

5D Plan Report

Apache

5D Plan Report**Apache Corporation****NM OIL CONSERVATION
ARTESIA DISTRICT**

Field Name: *Apache NM (Nad 83 NMEZ)*
Site Name: *Palmillo 26 State COM (314H,213H)*
Well Name: *Palmillo 26 State COM 213H*
Plan: *P1:V1 30-015-45040*

JUN 14 2018

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12 June 2018

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Palmillo 26 State COM 213H

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 26 State COM (314H,213H)	Units: US ft	North Reference: Grid	Convergence Angle: 0.10	
	Position:	Northing: 594674.50 US ft	Latitude: 32.634659955	
		Easting: 600955.60 US ft	Longitude: -104.139663731	
	Elevation above MSL: 3350.00 US ft			
Comment: Eddy Co. New Mexico				
Slot: Palmillo 26 State COM 213H	Position (Relative to Site Centre)			
	+N/-S: 40.00 US ft	Northing: 594714.50 US ft	Latitude: 32.634769904	
	+E/-W: -0.10 US ft	Easting: 600955.50 US ft	Longitude: -104.139663819	
	Slot TVD Reference: Ground Elevation			
	Elevation above MSL: 3358.00 US ft			
	Comment:			
Well: Palmillo 26 State COM 213H	Type: Main well		UWI:	Plan: P1:V1
	File Number:	Comment: HP 482		
	Closure Distance: 4936.88 US ft		Closure Azimuth: 265.46°	
	Vertical Section: Position of Origin (Relative to Slot centre)			
	+N/-S: 0.00 US ft		+E/-W: 0.00 US ft	Az: 265.46°
	Magnetic Parameters:			
	Model: bggm2018	Field Strength: 48092.5nT	Declination: 7.20°	Dip: 60.31° Date: 01/Jun/2018

Drill floor: Plan: P1:V1
Rig Height (Drill Floor): 26.00 US ft **Elevation above MSL:** 3384.00 US ft **Inclination:** 0.00° **Azimuth:** 0.00°

Target set: P26 St Com 213H 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
VP1	Point	7172.15	-230.00	131.02	594484.50	601086.52	0.00	
T1	Point	7626.00	-266.60	-1019.62	594447.90	599935.88	0.00	
T2	Point	7596.00	-293.80	-1874.90	594420.70	599080.60	0.00	
T3	Point	7569.00	-318.03	-2636.80	594396.47	598318.70	0.00	
T4	Point	7547.00	-335.48	-3185.14	594379.02	597770.36	0.00	
T5	Point	7523.00	-360.15	-3960.95	594354.35	596994.55	0.00	
T6	Point	7498.00	-382.20	-4654.31	594332.30	596301.19	0.00	
PBHL	Point	7490.00	-390.70	-4921.40	594323.80	596034.10	0.00	

Casing Points: (Relative to Slot centre)(TVD relative to Drill Floor)

MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)	Easting (US ft)	Name
400.00	0.00	0.00	400.00	0.00	0.00	594714.50	600955.50	13 3/8 in

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Casing Points: (Relative to Slot centre)(TVD relative to Drill Floor)								
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N. Offset (US ft)	E. Offset (US ft)	Northing (US ft)	Easting (US ft)	Name
3000.00	0.00	0.00	3000.00	0.00	0.00	594714.50	600955.50	9 5/8 in

Wellpath created using minimum curvature.

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

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	594714.50	600955.50	0.00	
3148.00	0.00	0.00	3148.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	Nudge
3648.34	5.00	150.33	3647.70	-9.27	-18.97	10.81	594695.53	600966.31	1.00	Hold
6182.74	5.00	150.33	6172.45	-103.13	-211.03	120.21	594503.47	601075.71	0.00	Drop
6683.08	0.00	0.00	6672.15	-112.40	-230.00	131.02	594484.50	601086.52	1.00	Hold
7183.08	0.00	0.00	7172.15	-112.40	-230.00	131.02	594484.50	601086.52	0.00	KOP
7950.02	92.03	268.18	7649.31	381.44	-245.72	-363.13	594468.78	600592.37	12.00	Landing Pt
8606.00	92.03	268.18	7626.04	1036.27	-266.56	-1018.37	594447.94	599937.13	0.00	
8607.25	92.01	268.18	7626.00	1037.52	-266.60	-1019.62	594447.90	599935.88	2.00	P26 St Com 213H T1
9462.59	92.01	268.18	7596.03	1891.37	-293.77	-1874.00	594420.73	599081.50	0.00	
9463.49	92.03	268.18	7596.00	1892.27	-293.80	-1874.90	594420.70	599080.60	2.00	P26 St Com 213H T2
10212.06	92.03	268.18	7569.54	2639.54	-317.58	-2622.63	594396.92	598332.87	0.00	
10226.25	92.31	268.18	7569.00	2653.70	-318.03	-2636.80	594396.47	598318.70	2.00	P26 St Com 213H T3
10748.23	92.31	268.18	7547.96	3174.67	-334.62	-3158.09	594379.88	597797.41	0.00	
10775.31	91.77	268.18	7547.00	3201.70	-335.48	-3185.14	594379.02	597770.36	2.00	P26 St Com 213H T4
11536.87	91.77	268.18	7523.50	3962.04	-359.67	-3945.95	594354.83	597009.55	0.00	
11551.89	92.07	268.18	7523.00	3977.03	-360.15	-3960.95	594354.35	596994.55	2.00	P26 St Com 213H T5
12228.36	92.07	268.18	7498.58	4652.31	-381.64	-4636.64	594332.86	596318.86	0.00	
12246.05	91.71	268.18	7498.00	4669.96	-382.20	-4654.31	594332.30	596301.19	2.00	P26 St Com 213H T6
12513.39	91.71	268.18	7490.00	4936.88	-390.70	-4921.40	594323.80	596034.10	0.00	P26 St Com 213H PBHL

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	594714.50	600955.50	0.00	
100.00	0.00	0.00	100.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	
200.00	0.00	0.00	200.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	
300.00	0.00	0.00	300.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	
400.00	0.00	0.00	400.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	
500.00	0.00	0.00	500.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	
600.00	0.00	0.00	600.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	
700.00	0.00	0.00	700.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	
800.00	0.00	0.00	800.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	
900.00	0.00	0.00	900.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	
1000.00	0.00	0.00	1000.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	
1100.00	0.00	0.00	1100.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	
1200.00	0.00	0.00	1200.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	
1300.00	0.00	0.00	1300.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	
1400.00	0.00	0.00	1400.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	
1500.00	0.00	0.00	1500.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	
1600.00	0.00	0.00	1600.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	
1700.00	0.00	0.00	1700.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	
1800.00	0.00	0.00	1800.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	
1900.00	0.00	0.00	1900.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	
2000.00	0.00	0.00	2000.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	

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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
2100.00	0.00	0.00	2100.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	
2200.00	0.00	0.00	2200.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	
2300.00	0.00	0.00	2300.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	
2400.00	0.00	0.00	2400.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	
2500.00	0.00	0.00	2500.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	
2600.00	0.00	0.00	2600.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	
2700.00	0.00	0.00	2700.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	
2800.00	0.00	0.00	2800.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	
2900.00	0.00	0.00	2900.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	
3000.00	0.00	0.00	3000.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	9 5/8 In
3098.90	0.00	0.00	3098.90	-0.00	0.00	0.00	594714.50	600955.50	0.00	Delaware Sands :
3100.00	0.00	0.00	3100.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	
3148.00	0.00	0.00	3148.00	-0.00	0.00	0.00	594714.50	600955.50	0.00	Nudge
3200.00	0.52	150.33	3200.00	-0.10	-0.21	0.12	594714.29	600955.62	1.00	
3300.00	1.52	150.33	3299.98	-0.86	-1.75	1.00	594712.75	600956.50	1.00	
3400.00	2.52	150.33	3399.92	-2.35	-4.81	2.74	594709.69	600958.24	1.00	
3500.00	3.52	150.33	3499.78	-4.59	-9.39	5.35	594705.11	600960.85	1.00	
3600.00	4.52	150.33	3599.53	-7.57	-15.48	8.82	594699.02	600964.32	1.00	
3648.34	5.00	150.33	3647.70	-9.27	-18.97	10.81	594695.53	600966.31	1.00	Hold
3700.00	5.00	150.33	3699.17	-11.18	-22.89	13.04	594691.61	600968.54	0.00	
3800.00	5.00	150.33	3798.79	-14.89	-30.46	17.35	594684.04	600972.85	0.00	
3900.00	5.00	150.33	3898.41	-18.59	-38.04	21.67	594676.46	600977.17	0.00	
4000.00	5.00	150.33	3998.02	-22.29	-45.62	25.99	594668.88	600981.49	0.00	
4086.30	5.00	150.33	4084.00	-25.49	-52.16	29.71	594662.34	600985.21	0.00	18SC :
4100.00	5.00	150.33	4097.64	-26.00	-53.20	30.30	594661.30	600985.80	0.00	
4200.00	5.00	150.33	4197.26	-29.70	-60.78	34.62	594653.72	600990.12	0.00	
4300.00	5.00	150.33	4296.88	-33.41	-68.35	38.94	594646.15	600994.44	0.00	
4400.00	5.00	150.33	4396.50	-37.11	-75.93	43.25	594638.57	600998.75	0.00	
4500.00	5.00	150.33	4496.12	-40.81	-83.51	47.57	594630.99	601003.07	0.00	
4600.00	5.00	150.33	4595.74	-44.52	-91.09	51.89	594623.41	601007.39	0.00	
4700.00	5.00	150.33	4695.36	-48.22	-98.67	56.21	594615.83	601011.71	0.00	
4800.00	5.00	150.33	4794.98	-51.92	-106.24	60.52	594608.26	601016.02	0.00	
4900.00	5.00	150.33	4894.59	-55.63	-113.82	64.84	594600.68	601020.34	0.00	
5000.00	5.00	150.33	4994.21	-59.33	-121.40	69.16	594593.10	601024.66	0.00	
5100.00	5.00	150.33	5093.83	-63.03	-128.98	73.47	594585.52	601028.97	0.00	
5200.00	5.00	150.33	5193.45	-66.74	-136.56	77.79	594577.94	601033.29	0.00	
5300.00	5.00	150.33	5293.07	-70.44	-144.13	82.11	594570.37	601037.61	0.00	
5400.00	5.00	150.33	5392.69	-74.14	-151.71	86.42	594562.79	601041.92	0.00	
5500.00	5.00	150.33	5492.31	-77.85	-159.29	90.74	594555.21	601046.24	0.00	
5600.00	5.00	150.33	5591.93	-81.55	-166.87	95.06	594547.63	601050.56	0.00	
5700.00	5.00	150.33	5691.55	-85.25	-174.45	99.37	594540.05	601054.87	0.00	
5800.00	5.00	150.33	5791.17	-88.96	-182.03	103.69	594532.47	601059.19	0.00	
5900.00	5.00	150.33	5890.78	-92.66	-189.60	108.01	594524.90	601063.51	0.00	
6000.00	5.00	150.33	5990.40	-96.36	-197.18	112.32	594517.32	601067.82	0.00	
6100.00	5.00	150.33	6090.02	-100.07	-204.76	116.64	594509.74	601072.14	0.00	
6182.74	5.00	150.33	6172.45	-103.13	-211.03	120.21	594503.47	601075.71	0.00	Drop
6200.00	4.83	150.33	6189.64	-103.76	-212.32	120.95	594502.18	601076.45	1.00	
6300.00	3.83	150.33	6289.36	-106.97	-218.88	124.68	594495.62	601080.18	1.00	
6400.00	2.83	150.33	6389.19	-109.43	-223.93	127.56	594490.57	601083.06	1.00	
6500.00	1.83	150.33	6489.10	-111.16	-227.46	129.57	594487.04	601085.07	1.00	
6600.00	0.83	150.33	6589.07	-112.15	-229.48	130.72	594485.02	601086.22	1.00	
6644.93	0.38	150.33	6634.00	-112.35	-229.89	130.96	594484.61	601086.46	1.00	1 BSS :
6683.08	0.00	0.00	6672.15	-112.40	-230.00	131.02	594484.50	601086.52	1.00	Hold
6700.00	0.00	0.00	6689.07	-112.40	-230.00	131.02	594484.50	601086.52	0.00	
6800.00	0.00	0.00	6789.07	-112.40	-230.00	131.02	594484.50	601086.52	0.00	
6814.93	0.00	0.00	6804.00	-112.40	-230.00	131.02	594484.50	601086.52	0.00	2 BSC :
6900.00	0.00	0.00	6889.07	-112.40	-230.00	131.02	594484.50	601086.52	0.00	
7000.00	0.00	0.00	6989.07	-112.40	-230.00	131.02	594484.50	601086.52	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
7100.00	0.00	0.00	7089.07	-112.40	-230.00	131.02	594484.50	601086.52	0.00	
7183.08	0.00	0.00	7172.15	-112.40	-230.00	131.02	594484.50	601086.52	0.00	KOP
7200.00	2.03	268.18	7189.07	-112.10	-230.01	130.72	594484.49	601086.22	12.00	
7300.00	14.03	268.18	7287.91	-98.17	-230.45	116.78	594484.05	601072.28	12.00	
7400.00	26.03	268.18	7381.69	-64.02	-231.54	82.61	594482.96	601038.11	12.00	
7436.69	30.43	268.18	7414.00	-46.69	-232.09	65.27	594482.41	601020.77	12.00	2 BSS :
7500.00	38.03	268.18	7466.31	-11.14	-233.22	29.70	594481.28	600985.20	12.00	
7600.00	50.03	268.18	7538.07	58.16	-235.43	-39.65	594479.07	600915.85	12.00	
7700.00	62.03	268.18	7593.85	140.85	-238.06	-122.39	594476.44	600833.11	12.00	
7782.28	71.90	268.18	7626.00	216.39	-240.46	-197.98	594474.04	600757.52	12.00	Landing Top
7800.00	74.03	268.18	7631.19	233.31	-241.00	-214.91	594473.50	600740.59	12.00	
7874.29	82.94	268.18	7646.00	305.95	-243.32	-287.59	594471.18	600667.91	12.00	Target :
7900.00	86.03	268.18	7648.47	331.51	-244.13	-313.17	594470.37	600642.33	12.00	
7950.02	92.03	268.18	7649.31	381.44	-245.72	-363.13	594468.78	600592.37	12.00	Landing Pt
8000.00	92.03	268.18	7647.54	431.34	-247.31	-413.06	594467.19	600542.44	0.00	
8100.00	92.03	268.18	7643.99	531.16	-250.48	-512.94	594464.02	600442.56	0.00	
8200.00	92.03	268.18	7640.45	630.98	-253.66	-612.83	594460.84	600342.67	0.00	
8300.00	92.03	268.18	7636.90	730.81	-256.84	-712.72	594457.66	600242.78	0.00	
8400.00	92.03	268.18	7633.35	830.63	-260.02	-812.60	594454.48	600142.90	0.00	
8500.00	92.03	268.18	7629.80	930.46	-263.19	-912.49	594451.31	600043.01	0.00	
8600.00	92.03	268.18	7626.26	1030.28	-266.37	-1012.38	594448.13	599943.12	0.00	
8606.00	92.03	268.18	7626.04	1036.27	-266.56	-1018.37	594447.94	599937.13	0.00	
8607.25	92.01	268.18	7626.00	1037.52	-266.60	-1019.62	594447.90	599935.88	2.00	P26 St Com 213H T1
8700.00	92.01	268.18	7622.75	1130.11	-269.55	-1112.26	594444.95	599843.24	0.00	
8800.00	92.01	268.18	7619.25	1229.94	-272.72	-1212.15	594441.78	599743.35	0.00	
8900.00	92.01	268.18	7615.74	1329.76	-275.90	-1312.04	594438.60	599643.46	0.00	
9000.00	92.01	268.18	7612.24	1429.59	-279.08	-1411.93	594435.42	599543.57	0.00	
9100.00	92.01	268.18	7608.74	1529.41	-282.25	-1511.82	594432.25	599443.68	0.00	
9200.00	92.01	268.18	7605.23	1629.24	-285.43	-1611.70	594429.07	599343.80	0.00	
9300.00	92.01	268.18	7601.73	1729.07	-288.61	-1711.59	594425.89	599243.91	0.00	
9400.00	92.01	268.18	7598.22	1828.89	-291.78	-1811.48	594422.72	599144.02	0.00	
9462.59	92.01	268.18	7596.03	1891.37	-293.77	-1874.00	594420.73	599081.50	0.00	
9463.49	92.03	268.18	7596.00	1892.27	-293.80	-1874.90	594420.70	599080.60	2.00	P26 St Com 213H T2
9500.00	92.03	268.18	7594.71	1928.72	-294.96	-1911.37	594419.54	599044.13	0.00	
9600.00	92.03	268.18	7591.17	2028.54	-298.14	-2011.25	594416.36	598944.25	0.00	
9700.00	92.03	268.18	7587.64	2128.37	-301.31	-2111.14	594413.19	598844.36	0.00	
9800.00	92.03	268.18	7584.10	2228.19	-304.49	-2211.03	594410.01	598744.47	0.00	
9900.00	92.03	268.18	7580.57	2328.02	-307.67	-2310.92	594406.83	598644.58	0.00	
10000.00	92.03	268.18	7577.03	2427.84	-310.84	-2410.80	594403.66	598544.70	0.00	
10100.00	92.03	268.18	7573.50	2527.67	-314.02	-2510.69	594400.48	598444.81	0.00	
10200.00	92.03	268.18	7569.96	2627.49	-317.20	-2610.58	594397.30	598344.92	0.00	
10212.06	92.03	268.18	7569.54	2639.54	-317.58	-2622.63	594396.92	598332.87	0.00	
10226.25	92.31	268.18	7569.00	2653.70	-318.03	-2636.80	594396.47	598318.70	2.00	P26 St Com 213H T3
10300.00	92.31	268.18	7566.03	2727.30	-320.37	-2710.45	594394.13	598245.05	0.00	
10400.00	92.31	268.18	7562.00	2827.11	-323.55	-2810.32	594390.95	598145.18	0.00	
10500.00	92.31	268.18	7557.97	2926.92	-326.73	-2910.18	594387.77	598045.32	0.00	
10600.00	92.31	268.18	7553.94	3026.72	-329.91	-3010.05	594384.59	597945.45	0.00	
10700.00	92.31	268.18	7549.91	3126.53	-333.09	-3109.92	594381.41	597845.58	0.00	
10748.23	92.31	268.18	7547.96	3174.67	-334.62	-3158.09	594379.88	597797.41	0.00	
10775.31	91.77	268.18	7547.00	3201.70	-335.48	-3185.14	594379.02	597770.36	2.00	P26 St Com 213H T4
10800.00	91.77	268.18	7546.24	3226.35	-336.26	-3209.80	594378.24	597745.70	0.00	
10900.00	91.77	268.18	7543.15	3326.19	-339.44	-3309.70	594375.06	597645.80	0.00	
11000.00	91.77	268.18	7540.07	3426.03	-342.62	-3409.61	594371.88	597545.89	0.00	
11100.00	91.77	268.18	7536.98	3525.87	-345.79	-3509.51	594368.71	597445.99	0.00	
11200.00	91.77	268.18	7533.90	3625.71	-348.97	-3609.41	594365.53	597346.09	0.00	

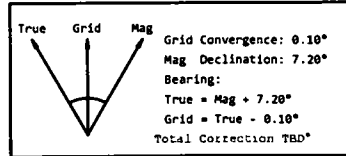
5D Plan Report

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
11300.00	91.77	268.18	7530.81	3725.55	-352.15	-3709.31	594362.35	597246.19	0.00	
11400.00	91.77	268.18	7527.73	3825.39	-355.32	-3809.21	594359.18	597146.29	0.00	
11500.00	91.77	268.18	7524.64	3925.23	-358.50	-3909.12	594356.00	597046.38	0.00	
11536.87	91.77	268.18	7523.50	3962.04	-359.67	-3945.95	594354.83	597009.55	0.00	
11551.89	92.07	268.18	7523.00	3977.03	-360.15	-3960.95	594354.35	596994.55	2.00	P26 St Com 213H T5
11600.00	92.07	268.18	7521.26	4025.06	-361.68	-4009.01	594352.82	596946.49	0.00	
11700.00	92.07	268.18	7517.65	4124.88	-364.85	-4108.89	594349.65	596846.61	0.00	
11800.00	92.07	268.18	7514.04	4224.70	-368.03	-4208.78	594346.47	596746.72	0.00	
11900.00	92.07	268.18	7510.44	4324.52	-371.21	-4308.66	594343.29	596646.84	0.00	
12000.00	92.07	268.18	7506.83	4424.35	-374.38	-4408.55	594340.12	596546.95	0.00	
12100.00	92.07	268.18	7503.22	4524.17	-377.56	-4508.43	594336.94	596447.07	0.00	
12200.00	92.07	268.18	7499.61	4623.99	-380.74	-4608.31	594333.76	596347.19	0.00	
12228.36	92.07	268.18	7498.58	4652.31	-381.64	-4636.64	594332.86	596318.86	0.00	
12246.05	91.71	268.18	7498.00	4669.96	-382.20	-4654.31	594332.30	596301.19	2.00	P26 St Com 213H T6
12300.00	91.71	268.18	7496.39	4723.83	-383.92	-4708.21	594330.58	596247.29	0.00	
12400.00	91.71	268.18	7493.39	4823.67	-387.09	-4808.12	594327.41	596147.38	0.00	
12500.00	91.71	268.18	7490.40	4923.51	-390.27	-4908.02	594324.23	596047.48	0.00	
12513.39	91.71	268.18	7490.00	4936.88	-390.70	-4921.40	594323.80	596034.10	0.00	P26 St Com 213H PBHL

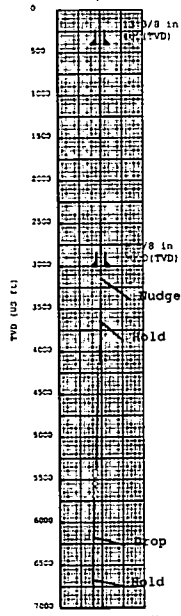
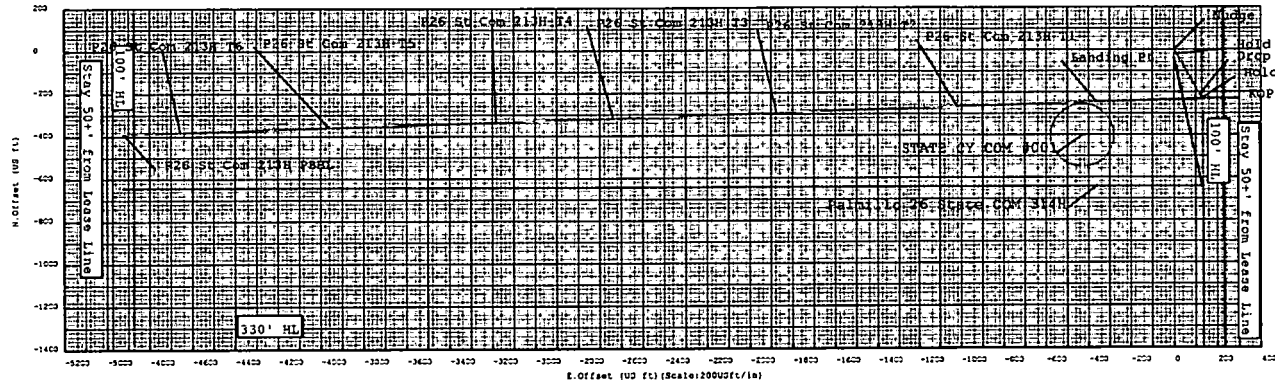
Formation Points: (Relative to Slot centre)(TVD relative to Drill Floor)										
Name	MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	TVD (MSL) (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)	Easting (US ft)	Comment
Landing Base	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3 BSC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Delaware Sands	3098.90	0.00	0.00	3098.90	-285.10	0.00	0.00	594714.50	600955.50	
1BSC	4086.30	5.00	150.33	4084.00	700.00	-52.16	29.71	594662.34	600985.21	
1 BSS	6644.93	0.38	150.33	6634.00	3250.00	-229.89	130.96	594484.61	601086.46	
2 BSC	6814.93	0.00	0.00	6804.00	3420.00	-230.00	131.02	594484.50	601086.52	
2 BSS	7436.69	30.43	268.18	7414.00	4030.00	-232.09	65.27	594482.41	601020.77	
Landing Top	7782.28	71.90	268.18	7626.00	4242.00	-240.46	-197.98	594474.04	600757.52	
Target	7874.29	82.94	268.18	7646.00	4262.00	-243.32	-287.59	594471.18	600667.91	



Apache Corporation
Palmillo 26 State COM 213H
Eddy Co., New Mexico
Plan P1:V1



KB: 3384.00
GL: 3358.00



VS (US Ft) (Bearing: 265.46° Scale: 500USFt/1in)

Plan Data for Palmillo 26 State COM 213H

Field: Apache NM (Mad 83 NREZ)
Map Unit: USFt
Vertical Reference Datum (VRD): Mean Sea Level
Projected Coordinate System: NAD83 / New Mexico East (ftUS)

Site: Palmillo 26 State COM (314M, 213H)
Unit: USFeet
Company Name: Apache Corporation
Position: Northing: 594674.50USFt Latitude: 32.634660°
Easting: 600955.60USFt Longitude: -104.139664°
North Reference: Grid Grid Convergence: 0.10°
Elevation Above VRD: 3350.00USFt
Comment: Eddy Co. New Mexico

Slot: Palmillo 26 State COM 213H
Position:
Offset is from Site centre
+N/-S: 40.00USFt Northing: 594714.50USFt Latitude: 32.634770°
+E/-W: -0.10USFt Easting: 600955.50USFt Longitude: -104.139664°
Elevation Above VRD: 3358.00USFt

Well: Palmillo 26 State COM 213H
Type: Main-Well
File Number:
Plan Folder: P1 Plan: P1:V1
Vertical Section: Position offset of origin from Slot centre:
+N/-S: 0.00USFt Azimuth: 265.46°
+E/-W: 0.00USFt
Magnetic Parameters:
Model: Field Strength: Declination: Dip: Date:
bggm2018 48092(nT) 7.20° 60.31° 2018-06-01
Comment: HP 482

Plan Data for Palmillo 26 State COM 213H

Target Set Information:
Name: P26 St Com 213H
Position offsets from Slot centre

Name	TVD Elevation (USFt)	+N/-S (USFt)	+E/-W (USFt)	Northing (USFt)	Easting (USFt)
VP1	7172.15	-3788.15	-238.00	131.02	594484.50
T1	7626.00	-4242.00	-266.60	-1019.62	594447.90
T2	7596.00	-4212.00	-293.80	-1874.90	594420.70
T3	7569.00	-4185.00	-318.03	-2636.80	594396.47
T4	7547.00	-4163.00	-335.48	-3185.14	594379.02
T5	7523.00	-4139.00	-360.15	-3960.95	594354.35
T6	7498.00	-4114.00	-382.20	-4654.31	594332.30
PBHL	7490.00	-4106.00	-390.70	-4921.40	594323.80

Plan Data for Palmillo 26 State COM 213H

Formation Point Information:

Name	TVD Elevation (USFt)	MD (USFt)
Landing Base	7666.00	-4282.00
3 BSC	7734.00	-4350.00
Delaware Sands	3098.90	285.10
18SC	4084.00	-780.00
1 B55	6634.00	-3250.00
2 B5C	6804.00	-3420.00
2 B55	7414.00	-4830.00
Landing Top	7626.00	-4242.00
Target	7646.00	-4262.00

Plan Data for Palmillo 26 State COM 213H

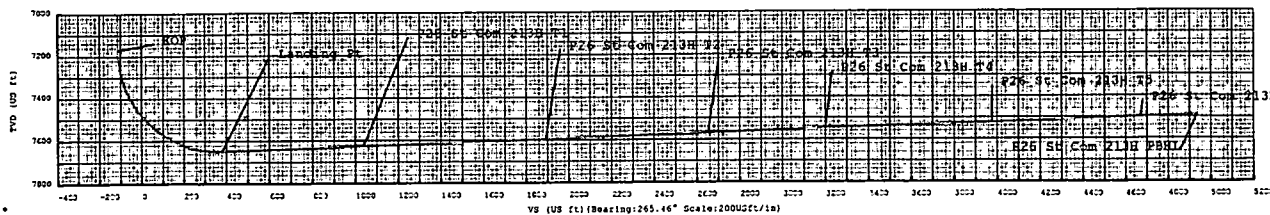
Plan Point Information:
Dogleg Severity Unit: */100.00ft
Position offsets from Slot centre

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	594714.50	600955.50	0.00	0.00	
3148.00	0.00	0.00	3148.00	0.00	0.00	594714.50	600955.50	0.00	0.00	Nudge
3648.34	5.00	150.33	3647.70	-18.97	10.81	594695.53	600966.31	-9.27	1.00	Hold
6182.74	5.00	150.33	6172.45	-211.03	120.21	594503.47	601075.71	-103.13	0.00	Drop
6683.08	0.00	0.00	6672.15	-238.00	131.02	594484.50	601086.52	-112.40	1.00	Hold
7183.08	0.00	0.00	7172.15	-238.00	131.02	594484.50	601086.52	-112.40	0.00	KOP
7950.02	92.03	268.18	7649.31	-245.72	-363.13	594468.78	600592.37	381.44	12.00	Landing Pt
8606.00	92.03	268.18	7626.04	-266.56	-1018.37	594447.94	599937.13	1036.27	0.00	
8607.25	92.01	268.18	7626.00	-266.60	-1019.62	594447.90	599935.88	1037.52	2.00	P26 St Com 213H T1
9462.59	92.01	268.18	7596.03	-293.77	-1874.90	594420.73	599881.50	1891.37	0.00	
9463.49	92.03	268.18	7596.00	-293.80	-1874.90	594420.70	599880.60	1892.27	2.00	P26 St Com 213H T2
10212.06	92.03	268.18	7569.54	-317.58	-2622.63	594396.92	598332.87	2639.54	0.00	
10226.25	92.31	268.18	7569.00	-318.03	-2636.80	594396.47	598318.70	2653.70	2.00	P26 St Com 213H T3
10748.23	92.31	268.18	7547.96	-334.62	-3158.09	594379.88	597797.41	3174.67	0.00	
10775.31	91.77	268.18	7547.00	-335.48	-3185.14	594379.02	597778.36	3201.70	2.00	P26 St Com 213H T4
11536.87	91.77	268.18	7523.50	-359.67	-3945.95	594354.83	597009.55	3962.04	0.00	
11551.89	92.07	268.18	7523.00	-360.15	-3960.95	594354.35	596994.55	3977.03	2.00	P26 St Com 213H T5
12228.36	92.07	268.18	7498.58	-381.64	-4636.64	594332.86	596318.06	4652.31	0.00	
12246.05	91.71	268.18	7498.00	-382.20	-4654.31	594332.30	596301.19	4669.96	2.00	P26 St Com 213H T6
12513.39	91.71	268.18	7490.00	-390.70	-4921.40	594323.80	596034.10	4936.88	0.00	P26 St Com 213H PBHL

Plan Data for Palmillo 26 State COM 213H

Casing Point Information:
Position offsets from Slot centre

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	594714.50	600955.50
9 5/8 in	3000.00	3000.00	0.00	0.00	594714.50	600955.50



VS (US Ft) (Bearing: 265.46° Scale: 200USFt/1in)

Drawing By: Ty Hardin Date: 12 June 2018
Office Name: Drilling Services - Houston
Address: 12101 Cutten Road
Houston, TX 77066
Phone: Office: +1.832.955.0032 | Cell: +1.713.882.8256