

BTA Oil Producers, LLC

Lea County, NM

Vaca Draw Sec 10, T25S, R33E

Vaca Draw 9418 10 Federal #7H

Wellbore #1

Plan: Design #1

HOBBS OCD

FEB 20 2017

RECEIVED

Standard Planning Report - Geographic

25 August, 2016

BTA
Planning Report - Geographic

Database: EDM 5000.1 Single User Db
Company: BTA Oil Producers, LLC
Project: Lea County, NM
Site: Vaca Draw Sec 10, T25S, R33E
Well: Vaca Draw 9418 10 Federal #7H
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference: Well Vaca Draw 9418 10 Federal #7H
TVD Reference: GL @ 3421.0usft
MD Reference: GL @ 3421.0usft
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	Vaca Draw Sec 10, T25S, R33E			
Site Position:		Northing:	419,754.20 usft	Latitude: 32° 9' 6.035 N
From:	Map	Easting:	738,410.70 usft	Longitude: 103° 33' 46.774 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence: 0.41 "

Well	Vaca Draw 9418 10 Federal #7H			
Well Position	+N/-S	0.0 usft	Northing:	419,767.60 usft
	+E/-W	0.0 usft	Easting:	739,813.90 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level: 3,421.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	7.74	60.18	48,751

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	168.89	

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	
8,884.0	0.00	0.00	8,884.0	0.0	0.0	0.00	0.00	0.00	0.00	
9,784.0	90.00	168.89	9,457.0	-562.2	110.4	10.00	10.00	0.00	168.89	
14,344.7	90.00	168.89	9,457.0	-5,037.4	989.0	0.00	0.00	0.00	0.00	Vaca Draw #7H BHL

BTA
Planning Report - Geographic

Database: EDM 5000.1 Single User Db
Company: BTA Oil Producers, LLC
Project: Lea County, NM
Site: Vaca Draw Sec 10, T25S, R33E
Well: Vaca Draw 9418 10 Federal #7H
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well Vaca Draw 9418 10 Federal #7H
GL @ 3421.0usft
GL @ 3421.0usft
Grid
Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
100.0	0.00	0.00	100.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
200.0	0.00	0.00	200.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
300.0	0.00	0.00	300.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
400.0	0.00	0.00	400.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
500.0	0.00	0.00	500.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
600.0	0.00	0.00	600.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
700.0	0.00	0.00	700.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
800.0	0.00	0.00	800.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
900.0	0.00	0.00	900.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
1,000.0	0.00	0.00	1,000.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
1,100.0	0.00	0.00	1,100.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
1,200.0	0.00	0.00	1,200.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
1,300.0	0.00	0.00	1,300.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
1,400.0	0.00	0.00	1,400.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
1,500.0	0.00	0.00	1,500.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
1,600.0	0.00	0.00	1,600.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
1,700.0	0.00	0.00	1,700.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
1,800.0	0.00	0.00	1,800.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
1,900.0	0.00	0.00	1,900.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
2,000.0	0.00	0.00	2,000.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
2,100.0	0.00	0.00	2,100.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
2,200.0	0.00	0.00	2,200.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
2,300.0	0.00	0.00	2,300.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
2,400.0	0.00	0.00	2,400.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
2,500.0	0.00	0.00	2,500.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
2,600.0	0.00	0.00	2,600.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
2,700.0	0.00	0.00	2,700.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
2,800.0	0.00	0.00	2,800.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
2,900.0	0.00	0.00	2,900.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
3,000.0	0.00	0.00	3,000.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
3,100.0	0.00	0.00	3,100.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
3,200.0	0.00	0.00	3,200.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
3,300.0	0.00	0.00	3,300.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
3,400.0	0.00	0.00	3,400.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
3,500.0	0.00	0.00	3,500.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
3,600.0	0.00	0.00	3,600.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
3,700.0	0.00	0.00	3,700.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
3,800.0	0.00	0.00	3,800.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
3,900.0	0.00	0.00	3,900.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
4,000.0	0.00	0.00	4,000.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
4,100.0	0.00	0.00	4,100.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
4,200.0	0.00	0.00	4,200.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
4,300.0	0.00	0.00	4,300.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
4,400.0	0.00	0.00	4,400.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
4,500.0	0.00	0.00	4,500.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
4,600.0	0.00	0.00	4,600.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
4,700.0	0.00	0.00	4,700.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
4,800.0	0.00	0.00	4,800.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
4,900.0	0.00	0.00	4,900.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
5,000.0	0.00	0.00	5,000.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
5,100.0	0.00	0.00	5,100.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
5,200.0	0.00	0.00	5,200.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
5,300.0	0.00	0.00	5,300.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
5,400.0	0.00	0.00	5,400.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W

BTA
Planning Report - Geographic

Database: EDM 5000.1 Single User Db
Company: BTA Oil Producers, LLC
Project: Lea County, NM
Site: Vaca Draw Sec 10, T25S, R33E
Well: Vaca Draw 9418 10 Federal #7H
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference: Well Vaca Draw 9418 10 Federal #7H
TVD Reference: GL @ 3421.0usft
MD Reference: GL @ 3421.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
5,500.0	0.00	0.00	5,500.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
5,600.0	0.00	0.00	5,600.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
5,700.0	0.00	0.00	5,700.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
5,800.0	0.00	0.00	5,800.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
5,900.0	0.00	0.00	5,900.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
6,000.0	0.00	0.00	6,000.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
6,100.0	0.00	0.00	6,100.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
6,200.0	0.00	0.00	6,200.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
6,300.0	0.00	0.00	6,300.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
6,400.0	0.00	0.00	6,400.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
6,500.0	0.00	0.00	6,500.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
6,600.0	0.00	0.00	6,600.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
6,700.0	0.00	0.00	6,700.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
6,800.0	0.00	0.00	6,800.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
6,900.0	0.00	0.00	6,900.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
7,000.0	0.00	0.00	7,000.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
7,100.0	0.00	0.00	7,100.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
7,200.0	0.00	0.00	7,200.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
7,300.0	0.00	0.00	7,300.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
7,400.0	0.00	0.00	7,400.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
7,500.0	0.00	0.00	7,500.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
7,600.0	0.00	0.00	7,600.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
7,700.0	0.00	0.00	7,700.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
7,800.0	0.00	0.00	7,800.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
7,900.0	0.00	0.00	7,900.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
8,000.0	0.00	0.00	8,000.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
8,100.0	0.00	0.00	8,100.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
8,200.0	0.00	0.00	8,200.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
8,300.0	0.00	0.00	8,300.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
8,400.0	0.00	0.00	8,400.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
8,500.0	0.00	0.00	8,500.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
8,600.0	0.00	0.00	8,600.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
8,700.0	0.00	0.00	8,700.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
8,800.0	0.00	0.00	8,800.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
8,884.0	0.00	0.00	8,884.0	0.0	0.0	419,767.60	739,813.90	32° 9' 6.068 N	103° 33' 30.452 W
8,900.0	1.60	168.89	8,900.0	-0.2	0.0	419,767.38	739,813.94	32° 9' 6.066 N	103° 33' 30.451 W
9,000.0	11.60	168.89	8,999.2	-11.5	2.3	419,756.12	739,816.15	32° 9' 5.954 N	103° 33' 30.426 W
9,100.0	21.60	168.89	9,094.9	-39.5	7.7	419,728.13	739,821.64	32° 9' 5.677 N	103° 33' 30.365 W
9,200.0	31.60	168.89	9,184.2	-83.3	16.4	419,684.26	739,830.26	32° 9' 5.242 N	103° 33' 30.268 W
9,300.0	41.60	168.89	9,264.4	-141.8	27.8	419,625.84	739,841.73	32° 9' 4.663 N	103° 33' 30.140 W
9,400.0	51.60	168.89	9,333.0	-213.0	41.8	419,554.64	739,855.71	32° 9' 3.958 N	103° 33' 29.983 W
9,500.0	61.60	168.89	9,388.0	-294.8	57.9	419,472.83	739,871.77	32° 9' 3.147 N	103° 33' 29.803 W
9,600.0	71.60	168.89	9,427.7	-384.7	75.5	419,382.89	739,889.43	32° 9' 2.256 N	103° 33' 29.605 W
9,700.0	81.60	168.89	9,450.8	-480.1	94.3	419,287.56	739,908.15	32° 9' 1.311 N	103° 33' 29.396 W
9,784.0	90.00	168.89	9,457.0	-562.2	110.4	419,205.39	739,924.28	32° 9' 0.497 N	103° 33' 29.215 W
9,800.0	90.00	168.89	9,457.0	-577.9	113.5	419,189.73	739,927.35	32° 9' 0.341 N	103° 33' 29.180 W
9,900.0	90.00	168.89	9,457.0	-676.0	132.7	419,091.61	739,946.62	32° 8' 59.369 N	103° 33' 28.965 W
10,000.0	90.00	168.89	9,457.0	-774.1	152.0	418,993.48	739,965.88	32° 8' 58.397 N	103° 33' 28.749 W
10,100.0	90.00	168.89	9,457.0	-872.3	171.3	418,895.36	739,985.15	32° 8' 57.424 N	103° 33' 28.533 W
10,200.0	90.00	168.89	9,457.0	-970.4	190.5	418,797.23	740,004.41	32° 8' 56.452 N	103° 33' 28.317 W
10,300.0	90.00	168.89	9,457.0	-1,068.5	209.8	418,699.11	740,023.68	32° 8' 55.480 N	103° 33' 28.101 W
10,400.0	90.00	168.89	9,457.0	-1,166.6	229.1	418,600.99	740,042.94	32° 8' 54.507 N	103° 33' 27.885 W
10,500.0	90.00	168.89	9,457.0	-1,264.8	248.3	418,502.86	740,062.21	32° 8' 53.535 N	103° 33' 27.669 W
10,600.0	90.00	168.89	9,457.0	-1,362.9	267.6	418,404.74	740,081.47	32° 8' 52.562 N	103° 33' 27.454 W
10,700.0	90.00	168.89	9,457.0	-1,461.0	286.9	418,306.61	740,100.74	32° 8' 51.590 N	103° 33' 27.238 W

BTA

Planning Report - Geographic

Database: EDM 5000.1 Single User Db
Company: BTA Oil Producers, LLC
Project: Lea County, NM
Site: Vaca Draw Sec 10, T25S, R33E
Well: Vaca Draw 9418 10 Federal #7H
Wellbore: Wellbore #1
Design: Design #1

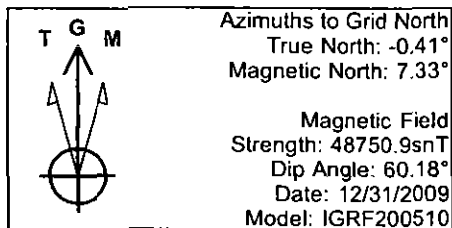
Local Co-ordinate Reference: Well Vaca Draw 9418 10 Federal #7H
TVD Reference: GL @ 3421.0usft
MD Reference: GL @ 3421.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
10,800.0	90.00	168.89	9,457.0	-1,559.1	306.1	418,208.49	740,120.00	32° 8' 50.618 N	103° 33' 27.022 W
10,900.0	90.00	168.89	9,457.0	-1,657.3	325.4	418,110.37	740,139.27	32° 8' 49.645 N	103° 33' 26.806 W
11,000.0	90.00	168.89	9,457.0	-1,755.4	344.6	418,012.24	740,158.54	32° 8' 48.673 N	103° 33' 26.590 W
11,100.0	90.00	168.89	9,457.0	-1,853.5	363.9	417,914.12	740,177.80	32° 8' 47.701 N	103° 33' 26.374 W
11,200.0	90.00	168.89	9,457.0	-1,951.7	383.2	417,815.99	740,197.07	32° 8' 46.728 N	103° 33' 26.159 W
11,300.0	90.00	168.89	9,457.0	-2,049.8	402.4	417,717.87	740,216.33	32° 8' 45.756 N	103° 33' 25.943 W
11,400.0	90.00	168.89	9,457.0	-2,147.9	421.7	417,619.74	740,235.60	32° 8' 44.784 N	103° 33' 25.727 W
11,500.0	90.00	168.89	9,457.0	-2,246.0	441.0	417,521.62	740,254.86	32° 8' 43.811 N	103° 33' 25.511 W
11,600.0	90.00	168.89	9,457.0	-2,344.2	460.2	417,423.50	740,274.13	32° 8' 42.839 N	103° 33' 25.295 W
11,700.0	90.00	168.89	9,457.0	-2,442.3	479.5	417,325.37	740,293.39	32° 8' 41.866 N	103° 33' 25.079 W
11,800.0	90.00	168.89	9,457.0	-2,540.4	498.8	417,227.25	740,312.66	32° 8' 40.894 N	103° 33' 24.864 W
11,900.0	90.00	168.89	9,457.0	-2,638.5	518.0	417,129.12	740,331.92	32° 8' 39.922 N	103° 33' 24.648 W
12,000.0	90.00	168.89	9,457.0	-2,736.7	537.3	417,031.00	740,351.19	32° 8' 38.949 N	103° 33' 24.432 W
12,100.0	90.00	168.89	9,457.0	-2,834.8	556.6	416,932.88	740,370.45	32° 8' 37.977 N	103° 33' 24.216 W
12,200.0	90.00	168.89	9,457.0	-2,932.9	575.8	416,834.75	740,389.72	32° 8' 37.005 N	103° 33' 24.000 W
12,300.0	90.00	168.89	9,457.0	-3,031.0	595.1	416,736.63	740,408.98	32° 8' 36.032 N	103° 33' 23.784 W
12,400.0	90.00	168.89	9,457.0	-3,129.2	614.4	416,638.50	740,428.25	32° 8' 35.060 N	103° 33' 23.569 W
12,500.0	90.00	168.89	9,457.0	-3,227.3	633.6	416,540.38	740,447.51	32° 8' 34.087 N	103° 33' 23.353 W
12,600.0	90.00	168.89	9,457.0	-3,325.4	652.9	416,442.25	740,466.78	32° 8' 33.115 N	103° 33' 23.137 W
12,700.0	90.00	168.89	9,457.0	-3,423.6	672.2	416,344.13	740,486.04	32° 8' 32.143 N	103° 33' 22.921 W
12,800.0	90.00	168.89	9,457.0	-3,521.7	691.4	416,246.01	740,505.31	32° 8' 31.170 N	103° 33' 22.705 W
12,900.0	90.00	168.89	9,457.0	-3,619.8	710.7	416,147.88	740,524.57	32° 8' 30.198 N	103° 33' 22.489 W
13,000.0	90.00	168.89	9,457.0	-3,717.9	730.0	416,049.76	740,543.84	32° 8' 29.226 N	103° 33' 22.274 W
13,100.0	90.00	168.89	9,457.0	-3,816.1	749.2	415,951.63	740,563.11	32° 8' 28.253 N	103° 33' 22.058 W
13,200.0	90.00	168.89	9,457.0	-3,914.2	768.5	415,853.51	740,582.37	32° 8' 27.281 N	103° 33' 21.842 W
13,300.0	90.00	168.89	9,457.0	-4,012.3	787.8	415,755.39	740,601.64	32° 8' 26.308 N	103° 33' 21.626 W
13,400.0	90.00	168.89	9,457.0	-4,110.4	807.0	415,657.26	740,620.90	32° 8' 25.336 N	103° 33' 21.410 W
13,500.0	90.00	168.89	9,457.0	-4,208.6	826.3	415,559.14	740,640.17	32° 8' 24.364 N	103° 33' 21.195 W
13,600.0	90.00	168.89	9,457.0	-4,306.7	845.6	415,461.01	740,659.43	32° 8' 23.391 N	103° 33' 20.979 W
13,700.0	90.00	168.89	9,457.0	-4,404.8	864.8	415,362.89	740,678.70	32° 8' 22.419 N	103° 33' 20.763 W
13,800.0	90.00	168.89	9,457.0	-4,502.9	884.1	415,264.76	740,697.96	32° 8' 21.447 N	103° 33' 20.547 W
13,900.0	90.00	168.89	9,457.0	-4,601.1	903.4	415,166.64	740,717.23	32° 8' 20.474 N	103° 33' 20.331 W
14,000.0	90.00	168.89	9,457.0	-4,699.2	922.6	415,068.52	740,736.49	32° 8' 19.502 N	103° 33' 20.116 W
14,100.0	90.00	168.89	9,457.0	-4,797.3	941.9	414,970.39	740,755.76	32° 8' 18.529 N	103° 33' 19.900 W
14,200.0	90.00	168.89	9,457.0	-4,895.5	961.2	414,872.27	740,775.02	32° 8' 17.557 N	103° 33' 19.684 W
14,300.0	90.00	168.89	9,457.0	-4,993.6	980.4	414,774.14	740,794.29	32° 8' 16.585 N	103° 33' 19.468 W
14,344.7	90.00	168.89	9,457.0	-5,037.4	989.0	414,730.30	740,802.90	32° 8' 16.150 N	103° 33' 19.372 W

Design Targets

Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
Vaca Draw #7H BHL	0.00	0.00	9,457.0	-5,037.4	989.0	414,730.30	740,802.90	32° 8' 16.150 N	103° 33' 19.372 W
- plan hits target center									
- Point									



WELL DETAILS: Vaca Draw 9418 10 Federal #7H					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	419767.60	739813.90	32° 9' 6.068 N	103° 33' 30.452 W

SITE DETAILS: Vaca Draw Sec 10, T25S, R33E	
Site Centre Northing:	419754.20
Easting:	738410.70
Positional Uncertainty:	0.0
Convergence:	0.41
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

