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Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

NM OIL CONSERVATION
ARTESIA DISTRICT
Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

RECEIVED
[X] AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

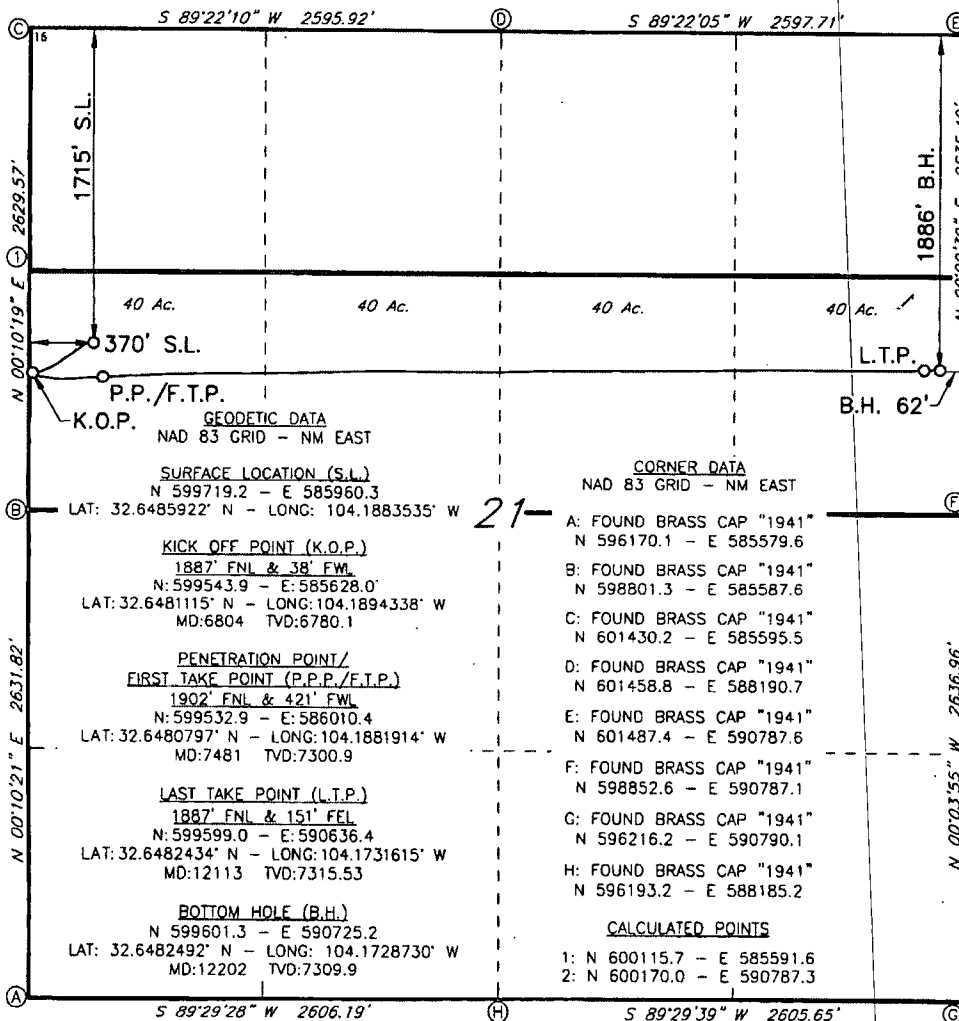
1 API Number 30-015-45279	2 Pool Code 97569	3 Pool Name Winchester Bone Spring West
4 Property Code 322494	5 Property Name PALMILLO 21 STATE COM	6 Well Number 227H
7 GRID NO. 873	8 Operator Name APACHE CORPORATION	9 Elevation 3458'

10 Surface Location									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
E	21	19S	28E		1715	NORTH	370	WEST	EDDY

11 Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	21	19S	28E		1886	NORTH	62	EAST	EDDY

12 Dedicated Acres 160	13 Joint or Infill	14 Consolidation Code	15 Order No.
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No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.



17 OPERATOR CERTIFICATION	
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.	
Signature <i>Alicia Fulton</i>	Date 9/30/2019
Printed Name Alicia Fulton	
E-mail Address alicia.fulton@apachecorp.com	

18 SURVEYOR CERTIFICATION	
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.	
8-21-18	
Date of Survey	
Signature and Seal of Professional Surveyor <i>Jeffrey L. Fansler</i>	
10034	
Certificate Number	
REV. 9/5/19: CHANGE KOP, PP/FTP & LTP	

Job No.: LS1808998ADR

NM OIL CONSERVATION

ARTESIA DISTRICT

OCT 03 2019

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Weatherford

Drilling Services
10000 West County Rd. 116
P.O. Box 61028
Midland, TX USA 79711
Tel. (432) 561-8892 Fax (432) 561-8895

Date: February 1, 2019

Apache Corporation
303 Veterans Airpark Lane
Midland, TX, 79705

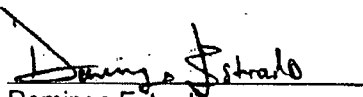
Attention: John Vacek

Re: Apache Corporation
Well: Apache Palmillo 21 State Com 227H
Eddy County, New Mexico

Enclosed, please find the original survey performed on the referenced well by Precision Energy Services, Inc. (P-5 No. 676004), a Weatherford company. Other information required by your office is as follows:

Name & Title Of Surveyor	Well Number	Surveyed Depths	Dates Performed	Type of Survey
Domingo Estrada	227H	6,727 MD	1/26/2019	Measurement
MWD Ops. Coordinator		12,141 MD	1/31/2019	While Drilling

A notarized plan vs. actual is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

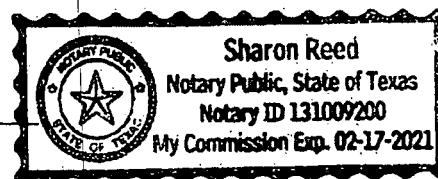

Domingo Estrada

MWD Ops. Coordinator

On this, the 1st day of February, 2019, before me a notary public, the undersigned officer, personally appeared Domingo Estrada, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same for the purposes therein contained.

In witness hereof, I hereunto set my hand and official seal.


Notary Public



Apache


Weatherford

Palmillo 21 State Com 227H

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 21 State Com Pad (325H, 227H, 324 H)	Units: US ft Position: North Reference: Grid Northing: 599759.30 US ft Easting: 585960.40 US ft Elevation above MSL: 3458.00 US ft Comment: Eddy Co., NM	Convergence Angle: 0.08 Latitude: 32.648702310 Longitude: -104.188352988
Slot: Palmillo 21 State Com 227H	Position (Relative to Site Centre) +N/-S: -40.10 US ft Northing: 599719.20 US ft +E/-W: -0.10 US ft Easting: 585960.30 US ft Slot TVD Reference: Ground Elevation Elevation above MSL: 3458.00 US ft Comment:	Latitude: 32.648592087 Longitude: -104.188353491
Well: Palmillo 21 State Com 227H	Type: Main well File Number: 13599853 Comment: H&P 482 Closure Distance: 4766.33 US ft Vertical Section: Position of Origin (Relative to Slot centre) +N/-S: 0.00 US ft	UWI: Closure Azimuth: 91.42° +E/-W: 0.00 US ft Az: 91.42°

Drill floor: Survey Name: Definitive Survey
Rig Height (Drill Floor): 26.00 US ft **Elevation above MSL:** 3484.00 US ft **Inclination:** 0.00° **Azimuth:** 0.00°

Survey Name: Definitive Survey
Date: 24/Sep/2018

Survey Tool: See Survey Tool Ranges below.

Comment:
Company:
Magnetic Model:
Model Name: Surcon MVHD

Date: 29/Dec/2018

Field Strength: 48022.0nT

Declination: 7.31°

Dip: 60.41°

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

Apache

5D Survey Report

Apache Corporation

Field Name: Apache NM (Nad 83 NMEZ)

Site Name: Palmillo 21 State Com Pad (325H,227H,324H)

Well Name: Palmillo 21 State Com 227H

File number: 13599853

Survey: Definitive survey

1 February 2019



Weatherford®

Survey Report

Survey Tool Ranges:

Name	Start MD(USFt)	End MD(USFt)	Source Survey
VES GyroFlex V3	0.00	6638.00	VES Gyro
MWD + HDGM + MS	6638.00	7295.00	WFT MWD 3
MWD + HDGM + MS	7295.00	7539.00	WFT MWD 4
MWD + HDGM + Sag Corr + MS_OW	7539.00	12202.00	WFT MWD 5

Wellpath created using minimum curvature:

Survey 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)	DLS (°/100US ft)	Northing (US ft)	Easting (US ft)	Comment
6638.00	2.94	171.50	6614.41	-332.93	-166.53	-337.16	0.41	599552.67	585623.14	VES Gyro Tieon
6727.00	3.21	158.28	6703.28	-331.56	-171.10	-335.90	0.85	599548.10	585624.40	First WFT MWD Svy
6822.00	5.33	127.94	6798.02	-326.96	-176.29	-331.43	3.19	599542.91	585628.87	
6869.00	11.51	106.04	6844.50	-320.67	-178.93	-325.20	14.59	599540.27	585635.10	
6916.00	17.86	99.74	6889.95	-308.98	-181.44	-313.58	13.91	599537.76	585646.72	
6963.00	24.53	97.34	6933.74	-292.13	-183.91	-296.78	14.31	599535.29	585663.52	
7011.00	28.09	96.98	6976.77	-270.96	-186.56	-275.67	7.42	599532.64	585684.63	
7058.00	31.51	98.12	7017.54	-247.74	-189.64	-252.52	7.38	599529.56	585707.78	
7106.00	34.60	98.01	7057.77	-221.74	-193.31	-226.60	6.44	599525.89	585733.70	
7153.00	37.23	95.65	7095.83	-194.30	-196.57	-199.23	6.32	599522.63	585761.07	
7200.00	39.26	90.26	7132.76	-165.24	-198.04	-170.20	8.31	599521.16	585790.10	
7247.00	42.95	85.88	7168.17	-134.42	-196.96	-139.34	9.96	599522.24	585820.96	
7295.00	46.84	85.89	7202.17	-100.70	-194.53	-105.56	8.10	599524.67	585854.74	
7326.00	49.51	85.46	7222.84	-77.72	-192.78	-82.52	8.67	599526.42	585877.78	
7358.00	53.05	85.95	7242.85	-52.88	-190.92	-57.63	11.13	599528.28	585902.67	
7389.00	57.10	86.76	7260.60	-27.57	-189.30	-32.27	13.24	599529.90	585928.03	
7421.00	61.94	87.79	7276.82	-0.07	-188.00	-4.73	15.38	599531.20	585955.57	
7453.00	66.62	88.40	7290.71	28.70	-187.04	24.07	14.73	599532.16	585984.37	
7484.00	70.75	88.44	7301.97	57.53	-186.25	52.93	13.32	599532.95	586013.23	
7516.00	76.08	87.92	7311.10	88.14	-185.27	83.58	16.73	599533.93	586043.88	
7539.00	79.87	87.38	7315.89	110.58	-184.35	106.05	16.64	599534.85	586066.35	
7614.00	88.10	85.37	7323.75	184.81	-179.63	180.42	11.29	599539.57	586140.72	
7709.00	90.83	86.97	7324.63	279.40	-173.28	275.19	3.33	599545.92	586235.49	
7803.00	91.46	87.59	7322.76	373.13	-168.82	369.06	0.94	599550.38	586329.36	
7898.00	90.69	88.93	7320.97	467.97	-165.94	464.00	1.63	599553.26	586424.30	
7992.00	90.83	88.51	7319.73	561.86	-163.84	557.97	0.47	599555.36	586518.27	
8087.00	90.20	89.32	7318.87	656.76	-162.04	652.95	1.08	599557.16	586613.25	
8181.00	88.73	89.92	7319.75	750.71	-161.42	746.94	1.69	599557.78	586707.24	
8276.00	88.73	89.91	7321.86	845.65	-161.28	841.91	0.01	599557.92	586802.21	
8371.00	88.80	89.76	7323.90	940.59	-161.00	936.89	0.17	599558.20	586897.19	
8465.00	88.45	88.91	7326.16	1034.50	-159.91	1030.86	0.98	599559.29	586991.16	
8560.00	87.61	88.69	7329.43	1129.35	-157.93	1125.78	0.91	599561.27	587086.08	
8654.00	87.82	88.32	7333.17	1223.15	-155.47	1219.67	0.45	599563.73	587179.97	
8749.00	88.45	87.88	7336.27	1317.94	-152.33	1314.57	0.81	599566.87	587274.87	
8843.00	88.94	87.87	7338.41	1411.74	-148.84	1408.48	0.52	599570.36	587368.78	
8938.00	89.22	88.23	7339.93	1506.56	-145.61	1503.41	0.48	599573.59	587463.71	
9032.00	89.22	89.72	7341.21	1600.46	-143.93	1597.39	1.58	599575.27	587557.69	
9127.00	88.52	90.97	7343.08	1695.42	-144.50	1692.36	1.51	599574.70	587652.66	
9221.00	89.22	90.74	7344.94	1789.40	-145.90	1786.33	0.78	599573.30	587746.63	
9316.00	90.13	89.99	7345.48	1884.38	-146.51	1881.33	1.24	599572.69	587841.63	
9410.00	89.29	90.12	7345.95	1978.35	-146.60	1975.33	0.90	599572.60	587935.63	
9505.00	88.45	90.08	7347.83	2073.31	-146.76	2070.31	0.89	599572.44	588030.61	
9599.00	87.54	89.68	7351.12	2167.22	-146.57	2164.25	1.06	599572.63	588124.55	
9693.00	87.26	88.97	7355.38	2261.06	-145.46	2258.14	0.81	599573.74	588218.44	
9788.00	88.17	88.72	7359.17	2355.88	-143.55	2353.05	0.99	599575.65	588313.35	
9883.00	89.01	87.58	7361.50	2450.70	-140.48	2447.97	1.49	599578.72	588408.27	
9977.00	87.82	88.65	7364.10	2544.50	-137.39	2541.88	1.70	599581.81	588502.18	
10072.00	87.25	89.34	7368.19	2639.33	-135.73	2636.77	0.94	599583.47	588597.07	

Survey Report

Survey Points: (Relative to Slot centre) (TVD relative to Drill Floor)										
HD (US ft)	Inc (°)	Alt (ft)	TVD (US ft)	VS (US ft)	H Offset (US ft)	E Offset (US ft)	DLS (%/100US ft)	North (US ft)	East (US ft)	Comment
10167.00	88.24	90.30	7371.93	2734.21	-135.43	2731.70	1.45	599583.77	588692.00	
10261.00	89.08	89.99	7374.13	2828.16	-135.67	2825.67	0.95	599583.53	588785.97	
10356.00	89.99	89.75	7374.90	2923.13	-135.45	2920.67	0.99	599583.75	588880.97	
10450.00	88.66	89.55	7376.01	3017.07	-134.88	3014.66	1.43	599584.32	588974.96	
10545.00	89.36	89.15	7377.65	3112.00	-133.80	3109.63	0.85	599585.40	589069.93	
10640.00	91.46	89.00	7376.97	3206.91	-132.26	3204.61	2.22	599586.94	589164.91	
10734.00	92.65	89.27	7373.60	3300.77	-130.85	3298.54	1.30	599588.35	589258.84	
10829.00	90.90	89.66	7370.65	3395.67	-129.96	3393.49	1.89	599589.24	589353.79	
10923.00	91.53	89.25	7368.66	3489.59	-129.07	3487.46	0.80	599590.13	589447.76	
11018.00	92.51	88.83	7365.31	3584.45	-127.48	3582.39	1.12	599591.72	589542.69	
11112.00	93.42	88.58	7360.45	3678.21	-125.35	3676.24	1.00	599593.85	589636.54	
11207.00	92.30	89.89	7355.71	3773.02	-124.09	3771.11	1.81	599595.11	589731.41	
11302.00	92.44	89.44	7351.78	3867.90	-123.53	3866.02	0.50	599595.67	589826.32	
11396.00	91.60	89.80	7348.47	3961.79	-122.91	3959.96	0.97	599596.29	589920.26	
11490.00	90.97	90.41	7346.36	4055.74	-123.08	4053.94	0.93	599596.12	590014.24	
11585.00	92.16	90.16	7343.77	4150.69	-123.55	4148.90	1.28	599595.65	590109.20	
11680.00	93.28	90.01	7339.26	4245.55	-123.70	4243.79	1.19	599595.50	590204.09	
11774.00	94.26	89.85	7333.08	4339.32	-123.58	4337.59	1.06	599595.62	590297.89	
11869.00	92.30	90.26	7327.64	4434.13	-123.67	4432.43	2.11	599595.53	590392.73	
11964.00	92.58	89.09	7323.60	4529.00	-123.13	4527.34	1.27	599596.07	590487.64	
12058.00	93.21	88.84	7318.85	4622.79	-121.44	4621.20	0.72	599597.76	590581.50	
12141.00	93.71	88.48	7313.84	4705.54	-119.50	4704.03	0.74	599599.70	590664.33	
12202.00 ✓	93.73	88.48	7309.88 ✓	4766.33	-117.89	4764.88	0.03	599601.31	590725.18	Last WFT MWD Svy TD@12,202 MD / PTB