8	5,125.9	0.00	0.00	0.00
14,500.0	90.00	179.96	9,520.0	-5,225.9	3.9	5,225.9	0.00	0.00	0.00
14,600.0	90.00	179.96	9,520.0	-5,325.9	4.0	5,325.9	0.00	0.00	0.00
14,700.0	90.00	179.96	9,520.0	-5,425.9	4.1	5,425.9	0.00	0.00	0.00
14,800.0	90.00	179.96	9,520.0	-5,525.9	4.1	5,525.9	0.00	0.00	0.00
14,900.0	90.00	179.96	9,520.0	-5,625.9	4.2	5,625.9	0.00	0.00	0.00
15,000.0	90.00	179.96	9,520.0	-5,725.9	4.3	5,725.9	0.00	0.00	0.00
15,100.0	90.00	179.96	9,520.0	-5,825.9	4.4	5,825.9	0.00	0.00	0.00
15,200.0	90.00	179.96	9,520.0	-5,925.9	4.4	5,925.9	0.00	0.00	0.00
15,300.0	90.00	179.96	9,520.0	-6,025.9	4.5	6,025.9	0.00	0.00	0.00
15,400.0	90.00	179.96	9,520.0	-6,125.9	4.6	6,125.9	0.00	0.00	0.00
15,500.0	90.00	179.96	9,520.0	-6,225.9	4.7	6,225.9	0.00	0.00	0.00
15,600.0	90.00	179.96	9,520.0	-6,325.9	4.8	6,325.9	0.00	0.00	0.00
15,700.0	90.00	179.96	9,520.0	-6,425.9	4.8	6,425.9	0.00	0.00	0.00
15,800.0	90.00	179.96	9,520.0	-6,525.9	4.9	6,525.9	0.00	0.00	0.00
15,900.0	90.00	179.96	9,520.0	-6,625.9	5.0	6,625.9	0.00	0.00	0.00

BTA

Planning Report

Database: EDM 5000.1 Single User Db
 Company: BTA Oil Producers, LLC
 Project: Lea County, NM
 Site: Mesa Sec 1 & 12, T26S, R32E
 Well: Mesa #31H
 Wellbore: Wellbore #1
 Design: Design #1

Local Co-ordinate Reference: Well Mesa #31H
 TVD Reference: WELL @ 3354.0usft (Original Well Elev)
 MD Reference: WELL @ 3354.0usft (Original Well Elev)
 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)
16,000.0	90.00	179.96	9,520.0	-6,725.9	5.1	6,725.9	0.00	0.00	0.00
16,100.0	90.00	179.96	9,520.0	-6,825.9	5.1	6,825.9	0.00	0.00	0.00
16,200.0	90.00	179.96	9,520.0	-6,925.9	5.2	6,925.9	0.00	0.00	0.00
16,300.0	90.00	179.96	9,520.0	-7,025.9	5.3	7,025.9	0.00	0.00	0.00
16,400.0	90.00	179.96	9,520.0	-7,125.9	5.4	7,125.9	0.00	0.00	0.00
16,500.0	90.00	179.96	9,520.0	-7,225.9	5.4	7,225.9	0.00	0.00	0.00
16,600.0	90.00	179.96	9,520.0	-7,325.9	5.5	7,325.9	0.00	0.00	0.00
16,700.0	90.00	179.96	9,520.0	-7,425.9	5.6	7,425.9	0.00	0.00	0.00
16,800.0	90.00	179.96	9,520.0	-7,525.9	5.7	7,525.9	0.00	0.00	0.00
16,900.0	90.00	179.96	9,520.0	-7,625.9	5.7	7,625.9	0.00	0.00	0.00
17,000.0	90.00	179.96	9,520.0	-7,725.9	5.8	7,725.9	0.00	0.00	0.00
17,100.0	90.00	179.96	9,520.0	-7,825.9	5.9	7,825.9	0.00	0.00	0.00
17,200.0	90.00	179.96	9,520.0	-7,925.9	6.0	7,925.9	0.00	0.00	0.00
17,300.0	90.00	179.96	9,520.0	-8,025.9	6.0	8,025.9	0.00	0.00	0.00
17,400.0	90.00	179.96	9,520.0	-8,125.9	6.1	8,125.9	0.00	0.00	0.00
17,500.0	90.00	179.96	9,520.0	-8,225.9	6.2	8,225.9	0.00	0.00	0.00
17,600.0	90.00	179.96	9,520.0	-8,325.9	6.3	8,325.9	0.00	0.00	0.00
17,700.0	90.00	179.96	9,520.0	-8,425.9	6.3	8,425.9	0.00	0.00	0.00
17,800.0	90.00	179.96	9,520.0	-8,525.9	6.4	8,525.9	0.00	0.00	0.00
17,900.0	90.00	179.96	9,520.0	-8,625.9	6.5	8,625.9	0.00	0.00	0.00
18,000.0	90.00	179.96	9,520.0	-8,725.9	6.6	8,725.9	0.00	0.00	0.00
18,100.0	90.00	179.96	9,520.0	-8,825.9	6.6	8,825.9	0.00	0.00	0.00
18,200.0	90.00	179.96	9,520.0	-8,925.9	6.7	8,925.9	0.00	0.00	0.00
18,300.0	90.00	179.96	9,520.0	-9,025.9	6.8	9,025.9	0.00	0.00	0.00
18,400.0	90.00	179.96	9,520.0	-9,125.9	6.9	9,125.9	0.00	0.00	0.00
18,500.0	90.00	179.96	9,520.0	-9,225.9	6.9	9,225.9	0.00	0.00	0.00
18,600.0	90.00	179.96	9,520.0	-9,325.9	7.0	9,325.9	0.00	0.00	0.00
18,700.0	90.00	179.96	9,520.0	-9,425.9	7.1	9,425.9	0.00	0.00	0.00
18,800.0	90.00	179.96	9,520.0	-9,525.9	7.2	9,525.9	0.00	0.00	0.00
18,900.0	90.00	179.96	9,520.0	-9,625.9	7.2	9,625.9	0.00	0.00	0.00
19,000.0	90.00	179.96	9,520.0	-9,725.9	7.3	9,725.9	0.00	0.00	0.00
19,100.0	90.00	179.96	9,520.0	-9,825.9	7.4	9,825.9	0.00	0.00	0.00
19,200.0	90.00	179.96	9,520.0	-9,925.9	7.5	9,925.9	0.00	0.00	0.00
19,300.0	90.00	179.96	9,520.0	-10,025.9	7.5	10,025.9	0.00	0.00	0.00
19,395.7	90.00	179.96	9,520.0	-10,121.7	7.6	10,121.7	0.00	0.00	0.00

Mesa #31 BHL target

Design Targets

Target Name

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Mesa #31 BHL target - plan hits target center - Point	0.00	0.00	9,520.0	-10,121.7	7.6	382,920.40	719,234.30	32° 3' 2.838 N	103° 37' 32.633 W



Azimuths to Grid North
 True North: -0.38°
 Magnetic North: 7.39°
 Magnetic Field
 Strength: 48699.7snT
 Dip Angle: 60.10°
 Date: 12/31/2009
 Model: IGRF200510

WELL DETAILS: Mesa #31H

			Ground Level: 3354.0		
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	393041.70	719226.70	32° 4' 42.997 N	103° 37' 31.950 W

SITE DETAILS: Mesa Sec 1 & 12, T26S, R32E

Site Centre Northing: 388357.80
 Easting: 718031.00

Positional Uncertainty: 0.0
 Convergence: 0.37
 Local North: Grid

BTA Oil Producers, LLC

PROJECT DETAILS: Lea County, NM

Geodetic System: US State Plane 1927 (Exact solution)
 Datum: NAD 1927 (NADCON CONUS)
 Ellipsoid: Clarke 1866
 Zone: New Mexico East 3001

System Datum: Ground Level

CASING DETAILS

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
8947.0	0.00	0.00	8947.0	0.0	0.0	0.00	0.00	0.0	
9847.0	90.00	179.96	9520.0	-573.0	0.4	10.00	179.96	573.0	
19395.8	90.00	179.96	9520.0	-10121.7	7.6	0.00	0.00	10121.7	Mesa #31 BHL target

