

One Energy Partners

WELL DETAILS: Blue Bay WCA State Com 1H

GE 3348.4 +25 @ 3373.4usft (25' KB)
Ground Level: 3348.4

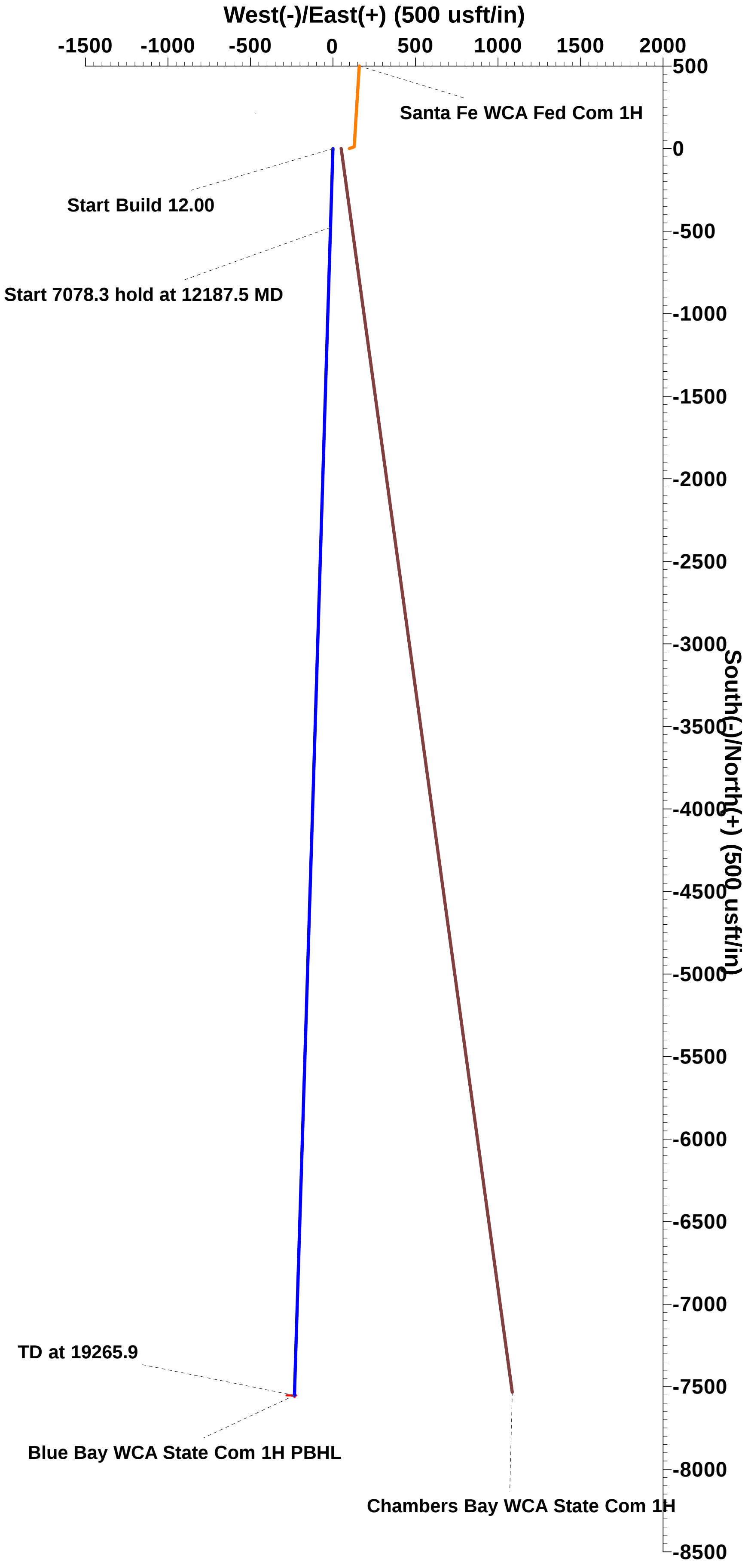
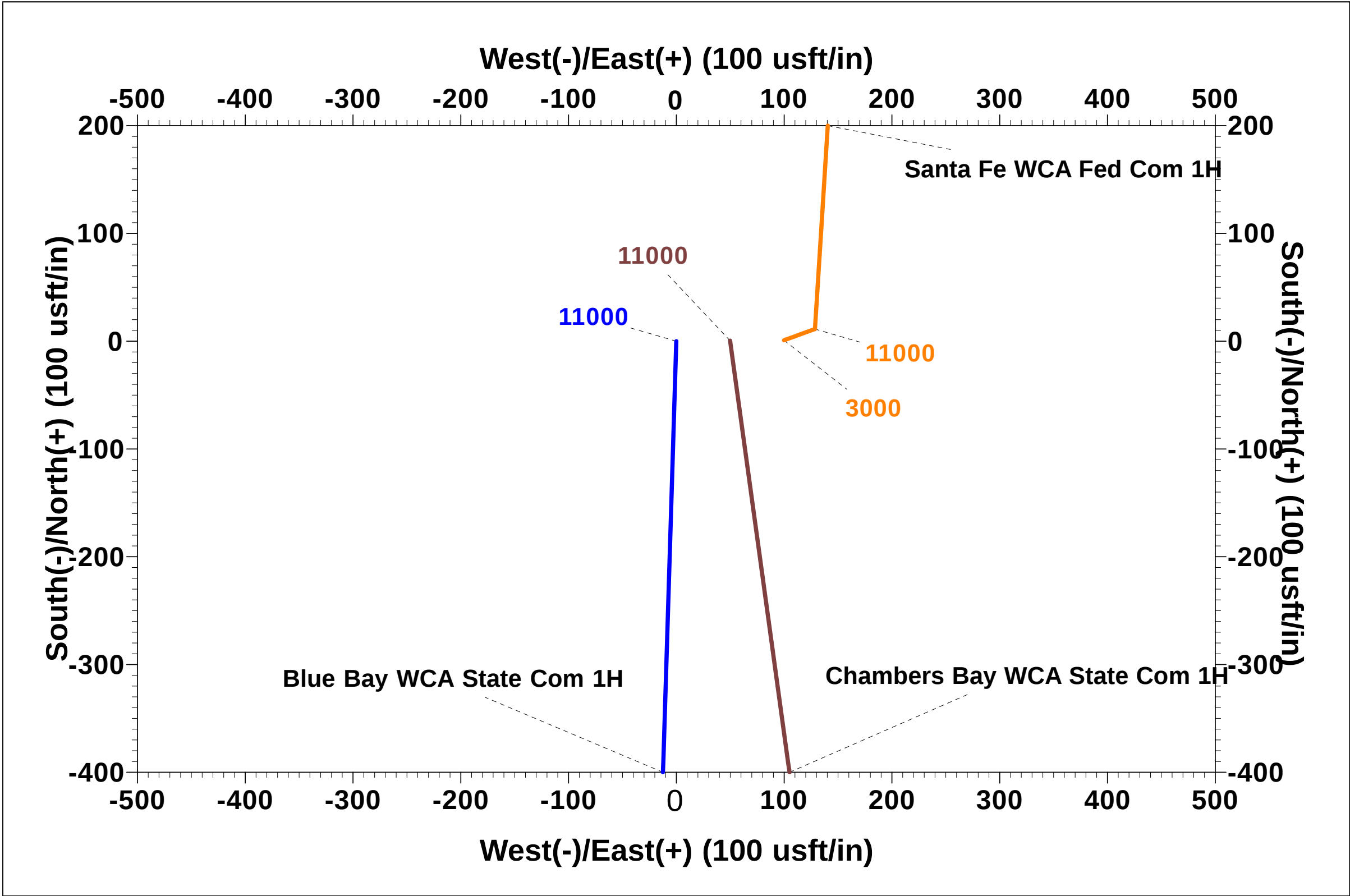
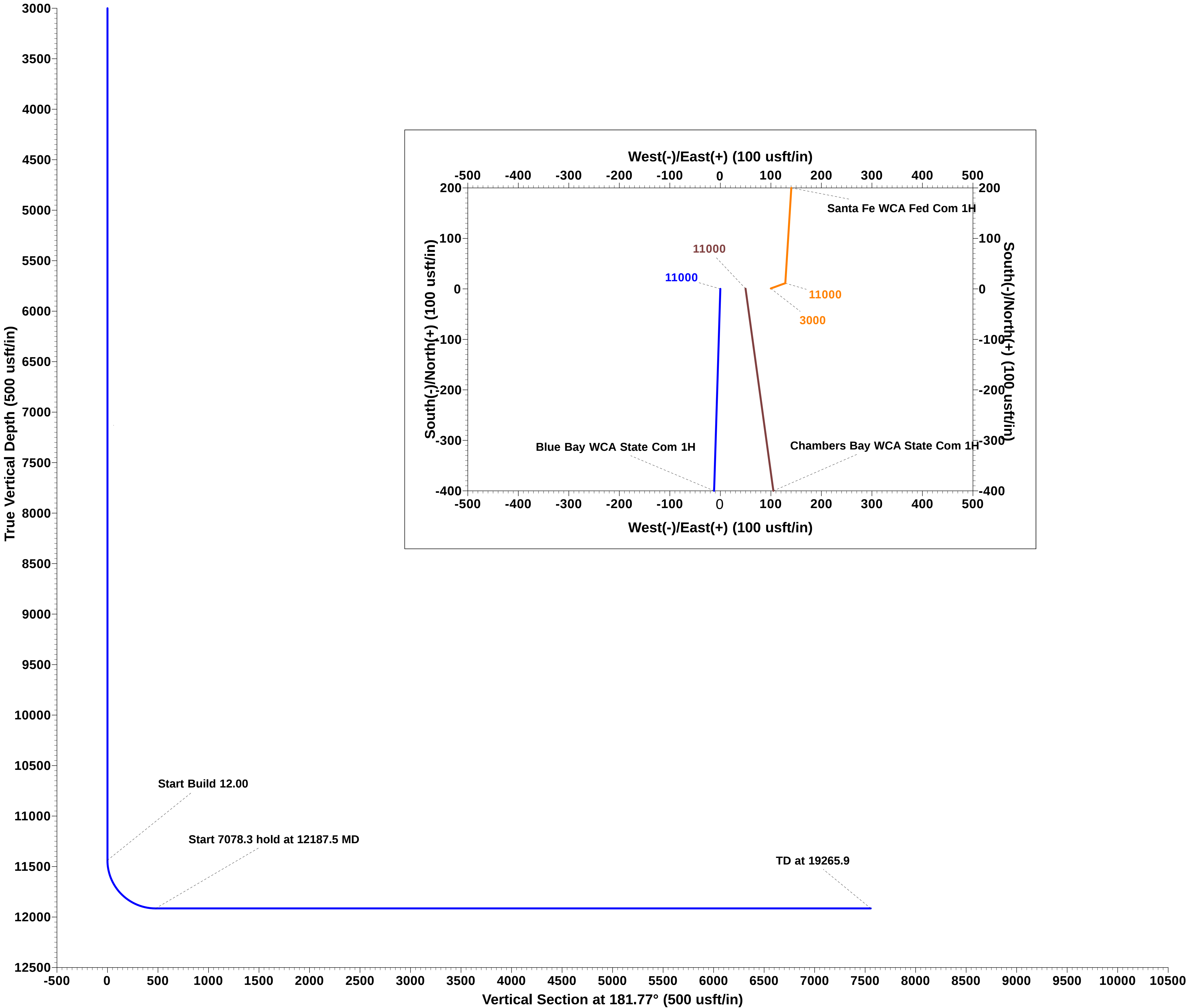
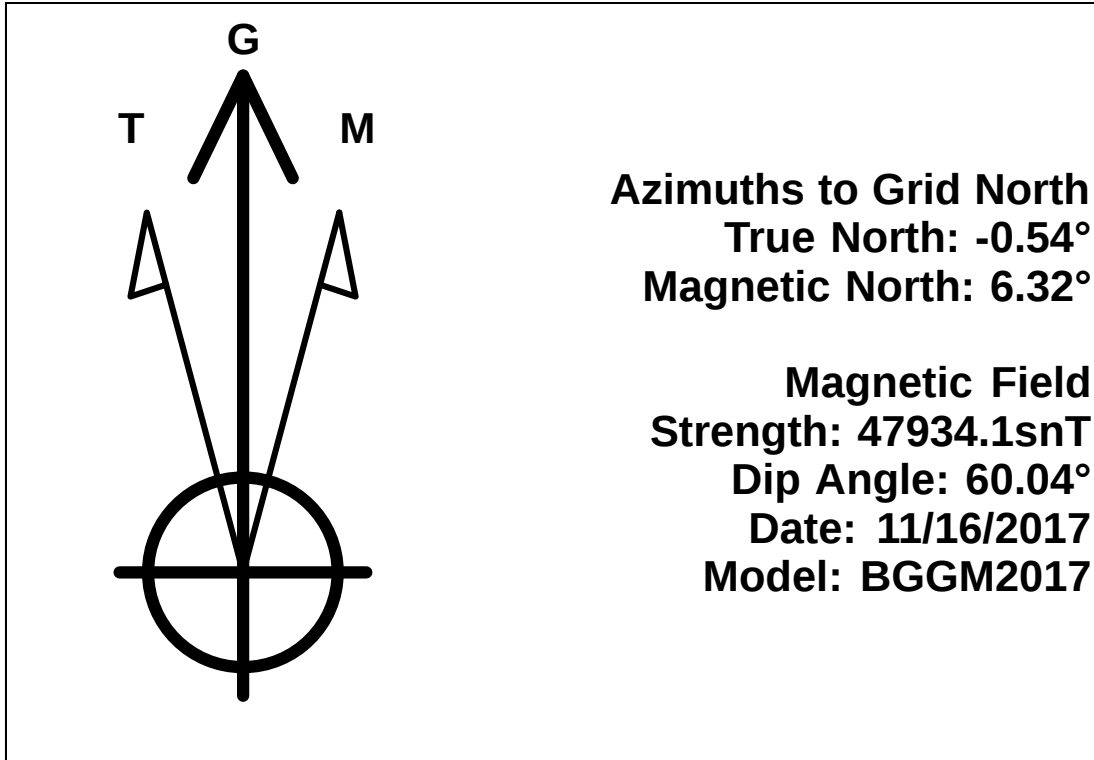
0.0 0.0 Northing 428451.76 Easting 814541.38 Latitude 32° 10' 25.846 N Longitude 103° 19' 0.361 W

SECTION DETAILS

Plan #1

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	VSect	Annotation
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.0	
2	11437.5	0.00	0.00	11437.5	0.0	0.0	0.00	0.0	
3	12187.5	90.00	181.77	11915.0	-477.2	-14.7	12.00	477.5	
4	19265.9	90.00	181.77	11915.0	-7552.2	-233.2	0.00	7555.8	

Lea County, NM (NAD 27)
Chambers, Blue Bay & Santa Fe Pad
Blue Bay WCA State Com 1H
Wellbore #1
Plan #1
25' KB



25' KB

One Energy Partners

Lea County, NM (NAD 27) Chambers, Blue Bay & Santa Fe Pad
API#

Blue Bay WCA State Com 1H

Wellbore #1

Plan: Plan #1

Sperry Drilling Services

Combo Report

16 November, 2017

Well Coordinates: 32° 10' 25.85" N
103° 19' 00.36" W

NAD 1927 (NADCON CONUS)
New Mexico East 3001
428,451.76 N
814,541.38 E

Ground Level: 3,348.40 usft

Local Coordinate Origin:

Viewing Datum:

TVDs to System:

North Reference:

Unit System:

Centered on Well Blue Bay WCA State Com 1H

GE 3348.4 +25 @ 3373.4usft (25' KB)

N

Grid

API - US Survey Feet

Version: 5000.1 Build: 81D

Report Version: Midcon Combo v1.11

HALLIBURTON

Plan Report for Blue Bay WCA State Com 1H - Plan #1

Measured Depth (usft)	Inclination (°)	Grid Azimuth (°)	TVD below System (usft)	Vertical Depth (usft)	Local Coordinates (usft)		Map Coordinates (usft)		Dogleg Rate (°/100usft)	Vertical Section (usft)	Comments
0.0	0.00	0.00	-3,373.4	0.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	Blue Bay WCA State Com 1H PBHL
100.0	0.00	0.00	-3,273.4	100.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
200.0	0.00	0.00	-3,173.4	200.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
300.0	0.00	0.00	-3,073.4	300.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
400.0	0.00	0.00	-2,973.4	400.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
500.0	0.00	0.00	-2,873.4	500.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
600.0	0.00	0.00	-2,773.4	600.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
605.0	0.00	0.00	-2,768.4	605.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	Rustler
700.0	0.00	0.00	-2,673.4	700.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
800.0	0.00	0.00	-2,573.4	800.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
900.0	0.00	0.00	-2,473.4	900.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
1,000.0	0.00	0.00	-2,373.4	1,000.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
1,075.0	0.00	0.00	-2,298.4	1,075.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	Top of Salt
1,100.0	0.00	0.00	-2,273.4	1,100.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
1,200.0	0.00	0.00	-2,173.4	1,200.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
1,300.0	0.00	0.00	-2,073.4	1,300.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
1,400.0	0.00	0.00	-1,973.4	1,400.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
1,500.0	0.00	0.00	-1,873.4	1,500.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
1,600.0	0.00	0.00	-1,773.4	1,600.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
1,700.0	0.00	0.00	-1,673.4	1,700.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
1,800.0	0.00	0.00	-1,573.4	1,800.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
1,900.0	0.00	0.00	-1,473.4	1,900.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
2,000.0	0.00	0.00	-1,373.4	2,000.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
2,100.0	0.00	0.00	-1,273.4	2,100.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
2,200.0	0.00	0.00	-1,173.4	2,200.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
2,300.0	0.00	0.00	-1,073.4	2,300.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
2,400.0	0.00	0.00	-973.4	2,400.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
2,500.0	0.00	0.00	-873.4	2,500.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
2,600.0	0.00	0.00	-773.4	2,600.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
2,700.0	0.00	0.00	-673.4	2,700.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
2,800.0	0.00	0.00	-573.4	2,800.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
2,900.0	0.00	0.00	-473.4	2,900.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
3,000.0	0.00	0.00	-373.4	3,000.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
3,100.0	0.00	0.00	-273.4	3,100.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
3,200.0	0.00	0.00	-173.4	3,200.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
3,300.0	0.00	0.00	-73.4	3,300.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
3,400.0	0.00	0.00	26.6	3,400.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
3,500.0	0.00	0.00	126.6	3,500.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
3,600.0	0.00	0.00	226.6	3,600.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
3,700.0	0.00	0.00	326.6	3,700.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
3,800.0	0.00	0.00	426.6	3,800.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	

Plan Report for Blue Bay WCA State Com 1H - Plan #1

Measured Depth (usft)	Inclination (°)	Grid Azimuth (°)	TVD below System (usft)	Vertical Depth (usft)	Local Coordinates		Map Coordinates		Dogleg Rate (°/100usft)	Vertical Section (usft)	Comments
					Northing (usft)	Easting (usft)	Northing (usft)	Easting (usft)			
3,900.0	0.00	0.00	526.6	3,900.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
4,000.0	0.00	0.00	626.6	4,000.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
4,100.0	0.00	0.00	726.6	4,100.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
4,200.0	0.00	0.00	826.6	4,200.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
4,300.0	0.00	0.00	926.6	4,300.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
4,397.0	0.00	0.00	1,023.6	4,397.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	Base of Salt
4,400.0	0.00	0.00	1,026.6	4,400.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
4,500.0	0.00	0.00	1,126.6	4,500.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
4,600.0	0.00	0.00	1,226.6	4,600.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
4,700.0	0.00	0.00	1,326.6	4,700.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
4,800.0	0.00	0.00	1,426.6	4,800.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
4,900.0	0.00	0.00	1,526.6	4,900.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
5,000.0	0.00	0.00	1,626.6	5,000.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
5,100.0	0.00	0.00	1,726.6	5,100.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
5,155.0	0.00	0.00	1,781.6	5,155.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	Delaware
5,200.0	0.00	0.00	1,826.6	5,200.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
5,300.0	0.00	0.00	1,926.6	5,300.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
5,400.0	0.00	0.00	2,026.6	5,400.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
5,500.0	0.00	0.00	2,126.6	5,500.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
5,600.0	0.00	0.00	2,226.6	5,600.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
5,700.0	0.00	0.00	2,326.6	5,700.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
5,800.0	0.00	0.00	2,426.6	5,800.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
5,900.0	0.00	0.00	2,526.6	5,900.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
6,000.0	0.00	0.00	2,626.6	6,000.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
6,100.0	0.00	0.00	2,726.6	6,100.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
6,200.0	0.00	0.00	2,826.6	6,200.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
6,300.0	0.00	0.00	2,926.6	6,300.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
6,400.0	0.00	0.00	3,026.6	6,400.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
6,500.0	0.00	0.00	3,126.6	6,500.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
6,600.0	0.00	0.00	3,226.6	6,600.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
6,700.0	0.00	0.00	3,326.6	6,700.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
6,800.0	0.00	0.00	3,426.6	6,800.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
6,900.0	0.00	0.00	3,526.6	6,900.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
7,000.0	0.00	0.00	3,626.6	7,000.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
7,100.0	0.00	0.00	3,726.6	7,100.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
7,200.0	0.00	0.00	3,826.6	7,200.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
7,300.0	0.00	0.00	3,926.6	7,300.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
7,400.0	0.00	0.00	4,026.6	7,400.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
7,500.0	0.00	0.00	4,126.6	7,500.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
7,600.0	0.00	0.00	4,226.6	7,600.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
7,700.0	0.00	0.00	4,326.6	7,700.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	

Plan Report for Blue Bay WCA State Com 1H - Plan #1

Measured Depth (usft)	Inclination (°)	Grid Azimuth (°)	TVD below System (usft)	Vertical Depth (usft)	Local Coordinates		Map Coordinates		Dogleg Rate (°/100usft)	Vertical Section (usft)	Comments
					Northing (usft)	Easting (usft)	Northing (usft)	Easting (usft)			
7,800.0	0.00	0.00	4,426.6	7,800.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
7,900.0	0.00	0.00	4,526.6	7,900.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
8,000.0	0.00	0.00	4,626.6	8,000.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
8,100.0	0.00	0.00	4,726.6	8,100.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
8,200.0	0.00	0.00	4,826.6	8,200.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
8,300.0	0.00	0.00	4,926.6	8,300.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
8,400.0	0.00	0.00	5,026.6	8,400.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
8,500.0	0.00	0.00	5,126.6	8,500.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
8,600.0	0.00	0.00	5,226.6	8,600.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
8,693.0	0.00	0.00	5,319.6	8,693.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	Bone Spring
8,700.0	0.00	0.00	5,326.6	8,700.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
8,733.0	0.00	0.00	5,359.6	8,733.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	Avalon
8,800.0	0.00	0.00	5,426.6	8,800.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
8,900.0	0.00	0.00	5,526.6	8,900.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
9,000.0	0.00	0.00	5,626.6	9,000.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
9,100.0	0.00	0.00	5,726.6	9,100.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
9,200.0	0.00	0.00	5,826.6	9,200.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
9,300.0	0.00	0.00	5,926.6	9,300.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
9,400.0	0.00	0.00	6,026.6	9,400.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
9,500.0	0.00	0.00	6,126.6	9,500.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
9,600.0	0.00	0.00	6,226.6	9,600.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
9,700.0	0.00	0.00	6,326.6	9,700.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
9,800.0	0.00	0.00	6,426.6	9,800.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
9,900.0	0.00	0.00	6,526.6	9,900.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
9,923.0	0.00	0.00	6,549.6	9,923.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	1st Bone Spring
10,000.0	0.00	0.00	6,626.6	10,000.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
10,100.0	0.00	0.00	6,726.6	10,100.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
10,200.0	0.00	0.00	6,826.6	10,200.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
10,300.0	0.00	0.00	6,926.6	10,300.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
10,400.0	0.00	0.00	7,026.6	10,400.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
10,473.0	0.00	0.00	7,099.6	10,473.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	2nd Bone Spring
10,500.0	0.00	0.00	7,126.6	10,500.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
10,600.0	0.00	0.00	7,226.6	10,600.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
10,700.0	0.00	0.00	7,326.6	10,700.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
10,800.0	0.00	0.00	7,426.6	10,800.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
10,900.0	0.00	0.00	7,526.6	10,900.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
11,000.0	0.00	0.00	7,626.6	11,000.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
11,100.0	0.00	0.00	7,726.6	11,100.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
11,200.0	0.00	0.00	7,826.6	11,200.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
11,300.0	0.00	0.00	7,926.6	11,300.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
11,400.0	0.00	0.00	8,026.6	11,400.0	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	

Plan Report for Blue Bay WCA State Com 1H - Plan #1

Measured Depth (usft)	Inclination (°)	Grid Azimuth (°)	TVD below System (usft)	Vertical Depth (usft)	Local Coordinates		Map Coordinates		Dogleg Rate (°/100usft)	Vertical Section (usft)	Comments
					Northing (usft)	Easting (usft)	Northing (usft)	Easting (usft)			
11,437.5	0.00	0.00	8,064.1	11,437.5	0.00 N	0.00 E	428,451.76	814,541.38	0.00	0.0	
11,500.0	7.50	181.77	8,126.4	11,499.8	4.08 S	0.13 W	428,447.68	814,541.25	12.00	4.1	
11,600.0	19.50	181.77	8,223.5	11,596.9	27.36 S	0.84 W	428,424.40	814,540.54	12.00	27.4	
11,700.0	31.50	181.77	8,313.6	11,687.0	70.31 S	2.17 W	428,381.45	814,539.21	12.00	70.3	
11,713.0	33.06	181.77	8,324.6	11,698.0	77.26 S	2.39 W	428,374.50	814,538.99	12.00	77.3	3rd Bone Spring
11,800.0	43.50	181.77	8,392.8	11,766.2	131.04 S	4.05 W	428,320.72	814,537.33	12.00	131.1	
11,846.0	49.02	181.77	8,424.6	11,798.0	164.28 S	5.07 W	428,287.48	814,536.31	12.00	164.4	Wolfcamp
11,900.0	55.50	181.77	8,457.6	11,831.0	206.90 S	6.39 W	428,244.86	814,534.99	12.00	207.0	
12,000.0	67.50	181.77	8,505.2	11,878.6	294.57 S	9.10 W	428,157.19	814,532.28	12.00	294.7	
12,100.0	79.50	181.77	8,533.6	11,907.0	390.23 S	12.05 W	428,061.53	814,529.33	12.00	390.4	
12,187.5	90.00	181.77	8,541.6	11,915.0	477.24 S	14.74 W	427,974.52	814,526.64	12.00	477.5	
12,200.0	90.00	181.77	8,541.6	11,915.0	489.70 S	15.12 W	427,962.06	814,526.26	0.00	489.9	
12,300.0	90.00	181.77	8,541.6	11,915.0	589.65 S	18.21 W	427,862.11	814,523.17	0.00	589.9	
12,400.0	90.00	181.77	8,541.6	11,915.0	689.60 S	21.29 W	427,762.16	814,520.09	0.00	689.9	
12,500.0	90.00	181.77	8,541.6	11,915.0	789.55 S	24.38 W	427,662.21	814,517.00	0.00	789.9	
12,600.0	90.00	181.77	8,541.6	11,915.0	889.51 S	27.46 W	427,562.25	814,513.92	0.00	889.9	
12,700.0	90.00	181.77	8,541.6	11,915.0	989.46 S	30.55 W	427,462.30	814,510.83	0.00	989.9	
12,800.0	90.00	181.77	8,541.6	11,915.0	1,089.41 S	33.64 W	427,362.35	814,507.74	0.00	1,089.9	
12,900.0	90.00	181.77	8,541.6	11,915.0	1,189.36 S	36.72 W	427,262.40	814,504.66	0.00	1,189.9	
13,000.0	90.00	181.77	8,541.6	11,915.0	1,289.32 S	39.81 W	427,162.44	814,501.57	0.00	1,289.9	
13,100.0	90.00	181.77	8,541.6	11,915.0	1,389.27 S	42.89 W	427,062.49	814,498.49	0.00	1,389.9	
13,200.0	90.00	181.77	8,541.6	11,915.0	1,489.22 S	45.98 W	426,962.54	814,495.40	0.00	1,489.9	
13,300.0	90.00	181.77	8,541.6	11,915.0	1,589.17 S	49.07 W	426,862.59	814,492.31	0.00	1,589.9	
13,400.0	90.00	181.77	8,541.6	11,915.0	1,689.12 S	52.15 W	426,762.64	814,489.23	0.00	1,689.9	
13,500.0	90.00	181.77	8,541.6	11,915.0	1,789.08 S	55.24 W	426,662.68	814,486.14	0.00	1,789.9	
13,600.0	90.00	181.77	8,541.6	11,915.0	1,889.03 S	58.33 W	426,562.73	814,483.05	0.00	1,889.9	
13,700.0	90.00	181.77	8,541.6	11,915.0	1,988.98 S	61.41 W	426,462.78	814,479.97	0.00	1,989.9	
13,800.0	90.00	181.77	8,541.6	11,915.0	2,088.93 S	64.50 W	426,362.83	814,476.88	0.00	2,089.9	
13,900.0	90.00	181.77	8,541.6	11,915.0	2,188.89 S	67.58 W	426,262.87	814,473.80	0.00	2,189.9	
14,000.0	90.00	181.77	8,541.6	11,915.0	2,288.84 S	70.67 W	426,162.92	814,470.71	0.00	2,289.9	
14,100.0	90.00	181.77	8,541.6	11,915.0	2,388.79 S	73.76 W	426,062.97	814,467.62	0.00	2,389.9	
14,200.0	90.00	181.77	8,541.6	11,915.0	2,488.74 S	76.84 W	425,963.02	814,464.54	0.00	2,489.9	
14,300.0	90.00	181.77	8,541.6	11,915.0	2,588.70 S	79.93 W	425,863.06	814,461.45	0.00	2,589.9	
14,400.0	90.00	181.77	8,541.6	11,915.0	2,688.65 S	83.01 W	425,763.11	814,458.37	0.00	2,689.9	
14,500.0	90.00	181.77	8,541.6	11,915.0	2,788.60 S	86.10 W	425,663.16	814,455.28	0.00	2,789.9	
14,600.0	90.00	181.77	8,541.6	11,915.0	2,888.55 S	89.19 W	425,563.21	814,452.19	0.00	2,889.9	
14,700.0	90.00	181.77	8,541.6	11,915.0	2,988.51 S	92.27 W	425,463.25	814,449.11	0.00	2,989.9	
14,800.0	90.00	181.77	8,541.6	11,915.0	3,088.46 S	95.36 W	425,363.30	814,446.02	0.00	3,089.9	
14,900.0	90.00	181.77	8,541.6	11,915.0	3,188.41 S	98.44 W	425,263.35	814,442.94	0.00	3,189.9	
15,000.0	90.00	181.77	8,541.6	11,915.0	3,288.36 S	101.53 W	425,163.40	814,439.85	0.00	3,289.9	
15,100.0	90.00	181.77	8,541.6	11,915.0	3,388.31 S	104.62 W	425,063.45	814,436.76	0.00	3,389.9	

Plan Report for Blue Bay WCA State Com 1H - Plan #1

Measured Depth (usft)	Inclination (°)	Grid Azimuth (°)	TVD below System (usft)	Vertical Depth (usft)	Local Coordinates Northing (usft) Easting (usft)	Map Coordinates Northing (usft) Easting (usft)	Dogleg Rate (°/100usft)	Vertical Section (usft)	Comments
15,200.0	90.00	181.77	8,541.6	11,915.0	3,488.27 S 107.70 W	424,963.49 814,433.68	0.00	3,489.9	
15,300.0	90.00	181.77	8,541.6	11,915.0	3,588.22 S 110.79 W	424,863.54 814,430.59	0.00	3,589.9	
15,400.0	90.00	181.77	8,541.6	11,915.0	3,688.17 S 113.88 W	424,763.59 814,427.50	0.00	3,689.9	
15,500.0	90.00	181.77	8,541.6	11,915.0	3,788.12 S 116.96 W	424,663.64 814,424.42	0.00	3,789.9	
15,600.0	90.00	181.77	8,541.6	11,915.0	3,888.08 S 120.05 W	424,563.68 814,421.33	0.00	3,889.9	
15,700.0	90.00	181.77	8,541.6	11,915.0	3,988.03 S 123.13 W	424,463.73 814,418.25	0.00	3,989.9	
15,800.0	90.00	181.77	8,541.6	11,915.0	4,087.98 S 126.22 W	424,363.78 814,415.16	0.00	4,089.9	
15,900.0	90.00	181.77	8,541.6	11,915.0	4,187.93 S 129.31 W	424,263.83 814,412.07	0.00	4,189.9	
16,000.0	90.00	181.77	8,541.6	11,915.0	4,287.89 S 132.39 W	424,163.87 814,408.99	0.00	4,289.9	
16,100.0	90.00	181.77	8,541.6	11,915.0	4,387.84 S 135.48 W	424,063.92 814,405.90	0.00	4,389.9	
16,200.0	90.00	181.77	8,541.6	11,915.0	4,487.79 S 138.56 W	423,963.97 814,402.82	0.00	4,489.9	
16,300.0	90.00	181.77	8,541.6	11,915.0	4,587.74 S 141.65 W	423,864.02 814,399.73	0.00	4,589.9	
16,400.0	90.00	181.77	8,541.6	11,915.0	4,687.70 S 144.74 W	423,764.06 814,396.64	0.00	4,689.9	
16,500.0	90.00	181.77	8,541.6	11,915.0	4,787.65 S 147.82 W	423,664.11 814,393.56	0.00	4,789.9	
16,600.0	90.00	181.77	8,541.6	11,915.0	4,887.60 S 150.91 W	423,564.16 814,390.47	0.00	4,889.9	
16,700.0	90.00	181.77	8,541.6	11,915.0	4,987.55 S 153.99 W	423,464.21 814,387.39	0.00	4,989.9	
16,800.0	90.00	181.77	8,541.6	11,915.0	5,087.51 S 157.08 W	423,364.25 814,384.30	0.00	5,089.9	
16,900.0	90.00	181.77	8,541.6	11,915.0	5,187.46 S 160.17 W	423,264.30 814,381.21	0.00	5,189.9	
17,000.0	90.00	181.77	8,541.6	11,915.0	5,287.41 S 163.25 W	423,164.35 814,378.13	0.00	5,289.9	
17,100.0	90.00	181.77	8,541.6	11,915.0	5,387.36 S 166.34 W	423,064.40 814,375.04	0.00	5,389.9	
17,200.0	90.00	181.77	8,541.6	11,915.0	5,487.31 S 169.43 W	422,964.45 814,371.95	0.00	5,489.9	
17,300.0	90.00	181.77	8,541.6	11,915.0	5,587.27 S 172.51 W	422,864.49 814,368.87	0.00	5,589.9	
17,400.0	90.00	181.77	8,541.6	11,915.0	5,687.22 S 175.60 W	422,764.54 814,365.78	0.00	5,689.9	
17,500.0	90.00	181.77	8,541.6	11,915.0	5,787.17 S 178.68 W	422,664.59 814,362.70	0.00	5,789.9	
17,600.0	90.00	181.77	8,541.6	11,915.0	5,887.12 S 181.77 W	422,564.64 814,359.61	0.00	5,889.9	
17,700.0	90.00	181.77	8,541.6	11,915.0	5,987.08 S 184.86 W	422,464.68 814,356.52	0.00	5,989.9	
17,800.0	90.00	181.77	8,541.6	11,915.0	6,087.03 S 187.94 W	422,364.73 814,353.44	0.00	6,089.9	
17,900.0	90.00	181.77	8,541.6	11,915.0	6,186.98 S 191.03 W	422,264.78 814,350.35	0.00	6,189.9	
18,000.0	90.00	181.77	8,541.6	11,915.0	6,286.93 S 194.11 W	422,164.83 814,347.27	0.00	6,289.9	
18,100.0	90.00	181.77	8,541.6	11,915.0	6,386.89 S 197.20 W	422,064.87 814,344.18	0.00	6,389.9	
18,200.0	90.00	181.77	8,541.6	11,915.0	6,486.84 S 200.29 W	421,964.92 814,341.09	0.00	6,489.9	
18,300.0	90.00	181.77	8,541.6	11,915.0	6,586.79 S 203.37 W	421,864.97 814,338.01	0.00	6,589.9	
18,400.0	90.00	181.77	8,541.6	11,915.0	6,686.74 S 206.46 W	421,765.02 814,334.92	0.00	6,689.9	
18,500.0	90.00	181.77	8,541.6	11,915.0	6,786.70 S 209.54 W	421,665.06 814,331.84	0.00	6,789.9	
18,600.0	90.00	181.77	8,541.6	11,915.0	6,886.65 S 212.63 W	421,565.11 814,328.75	0.00	6,889.9	
18,700.0	90.00	181.77	8,541.6	11,915.0	6,986.60 S 215.72 W	421,465.16 814,325.66	0.00	6,989.9	
18,800.0	90.00	181.77	8,541.6	11,915.0	7,086.55 S 218.80 W	421,365.21 814,322.58	0.00	7,089.9	
18,900.0	90.00	181.77	8,541.6	11,915.0	7,186.50 S 221.89 W	421,265.26 814,319.49	0.00	7,189.9	
19,000.0	90.00	181.77	8,541.6	11,915.0	7,286.46 S 224.98 W	421,165.30 814,316.40	0.00	7,289.9	
19,100.0	90.00	181.77	8,541.6	11,915.0	7,386.41 S 228.06 W	421,065.35 814,313.32	0.00	7,389.9	
19,200.0	90.00	181.77	8,541.6	11,915.0	7,486.36 S 231.15 W	420,965.40 814,310.23	0.00	7,489.9	

Plan Report for Blue Bay WCA State Com 1H - Plan #1

Measured Depth (usft)	Inclination (°)	Grid Azimuth (°)	TVD below System (usft)	Vertical Depth (usft)	Local Coordinates		Map Coordinates		Dogleg Rate (°/100usft)	Vertical Section (usft)	Comments
					Northing (usft)	Easting (usft)	Northing (usft)	Easting (usft)			
19,265.9	90.00	181.77	8,541.6	11,915.0	7,552.19 S	233.18 W	420,899.57	814,308.20	0.00	7,555.8	

Vertical Section Information

Angle Type	Target	Azimuth (°)	Origin Type	Origin		Start TVD (usft)
				+N/-S (usft)	+E/-W (usft)	
TD	No Target (Freehand)	181.77	Slot	0.0	0.0	0.0

Survey tool program

From (usft)	To (usft)	Survey/Plan	Survey Tool
0.0	19,265.9	Plan #1	MWD

Casing Details

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
1,000.0	1,000.0	13 3/8"	13-3/8	17-1/2

Formation Details

Measured Depth (usft)	Vertical Depth (usft)	TVDSS (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
605.0	605.0	-2,768.40	Rustler		0.00	181.77
1,075.0	1,075.0	-2,298.40	Top of Salt		0.00	181.77
4,397.0	4,397.0	1,023.60	Base of Salt		0.00	181.77
5,155.0	5,155.0	1,781.60	Delaware		0.00	181.77
8,693.0	8,693.0	5,319.60	Bone Spring		0.00	181.77
8,733.0	8,733.0	5,359.60	Avalon		0.00	181.77
9,923.0	9,923.0	6,549.60	1st Bone Spring		0.00	181.77
10,473.0	10,473.0	7,099.60	2nd Bone Spring		0.00	181.77
11,713.0	11,698.0	8,324.60	3rd Bone Spring		0.00	181.77
11,846.0	11,798.0	8,424.60	Wolfcamp		0.00	181.77

Plan Report for Blue Bay WCA State Com 1H - Plan #1

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
Blue Bay WCA State Com 1H PBHL ()	0.00	0.00	0.0	-7,552.2	-233.2	420,899.57	814,308.20	32° 9' 11.139 N	103° 19' 3.902 W
- plan misses target center by 7555.8usft at 0.0usft MD (0.0 TVD, 0.0 N, 0.0 E)									
- Point									

Directional Difficulty Index

Average Dogleg over Survey:	0.47 °/100usft	Maximum Dogleg over Survey:	12.00 °/100usft at 12,187.5 usft
Net Tortousity applicable to Plans:	0.47 °/100usft	Directional Difficulty Index:	6.348

Audit Info

North Reference Sheet for Chambers, Blue Bay & Santa Fe Pad - Blue Bay WCA State Com 1H - Wellbore #1

All data is in US Feet unless otherwise stated. Directions and Coordinates are relative to Grid North Reference.

Vertical Depths are relative to GE 3348.4 +25 @ 3373.4usft (25' KB). Northing and Easting are relative to Blue Bay WCA State Com 1H

Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 3001 using datum NAD 1927 (NADCON CONUS), ellipsoid Clarke 1866

Projection method is Transverse Mercator (Gauss-Kruger)

Central Meridian is 104° 20' 0.000 W°, Longitude Origin:0° 0' 0.000 E°, Latitude Origin:0° 0' 0.000 N°

False Easting: 500,000.00usft, False Northing: 0.00usft, Scale Reduction: 1.00002241

Grid Coordinates of Well: 428,451.76 usft N, 814,541.38 usft E

Geographical Coordinates of Well: 32° 10' 25.85" N, 103° 19' 00.36" W

Grid Convergence at Surface is: 0.54°

Based upon Minimum Curvature type calculations, at a Measured Depth of 19,265.86usft
the Bottom Hole Displacement is 7,555.79usft in the Direction of 181.77° (Grid).

Magnetic Convergence at surface is: -6.32° (16 November 2017, , BGGM2017)

