

5D Plan Report

**NM OIL CONSERVATION
ARTESIA DISTRICT**

APR 25 2018

RECEIVED**5D Plan Report**

Apache Corporation**Field Name:** *Apache NM (Nad 83 NMEZ)***Site Name:** *Palmillo 26 State COM (315H,316H)***Well Name:** *Palmillo 26 State COM 315H - 30-015-44907***Plan:** *P1:V1*

9 April 2018





Palmillo 26 State COM 315H

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 (315H,316H)	Units: US ft	North Reference: Grid	Convergence Angle: 0.10	
	Position:	Northing: 595474.30 US ft	Latitude: 32.636858387	
		Easting: 600953.20 US ft	Longitude: -104.139666791	
Elevation above MSL: 3360.00 US ft				
Comment: Eddy Co. New Mexico				
Slot: Palmillo 26 State COM 315H	Position (Relative to Site Centre)			
	+N/-S: 0.00 US ft	Northing: 595474.30 US ft	Latitude: 32.636858387	
	+E/-W: 0.00 US ft	Easting: 600953.20 US ft	Longitude: -104.139666791	
	Slot TVD Reference: Ground Elevation			
Elevation above MSL: 3360.00 US ft				
Comment:				
Well: Palmillo 26 State COM 315H	Type: Main well		UWI:	Plan: P1:V1
	File Number:	Comment: H&P 482		
	Closure Distance: 4944.3US ft		Closure Azimuth: 264.21°	
	Vertical Section: Position of Origin (Relative to Slot centre)			
	+N/-S: 0.00 US ft		+E/-W: -0.00 US ft	Az: 270.00°
	Magnetic Parameters:			
	Model: bggm2017	Field Strength: 48131.3nT	Declination: 7.23°	Dip: 60.33°

Drill floor: Plan: P1:V1

Rig Height (Drill Floor): 26.00us ft	Elevation above MSL: 3386.00us ft	Inclination: 0.00°	Azimuth: 0.00°
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Target set: P26 St Com 315H Comment:

Target Name:	Shape:	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (USft)	Easting (USft)	C.Pt.Distance (US ft)	Comment
KOP	Point	8149.00	-498.60	130.00	594975.70	601083.20	0.00	
LP	Point	8626.26	-498.60	-361.29	594975.70	600591.91	0.00	
T1	Point	8569.00	-498.60	-2346.00	594975.70	598607.20	0.00	
T2	Point	8554.00	-498.60	-3255.00	594975.70	597698.20	0.00	
PBHL	Point	8546.00	-498.60	-4869.10	594975.70	596084.10	0.00	

5D Plan Report

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	595474.30	600953.20	13 3/8 in
8030.93	0.00	0.00	8000.00	-498.60	130.00	594975.70	601083.20	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	595474.30	600953.20	0.00	
3100.00	0.00	0.00	3100.00	-0.00	0.00	-0.00	595474.30	600953.20	0.00	Nudge
3830.94	7.31	165.39	3828.96	-11.75	-45.05	11.75	595429.25	600964.95	1.00	Hold Tangent
7148.98	7.31	165.39	7120.04	-118.25	-453.55	118.25	595020.75	601071.45	0.00	Drop
7879.93	0.00	0.00	7849.00	-130.00	-498.60	130.00	594975.70	601083.20	1.00	Hold
8179.93	0.00	0.00	8149.00	-130.00	-498.60	130.00	594975.70	601083.20	0.00	KOP
8943.75	91.66	270.00	8626.26	361.29	-498.60	-361.29	594975.70	600591.91	12.00	Landing Pt
10894.24	91.66	270.00	8569.80	2310.96	-498.60	-2310.96	594975.70	598642.24	0.00	Drop
10929.29	90.96	270.00	8569.00	2346.00	-498.60	-2346.00	594975.70	598607.20	2.00	T1
11804.72	90.96	270.00	8554.37	3221.31	-498.60	-3221.31	594975.70	597731.89	0.00	Drop
11838.41	90.28	270.00	8554.00	3255.00	-498.60	-3255.00	594975.70	597698.20	2.00	T2
13452.53	90.28	270.00	8546.00	4869.10	-498.60	-4869.10	594975.70	596084.10	0.00	315H PBHL
13502.53	90.28	270.00	8545.75	4919.10	-498.60	-4919.10	594975.70	596034.10	0.00	+50' for Orio Valve

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	595474.30	600953.20	0.00	
100.00	0.00	0.00	100.00	-0.00	0.00	-0.00	595474.30	600953.20	0.00	
200.00	0.00	0.00	200.00	-0.00	0.00	-0.00	595474.30	600953.20	0.00	
300.00	0.00	0.00	300.00	-0.00	0.00	-0.00	595474.30	600953.20	0.00	
400.00	0.00	0.00	400.00	-0.00	0.00	-0.00	595474.30	600953.20	0.00	13 3/8 in
500.00	0.00	0.00	500.00	-0.00	0.00	-0.00	595474.30	600953.20	0.00	
600.00	0.00	0.00	600.00	-0.00	0.00	-0.00	595474.30	600953.20	0.00	
700.00	0.00	0.00	700.00	-0.00	0.00	-0.00	595474.30	600953.20	0.00	
800.00	0.00	0.00	800.00	-0.00	0.00	-0.00	595474.30	600953.20	0.00	
900.00	0.00	0.00	900.00	-0.00	0.00	-0.00	595474.30	600953.20	0.00	
1000.00	0.00	0.00	1000.00	-0.00	0.00	-0.00	595474.30	600953.20	0.00	
1100.00	0.00	0.00	1100.00	-0.00	0.00	-0.00	595474.30	600953.20	0.00	
1200.00	0.00	0.00	1200.00	-0.00	0.00	-0.00	595474.30	600953.20	0.00	
1300.00	0.00	0.00	1300.00	-0.00	0.00	-0.00	595474.30	600953.20	0.00	
1400.00	0.00	0.00	1400.00	-0.00	0.00	-0.00	595474.30	600953.20	0.00	
1500.00	0.00	0.00	1500.00	-0.00	0.00	-0.00	595474.30	600953.20	0.00	
1600.00	0.00	0.00	1600.00	-0.00	0.00	-0.00	595474.30	600953.20	0.00	
1700.00	0.00	0.00	1700.00	-0.00	0.00	-0.00	595474.30	600953.20	0.00	
1800.00	0.00	0.00	1800.00	-0.00	0.00	-0.00	595474.30	600953.20	0.00	
1900.00	0.00	0.00	1900.00	-0.00	0.00	-0.00	595474.30	600953.20	0.00	
2000.00	0.00	0.00	2000.00	-0.00	0.00	-0.00	595474.30	600953.20	0.00	
2100.00	0.00	0.00	2100.00	-0.00	0.00	-0.00	595474.30	600953.20	0.00	
2200.00	0.00	0.00	2200.00	-0.00	0.00	-0.00	595474.30	600953.20	0.00	
2300.00	0.00	0.00	2300.00	-0.00	0.00	-0.00	595474.30	600953.20	0.00	
2400.00	0.00	0.00	2400.00	-0.00	0.00	-0.00	595474.30	600953.20	0.00	
2500.00	0.00	0.00	2500.00	-0.00	0.00	-0.00	595474.30	600953.20	0.00	
2600.00	0.00	0.00	2600.00	-0.00	0.00	-0.00	595474.30	600953.20	0.00	
2700.00	0.00	0.00	2700.00	-0.00	0.00	-0.00	595474.30	600953.20	0.00	
2800.00	0.00	0.00	2800.00	-0.00	0.00	-0.00	595474.30	600953.20	0.00	
2900.00	0.00	0.00	2900.00	-0.00	0.00	-0.00	595474.30	600953.20	0.00	
3000.00	0.00	0.00	3000.00	-0.00	0.00	-0.00	595474.30	600953.20	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
3100.00	0.00	0.00	3100.00	-0.00	0.00	-0.00	595474.30	600953.20	0.00	Nudge
3100.90	0.01	165.39	3100.90	-0.00	-0.00	0.00	595474.30	600953.20	1.00	Delaware Sands :
3200.00	1.00	165.39	3199.99	-0.22	-0.84	0.22	595473.46	600953.42	1.00	
3300.00	2.00	165.39	3299.96	-0.88	-3.38	0.88	595470.92	600954.08	1.00	
3400.00	3.00	165.39	3399.86	-1.98	-7.60	1.98	595466.70	600955.18	1.00	
3500.00	4.00	165.39	3499.68	-3.52	-13.51	3.52	595460.79	600956.72	1.00	
3600.00	5.00	165.39	3599.37	-5.50	-21.10	5.50	595453.20	600958.70	1.00	
3700.00	6.00	165.39	3698.90	-7.92	-30.37	7.92	595443.93	600961.12	1.00	
3800.00	7.00	165.39	3798.26	-10.77	-41.33	10.77	595432.97	600963.97	1.00	
3830.94	7.31	165.39	3828.96	-11.75	-45.05	11.75	595429.25	600964.95	1.00	Hold Tangent
3900.00	7.31	165.39	3897.46	-13.96	-53.56	13.96	595420.74	600967.16	0.00	
3948.94	7.31	165.39	3946.00	-15.53	-59.58	15.53	595414.72	600968.73	0.00	1BSC :
4000.00	7.31	165.39	3996.65	-17.17	-65.87	17.17	595408.43	600970.37	0.00	
4100.00	7.31	165.39	4095.83	-20.38	-78.18	20.38	595396.12	600973.58	0.00	
4200.00	7.31	165.39	4195.02	-23.59	-90.49	23.59	595383.81	600976.79	0.00	
4300.00	7.31	165.39	4294.21	-26.80	-102.80	26.80	595371.50	600980.00	0.00	
4400.00	7.31	165.39	4393.39	-30.01	-115.11	30.01	595359.19	600983.21	0.00	
4500.00	7.31	165.39	4492.58	-33.22	-127.42	33.22	595346.88	600986.42	0.00	
4600.00	7.31	165.39	4591.77	-36.43	-139.74	36.43	595334.56	600989.63	0.00	
4700.00	7.31	165.39	4690.96	-39.64	-152.05	39.64	595322.25	600992.84	0.00	
4800.00	7.31	165.39	4790.14	-42.85	-164.36	42.85	595309.94	600996.05	0.00	
4900.00	7.31	165.39	4889.33	-46.06	-176.67	46.06	595297.63	600999.26	0.00	
5000.00	7.31	165.39	4988.52	-49.27	-188.98	49.27	595285.32	601002.47	0.00	
5100.00	7.31	165.39	5087.71	-52.48	-201.29	52.48	595273.01	601005.68	0.00	
5200.00	7.31	165.39	5186.89	-55.69	-213.60	55.69	595260.70	601008.89	0.00	
5300.00	7.31	165.39	5286.08	-58.90	-225.91	58.90	595248.39	601012.10	0.00	
5400.00	7.31	165.39	5385.27	-62.11	-238.22	62.11	595236.08	601015.31	0.00	
5500.00	7.31	165.39	5484.46	-65.32	-250.54	65.32	595223.76	601018.52	0.00	
5600.00	7.31	165.39	5583.64	-68.53	-262.85	68.53	595211.45	601021.73	0.00	
5700.00	7.31	165.39	5682.83	-71.74	-275.16	71.74	595199.14	601024.94	0.00	
5800.00	7.31	165.39	5782.02	-74.95	-287.47	74.95	595186.83	601028.15	0.00	
5900.00	7.31	165.39	5881.20	-78.16	-299.78	78.16	595174.52	601031.36	0.00	
6000.00	7.31	165.39	5980.39	-81.37	-312.09	81.37	595162.21	601034.57	0.00	
6100.00	7.31	165.39	6079.58	-84.58	-324.40	84.58	595149.90	601037.78	0.00	
6200.00	7.31	165.39	6178.77	-87.79	-336.71	87.79	595137.59	601040.99	0.00	
6300.00	7.31	165.39	6277.95	-91.00	-349.03	91.00	595125.27	601044.20	0.00	
6400.00	7.31	165.39	6377.14	-94.21	-361.34	94.21	595112.96	601047.41	0.00	
6500.00	7.31	165.39	6476.33	-97.42	-373.65	97.42	595100.65	601050.62	0.00	
6600.00	7.31	165.39	6575.52	-100.63	-385.96	100.63	595088.34	601053.83	0.00	
6650.90	7.31	165.39	6626.00	-102.26	-392.22	102.26	595082.08	601055.46	0.00	1 BSS :
6700.00	7.31	165.39	6674.70	-103.84	-398.27	103.84	595076.03	601057.04	0.00	
6800.00	7.31	165.39	6773.89	-107.05	-410.58	107.05	595063.72	601060.25	0.00	
6822.29	7.31	165.39	6796.00	-107.77	-413.32	107.77	595060.98	601060.97	0.00	2 BSC :
6900.00	7.31	165.39	6873.08	-110.26	-422.89	110.26	595051.41	601063.46	0.00	
7000.00	7.31	165.39	6972.27	-113.47	-435.20	113.47	595039.10	601066.67	0.00	
7100.00	7.31	165.39	7071.45	-116.68	-447.51	116.68	595026.79	601069.88	0.00	
7148.98	7.31	165.39	7120.04	-118.25	-453.55	118.25	595020.75	601071.45	0.00	Drop
7200.00	6.80	165.39	7170.67	-119.83	-459.61	119.83	595014.69	601073.03	1.00	
7300.00	5.80	165.39	7270.06	-122.60	-470.22	122.60	595004.08	601075.80	1.00	
7400.00	4.80	165.39	7369.63	-124.93	-479.16	124.93	594995.14	601078.13	1.00	
7416.42	4.64	165.39	7386.00	-125.27	-480.47	125.27	594993.83	601078.47	1.00	2 BSS :
7500.00	3.80	165.39	7469.35	-126.82	-486.42	126.82	594987.88	601080.02	1.00	
7600.00	2.80	165.39	7569.19	-128.28	-491.98	128.28	594982.32	601081.48	1.00	
7700.00	1.80	165.39	7669.10	-129.29	-495.87	129.29	594978.43	601082.49	1.00	
7731.91	1.48	165.39	7701.00	-129.52	-496.75	129.52	594977.55	601082.72	1.00	3 BSC :
7800.00	0.80	165.39	7769.08	-129.86	-498.06	129.86	594976.24	601083.06	1.00	
7879.93	0.00	0.00	7849.00	-130.00	-498.60	130.00	594975.70	601083.20	1.00	Hold
7900.00	0.00	0.00	7869.07	-130.00	-498.60	130.00	594975.70	601083.20	0.00	

5D Plan Report

Interpolated Points: (Relative to Slot centre)(TVD relative to Drill Floor)										Comment
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)	
8000.00	0.00	0.00	7969.07	-130.00	-498.60	130.00	594975.70	601083.20	0.00	
8030.93	0.00	0.00	8000.00	-130.00	-498.60	130.00	594975.70	601083.20	0.00	9 5/8 in
8100.00	0.00	0.00	8069.07	-130.00	-498.60	130.00	594975.70	601083.20	0.00	
8179.93	0.00	0.00	8149.00	-130.00	-498.60	130.00	594975.70	601083.20	0.00	KOP
8200.00	2.41	270.00	8169.07	-129.58	-498.60	129.58	594975.70	601082.78	12.00	
8300.00	14.41	270.00	8267.81	-114.98	-498.60	114.98	594975.70	601068.18	12.00	
8400.00	26.41	270.00	8361.36	-80.17	-498.60	80.17	594975.70	601033.37	12.00	
8500.00	38.41	270.00	8445.63	-26.68	-498.60	26.68	594975.70	600979.88	12.00	
8595.41	49.86	270.00	8514.00	39.65	-498.60	-39.65	594975.70	600913.55	12.00	3 BSS :
8600.00	50.41	270.00	8516.94	43.17	-498.60	-43.17	594975.70	600910.03	12.00	
8700.00	62.41	270.00	8572.17	126.32	-498.60	-126.32	594975.70	600826.88	12.00	
8731.93	66.24	270.00	8586.00	155.09	-498.60	-155.09	594975.70	600798.11	12.00	Landing Top :
8773.28	71.20	270.00	8601.00	193.61	-498.60	-193.61	594975.70	600759.59	12.00	Target :
8800.00	74.41	270.00	8608.90	219.14	-498.60	-219.14	594975.70	600734.06	12.00	
8829.76	77.98	270.00	8616.00	248.03	-498.60	-248.03	594975.70	600705.17	12.00	Landing Base :
8900.00	86.41	270.00	8625.53	317.56	-498.60	-317.56	594975.70	600635.64	12.00	
8943.75	91.66	270.00	8626.26	361.29	-498.60	-361.29	594975.70	600591.91	12.00	Landing Pt
9000.00	91.66	270.00	8624.64	417.51	-498.60	-417.51	594975.70	600535.69	0.00	
9100.00	91.66	270.00	8621.74	517.47	-498.60	-517.47	594975.70	600435.73	0.00	
9200.00	91.66	270.00	8618.85	617.43	-498.60	-617.43	594975.70	600335.77	0.00	
9300.00	91.66	270.00	8615.95	717.39	-498.60	-717.39	594975.70	600235.81	0.00	
9400.00	91.66	270.00	8613.06	817.35	-498.60	-817.35	594975.70	600135.85	0.00	
9500.00	91.66	270.00	8610.16	917.30	-498.60	-917.30	594975.70	600035.90	0.00	
9600.00	91.66	270.00	8607.27	1017.26	-498.60	-1017.26	594975.70	599935.94	0.00	
9700.00	91.66	270.00	8604.37	1117.22	-498.60	-1117.22	594975.70	599835.98	0.00	
9800.00	91.66	270.00	8601.48	1217.18	-498.60	-1217.18	594975.70	599736.02	0.00	
9900.00	91.66	270.00	8598.58	1317.14	-498.60	-1317.14	594975.70	599636.06	0.00	
10000.00	91.66	270.00	8595.69	1417.09	-498.60	-1417.09	594975.70	599536.11	0.00	
10100.00	91.66	270.00	8592.79	1517.05	-498.60	-1517.05	594975.70	599436.15	0.00	
10200.00	91.66	270.00	8589.90	1617.01	-498.60	-1617.01	594975.70	599336.19	0.00	
10300.00	91.66	270.00	8587.00	1716.97	-498.60	-1716.97	594975.70	599236.23	0.00	
10400.00	91.66	270.00	8584.11	1816.93	-498.60	-1816.93	594975.70	599136.27	0.00	
10500.00	91.66	270.00	8581.21	1916.88	-498.60	-1916.88	594975.70	599036.32	0.00	
10600.00	91.66	270.00	8578.32	2016.84	-498.60	-2016.84	594975.70	598936.36	0.00	
10700.00	91.66	270.00	8575.42	2116.80	-498.60	-2116.80	594975.70	598836.40	0.00	
10800.00	91.66	270.00	8572.53	2216.76	-498.60	-2216.76	594975.70	598736.44	0.00	
10894.24	91.66	270.00	8569.80	2310.96	-498.60	-2310.96	594975.70	598642.24	0.00	Drop
10900.00	91.54	270.00	8569.64	2316.72	-498.60	-2316.72	594975.70	598636.48	2.00	
10929.29	90.96	270.00	8569.00	2346.00	-498.60	-2346.00	594975.70	598607.20	2.00	T1
11000.00	90.96	270.00	8567.82	2416.70	-498.60	-2416.70	594975.70	598536.50	0.00	
11100.00	90.96	270.00	8566.15	2516.69	-498.60	-2516.69	594975.70	598436.51	0.00	
11200.00	90.96	270.00	8564.47	2616.67	-498.60	-2616.67	594975.70	598336.53	0.00	
11300.00	90.96	270.00	8562.80	2716.66	-498.60	-2716.66	594975.70	598236.54	0.00	
11400.00	90.96	270.00	8561.13	2816.64	-498.60	-2816.64	594975.70	598136.56	0.00	
11500.00	90.96	270.00	8559.46	2916.63	-498.60	-2916.63	594975.70	598036.57	0.00	
11600.00	90.96	270.00	8557.79	3016.62	-498.60	-3016.62	594975.70	597936.58	0.00	
11700.00	90.96	270.00	8556.12	3116.60	-498.60	-3116.60	594975.70	597836.60	0.00	
11800.00	90.96	270.00	8554.44	3216.59	-498.60	-3216.59	594975.70	597736.61	0.00	
11804.72	90.96	270.00	8554.37	3221.31	-498.60	-3221.31	594975.70	597731.89	0.00	Drop
11838.41	90.28	270.00	8554.00	3255.00	-498.60	-3255.00	594975.70	597698.20	2.00	T2
11900.00	90.28	270.00	8553.69	3316.58	-498.60	-3316.58	594975.70	597636.62	0.00	
12000.00	90.28	270.00	8553.20	3416.58	-498.60	-3416.58	594975.70	597536.62	0.00	
12100.00	90.28	270.00	8552.70	3516.58	-498.60	-3516.58	594975.70	597436.62	0.00	
12200.00	90.28	270.00	8552.21	3616.58	-498.60	-3616.58	594975.70	597336.62	0.00	
12300.00	90.28	270.00	8551.71	3716.58	-498.60	-3716.58	594975.70	597236.62	0.00	
12400.00	90.28	270.00	8551.22	3816.58	-498.60	-3816.58	594975.70	597136.62	0.00	
12500.00	90.28	270.00	8550.72	3916.58	-498.60	-3916.58	594975.70	597036.62	0.00	

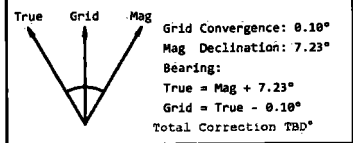
5D Plan Report

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
12600.00	90.28	270.00	8550.23	4016.58	-498.60	-4016.58	594975.70	596936.62	0.00	
12700.00	90.28	270.00	8549.73	4116.57	-498.60	-4116.57	594975.70	596836.63	0.00	
12800.00	90.28	270.00	8549.23	4216.57	-498.60	-4216.57	594975.70	596736.63	0.00	
12900.00	90.28	270.00	8548.74	4316.57	-498.60	-4316.57	594975.70	596636.63	0.00	
13000.00	90.28	270.00	8548.24	4416.57	-498.60	-4416.57	594975.70	596536.63	0.00	
13100.00	90.28	270.00	8547.75	4516.57	-498.60	-4516.57	594975.70	596436.63	0.00	
13200.00	90.28	270.00	8547.25	4616.57	-498.60	-4616.57	594975.70	596336.63	0.00	
13300.00	90.28	270.00	8546.76	4716.57	-498.60	-4716.57	594975.70	596236.63	0.00	
13400.00	90.28	270.00	8546.26	4816.57	-498.60	-4816.57	594975.70	596136.63	0.00	
13452.53	90.28	270.00	8546.00	4869.10	-498.60	-4869.10	594975.70	596084.10	0.00	315H PBHL
13500.00	90.28	270.00	8545.76	4916.57	-498.60	-4916.57	594975.70	596036.63	0.00	
13502.53	90.28	270.00	8545.75	4919.10	-498.60	-4919.10	594975.70	596034.10	0.00	+50' for Orio Valve

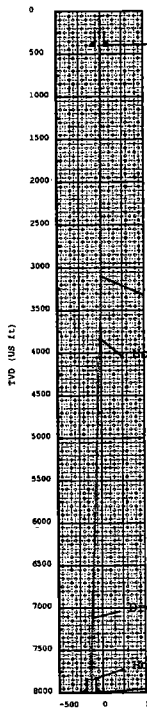
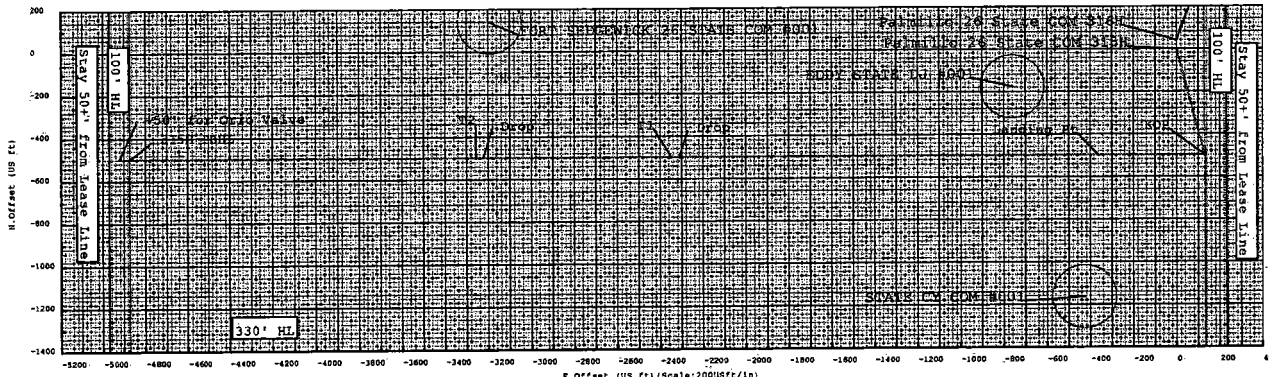
Formation Points: (Relative to Slot centre)(TVD relative to Drill Floor)									
Name	MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)	Easting (US ft)	
Wolfcamp	N/A	2.86	165.39	8906.00	-6.91	1.80	595467.39	600955.00	
Delaware Sands	3100.90	0.01	165.39	3100.90	-0.00	0.00	595474.30	600953.20	
1BSC	3948.94	7.31	165.39	3946.00	-59.58	15.53	595414.72	600968.73	
1 BSS	6650.90	7.31	165.39	6626.00	-392.22	102.26	595082.08	601055.46	
2 BSC	6822.29	7.31	165.39	6796.00	-413.32	107.77	595060.98	601060.97	
2 BSS	7416.42	4.64	165.39	7386.00	-480.47	125.27	594993.83	601078.47	
3 BSC	7731.91	1.48	165.39	7701.00	-496.75	129.52	594977.55	601082.72	
3 BSS	8595.41	49.86	270.00	8514.00	-498.60	-39.65	594975.70	600913.55	
Landing Top	8731.93	66.24	270.00	8586.00	-498.60	-155.09	594975.70	600798.11	
Target	8773.28	71.20	270.00	8601.00	-498.60	-193.61	594975.70	600759.59	
Landing Base	8829.76	77.98	270.00	8616.00	-498.60	-248.03	594975.70	600705.17	



Apache Corporation
Palmillo 26 State COM 315H
Eddy Co., New Mexico
Plan P1:V1



KB: 3386.00
GL: 3360.00



Plan Data for Palmillo 26 State COM 315H

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

Site: Palmillo 26 State COM (315H, 316H)
Unit: USFeet TVD Reference:
Company Name: Apache Corporation
Position: Northing: 595474.30USFt Latitude: 32.636858°
Easting: 600953.20USFt Longitude: -104.139667°
North Reference: Grid Grid Convergence: 0.10°
Elevation Above VRD: 3360.00USFt
Comment: Eddy Co. New Mexico

Slot: Palmillo 26 State COM 315H
Position:
Offset is from Site centre
Northing: 595474.30USFt Latitude: 32.636858°
Easting: 600953.20USFt Longitude: -104.139667°
Elevation Above VRD: 3360.00USFt

Well: Palmillo 26 State COM 315H
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: 270.00°
+E/-W: -0.00USFt

Magnetic Parameters:
Model: Field Strength: Declination: Dip: Date:
bgm2017 48131(NT) 7.23° 60.33° 2018-05-01
Comment: H&P 482

Plan Data for Palmillo 26 State COM 315H

Target Set Information:
Name: P26 St Com 315H

Position offsets from Slot centre

Name	TVD	Elevation	+N/-S	+E/-W	Northing	Easting
(USFt)	(USFt)	(USFt)	(USFt)	(USFt)	(USFt)	(USFt)
KOP	8149.00	-4763.00	-498.60	130.00	594975.70	601083.20
LP	8626.26	-5240.26	-498.60	-361.29	594975.70	600591.91
T1	8569.00	-5183.00	-498.60	-2346.00	594975.70	597698.20
T2	8554.00	-5168.00	-498.60	-3225.00	594975.70	597698.20
PBHL	8546.00	-5160.00	-498.60	-4869.10	594975.70	596084.10

Plan Data for Palmillo 26 State COM 315H

Formation Point Information:

Name	TVD	Elevation	MD
(USFt)	(USFt)	(USFt)	(USFt)
Wolfcamp	8906.00	0.00	-1.00
Delaware Sands	3100.90	285.10	3100.90
18SC	3946.00	-560.00	3948.94
1 BSS	6626.00	-3240.00	6650.90
2 BSC	6796.00	-3410.00	6822.29
2 BSS	7386.00	-4000.00	7416.42
3 BSC	7701.00	-4315.00	7731.91
3 BSS	8514.00	-5128.00	8595.41
Landing Top	8586.00	-5200.00	8731.93
Target	8601.00	-5215.00	8773.28
Landing Base	8616.00	-5230.00	8829.76

Plan Data for Palmillo 26 State COM 315H

Plan Point Information:

Dogleg Severity Unit: °/100.00ft

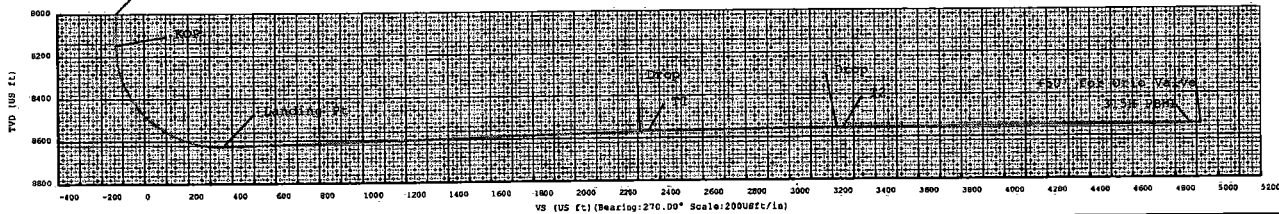
MD	Inc	Az	TVD	+N/-S	+E/-W	Northing	Easting	VSec	DLS	Comments
(USFt)	(°)	(°)	(USFt)	(USFt)	(USFt)	(USFt)	(USFt)	(USFt)	(USFt)	(DLSU)
0.00	0.00	0.00	0.00	0.00	-0.00	595474.30	600953.20	0.00	0.00	
3100.00	0.00	0.00	3100.00	0.00	-0.00	595474.30	600953.20	0.00	0.00	Nudge
3830.94	7.31	165.39	3828.96	-45.05	11.75	595429.25	600964.95	-11.75	1.00	Hold Tangent
7148.98	7.31	165.39	7120.04	-453.55	118.25	595020.75	601071.45	-118.25	0.00	Drop
7879.93	0.00	0.00	7849.00	-498.60	130.00	594975.70	601083.20	-130.00	1.00	Hold
8179.93	0.00	0.00	8149.00	-498.60	130.00	594975.70	601083.20	-130.00	0.00	KOP
8943.75	91.66	278.00	8626.26	-498.60	-361.29	594975.70	600591.91	361.29	12.00	Landing Pt
10894.24	91.66	278.00	8569.00	-498.60	-2310.96	594975.70	598642.24	2310.96	0.00	Drop
10929.29	90.96	278.00	8569.00	-498.60	-2346.00	594975.70	598607.20	2346.00	2.00	T1
11804.72	90.96	278.00	8554.37	-498.60	-3221.31	594975.70	597731.89	3221.31	0.00	Drop
11838.41	90.28	278.00	8554.00	-498.60	-3255.00	594975.70	597698.20	3255.00	2.00	T2
13452.53	90.28	278.00	8546.00	-498.60	-4869.10	594975.70	596084.10	4869.10	0.00	315H PBHL
13502.53	90.28	278.00	8545.75	-498.60	-4919.10	594975.70	596034.10	4919.10	0.00	+50' for Orlo Valve

Plan Data for Palmillo 26 State COM 315H

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	595474.30	600953.20
9 5/8 in	8030.93	8000.00	-498.60	130.00	594975.70	601083.20



Drawing By: Ty Hardin Date: 9 April 2018
Office Name: Drilling Services - Houston
Address: 12181 Cutten Road
Houston, TX 77066
Phone: Office: +1.832.955.0032 | Cell: +1.713.882.8256