

5D Plan Report

NM OIL CONSERVATION
ARTESIA DISTRICT

OCT 21 2019

RECEIVED

The Apache logo is rendered in a stylized, italicized font with a double outline and a textured, stippled fill.**5D Plan Report**

Apache Corporation

Field Name: *Apache NM (Nad 83 NMEZ)*
Site Name: *Palmillo 10 State Com Pad (332,231,331)*
Well Name: *Palmillo 10 State Com 332H*
File number: *13930967*
Plan: *P1:V3 (Current plan)*

3 October 2019

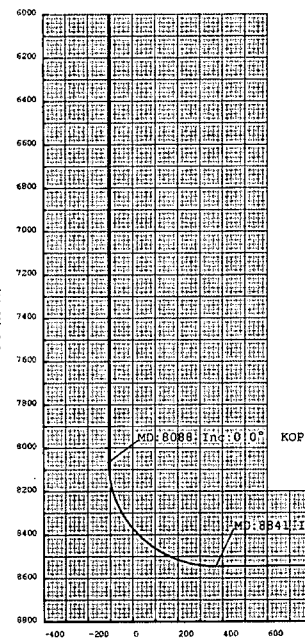
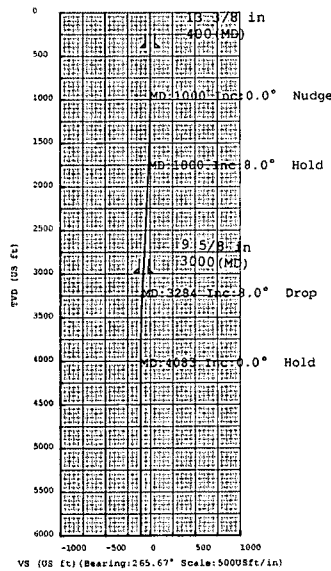




Palmillo 10 State Com 332H Eddy Co, New Mexic



KB:3514.00'
GL:3488.00'



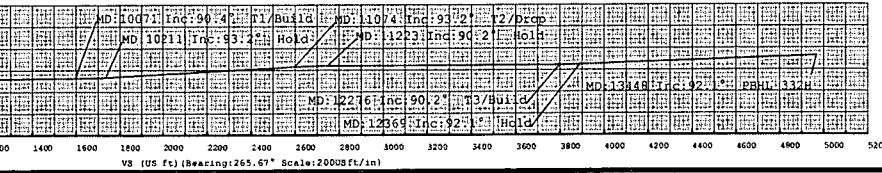
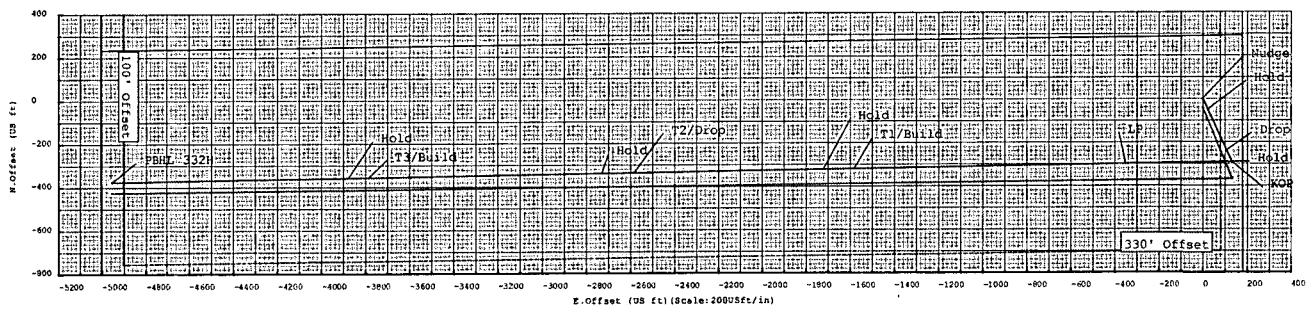
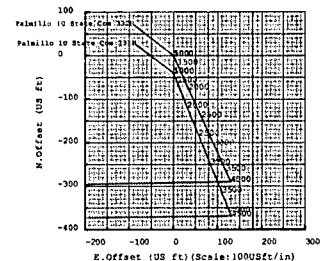
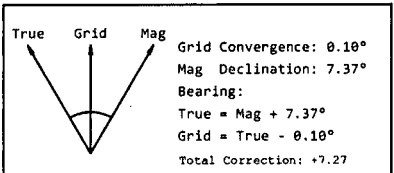
Plan Data for Palmillo 10 State Com 332H													
Plan Point Information:													
MD	Inc	Az	TVD	+N/-S	+E/-W	Northing	Easting	VSec	DLS	Comments			
(USft)	(°)	(°)	(USft)	(USft)	(USft)	(USft)	(USft)	(USft)	(DLSU)				
0.00	0.00	0.00	-0.00	-0.00	-0.00	607843.00	595809.80	0.00	0.00				
1000.00	0.00	0.00	1000.00	-0.00	-0.00	607843.00	595809.80	0.00	0.00	Nudge			
1799.52	8.00	155.85	1796.93	-50.82	-22.78	607792.18	595832.58	-18.88	1.00	Hold			
3283.59	8.00	155.85	3266.57	-239.18	-107.22	607603.82	595917.02	-88.85	0.00	Drop			
4083.11	0.00	0.00	4063.50	-290.00	130.00	607553.00	595939.80	-107.73	1.00	Hold			
8087.81	0.00	0.00	8068.20	-290.00	130.00	607553.00	595939.80	-107.73	0.00	KOP			
8841.10	90.40	269.04	8545.65	-298.05	-350.69	607544.95	595459.11	372.19	12.00	LP			
10071.06	90.40	269.04	8537.17	-318.63	-1580.45	607524.37	594229.35	1600.00	0.00	T1/Build			
10210.78	93.19	269.04	8532.80	-320.97	-1720.06	607522.03	594089.74	1739.39	2.00	Hold			
11074.22	93.19	269.04	8484.76	-335.39	-2582.05	607507.61	593227.75	2600.00	0.00	T2/Drop			
11223.28	90.21	269.04	8480.34	-337.88	-2731.00	607505.12	593078.80	2748.71	2.00	Hold			
12276.39	90.21	269.04	8476.51	-355.51	-3783.96	607487.49	592025.84	3800.00	0.00	T3/Build			
12369.44	92.07	269.04	8474.66	-357.07	-3876.97	607485.93	591932.83	3892.87	2.00	Hold			
13447.52	92.07	269.04	8435.73	-375.10	-4954.20	607467.90	590855.60	4968.38	0.00	PBHL 332H			

Plan Data for Palmillo 10 State Com 332H						
Casing Point Information:						
Position offsets from Slot centre						
Name	MD	TVD	+N/-S	+E/-W	Northing	Easting
	(USft)	(USft)	(USft)	(USft)	(USft)	(USft)
13 3/8 in	400.00	400.00	-0.00	-0.00	607843.00	595809.80
9 5/8 in	3000.00	2985.74	-203.19	91.08	607639.81	595900.88
Formation Point Information:						
Name	TVD	Elevation	MD			
	(USft)	(USft)	(USft)			
WOLF CAMP	8764.00	-5250.00	-1.00			
TAN SILL	649.00	2865.00	649.00			
YATES	844.00	2670.00	844.00			
SEVEN RIVE RS	1219.00	2295.00	1219.05			
QUEEN	1689.00	1825.00	1690.67			
GRAYBURG	2034.00	1480.00	2038.92			
SAN ANDRES	2474.00	1040.00	2483.24			
BONE SPRING	3658.00	-144.00	3677.27			
1ST BONE SPRING SAND	6354.00	-2840.00	6373.61			
2ND BONE SPRING CARB	6514.00	-3000.00	6533.61			
2ND BONE SPRING SAND	7234.00	-3720.00	7253.61			
3RD BONE SPRING GARB	7474.00	-3960.00	7493.61			
3RD BONE SPRING SAND	8364.00	-4850.00	8406.82			
LANDING TOP	8499.00	-4985.00	8624.96			
TARGET	8514.00	-5000.00	8662.94			
LANDING BASE	8529.00	-5015.00	8711.29			



Weatherford

Plan Data for Palmillo 10 State Com 332H													
Target Set Information:													
Name: Palm10SC332H													
Position offsets from Slot centre													
Name	TVD	Elevation	+N/-S	+E/-W	Northing	Easting							
	(USft)	(USft)	(USft)	(USft)	(USft)	(USft)							
NP 8068.20	-4554.20	-290.00	130.00	607553.00	595939.80								
T1 8537.17	-5023.17	-318.63	-1580.45	607524.37	594229.35								
T2 8484.76	-4970.76	-335.39	-2582.05	607507.61	593227.75								
T3 8476.51	-4962.51	-355.51	-3783.96	607487.49	592025.84								
LTP 332H 8437.54	-4923.54	-374.60	-4904.20	607468.40	590905.60								
PBHL 332H 8435.73	-4921.73	-375.10	-4954.20	607467.90	590855.60								



Palmillo 10 State Com 332H
Palmillo 10 State Com 231H

Drawing By: Ty Hardin Date: 11 September 2019
Office Name: Drilling Services - Houston
Address: 12101 Cutten Road
Houston, TX 77066
Phone: +1.713.882.8256



Palmillo 10 State Com 332H

Field Name: Apache NM (Nad 83 NMEZ)	Map Units: US ft		Company Name: Apache Corporation	
	Vertical Reference Datum (VRD): Mean Sea Level			
	Projected Coordinate System: NAD83 / New Mexico East (ftUS)			
	Comment:			
Site: Palmillo 10 State Com Pad (332,231,331)	Units: US ft	North Reference: Grid	Convergence Angle: 0.10	
	Position:	Northing: 607843.00 US ft	Latitude: 32.670880967	
		Easting: 595809.80 US ft	Longitude: -104.156308496	
	Elevation above MSL: 3488.00 US ft			
Comment: Eddy Co., New Mexico				
Slot: Palmillo 10 State Com 332H	Position (Relative to Site Centre)			
	+N/-S: 0.00 US ft	Northing: 607843.00 US ft	Latitude: 32.670880967	
	+E/-W: 0.00 US ft	Easting: 595809.80 US ft	Longitude: -104.156308496	
	Slot TVD Reference: Ground Elevation			
Elevation above MSL: 3488.00 US ft				
Comment:				
Well: Palmillo 10 State Com 332H	Type: Main well	UWI:	Plan: P1:V3 (Current plan)	
	File Number: 13930967	Comment:		
	Closure Distance: 4968.38 US ft	Closure Azimuth: 265.67°		
	Vertical Section: Position of Origin (Relative to Slot centre)			
	+N/-S: 0.00 US ft	+E/-W: 0.00 US ft	Az: 265.67°	
Magnetic Parameters:				
Model: IFR	Field Strength: 47893.6 nT	Declination: 7.37°	Dip: 60.47°	Date: 28/Oct/2019

Drill floor: Plan: P1:V3 (Current plan)

Rig Height (Drill Floor): 26.00 US ft **Elevation above MSL:** 3514.00 US ft **Inclination:** 0.00° **Azimuth:** 0.00°

Target set: Palm10SC332H 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	8068.20	-290.00	130.00	607553.00	595939.80	0.00	
T1	Point	8537.17	-318.63	-1580.45	607524.37	594229.35	0.00	
T2	Point	8484.76	-335.39	-2582.05	607507.61	593227.75	0.00	
T3	Point	8476.51	-355.51	-3783.96	607487.49	592025.84	0.00	
LTP 332H	Point	8437.54	-374.60	-4904.20	607468.40	590905.60	0.34	
PBHL 332H	Point	8435.73	-375.10	-4954.20	607467.90	590855.60	0.00	

SD Plan Report

Tie Point:					
MD: 0.00USFt	Inclination: 0.00°	Azimuth: 0.00°	TVD: - 0.00USFt	North Offset: - 0.00USFt	East Offset: - 0.00USFt

Survey Tool Ranges: (Using Anticipated Survey Programme)

Name	Start MD(USFt)	End MD(USFt)	Source Survey
MWD + IFR	0.00	8089.00	ASP
MWD + IFR + Sag.Corr + MS	8089.00	13447.13	ASP
MWD	13447.13	13447.52	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	607843.00	595809.80
9 5/8 in	3000.00	8.00	155.85	2985.74	-203.19	91.08	607639.81	595900.88

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	607843.00	595809.80	0.00	
1000.00	0.00	0.00	1000.00	0.00	-0.00	-0.00	607843.00	595809.80	0.00	Nudge
1799.52	8.00	155.85	1796.93	-18.88	-50.82	22.78	607792.18	595832.58	1.00	Hold
3283.59	8.00	155.85	3266.57	-88.85	-239.18	107.22	607603.82	595917.02	0.00	Drop
4083.11	0.00	0.00	4063.50	-107.73	-290.00	130.00	607553.00	595939.80	1.00	Hold
8087.81	0.00	0.00	8068.20	-107.73	-290.00	130.00	607553.00	595939.80	0.00	KOP
8841.10	90.40	269.04	8545.65	372.19	-298.05	-350.69	607544.95	595459.11	12.00	LP
10071.06	90.40	269.04	8537.17	1600.00	-318.63	-1580.45	607524.37	594229.35	0.00	T1/Build
10210.78	93.19	269.04	8532.80	1739.39	-320.97	-1720.06	607522.03	594089.74	2.00	Hold
11074.22	93.19	269.04	8484.76	2600.00	-335.39	-2582.05	607507.61	593227.75	0.00	T2/Drop
11223.28	90.21	269.04	8480.34	2748.71	-337.88	-2731.00	607505.12	593078.80	2.00	Hold
12276.39	90.21	269.04	8476.51	3800.00	-355.51	-3783.96	607487.49	592025.84	0.00	T3/Build
12369.44	92.07	269.04	8474.66	3892.87	-357.07	-3876.97	607485.93	591932.83	2.00	Hold
13447.52	92.07	269.04	8435.73	4968.38	-375.10	-4954.20	607467.90	590855.60	0.00	PBHL 332H

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	607843.00	595809.80	0.00	
100.00	0.00	0.00	100.00	0.00	-0.00	-0.00	607843.00	595809.80	0.00	
200.00	0.00	0.00	200.00	0.00	-0.00	-0.00	607843.00	595809.80	0.00	
300.00	0.00	0.00	300.00	0.00	-0.00	-0.00	607843.00	595809.80	0.00	
400.00	0.00	0.00	400.00	0.00	-0.00	-0.00	607843.00	595809.80	0.00	13 3/8 in
500.00	0.00	0.00	500.00	0.00	-0.00	-0.00	607843.00	595809.80	0.00	
600.00	0.00	0.00	600.00	0.00	-0.00	-0.00	607843.00	595809.80	0.00	
700.00	0.00	0.00	700.00	0.00	-0.00	-0.00	607843.00	595809.80	0.00	
800.00	0.00	0.00	800.00	0.00	-0.00	-0.00	607843.00	595809.80	0.00	
900.00	0.00	0.00	900.00	0.00	-0.00	-0.00	607843.00	595809.80	0.00	
1000.00	0.00	0.00	1000.00	0.00	-0.00	-0.00	607843.00	595809.80	0.00	Nudge
1100.00	1.00	155.85	1099.99	-0.30	-0.80	0.36	607842.20	595810.16	1.00	
1200.00	2.00	155.85	1199.96	-1.18	-3.18	1.43	607839.82	595811.23	1.00	
1300.00	3.00	155.85	1299.86	-2.66	-7.17	3.21	607835.83	595813.01	1.00	
1400.00	4.00	155.85	1399.68	-4.73	-12.74	5.71	607830.26	595815.51	1.00	
1500.00	5.00	155.85	1499.37	-7.39	-19.90	8.92	607823.10	595818.72	1.00	
1600.00	6.00	155.85	1598.90	-10.64	-28.64	12.84	607814.36	595822.64	1.00	
1700.00	7.00	155.85	1698.26	-14.48	-38.97	17.47	607804.03	595827.27	1.00	
1799.52	8.00	155.85	1796.93	-18.88	-50.82	22.78	607792.18	595832.58	1.00	Hold
1800.00	8.00	155.85	1797.40	-18.90	-50.88	22.81	607792.12	595832.61	0.00	
1900.00	8.00	155.85	1896.43	-23.62	-63.57	28.50	607779.43	595838.30	0.00	
2000.00	8.00	155.85	1995.46	-28.33	-76.27	34.19	607766.73	595843.99	0.00	
2100.00	8.00	155.85	2094.49	-33.05	-88.96	39.88	607754.04	595849.68	0.00	
2200.00	8.00	155.85	2193.52	-37.76	-101.65	45.57	607741.35	595855.37	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
2300.00	8.00	155.85	2292.54	-42.48	-114.34	51.26	607728.66	595861.06	0.00	
2400.00	8.00	155.85	2391.57	-47.19	-127.03	56.95	607715.97	595866.75	0.00	
2500.00	8.00	155.85	2490.60	-51.91	-139.73	62.64	607703.27	595872.44	0.00	
2600.00	8.00	155.85	2589.63	-56.62	-152.42	68.33	607690.58	595878.13	0.00	
2700.00	8.00	155.85	2688.65	-61.34	-165.11	74.01	607677.89	595883.81	0.00	
2800.00	8.00	155.85	2787.68	-66.05	-177.80	79.70	607665.20	595889.50	0.00	
2900.00	8.00	155.85	2886.71	-70.77	-190.49	85.39	607652.51	595895.19	0.00	
3000.00	8.00	155.85	2985.74	-75.48	-203.19	91.08	607639.81	595900.88	0.00	9 5/8 in
3100.00	8.00	155.85	3084.77	-80.20	-215.88	96.77	607627.12	595906.57	0.00	
3200.00	8.00	155.85	3183.79	-84.91	-228.57	102.46	607614.43	595912.26	0.00	
3283.59	8.00	155.85	3266.57	-88.85	-239.18	107.22	607603.82	595917.02	0.00	Drop
3300.00	7.83	155.85	3282.83	-89.62	-241.24	108.14	607601.76	595917.94	1.00	
3400.00	6.83	155.85	3382.01	-93.95	-252.88	113.36	607590.12	595923.16	1.00	
3500.00	5.83	155.85	3481.40	-97.68	-262.95	117.87	607580.05	595927.67	1.00	
3600.00	4.83	155.85	3580.96	-100.83	-271.43	121.67	607571.57	595931.47	1.00	
3700.00	3.83	155.85	3680.68	-103.39	-278.32	124.76	607564.68	595934.56	1.00	
3800.00	2.83	155.85	3780.51	-105.36	-283.62	127.14	607559.38	595936.94	1.00	
3900.00	1.83	155.85	3880.42	-106.74	-287.33	128.80	607555.67	595938.60	1.00	
4000.00	0.83	155.85	3980.39	-107.53	-289.45	129.75	607553.55	595939.55	1.00	
4083.11	0.00	0.00	4063.50	-107.73	-290.00	130.00	607553.00	595939.80	1.00	Hold
4100.00	0.00	0.00	4080.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
4200.00	0.00	0.00	4180.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
4300.00	0.00	0.00	4280.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
4400.00	0.00	0.00	4380.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
4500.00	0.00	0.00	4480.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
4600.00	0.00	0.00	4580.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
4700.00	0.00	0.00	4680.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
4800.00	0.00	0.00	4780.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
4900.00	0.00	0.00	4880.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
5000.00	0.00	0.00	4980.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
5100.00	0.00	0.00	5080.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
5200.00	0.00	0.00	5180.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
5300.00	0.00	0.00	5280.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
5400.00	0.00	0.00	5380.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
5500.00	0.00	0.00	5480.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
5600.00	0.00	0.00	5580.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
5700.00	0.00	0.00	5680.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
5800.00	0.00	0.00	5780.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
5900.00	0.00	0.00	5880.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
6000.00	0.00	0.00	5980.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
6100.00	0.00	0.00	6080.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
6200.00	0.00	0.00	6180.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
6300.00	0.00	0.00	6280.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
6400.00	0.00	0.00	6380.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
6500.00	0.00	0.00	6480.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
6600.00	0.00	0.00	6580.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
6700.00	0.00	0.00	6680.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
6800.00	0.00	0.00	6780.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
6900.00	0.00	0.00	6880.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
7000.00	0.00	0.00	6980.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
7100.00	0.00	0.00	7080.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
7200.00	0.00	0.00	7180.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
7300.00	0.00	0.00	7280.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
7400.00	0.00	0.00	7380.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
7500.00	0.00	0.00	7480.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
7600.00	0.00	0.00	7580.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
7700.00	0.00	0.00	7680.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
7800.00	0.00	0.00	7780.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
7900.00	0.00	0.00	7880.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	

SD 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
8000.00	0.00	0.00	7980.39	-107.73	-290.00	130.00	607553.00	595939.80	0.00	
8087.81	0.00	0.00	8068.20	-107.73	-290.00	130.00	607553.00	595939.80	0.00	KOP
8100.00	1.46	269.04	8080.39	-107.58	-290.00	129.84	607553.00	595939.64	12.00	
8200.00	13.46	269.04	8179.36	-94.64	-290.22	116.88	607552.78	595926.68	12.00	
8300.00	25.46	269.04	8273.47	-61.44	-290.78	83.63	607552.22	595893.43	12.00	
8400.00	37.46	269.04	8358.62	-9.43	-291.65	31.54	607551.35	595841.34	12.00	
8500.00	49.46	269.04	8431.07	59.12	-292.80	-37.12	607550.20	595772.68	12.00	
8600.00	61.46	269.04	8487.66	141.20	-294.17	-119.33	607548.83	595690.47	12.00	
8700.00	73.46	269.04	8525.91	233.24	-295.72	-211.51	607547.28	595598.29	12.00	
8800.00	85.46	269.04	8544.17	331.20	-297.36	-309.63	607545.64	595500.17	12.00	
8841.10	90.40	269.04	8545.65	372.19	-298.05	-350.69	607544.95	595459.11	12.00	LP
8900.00	90.40	269.04	8545.25	430.99	-299.03	-409.58	607543.97	595400.22	0.00	
9000.00	90.40	269.04	8544.56	530.81	-300.71	-509.56	607542.29	595300.24	0.00	
9100.00	90.40	269.04	8543.87	630.64	-302.38	-609.55	607540.62	595200.25	0.00	
9200.00	90.40	269.04	8543.18	730.46	-304.05	-709.53	607538.95	595100.27	0.00	
9300.00	90.40	269.04	8542.49	830.28	-305.73	-809.51	607537.27	595000.29	0.00	
9400.00	90.40	269.04	8541.80	930.11	-307.40	-909.50	607535.60	594900.30	0.00	
9500.00	90.40	269.04	8541.11	1029.93	-309.07	-1009.48	607533.93	594800.32	0.00	
9600.00	90.40	269.04	8540.42	1129.76	-310.75	-1109.46	607532.25	594700.34	0.00	
9700.00	90.40	269.04	8539.73	1229.58	-312.42	-1209.45	607530.58	594600.35	0.00	
9800.00	90.40	269.04	8539.04	1329.41	-314.09	-1309.43	607528.91	594500.37	0.00	
9900.00	90.40	269.04	8538.35	1429.23	-315.77	-1409.41	607527.23	594400.39	0.00	
10000.00	90.40	269.04	8537.66	1529.06	-317.44	-1509.40	607525.56	594300.40	0.00	
10071.06	90.40	269.04	8537.17	1600.00	-318.63	-1580.45	607524.37	594229.35	0.00	T1/Build
10100.00	90.97	269.04	8536.82	1628.88	-319.11	-1609.38	607523.89	594200.42	2.00	
10200.00	92.97	269.04	8533.38	1728.64	-320.79	-1709.30	607522.21	594100.50	2.00	
10210.78	93.19	269.04	8532.80	1739.39	-320.97	-1720.06	607522.03	594089.74	2.00	Hold
10300.00	93.19	269.04	8527.84	1828.32	-322.46	-1809.13	607520.54	594000.67	0.00	
10400.00	93.19	269.04	8522.27	1927.99	-324.13	-1908.96	607518.87	593900.84	0.00	
10500.00	93.19	269.04	8516.71	2027.66	-325.80	-2008.80	607517.20	593801.00	0.00	
10600.00	93.19	269.04	8511.14	2127.33	-327.47	-2108.63	607515.53	593701.17	0.00	
10700.00	93.19	269.04	8505.58	2227.00	-329.14	-2208.46	607513.86	593601.34	0.00	
10800.00	93.19	269.04	8500.02	2326.68	-330.81	-2308.29	607512.19	593501.51	0.00	
10900.00	93.19	269.04	8494.45	2426.35	-332.48	-2408.12	607510.52	593401.68	0.00	
11000.00	93.19	269.04	8488.89	2526.02	-334.15	-2507.95	607508.85	593301.85	0.00	
11074.22	93.19	269.04	8484.76	2600.00	-335.39	-2582.05	607507.61	593227.75	0.00	T2/Drop
11100.00	92.67	269.04	8483.44	2625.70	-335.82	-2607.79	607507.18	593202.01	2.00	
11200.00	90.67	269.04	8480.52	2725.48	-337.49	-2707.73	607505.51	593102.07	2.00	
11223.28	90.21	269.04	8480.34	2748.71	-337.88	-2731.00	607505.12	593078.80	2.00	Hold
11300.00	90.21	269.04	8480.06	2825.31	-339.17	-2807.71	607503.83	593002.09	0.00	
11400.00	90.21	269.04	8479.70	2925.13	-340.84	-2907.70	607502.16	592902.10	0.00	
11500.00	90.21	269.04	8479.33	3024.96	-342.51	-3007.68	607500.49	592802.12	0.00	
11600.00	90.21	269.04	8478.97	3124.78	-344.19	-3107.67	607498.81	592702.13	0.00	
11700.00	90.21	269.04	8478.61	3224.61	-345.86	-3207.65	607497.14	592602.15	0.00	
11800.00	90.21	269.04	8478.24	3324.44	-347.54	-3307.64	607495.46	592502.16	0.00	
11900.00	90.21	269.04	8477.88	3424.26	-349.21	-3407.62	607493.79	592402.18	0.00	
12000.00	90.21	269.04	8477.52	3524.09	-350.88	-3507.61	607492.12	592302.19	0.00	
12100.00	90.21	269.04	8477.15	3623.92	-352.56	-3607.59	607490.44	592202.21	0.00	
12200.00	90.21	269.04	8476.79	3723.74	-354.23	-3707.58	607488.77	592102.22	0.00	
12276.39	90.21	269.04	8476.51	3800.00	-355.51	-3783.96	607487.49	592025.84	0.00	T3/Build
12300.00	90.68	269.04	8476.33	3823.57	-355.91	-3807.56	607487.09	592002.24	2.00	
12369.44	92.07	269.04	8474.66	3892.87	-357.07	-3876.97	607485.93	591932.83	2.00	Hold
12400.00	92.07	269.04	8473.56	3923.35	-357.58	-3907.51	607485.42	591902.29	0.00	
12500.00	92.07	269.04	8469.95	4023.12	-359.25	-4007.43	607483.75	591802.37	0.00	
12600.00	92.07	269.04	8466.33	4122.88	-360.92	-4107.35	607482.08	591702.45	0.00	
12700.00	92.07	269.04	8462.72	4222.64	-362.60	-4207.27	607480.40	591602.53	0.00	
12800.00	92.07	269.04	8459.11	4322.40	-364.27	-4307.19	607478.73	591502.61	0.00	
12900.00	92.07	269.04	8455.50	4422.16	-365.94	-4407.11	607477.06	591402.69	0.00	
13000.00	92.07	269.04	8451.89	4521.92	-367.61	-4507.03	607475.39	591302.77	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
13100.00	92.07	269.04	8448.28	4621.69	-369.29	-4606.95	607473.71	591202.85	0.00	
13200.00	92.07	269.04	8444.67	4721.45	-370.96	-4706.88	607472.04	591102.92	0.00	
13300.00	92.07	269.04	8441.06	4821.21	-372.63	-4806.80	607470.37	591003.00	0.00	
13400.00	92.07	269.04	8437.45	4920.97	-374.31	-4906.72	607468.69	590903.08	0.00	
13447.52	92.07	269.04	8435.73	4968.38	-375.10	-4954.20	607467.90	590855.60	0.00	PBHL 332H

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
WOLFCAMP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
TAN SILL	649.00	0.00	0.00	649.00	-2865.00	-0.00	-0.00	607843.00	595809.80	
YATES	844.00	0.00	0.00	844.00	-2670.00	-0.00	-0.00	607843.00	595809.80	
SEVEN RIVE RS	1219.05	2.19	155.85	1219.00	-2295.00	-3.82	1.71	607839.18	595811.51	
QUEEN	1690.67	6.91	155.85	1689.00	-1825.00	-37.94	17.01	607805.06	595826.81	
GRAYBURG	2038.92	8.00	155.85	2034.00	-1480.00	-81.21	36.40	607761.79	595846.20	
SAN ANDRES	2483.24	8.00	155.85	2474.00	-1040.00	-137.60	61.68	607705.40	595871.48	
BONE SPRING	3677.27	4.06	155.85	3658.00	144.00	-276.89	124.12	607566.11	595933.92	
1ST BONE SPRING SAND	6373.61	0.00	0.00	6354.00	2840.00	-290.00	130.00	607553.00	595939.80	
2ND BONE SPRING CARB	6533.61	0.00	0.00	6514.00	3000.00	-290.00	130.00	607553.00	595939.80	
2ND BONESPRING SAND	7253.61	0.00	0.00	7234.00	3720.00	-290.00	130.00	607553.00	595939.80	
3RD BONE SPRING GARB	7493.61	0.00	0.00	7474.00	3960.00	-290.00	130.00	607553.00	595939.80	
3RD BONE SPRING SAND	8406.82	38.28	269.04	8364.00	4850.00	-291.72	27.35	607551.28	595837.15	
LANDING TOP	8624.96	64.46	269.04	8499.00	4985.00	-294.55	-141.55	607548.45	595668.25	
TARGET	8662.94	69.02	269.04	8514.00	5000.00	-295.13	-176.44	607547.87	595633.36	
LANDING BASE	8711.29	74.82	269.04	8529.00	5015.00	-295.90	-222.37	607547.10	595587.43	