

5D Plan Report

NM OIL CONSERVATION
ARTESIA DISTRICT

OCT 21 2019

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**5D Plan Report****Apache Corporation**

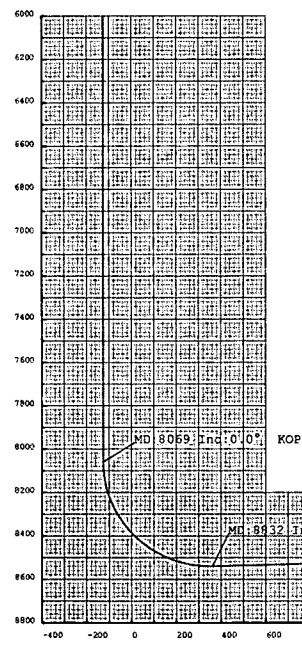
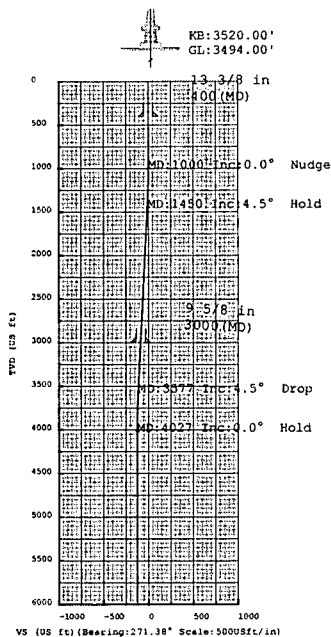
Field Name: *Apache NM (Nad 83 NMEZ)*
Site Name: *Palmillo 10 State Com Pad (234,335,336)*
Well Name: *Palmillo 10 State Com 335H*
File number: *13930835*
Plan: *P1:V2 (Current plan)*

4 October 2019



Apache

Palmillo 10 State Com 335H Eddy Co, New Mexico



Plan Data for Palmillo 10 State Com 335H										
Plan Point Information:										
DogLeg Severity Unit: +/-0.00ft					Position offsets from Slot centre					
MD	Inc	Az	TVD	+N/-S	+E/-W	Northing	Easting	VSec	DLS	Comments
(USft)	(%)	(%)	(USft)	(USft)	(USft)	(USft)	(USft)	(USft)	(USft)	(DLSU)
0.00	0.00	0.00	0.00	-0.00	0.00	611201.10	595797.70	0.00	0.00	
1000.00	0.00	0.00	1000.00	-0.00	0.00	611201.10	595797.70	0.00	0.00	Nudge
1450.25	4.50	39.99	1449.79	13.55	11.36	611214.65	595809.06	-11.03	1.00	Hold
3576.74	4.50	39.99	3569.71	141.45	118.64	611342.55	595916.34	-115.20	0.00	Drop
4026.99	0.00	0.00	4019.50	155.00	130.00	611356.10	595927.70	-126.23	1.00	Hold
8069.29	0.00	0.00	8061.80	155.00	130.00	611356.10	595927.70	-126.23	0.00	KOP
8832.03	91.53	269.59	8539.09	151.52	-360.20	611352.62	595437.50	363.74	12.00	LP
11570.66	91.53	269.59	8466.00	132.11	-3097.72	611333.21	592699.98	3100.00	0.00	T/Build
11573.15	91.58	269.59	8465.93	132.09	-3100.27	611333.19	592697.43	3102.55	2.00	Hold
13419.73	91.58	269.59	8415.00	119.00	-4946.10	611320.10	590851.60	4947.53	0.00	PBHL 335H

Plan Data for Palmillo 10 State Com 335H

Casing Point Information:									
Name	MD	TVD	+N/-S	+E/-W	Northing	Easting			
(USft)	(USft)	(USft)	(USft)	(USft)	(USft)	(USft)			
13 3/8 in	400.00	400.00	-0.00	0.00	611201.10	595797.70			
9 5/8 in	3000.00	2994.75	106.76	89.54	611307.86	595887.24			

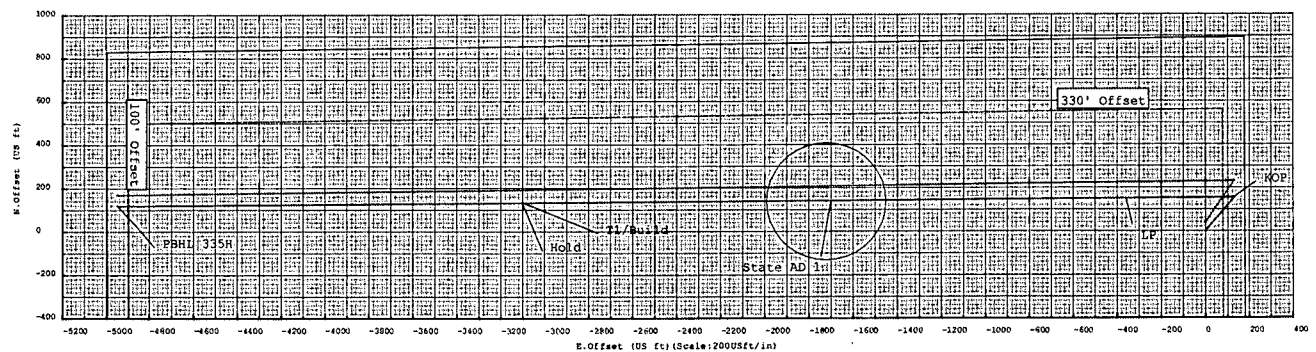
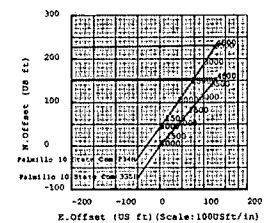
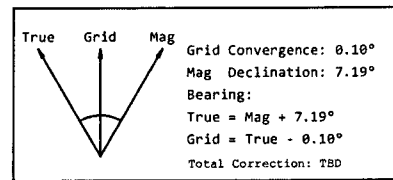
Formation Point Information:									
Name	TVD	Elevation	MD						
(USft)	(USft)	(USft)	(USft)						
TARGET	8548.00	-5028.00	-1.00						
LANDING BASE	8563.00	-5043.00	-1.00						
WOLFCAMP	8710.00	-5190.00	-1.00						
TAN SILL	650.00	2870.00	650.00						
YATES	820.00	2700.00	820.00						
SEVEN RIVERS	1180.00	2340.00	1180.00						
QUEEN	1680.00	1840.00	1681.18						
GRAYBURG	2035.00	1485.00	2037.27						
SAN ANDRES	2490.00	1030.00	2493.68						
BONE SPRING	3650.00	-130.00	3657.23						
1ST BONE SPRING SAND	6330.00	-2810.00	6337.49						
2ND BONE SPRING CARB	6450.00	-2930.00	6457.49						
2ND BONE SPRING SAND	7285.00	-3765.00	7292.49						
3RD BONE SPRING GARB	7480.00	-3960.00	7487.49						
3RD BONE SPRING SAND	8370.00	-4850.00	8404.31						
LANDING TOP	8533.00	-5013.00	8741.86						



Weatherford

Plan Data for Palmillo 10 State Com 335H

Target Set Information:									
Name: Palm10SC335H									
Position offsets from Slot centre									
Name	TVD	Elevation	+N/-S	+E/-W	Northing	Easting			
(USft)	(USft)	(USft)	(USft)	(USft)	(USft)	(USft)			
NP 8061.80	-4541.80	155.00	130.00	611356.10	595927.70				
T1 8466.00	-4946.00	132.11	-3097.72	611333.21	592699.98				
LTP-335H	0.00	3520.00	119.50	-4896.20	611320.60	590901.50			
PBHL 335H	8415.00	-4895.00	119.00	-4946.10	611320.10	590851.60			



Palmillo 10 State Com 335H	_____
State AD 1 Offset	_____
Palmillo 10 State Com 234H	_____

Drawing By: Ty Hardin Date: 11 September 2019
Office Name: Drilling Services - Houston
Address: 12181 Cullen Road
Houston, TX 77066
Phone: +1.713.882.8256



Palmillo 10 State Com 335H

Field Name: Apache.NM (Nad 83 NMEZ)	Map Units: US ft Vertical Reference Datum (VRD): Mean Sea Level Projected Coordinate System: NAD83 / New Mexico East (ftUS) Comment:	Company Name: Apache Corporation
Site: Palmillo 10 State Com Pad (234,335,336)	Units: US ft Position: North Reference: Grid Northings: 611241.00 US ft Easting: 595797.60 US ft Elevation above MSL: 3492.00 US ft Comment: Eddy Co., New Mexico	Convergence Angle: 0.10 Latitude: 32.680221093 Longitude: -104.156329726
Slot: Palmillo 10 State Com 335H	Position (Relative to Site Centre) +N/-S: -39.90 US ft +E/-W: 0.10 US ft Slot TVD Reference: Ground Elevation Elevation above MSL: 3494.00 US ft Comment:	Northings: 611201.10 US ft Easting: 595797.70 US ft Latitude: 32.680111420 Longitude: -104.156329617
Well: Palmillo 10 State Com 335H	Type: Main well File Number: 13930835 Comment: Closure Distance: 4947.53 US ft Vertical Section: Position of Origin (Relative to Slot centre) +N/-S: -0.00 US ft Magnetic Parameters: Model: bggm2019 Field Strength: 47870.9 nT	UWI: Plan: P1:V2 (Current plan) Closure Azimuth: 271.38° Az: 271.38° Declination: 7.19° Dip: 60.40° Date: 25/Dec/2019

Drill floor: Plan: P1:V2 (Current plan)
Rig Height (Drill Floor): 26.00 US ft **Elevation above MSL:** 3520.00 US ft **Inclination:** 0.00° **Azimuth:** 0.00°

Target set: Palm10SC335H Comment:								
Target Name:	Shape:	TVD (US ft)	N. Offset (US ft)	E. Offset (US ft)	Northing (US ft)	Easting (US ft)	C. Pt. Distance (US ft)	Comment
NP	Point	8061.80	155.00	130.00	611356.10	595927.70	0.00	
T1	Point	8466.00	132.11	-3097.72	611333.21	592699.98	0.00	
LTP-335H	Point	0.00	119.50	-4896.20	611320.60	590901.50	4897.66	
PBHL 335H	Point	8415.00	119.00	-4946.10	611320.10	590851.60	0.00	

Tie Point:
MD: 0.00 US ft **Inclination:** 0.00° **Azimuth:** 0.00° **TVD:** 0.00 US ft **North Offset:** 0.00 US ft **East Offset:** 0.00 US ft

5D Plan Report

Survey Tool Ranges:			
Name	Start MD(USft)	End MD(USft)	Source Survey
MWD	0.00	1000.00	
MWD	1000.00	13419.73	Default Tool

Casing Points: (Relative to Slot centre)(TVD relative to Drill Floor)								
Name	MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)	Easting (US ft)
13 3/8 in	400.00	0.00	0.00	400.00	-0.00	0.00	611201.10	595797.70
9 5/8 in	3000.00	4.50	39.99	2994.75	106.76	89.54	611307.86	595887.24

Wellpath created using minimum curvature.

Salient Points: (Relative to Slot centre)(TVD relative to Drill Floor)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)	Easting (US ft)	DLS (°/100US ft)	Comment
0.00	0.00	0.00	0.00	0.00	-0.00	0.00	611201.10	595797.70	0.00	
1000.00	0.00	0.00	1000.00	0.00	-0.00	0.00	611201.10	595797.70	0.00	Nudge
1450.25	4.50	39.99	1449.79	-11.03	13.55	11.36	611214.65	595809.06	1.00	Hold
3576.74	4.50	39.99	3569.71	-115.20	141.45	118.64	611342.55	595916.34	0.00	Drop
4026.99	0.00	0.00	4019.50	-126.23	155.00	130.00	611356.10	595927.70	1.00	Hold
8069.29	0.00	0.00	8061.80	-126.23	155.00	130.00	611356.10	595927.70	0.00	KOP
8832.03	91.53	269.59	8539.09	363.74	151.52	-360.20	611352.62	595437.50	12.00	LP
11570.60	91.53	269.59	8466.00	3100.00	132.11	-3097.72	611333.21	592699.98	0.00	T1/Build
11573.15	91.58	269.59	8465.93	3102.55	132.09	-3100.27	611333.19	592697.43	2.00	Hold
13419.73	91.58	269.59	8415.00	4947.53	119.00	-4946.10	611320.10	590851.60	0.00	PBHL 335H

Interpolated Points: (Relative to Slot centre)(TVD relative to Drill Floor)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)	Easting (US ft)	DLS (°/100US ft)	Comment
0.00	0.00	0.00	0.00	0.00	-0.00	0.00	611201.10	595797.70	0.00	
100.00	0.00	0.00	100.00	0.00	-0.00	0.00	611201.10	595797.70	0.00	
200.00	0.00	0.00	200.00	0.00	-0.00	0.00	611201.10	595797.70	0.00	
300.00	0.00	0.00	300.00	0.00	-0.00	0.00	611201.10	595797.70	0.00	
400.00	0.00	0.00	400.00	0.00	-0.00	0.00	611201.10	595797.70	0.00	13 3/8 in
500.00	0.00	0.00	500.00	0.00	-0.00	0.00	611201.10	595797.70	0.00	
600.00	0.00	0.00	600.00	0.00	-0.00	0.00	611201.10	595797.70	0.00	
700.00	0.00	0.00	700.00	0.00	-0.00	0.00	611201.10	595797.70	0.00	
800.00	0.00	0.00	800.00	0.00	-0.00	0.00	611201.10	595797.70	0.00	
900.00	0.00	0.00	900.00	0.00	-0.00	0.00	611201.10	595797.70	0.00	
1000.00	0.00	0.00	1000.00	0.00	-0.00	0.00	611201.10	595797.70	0.00	Nudge
1100.00	1.00	39.99	1099.99	-0.54	0.67	0.56	611201.77	595798.26	1.00	
1200.00	2.00	39.99	1199.96	-2.18	2.67	2.24	611203.77	595799.94	1.00	
1300.00	3.00	39.99	1299.86	-4.90	6.02	5.05	611207.12	595802.75	1.00	
1400.00	4.00	39.99	1399.68	-8.71	10.69	8.97	611211.79	595806.67	1.00	
1450.25	4.50	39.99	1449.79	-11.03	13.55	11.36	611214.65	595809.06	1.00	Hold
1500.00	4.50	39.99	1499.38	-13.47	16.54	13.87	611217.64	595811.57	0.00	
1600.00	4.50	39.99	1599.07	-18.37	22.55	18.92	611223.65	595816.62	0.00	
1700.00	4.50	39.99	1698.77	-23.27	28.57	23.96	611229.67	595821.66	0.00	
1800.00	4.50	39.99	1798.46	-28.17	34.58	29.01	611235.68	595826.71	0.00	
1900.00	4.50	39.99	1898.15	-33.06	40.60	34.05	611241.70	595831.75	0.00	
2000.00	4.50	39.99	1997.84	-37.96	46.61	39.10	611247.71	595836.80	0.00	
2100.00	4.50	39.99	2097.53	-42.86	52.63	44.14	611253.73	595841.84	0.00	
2200.00	4.50	39.99	2197.22	-47.76	58.64	49.19	611259.74	595846.89	0.00	
2300.00	4.50	39.99	2296.91	-52.66	64.66	54.23	611265.76	595851.93	0.00	
2400.00	4.50	39.99	2396.61	-57.56	70.67	59.27	611271.77	595856.97	0.00	
2500.00	4.50	39.99	2496.30	-62.45	76.69	64.32	611277.79	595862.02	0.00	
2600.00	4.50	39.99	2595.99	-67.35	82.70	69.36	611283.80	595867.06	0.00	
2700.00	4.50	39.99	2695.68	-72.25	88.72	74.41	611289.82	595872.11	0.00	
2800.00	4.50	39.99	2795.37	-77.15	94.73	79.45	611295.83	595877.15	0.00	
2900.00	4.50	39.99	2895.06	-82.05	100.75	84.50	611301.85	595882.20	0.00	
3000.00	4.50	39.99	2994.75	-86.95	106.76	89.54	611307.86	595887.24	0.00	9 5/8 in
3100.00	4.50	39.99	3094.45	-91.84	112.78	94.59	611313.88	595892.29	0.00	

5D Plan Report

Interpolated Points: (Relative to Slot centre)(TVD relative to Drill Floor)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N. Offset (US ft)	E. Offset (US ft)	Northing (US ft)	Easting (US ft)	DLS (°/100US ft)	Comment
3200.00	4.50	39.99	3194.14	-96.74	118.79	99.63	611319.89	595897.33	0.00	
3300.00	4.50	39.99	3293.83	-101.64	124.81	104.68	611325.91	595902.38	0.00	
3400.00	4.50	39.99	3393.52	-106.54	130.82	109.72	611331.92	595907.42	0.00	
3500.00	4.50	39.99	3493.21	-111.44	136.84	114.77	611337.94	595912.47	0.00	
3576.74	4.50	39.99	3569.71	-115.20	141.45	118.64	611342.55	595916.34	0.00	Drop
3600.00	4.27	39.99	3592.91	-116.31	142.82	119.78	611343.92	595917.48	1.00	
3700.00	3.27	39.99	3692.69	-120.41	147.85	124.01	611348.95	595921.71	1.00	
3800.00	2.27	39.99	3792.57	-123.42	151.56	127.11	611352.66	595924.81	1.00	
3900.00	1.27	39.99	3892.52	-125.35	153.92	129.10	611355.02	595926.80	1.00	
4000.00	0.27	39.99	3992.51	-126.19	154.95	129.96	611356.05	595927.66	1.00	
4026.99	0.00	0.00	4019.50	-126.23	155.00	130.00	611356.10	595927.70	1.00	Hold
4100.00	0.00	0.00	4092.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
4200.00	0.00	0.00	4192.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
4300.00	0.00	0.00	4292.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
4400.00	0.00	0.00	4392.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
4500.00	0.00	0.00	4492.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
4600.00	0.00	0.00	4592.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
4700.00	0.00	0.00	4692.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
4800.00	0.00	0.00	4792.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
4900.00	0.00	0.00	4892.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
5000.00	0.00	0.00	4992.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
5100.00	0.00	0.00	5092.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
5200.00	0.00	0.00	5192.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
5300.00	0.00	0.00	5292.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
5400.00	0.00	0.00	5392.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
5500.00	0.00	0.00	5492.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
5600.00	0.00	0.00	5592.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
5700.00	0.00	0.00	5692.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
5800.00	0.00	0.00	5792.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
5900.00	0.00	0.00	5892.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
6000.00	0.00	0.00	5992.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
6100.00	0.00	0.00	6092.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
6200.00	0.00	0.00	6192.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
6300.00	0.00	0.00	6292.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
6400.00	0.00	0.00	6392.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
6500.00	0.00	0.00	6492.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
6600.00	0.00	0.00	6592.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
6700.00	0.00	0.00	6692.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
6800.00	0.00	0.00	6792.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
6900.00	0.00	0.00	6892.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
7000.00	0.00	0.00	6992.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
7100.00	0.00	0.00	7092.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
7200.00	0.00	0.00	7192.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
7300.00	0.00	0.00	7292.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
7400.00	0.00	0.00	7392.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
7500.00	0.00	0.00	7492.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
7600.00	0.00	0.00	7592.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
7700.00	0.00	0.00	7692.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
7800.00	0.00	0.00	7792.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
7900.00	0.00	0.00	7892.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
8000.00	0.00	0.00	7992.51	-126.23	155.00	130.00	611356.10	595927.70	0.00	
8069.29	0.00	0.00	8061.80	-126.23	155.00	130.00	611356.10	595927.70	0.00	KOP
8100.00	3.69	269.59	8092.49	-125.24	154.99	129.01	611356.09	595926.71	12.00	
8200.00	15.69	269.59	8190.88	-108.46	154.87	112.22	611355.97	595909.92	12.00	
8300.00	27.69	269.59	8283.64	-71.59	154.61	75.34	611355.71	595873.04	12.00	
8400.00	39.69	269.59	8366.69	-16.26	154.22	19.98	611355.32	595817.68	12.00	
8500.00	51.69	269.59	8436.43	55.13	153.71	-51.44	611354.81	595746.26	12.00	
8600.00	63.69	269.59	8489.79	139.45	153.12	-135.80	611354.22	595661.90	12.00	
8700.00	75.69	269.59	8524.44	233.01	152.45	-229.40	611353.55	595568.30	12.00	

5D Plan Report

Interpolated Points: (Relative to Slot centre)(TVD relative to Drill Floor)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)	Easting (US ft)	DLS (°/100US ft)	Comment
8800.00	87.69	269.59	8538.88	331.73	151.75	-328.17	611352.85	595469.53	12.00	
8832.03	91.53	269.59	8539.09	363.74	151.52	-360.20	611352.62	595437.50	12.00	LP
8900.00	91.53	269.59	8537.28	431.65	151.04	-428.14	611352.14	595369.56	0.00	
9000.00	91.53	269.59	8534.61	531.57	150.33	-528.10	611351.43	595269.60	0.00	
9100.00	91.53	269.59	8531.94	631.48	149.62	-628.06	611350.72	595169.64	0.00	
9200.00	91.53	269.59	8529.27	731.40	148.92	-728.02	611350.02	595069.68	0.00	
9300.00	91.53	269.59	8526.60	831.31	148.21	-827.98	611349.31	594969.72	0.00	
9400.00	91.53	269.59	8523.94	931.23	147.50	-927.95	611348.60	594869.75	0.00	
9500.00	91.53	269.59	8521.27	1031.14	146.79	-1027.91	611347.89	594769.79	0.00	
9600.00	91.53	269.59	8518.60	1131.06	146.08	-1127.87	611347.18	594669.83	0.00	
9700.00	91.53	269.59	8515.93	1230.98	145.37	-1227.83	611346.47	594569.87	0.00	
9800.00	91.53	269.59	8513.26	1330.89	144.66	-1327.79	611345.76	594469.91	0.00	
9900.00	91.53	269.59	8510.59	1430.81	143.95	-1427.75	611345.05	594369.95	0.00	
10000.00	91.53	269.59	8507.92	1530.72	143.24	-1527.72	611344.34	594269.98	0.00	
10100.00	91.53	269.59	8505.25	1630.64	142.54	-1627.68	611343.64	594170.02	0.00	
10200.00	91.53	269.59	8502.58	1730.55	141.83	-1727.64	611342.93	594070.06	0.00	
10300.00	91.53	269.59	8499.91	1830.47	141.12	-1827.60	611342.22	593970.10	0.00	
10400.00	91.53	269.59	8497.24	1930.39	140.41	-1927.56	611341.51	593870.14	0.00	
10500.00	91.53	269.59	8494.58	2030.30	139.70	-2027.53	611340.80	593770.17	0.00	
10600.00	91.53	269.59	8491.91	2130.22	138.99	-2127.49	611340.09	593670.21	0.00	
10700.00	91.53	269.59	8489.24	2230.13	138.28	-2227.45	611339.38	593570.25	0.00	
10800.00	91.53	269.59	8486.57	2330.05	137.57	-2327.41	611338.67	593470.29	0.00	
10900.00	91.53	269.59	8483.90	2429.97	136.86	-2427.37	611337.96	593370.33	0.00	
11000.00	91.53	269.59	8481.23	2529.88	136.15	-2527.33	611337.25	593270.37	0.00	
11100.00	91.53	269.59	8478.56	2629.80	135.45	-2627.30	611336.55	593170.40	0.00	
11200.00	91.53	269.59	8475.89	2729.71	134.74	-2727.26	611335.84	593070.44	0.00	
11300.00	91.53	269.59	8473.22	2829.63	134.03	-2827.22	611335.13	592970.48	0.00	
11400.00	91.53	269.59	8470.55	2929.54	133.32	-2927.18	611334.42	592870.52	0.00	
11500.00	91.53	269.59	8467.88	3029.46	132.61	-3027.14	611333.71	592770.56	0.00	
11570.60	91.53	269.59	8466.00	3100.00	132.11	-3097.72	611333.21	592699.98	0.00	T1/Build
11573.15	91.58	269.59	8465.93	3102.55	132.09	-3100.27	611333.19	592697.43	2.00	Hold
11600.00	91.58	269.59	8465.19	3129.38	131.90	-3127.11	611333.00	592670.59	0.00	
11700.00	91.58	269.59	8462.43	3229.29	131.19	-3227.06	611332.29	592570.64	0.00	
11800.00	91.58	269.59	8459.67	3329.20	130.48	-3327.02	611331.58	592470.68	0.00	
11900.00	91.58	269.59	8456.92	3429.12	129.77	-3426.98	611330.87	592370.72	0.00	
12000.00	91.58	269.59	8454.16	3529.03	129.07	-3526.94	611330.17	592270.76	0.00	
12100.00	91.58	269.59	8451.40	3628.94	128.36	-3626.90	611329.46	592170.80	0.00	
12200.00	91.58	269.59	8448.64	3728.86	127.65	-3726.86	611328.75	592070.84	0.00	
12300.00	91.58	269.59	8445.88	3828.77	126.94	-3826.82	611328.04	591970.88	0.00	
12400.00	91.58	269.59	8443.13	3928.68	126.23	-3926.78	611327.33	591870.92	0.00	
12500.00	91.58	269.59	8440.37	4028.60	125.52	-4026.74	611326.62	591770.96	0.00	
12600.00	91.58	269.59	8437.61	4128.51	124.81	-4126.70	611325.91	591671.00	0.00	
12700.00	91.58	269.59	8434.85	4228.42	124.10	-4226.66	611325.20	591571.04	0.00	
12800.00	91.58	269.59	8432.09	4328.34	123.39	-4326.62	611324.49	591471.08	0.00	
12900.00	91.58	269.59	8429.33	4428.25	122.68	-4426.58	611323.78	591371.12	0.00	
13000.00	91.58	269.59	8426.58	4528.16	121.98	-4526.54	611323.08	591271.16	0.00	
13100.00	91.58	269.59	8423.82	4628.08	121.27	-4626.50	611322.37	591171.20	0.00	
13200.00	91.58	269.59	8421.06	4727.99	120.56	-4726.46	611321.66	591071.24	0.00	
13300.00	91.58	269.59	8418.30	4827.90	119.85	-4826.42	611320.95	590971.28	0.00	
13400.00	91.58	269.59	8415.54	4927.82	119.14	-4926.38	611320.24	590871.32	0.00	
13419.73	91.58	269.59	8415.00	4947.53	119.00	-4946.10	611320.10	590851.60	0.00	PBHL 335H

Formation Points: (Relative to Slot centre)(TVD relative to Drill Floor)										
Name	MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	TVD (MSL) (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)	Easting (US ft)	Comment
TARGET	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
LANDING BASE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
WOLFCAMP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

5D Plan Report

Formation Points: (Relative to Slot centre)(TVD relative to Drill Floor)										
Name	MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	TVD (MSL) (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)	Easting (US ft)	Comment
TAN SILL	650.00	0.00	0.00	650.00	-2870.00	-0.00	0.00	611201.10	595797.70	
YATES	820.00	0.00	0.00	820.00	-2700.00	-0.00	0.00	611201.10	595797.70	
SEVEN RIVERS	1180.03	1.80	39.99	1180.00	-2340.00	2.17	1.82	611203.27	595799.52	
QUEEN	1681.18	4.50	39.99	1680.00	-1840.00	27.44	23.01	611228.54	595820.71	
GRAYBURG	2037.27	4.50	39.99	2035.00	-1485.00	48.86	40.98	611249.96	595838.68	
SAN ANDRES	2493.68	4.50	39.99	2490.00	-1030.00	76.31	64.00	611277.41	595861.70	
BONE SPRING	3657.23	3.70	39.99	3650.00	130.00	145.86	122.34	611346.96	595920.04	
1ST BONE SPRING SAND	6337.49	0.00	0.00	6330.00	2810.00	155.00	130.00	611356.10	595927.70	
2ND BONE SPRING CARB	6457.49	0.00	0.00	6450.00	2930.00	155.00	130.00	611356.10	595927.70	
2ND BONESPRING SAND	7292.49	0.00	0.00	7285.00	3765.00	155.00	130.00	611356.10	595927.70	
3RD BONE SPRING GARB	7487.49	0.00	0.00	7480.00	3960.00	155.00	130.00	611356.10	595927.70	
3RD BONE SPRING SAND	8404.31	40.20	269.59	8370.00	4850.00	154.20	17.21	611355.30	595814.91	
LANDING TOP	8741.86	80.71	269.59	8533.00	5013.00	152.16	-270.36	611353.26	595527.34	