

HOBBS OCD

NOV 04 2014

RECEIVED

Job#
HP212

Devon

Lea County, NM (NAD 83) Sec 32 T. 24 S., R.32E.

API#

Chincoteague 32 ST Com 3H

200' FSL & 2630' FWL

Wellbore #1

Plan: Plan#1 102814 RevA0

Sperry Drilling Services Combo Report

28 October, 2014

Well Coordinates: 32° 10' 01.94" N
103° 41' 48.08" W

North American Datum 1983
New Mexico Eastern Zone
425,146.72 N
738,332.47 E

Ground Level: 3,471.20 ft

Local Coordinate Origin:

Viewing Datum:

TVDs to System:

North Reference:

Unit System:

Centered on Well Chincoteague 32 ST Com 3H

Well @ 3496.20ft (HP212)

N

Grid

API US Survey Feet

Version: 5000.1 Build: 73

Report Version: Midcon Combo v1.50

HALLIBURTON

NOV 05 2014

Plan Report for Chincoteague 32 ST Com 3H - Plan#1 102814 RevA0

Measured Depth (ft)	Inclination (°)	Grid Azimuth (°)	TVD below System (ft)	Vertical Depth (ft)	Local Coordinates		Map Coordinates		Dogleg Rate (°/100usft)	Vertical Section (ft)	Comments
					Northing (ft)	Easting (ft)	Northing (usft)	Easting (usft)			
0.00	0.00	0.00	-3,496.20	0.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
100.00	0.00	0.00	-3,396.20	100.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
200.00	0.00	0.00	-3,296.20	200.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
300.00	0.00	0.00	-3,196.20	300.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
400.00	0.00	0.00	-3,096.20	400.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
500.00	0.00	0.00	-2,996.20	500.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
600.00	0.00	0.00	-2,896.20	600.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
700.00	0.00	0.00	-2,796.20	700.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
746.20	0.00	0.00	-2,750.00	746.20	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	Rustler
800.00	0.00	0.00	-2,696.20	800.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
900.00	0.00	0.00	-2,596.20	900.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
1,000.00	0.00	0.00	-2,496.20	1,000.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
1,046.20	0.00	0.00	-2,450.00	1,046.20	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	Top of Salt
1,100.00	0.00	0.00	-2,396.20	1,100.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
1,200.00	0.00	0.00	-2,296.20	1,200.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
1,300.00	0.00	0.00	-2,196.20	1,300.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
1,400.00	0.00	0.00	-2,096.20	1,400.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
1,500.00	0.00	0.00	-1,996.20	1,500.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
1,600.00	0.00	0.00	-1,896.20	1,600.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
1,700.00	0.00	0.00	-1,796.20	1,700.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
1,800.00	0.00	0.00	-1,696.20	1,800.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
1,900.00	0.00	0.00	-1,596.20	1,900.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
2,000.00	0.00	0.00	-1,496.20	2,000.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
2,100.00	0.00	0.00	-1,396.20	2,100.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
2,200.00	0.00	0.00	-1,296.20	2,200.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
2,300.00	0.00	0.00	-1,196.20	2,300.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
2,400.00	0.00	0.00	-1,096.20	2,400.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
2,500.00	0.00	0.00	-996.20	2,500.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
2,600.00	0.00	0.00	-896.20	2,600.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
2,700.00	0.00	0.00	-796.20	2,700.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
2,800.00	0.00	0.00	-696.20	2,800.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
2,900.00	0.00	0.00	-596.20	2,900.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
3,000.00	0.00	0.00	-496.20	3,000.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
3,100.00	0.00	0.00	-396.20	3,100.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
3,200.00	0.00	0.00	-296.20	3,200.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
3,300.00	0.00	0.00	-196.20	3,300.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
3,400.00	0.00	0.00	-96.20	3,400.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
3,500.00	0.00	0.00	3.80	3,500.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
3,600.00	0.00	0.00	103.80	3,600.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
3,700.00	0.00	0.00	203.80	3,700.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
3,800.00	0.00	0.00	303.80	3,800.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	

Plan Report for Chincoteague 32 ST Com 3H - Plan#1 102814 RevA0

Measured		Grid	TVD below	Vertical	Local Coordinates		Map Coordinates		Dogleg	Vertical	Comments
Depth	Inclination	Azimuth	System	Depth	Northing	Easting	Northing	Easting	Rate	Section	
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(usft)	(usft)	(°/100usft)	(ft)	
3,900.00	0.00	0.00	403.80	3,900.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
4,000.00	0.00	0.00	503.80	4,000.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
4,100.00	0.00	0.00	603.80	4,100.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
4,200.00	0.00	0.00	703.80	4,200.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
4,300.00	0.00	0.00	803.80	4,300.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
4,386.20	0.00	0.00	890.00	4,386.20	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	Base of Salt
4,400.00	0.00	0.00	903.80	4,400.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
4,500.00	0.00	0.00	1,003.80	4,500.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
4,600.00	0.00	0.00	1,103.80	4,600.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
4,651.20	0.00	0.00	1,155.00	4,651.20	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	Bell Canyon
4,700.00	0.00	0.00	1,203.80	4,700.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
4,800.00	0.00	0.00	1,303.80	4,800.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
4,900.00	0.00	0.00	1,403.80	4,900.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
5,000.00	0.00	0.00	1,503.80	5,000.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
5,100.00	0.00	0.00	1,603.80	5,100.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
5,200.00	0.00	0.00	1,703.80	5,200.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
5,300.00	0.00	0.00	1,803.80	5,300.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
5,400.00	0.00	0.00	1,903.80	5,400.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
5,500.00	0.00	0.00	2,003.80	5,500.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
5,566.20	0.00	0.00	2,070.00	5,566.20	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	Cherry Canyon
5,600.00	0.00	0.00	2,103.80	5,600.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
5,700.00	0.00	0.00	2,203.80	5,700.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
5,800.00	0.00	0.00	2,303.80	5,800.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
5,900.00	0.00	0.00	2,403.80	5,900.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
6,000.00	0.00	0.00	2,503.80	6,000.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
6,100.00	0.00	0.00	2,603.80	6,100.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
6,200.00	0.00	0.00	2,703.80	6,200.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
6,300.00	0.00	0.00	2,803.80	6,300.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
6,400.00	0.00	0.00	2,903.80	6,400.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
6,500.00	0.00	0.00	3,003.80	6,500.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
6,600.00	0.00	0.00	3,103.80	6,600.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
6,700.00	0.00	0.00	3,203.80	6,700.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
6,800.00	0.00	0.00	3,303.80	6,800.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
6,900.00	0.00	0.00	3,403.80	6,900.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
6,921.20	0.00	0.00	3,425.00	6,921.20	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	Brushy Canyon
7,000.00	0.00	0.00	3,503.80	7,000.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
7,100.00	0.00	0.00	3,603.80	7,100.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
7,200.00	0.00	0.00	3,703.80	7,200.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
7,300.00	0.00	0.00	3,803.80	7,300.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
7,400.00	0.00	0.00	3,903.80	7,400.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
7,500.00	0.00	0.00	4,003.80	7,500.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	

Plan Report for Chincoteague 32 ST Com 3H - Plan#1 102814 RevA0

Measured Depth (ft)	Inclination (°)	Grid Azimuth (°)	TVD below System (ft)	Vertical Depth (ft)	Local Coordinates		Map Coordinates		Dogleg Rate (°/100usft)	Vertical Section (ft)	Comments
					Northing (ft)	Easting (ft)	Northing (usft)	Easting (usft)			
7,600.00	0.00	0.00	4,103.80	7,600.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
7,700.00	0.00	0.00	4,203.80	7,700.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
7,800.00	0.00	0.00	4,303.80	7,800.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
7,900.00	0.00	0.00	4,403.80	7,900.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
8,000.00	0.00	0.00	4,503.80	8,000.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
8,100.00	0.00	0.00	4,603.80	8,100.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
8,200.00	0.00	0.00	4,703.80	8,200.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
8,300.00	0.00	0.00	4,803.80	8,300.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
8,400.00	0.00	0.00	4,903.80	8,400.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
8,500.00	0.00	0.00	5,003.80	8,500.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
8,566.20	0.00	0.00	5,070.00	8,566.20	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	1st BSPG Lime
8,600.00	0.00	0.00	5,103.80	8,600.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
8,700.00	0.00	0.00	5,203.80	8,700.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
8,800.00	0.00	0.00	5,303.80	8,800.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
8,900.00	0.00	0.00	5,403.80	8,900.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
9,000.00	0.00	0.00	5,503.80	9,000.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
9,100.00	0.00	0.00	5,603.80	9,100.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
9,200.00	0.00	0.00	5,703.80	9,200.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
9,300.00	0.00	0.00	5,803.80	9,300.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
9,400.00	0.00	0.00	5,903.80	9,400.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
9,500.00	0.00	0.00	6,003.80	9,500.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
9,600.00	0.00	0.00	6,103.80	9,600.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
9,616.20	0.00	0.00	6,120.00	9,616.20	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	1st BSPG Sand
9,700.00	0.00	0.00	6,203.80	9,700.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
9,800.00	0.00	0.00	6,303.80	9,800.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
9,846.20	0.00	0.00	6,350.00	9,846.20	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	2nd BSPG Lime
9,900.00	0.00	0.00	6,403.80	9,900.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
10,000.00	0.00	0.00	6,503.80	10,000.00	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	
10,063.52	0.00	0.00	6,567.32	10,063.52	0.00 N	0.00 E	425,146.72	738,332.47	0.00	0.00	Start Build 10'00
10,100.00	3.65	327.21	6,603.78	10,099.98	0.98 N	0.63 W	425,147.70	738,331.84	10.00	1.03	
10,197.42	13.39	327.21	6,700.00	10,196.20	13.09 N	8.43 W	425,159.81	738,324.04	10.00	13.86	2nd BSPG Sand
10,200.00	13.65	327.21	6,702.51	10,198.71	13.60 N	8.76 W	425,160.32	738,323.71	10.00	14.40	
10,300.00	23.65	327.21	6,797.14	10,293.34	40.45 N	26.06 W	425,187.17	738,306.41	10.00	42.81	
10,400.00	33.65	327.21	6,884.79	10,380.99	80.70 N	51.99 W	425,227.42	738,280.48	10.00	85.42	
10,500.00	43.65	327.21	6,962.79	10,458.99	133.13 N	85.77 W	425,279.85	738,246.70	10.00	140.92	
10,600.00	53.65	327.21	7,028.78	10,524.98	196.16 N	126.37 W	425,342.88	738,206.10	10.00	207.62	
10,663.52	60.00	327.21	7,063.52	10,559.72	240.83 N	155.15 W	425,387.55	738,177.32	10.00	254.91	Start DLS 10'00 TFO 49.11
10,700.00	62.42	330.32	7,081.09	10,577.29	268.17 N	171.71 W	425,414.89	738,160.76	10.00	283.74	
10,800.00	69.38	338.20	7,121.94	10,618.14	350.33 N	211.14 W	425,497.05	738,121.33	10.00	369.38	
10,900.00	76.67	345.37	7,151.15	10,647.35	441.09 N	240.89 W	425,587.80	738,091.58	10.00	462.61	
11,000.00	84.14	352.11	7,167.83	10,664.03	537.67 N	260.05 W	425,684.39	738,072.42	10.00	560.62	

Plan Report for Chincoteague 32 ST Com 3H - Plan#1 102814 RevA0

Measured Depth (ft)	Inclination (°)	Grid Azimuth (°)	TVD below System (ft)	Vertical Depth (ft)	Local Coordinates		Map Coordinates		Dogleg Rate (°/100usft)	Vertical Section (ft)	Comments
					Northing (ft)	Easting (ft)	Northing (usft)	Easting (usft)			
11,077.63	90.00	357.21	7,171.80	10,668.00	614.81 N	267.25 W	425,761.53	738,065.22	10.00	638.08	Start 4136.18' hold at 11077.63 MD
11,100.00	90.00	357.21	7,171.80	10,668.00	637.15 N	268.34 W	425,783.87	738,064.13	0.00	660.43	
11,200.00	90.00	357.21	7,171.80	10,668.00	737.03 N	273.20 W	425,883.75	738,059.27	0.00	760.30	
11,300.00	90.00	357.21	7,171.80	10,668.00	836.91 N	278.07 W	425,983.63	738,054.40	0.00	860.18	
11,400.00	90.00	357.21	7,171.80	10,668.00	936.80 N	282.93 W	426,083.51	738,049.54	0.00	960.06	
11,500.00	90.00	357.21	7,171.80	10,668.00	1,036.68 N	287.80 W	426,183.40	738,044.67	0.00	1,059.93	
11,600.00	90.00	357.21	7,171.80	10,668.00	1,136.56 N	292.66 W	426,283.28	738,039.81	0.00	1,159.81	
11,700.00	90.00	357.21	7,171.80	10,668.00	1,236.44 N	297.53 W	426,383.16	738,034.95	0.00	1,259.69	
11,800.00	90.00	357.21	7,171.80	10,668.00	1,336.32 N	302.39 W	426,483.04	738,030.08	0.00	1,359.56	
11,900.00	90.00	357.21	7,171.80	10,668.00	1,436.20 N	307.25 W	426,582.92	738,025.22	0.00	1,459.44	
12,000.00	90.00	357.21	7,171.80	10,668.00	1,536.09 N	312.12 W	426,682.80	738,020.35	0.00	1,559.31	
12,100.00	90.00	357.21	7,171.80	10,668.00	1,635.97 N	316.98 W	426,782.68	738,015.49	0.00	1,659.19	
12,200.00	90.00	357.21	7,171.80	10,668.00	1,735.85 N	321.85 W	426,882.57	738,010.62	0.00	1,759.07	
12,300.00	90.00	357.21	7,171.80	10,668.00	1,835.73 N	326.71 W	426,982.45	738,005.76	0.00	1,858.94	
12,400.00	90.00	357.21	7,171.80	10,668.00	1,935.61 N	331.58 W	427,082.33	738,000.89	0.00	1,958.82	
12,500.00	90.00	357.21	7,171.80	10,668.00	2,035.49 N	336.44 W	427,182.21	737,996.03	0.00	2,058.70	
12,600.00	90.00	357.21	7,171.80	10,668.00	2,135.37 N	341.31 W	427,282.09	737,991.17	0.00	2,158.57	
12,700.00	90.00	357.21	7,171.80	10,668.00	2,235.26 N	346.17 W	427,381.97	737,986.30	0.00	2,258.45	
12,800.00	90.00	357.21	7,171.80	10,668.00	2,335.14 N	351.03 W	427,481.85	737,981.44	0.00	2,358.33	
12,900.00	90.00	357.21	7,171.80	10,668.00	2,435.02 N	355.90 W	427,581.73	737,976.57	0.00	2,458.20	
13,000.00	90.00	357.21	7,171.80	10,668.00	2,534.90 N	360.76 W	427,681.62	737,971.71	0.00	2,558.08	
13,100.00	90.00	357.21	7,171.80	10,668.00	2,634.78 N	365.63 W	427,781.50	737,966.84	0.00	2,657.96	
13,200.00	90.00	357.21	7,171.80	10,668.00	2,734.66 N	370.49 W	427,881.38	737,961.98	0.00	2,757.83	
13,300.00	90.00	357.21	7,171.80	10,668.00	2,834.55 N	375.36 W	427,981.26	737,957.11	0.00	2,857.71	
13,400.00	90.00	357.21	7,171.80	10,668.00	2,934.43 N	380.22 W	428,081.14	737,952.25	0.00	2,957.58	
13,500.00	90.00	357.21	7,171.80	10,668.00	3,034.31 N	385.08 W	428,181.02	737,947.39	0.00	3,057.46	
13,600.00	90.00	357.21	7,171.80	10,668.00	3,134.19 N	389.95 W	428,280.90	737,942.52	0.00	3,157.34	
13,700.00	90.00	357.21	7,171.80	10,668.00	3,234.07 N	394.81 W	428,380.79	737,937.66	0.00	3,257.21	
13,800.00	90.00	357.21	7,171.80	10,668.00	3,333.95 N	399.68 W	428,480.67	737,932.79	0.00	3,357.09	
13,900.00	90.00	357.21	7,171.80	10,668.00	3,433.84 N	404.54 W	428,580.55	737,927.93	0.00	3,456.97	
14,000.00	90.00	357.21	7,171.80	10,668.00	3,533.72 N	409.41 W	428,680.43	737,923.06	0.00	3,556.84	
14,100.00	90.00	357.21	7,171.80	10,668.00	3,633.60 N	414.27 W	428,780.31	737,918.20	0.00	3,656.72	
14,200.00	90.00	357.21	7,171.80	10,668.00	3,733.48 N	419.14 W	428,880.19	737,913.34	0.00	3,756.60	
14,300.00	90.00	357.21	7,171.80	10,668.00	3,833.36 N	424.00 W	428,980.07	737,908.47	0.00	3,856.47	
14,400.00	90.00	357.21	7,171.80	10,668.00	3,933.24 N	428.86 W	429,079.96	737,903.61	0.00	3,956.35	
14,500.00	90.00	357.21	7,171.80	10,668.00	4,033.13 N	433.73 W	429,179.84	737,898.74	0.00	4,056.23	
14,600.00	90.00	357.21	7,171.80	10,668.00	4,133.01 N	438.59 W	429,279.72	737,893.88	0.00	4,156.10	
14,700.00	90.00	357.21	7,171.80	10,668.00	4,232.89 N	443.46 W	429,379.60	737,889.01	0.00	4,255.98	
14,800.00	90.00	357.21	7,171.80	10,668.00	4,332.77 N	448.32 W	429,479.48	737,884.15	0.00	4,355.85	
14,900.00	90.00	357.21	7,171.80	10,668.00	4,432.65 N	453.19 W	429,579.36	737,879.28	0.00	4,455.73	
15,000.00	90.00	357.21	7,171.80	10,668.00	4,532.53 N	458.05 W	429,679.24	737,874.42	0.00	4,555.61	

Plan Report for Chincoteague 32 ST Com 3H - Plan#1 102814 RevA0

Measured Depth (ft)	Inclination (°)	Grid Azimuth (°)	TVD below System (ft)	Vertical Depth (ft)	Local Coordinates Northing (ft)	Easting (ft)	Map Coordinates Northing (usft)	Easting (usft)	Dogleg Rate (°/100usft)	Vertical Section (ft)	Comments
15,100.00	90.00	357.21	7,171.80	10,668.00	4,632.42 N	462.91 W	429,779.13	737,869.56	0.00	4,655.48	
15,200.00	90.00	357.21	7,171.80	10,668.00	4,732.30 N	467.78 W	429,879.01	737,864.69	0.00	4,755.36	
15,213.81	90.00	357.21	7,171.80	10,668.00	4,746.09 N	468.45 W	429,892.80	737,864.02	0.00	4,769.15	TD at 15213.81

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	+E/-W (ft)	Comment
10,063.52	10,063.52	0.00	0.00	Start Build 10.00
10,663.52	10,559.72	240.83	-155.15	Start DLS 10.00 TFO 49.11
11,077.63	10,668.00	614.81	-267.25	Start 4136.18 hold at 11077.63 MD
15,213.81	10,668.00	4,746.09	-468.45	TD at 15213.81

Vertical Section Information

Angle Type	Target	Azimuth (°)	Origin Type	Origin +N/-S (ft)	+E/-W (ft)	Start TVD (ft)
TD	No Target (Freehand)	354.36	Slot	0.00	0.00	0.00

Survey tool program

From (ft)	To (ft)	Survey/Plan	Survey Tool
0.00	15,213.51	Plan#1 102814 RevA0	MWD

Plan Report for Chincoteague 32 ST Com 3H - Plan#1 102814 RevA0

Formation Details

Measured Depth (ft)	Vertical Depth (ft)	TVDSS (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
746.20	746.20	-2,750.00	Rustler		0.00	
1,046.20	1,046.20	-2,450.00	Top of Salt		0.00	
4,386.20	4,386.20	890.00	Base of Salt		0.00	
4,651.20	4,651.20	1,155.00	Bell Canyon		0.00	
5,566.20	5,566.20	2,070.00	Cherry Canyon		0.00	
6,921.20	6,921.20	3,425.00	Brushy Canyon		0.00	
8,566.20	8,566.20	5,070.00	1st BSPG Lime		0.00	
9,616.20	9,616.20	6,120.00	1st BSPG Sand		0.00	
9,846.20	9,846.20	6,350.00	2nd BSPG Lime		0.00	
10,197.42	10,196.20	6,700.00	2nd BSPG Sand		0.00	

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Chincoteague 32 ST Com 3H BHL ()	0.00	0.00	10,668.00	4,746.09	-468.45	429,892.80	737,864.02	32° 10' 48.929 N	103° 41' 53.204 W
- plan hits target center									
- Point									

Directional Difficulty Index

Average Dogleg over Survey:	0.67 °/100usft	Maximum Dogleg over Survey:	10.00 °/100usft at 10,663.52 ft
Net Tortousity applicable to Plans:	0.67 °/100usft	Directional Difficulty Index:	6.074

Audit Info

SAP=346244

North Reference Sheet for Sec 32 T. 24 S., R.32E. - Chincoteague 32 ST Com 3H - Wellbore #1

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

Vertical Depths are relative to Well @ 3496.20ft (HP212). Northing and Easting are relative to Chincoteague 32 ST Com 3H

Coordinate System is US State Plane 1983, New Mexico Eastern Zone using datum North American Datum 1983, ellipsoid GRS 1980

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: 541,337.50usft, False Northing: 0.00usft, Scale Reduction: 0.99995354

Grid Coordinates of Well: 425,146.72 usft N, 738,332.47 usft E

Geographical Coordinates of Well: 32° 10' 01.94" N, 103° 41' 48.08" W

Grid Convergence at Surface is: 0.34°

Based upon Minimum Curvature type calculations, at a Measured Depth of 15,213.81ft
the Bottom Hole Displacement is 4,769.15ft in the Direction of 354.36° (Grid).

Magnetic Convergence at surface is: -7.05° (28 October 2014, , BGGM2014)

