

NM OIL CONSERVATION

ARTESIA DISTRICT

APR 26 2016

RECEIVED

Archer

DIRECTIONAL SURVEY REPORT

15-42281

WPX ENERGY

EAST PECOS FEDERAL COM 22 6H

ORIGINAL HOLE

EDDY COUNTY, NEW MEXICO

Fax (432) 563-7966
Archer, DDS

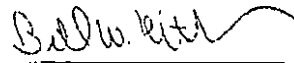
10600 County Road 128 W
Odessa, Texas 79765
Tel. (432) 563-7962

Archer

MWD Survey Certification

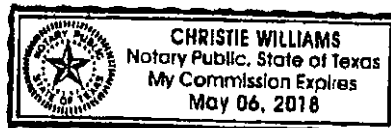
State of New Mexico
County of Eddy

I, Bill Kitchens, certify that; I am employed by Archer Directional Drilling Services; that I did on the day(s) of 12/16/15 through 01/12/16, conduct or supervise the taking of MWD surveys from a depth of 148 feet to a depth of 13251 feet; that the data is true, correct, complete, and within the limitations of the tool as set forth by Archer Directional Drilling Services; that I am authorized and qualified to make this report; that these surveys were conducted at the request of WPX Energy for the East Pecos Federal Com 22 6H, (API# 30-015-42281), well located in Eddy County, New Mexico; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Archer Directional Drilling Services.



Bill Kitchens
MWD Operator

cc. WPX Energy



Fax (432) 563-7966
Archer, DDS

10600 County Road 128 W
Odessa, Texas 79765
Tel. (432) 563-7962

Archer

January 18, 2016

WPX Energy
210 Park Avenue, Suite 900
Oklahoma City, Oklahoma 73102

RE: WPX Energy
East Pecos Federal Com 22 6H
Eddy County, New Mexico
API Well No. 30-015-42281
Rig: Silver Oak 14

Dear Sir or Madam:

We hereby certify that the enclosed Original Field Survey Data contained in this report represents to the best of our knowledge, a true and accurate survey of the well at the time the survey was performed.

Please see the attached Directional Survey Report, and the Directional Survey Certification Letter.

We appreciate the opportunity to work with you and we look forward to your business support. If you have any questions, I can be reached at (432) 563-7962.

Sincerely,



Juan Alcocer
MWD Coordinator
Archer Directional Drilling Services

Fax (432) 563-7966
Archer, DDS

10600 County Road 128 W
Odessa, Texas 79765
Tel. (432) 563-7962

Archer

DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: ARCHER DDS
2. NAME OF PERSON(S) PERFORMING SURVEY:
BILL KITCHENS ALFRED WILLIAMS
3. POSITION OF SAID PERSON(S): MWD OPERATOR
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 12/16/15 - 01/12/16
5. STATE IN WHICH SURVEY WAS PERFORMED: NEW MEXICO
6. LOCATION OF WELL: EDDY COUNTY
7. TYPE OF SURVEY(S) PERFORMED: MWD
8. COMPLETE IDENTIFICATION OF WELL:

WPX ENERGY
EAST PECOS FEDERAL COM 22 6H
WPX ENERGY
EDDY COUNTY, NEW MEXICO
API WELL NO. 30-015-42281
RIG: SILVER OAK 14

9. SURVEY CERTIFIED FROM: 148 TO 13251 FEET MEASURED DEPTH

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE DISPLACED AT 4837.58 FEET ON A BEARING OF 359.61 DEGREES FROM THE CENTER OF THE ROTARY TABLE AT A PROJECTED DEPTH OF 13305 FEET, ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.



Juan Alcocer
MWD Coordinator

North Aligned To: GRID NORTH
 Total Magnetic Correction: 6.04
 Proposed Azimuth: 359.81
 Horizontal Reference: Wellhead
 Vertical Reference: 17' Kelly Bushing To Ground
 Ground Elevation: 2681.2' Ground To MSL
 Grid Reference: NAD 83 New Mexico East Lambert
 Grid Coordinates: X: 654,238.40 Y: 371,551.50
 Ref. Coordinates: LAT: 32° 1' 15.43"N LON: 103° 58' 8.55"W

ARCHER DIRECTIONAL DRILLING SURVEY REPORT

Archer

Archer MWD Operators:
 BILL KITCHENS ALFRED WILLIAMS

WPX ENERGY RIG: SILVER OAK 14
 EAST PECOS FEDERAL COM 22 6H / 30-015-422 EDDY COUNTY, NEW MEXICO

File In Date: 12/16/15
 Date Completed: 01/12/16

Measured Depth (ft)	Incl (deg)	Azimuth (deg)	Course Length (ft)	TVD (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)	Closure Dist (ft)	DLS Dir (deg) (dg/100ft)
ORIGIN OF WELLBORE AT SURFACE								
0	0.00	0.00	0.00	0.00	0.00	0.00 0.00	0.00	0.00 0.00
THE FOLLOWING ARE ARCHER MWD SURVEYS								
148	0.40	57.40	148.00	148.00	0.28	0.28 N 0.44 E	0.52	57.40 0.27
347	0.90	349.10	189.00	348.99	2.16	2.19 N 0.72 E	2.30	18.34 0.42
518	1.60	350.00	171.00	517.95	5.89	5.89 N 0.47 E	5.91	4.57 0.43
641	2.00	10.50	123.00	640.89	9.72	9.72 N 0.88 E	9.76	5.07 0.42
823	2.10	41.30	182.00	822.77	15.34	15.35 N 3.64 E	15.76	13.35 0.60
1007	1.60	74.60	184.00	1006.88	18.54	18.56 N 8.34 E	20.35	24.20 0.63
1190	0.90	108.90	183.00	1189.64	18.74	18.78 N 12.17 E	22.37	32.94 0.54
1373	1.10	143.40	183.00	1372.61	16.85	16.90 N 14.57 E	22.32	40.77 0.34
1556	1.50	158.70	183.00	1555.57	13.20	13.26 N 16.49 E	21.16	51.20 0.29
1739	0.70	222.60	183.00	1738.84	10.15	10.20 N 18.60 E	19.49	59.43 0.74
1923	0.90	236.90	184.00	1922.52	8.54	8.59 N 14.83 E	16.97	59.59 0.16
2112	1.30	240.80	189.00	2111.48	5.88	5.73 N 11.52 E	13.34	59.70 0.22
2302	1.30	224.90	190.00	2301.44	4.13	4.15 N 8.12 E	9.12	82.90 0.19
2491	1.50	186.30	189.00	2490.38	0.16	0.18 N 6.33 E	8.33	88.41 0.50
2680	2.50	166.20	189.00	2679.27	-8.08	6.05 S 7.72 E	9.81	126.10 0.75
2870	3.30	213.90	190.00	2869.06	-14.41	14.39 S 6.34 E	15.72	156.20 1.52
3060	3.10	239.80	190.00	3058.78	-21.51	21.51 S 1.15 W	21.54	183.05 0.76
3251	2.80	263.90	191.00	3249.53	-24.57	24.60 S 10.25 W	28.65	202.61 0.66
3440	2.10	272.70	189.00	3438.36	-24.87	24.93 S 18.30 W	30.93	215.28 0.42
3629	1.20	273.40	189.00	3627.28	-24.57	24.65 S 23.73 W	34.22	223.91 0.48
3818	0.70	298.00	190.00	3817.25	-23.88	23.97 S 26.73 W	35.91	228.12 0.34
4009	1.10	314.00	190.00	4007.23	-22.04	22.14 S 29.06 W	36.53	232.70 0.24
4198	1.40	304.20	189.00	4196.18	-19.48	19.56 S 32.28 W	37.75	236.75 0.19
4388	1.10	325.60	188.00	4384.14	-18.69	18.80 S 35.19 W	39.00	244.48 0.29
4576	0.80	358.00	190.00	4574.12	-14.18	14.30 S 36.26 W	38.98	249.47 0.36
4768	0.70	1.80	190.00	4764.11	-12.03	12.15 S 38.26 W	38.24	251.47 0.08
4956	0.40	345.80	190.00	4954.10	-10.23	10.35 S 38.38 W	37.83	254.13 0.18
5146	0.30	54.40	190.00	5144.09	-9.29	9.41 S 38.14 W	37.35	255.40 0.21
5241	0.20	87.70	95.00	5239.09	-9.14	9.26 S 35.77 W	36.95	255.48 0.18
5336	0.50	114.80	95.00	5334.09	-9.31	9.43 S 35.23 W	36.47	255.02 0.35
5431	0.50	156.80	95.00	5429.09	-9.87	9.98 S 34.69 W	36.10	253.94 0.38
5526	0.60	159.00	95.00	5524.08	-10.71	10.83 S 34.34 W	36.01	252.50 0.11
5621	1.00	178.30	95.00	5619.07	-12.00	12.12 S 34.13 W	36.22	250.46 0.51
5716	1.20	189.80	95.00	5714.06	-13.81	13.92 S 33.93 W	36.68	247.59 0.27
5811	1.20	174.20	95.00	5809.04	-15.78	15.89 S 33.66 W	37.22	244.72 0.10
5905	1.50	168.30	94.00	5903.01	-17.97	18.08 S 33.31 W	37.90	241.51 0.35
6000	1.80	180.70	95.00	5997.97	-20.59	20.70 S 32.56 W	38.59	237.55 0.39
6095	2.00	158.50	95.00	6092.92	-23.53	23.63 S 31.41 W	39.30	233.04 0.26
6189	2.10	148.20	94.00	6186.86	-26.45	26.55 S 29.77 W	39.89	228.27 0.44
6284	2.20	144.00	95.00	6281.79	-29.35	29.45 S 27.70 W	40.44	223.25 0.12
6379	2.40	150.90	95.00	6376.72	-32.58	32.67 S 25.87 W	41.54	218.16 0.36
6474	2.60	148.00	95.00	6471.63	-35.11	35.19 S 23.49 W	43.15	212.99 0.31
6611	2.50	148.70	137.00	6608.49	-41.25	41.32 S 20.20 W	48.00	206.08 0.11
6772	2.40	161.10	161.00	6769.34	-47.45	47.51 S 17.29 W	50.56	199.99 0.33
6867	2.70	158.10	95.00	6864.25	-51.42	51.47 S 15.81 W	53.84	197.07 0.35
6961	3.30	156.20	94.00	6958.12	-55.95	56.00 S 13.89 W	57.70	193.93 0.65
7057	3.10	167.90	98.00	7053.97	-60.89	60.93 S 11.80 W	62.06	190.98 0.23
7151	3.00	164.10	94.00	7147.84	-65.62	65.65 S 10.17 W	66.44	188.80 0.37
7246	2.90	172.40	95.00	7242.71	-70.39	70.43 S 9.17 W	71.02	187.42 0.48
7341	4.10	174.90	95.00	7337.53	-76.16	76.18 S 8.55 W	76.67	186.40 1.27
7435	5.00	176.80	94.00	7431.24	-83.60	83.63 S 8.01 W	84.01	185.47 0.97
7630	3.90	181.30	95.00	7625.95	-90.96	90.99 S 7.84 W	91.33	184.92 1.22
7625	3.60	184.00	95.00	7620.75	-97.08	97.11 S 8.11 W	97.45	184.78 0.48
7720	3.50	184.70	95.00	7715.57	-102.87	102.89 S 8.55 W	103.25	184.75 0.04
7814	1.80	179.20	94.00	7809.47	-107.28	107.31 S 8.77 W	107.67	184.67 1.72
7940	0.70	226.90	126.00	7935.43	-109.90	109.93 S 9.30 W	110.32	184.83 1.21
7972	0.50	40.80	32.00	7967.43	-109.92	109.95 S 9.35 W	110.35	184.86 3.74
8003	2.30	45.70	31.00	7998.42	-109.39	109.42 S 8.82 W	109.77	184.61 5.81
8034	5.20	27.00	31.00	8029.35	-107.71	107.73 S 7.73 W	108.01	184.11 10.03
8065	6.50	21.50	31.00	8060.13	-104.33	104.36 S 8.25 W	104.54	183.43 10.83
8095	11.90	18.50	31.00	8090.83	-99.17	99.19 S 4.39 W	99.28	182.54 11.11
8128	14.20	21.40	32.00	8121.81	-92.40	92.40 S 1.91 W	92.42	181.19 7.47
8159	16.70	21.80	31.00	8151.68	-84.73	84.73 S 1.13 E	84.73	179.24 8.07
8189	19.30	20.60	30.00	8180.21	-76.10	76.08 S 4.47 E	78.21	176.63 8.75
8220	22.20	19.30	31.00	8209.20	-66.78	66.76 S 8.21 E	66.27	172.88 9.47
8252	25.60	19.20	32.00	8238.45	-53.58	53.52 S 12.49 E	54.95	166.87 10.63
8284	28.40	20.50	32.00	8266.98	-39.92	39.86 S 17.43 E	43.50	159.39 8.94
8315	30.90	17.80	31.00	8293.90	-25.45	25.37 S 22.44 E	33.87	138.51 9.14

Measured Depth	Incl	Azimuth	Course Length	TVD	Vertical Section	TOTAL Rectangular Offsets	Closure Dist	Dir	DLS
(ft)	(deg)	(deg)	(ft)	(ft)	(ft)	(ft)	(ft)	(deg)	(dg/100ft)
8346	33.00	13.90	31.00	8320.21	-9.68	9.59 S	26.90 E	28.56	109.63
8377	35.30	9.90	31.00	8345.86	7.33	7.43 N	30.47 E	31.37	78.30
8408	38.20	8.30	31.00	8370.70	25.88	25.79 N	33.07 E	41.93	52.05
8440	41.10	3.20	32.00	8395.34	46.01	46.13 N	34.74 E	57.75	36.98
8471	43.90	1.90	31.00	8416.19	66.93	67.05 N	35.66 E	75.94	26.01
8503	47.30	0.50	32.00	8440.58	89.76	89.90 N	36.13 E	95.89	21.90
8534	50.90	358.10	31.00	8460.87	113.21	113.33 N	36.05 E	118.92	17.64
8565	53.70	358.50	31.00	8479.83	137.72	137.83 N	35.11 E	142.24	14.29
8596	54.20	353.70	31.00	8498.08	162.69	162.80 N	32.99 E	166.11	11.46
8627	55.70	351.80	31.00	8515.88	187.87	187.97 N	29.79 E	180.32	9.00
8658	58.30	353.50	31.00	8532.76	213.67	213.76 N	26.47 E	215.39	7.08
8689	62.20	353.30	31.00	8548.14	240.41	240.49 N	23.37 E	241.62	5.55
8720	66.70	352.90	31.00	8561.51	268.18	268.25 N	20.01 E	268.99	4.27
8751	70.80	354.00	31.00	8572.72	296.80	296.85 N	16.72 E	297.42	3.22
8782	71.70	353.90	31.00	8582.66	326.10	326.15 N	13.63 E	326.44	2.39
8812	71.30	351.50	30.00	8592.18	354.33	354.37 N	10.01 E	354.51	1.62
8874	76.40	350.20	31.00	8609.24	413.15	413.16 N	0.30 E	413.16	0.04
8905	79.60	349.80	31.00	8615.68	443.03	443.01 N	4.96 W	443.04	359.36
8937	83.00	349.50	32.00	8620.52	474.16	474.13 N	10.65 W	474.25	358.71
8967	86.8	350.30	30.00	8623.19	503.59	503.54 N	15.89 W	503.79	358.19
9005	90.20	353.00	38.00	8624.18	541.18	541.11 N	21.40 W	541.54	357.74
9120	91.80	352.80	115.00	8622.17	655.34	655.22 N	35.51 W	656.19	356.90
9211	90.10	355.20	91.00	8620.67	746.66	746.71 N	44.94 W	747.07	356.55
9304	89.80	357.50	93.00	8620.75	838.69	838.52 N	50.86 W	840.06	356.53
9399	90.40	0.20	94.00	8620.58	932.66	932.49 N	52.75 W	933.98	358.76
9461	90.50	1.30	93.00	8619.65	1026.64	1026.48 N	51.53 W	1026.77	357.12
9584	89.60	2.20	93.00	8619.77	1118.59	1118.43 N	48.69 W	1119.49	357.51
9678	90.00	2.70	94.00	8620.10	1212.49	1212.34 N	44.87 W	1213.17	357.89
9771	90.00	2.50	93.00	8620.10	1305.38	1305.25 N	40.45 W	1305.88	358.22
9866	88.20	3.20	95.00	8621.59	1400.23	1400.11 N	35.73 W	1400.57	358.54
9960	89.80	3.50	94.00	8623.23	1494.03	1493.94 N	30.24 W	1494.24	358.84
10053	88.10	1.90	93.00	8624.94	1586.89	1586.81 N	25.86 W	1587.02	359.07
10147	89.50	0.90	94.00	8626.90	1680.83	1680.76 N	23.56 W	1680.92	359.20
10242	87.60	1.20	95.00	8629.31	1775.77	1775.71 N	21.82 W	1775.84	359.30
10335	89.40	1.10	93.00	8631.74	1868.71	1868.65 N	19.96 W	1868.78	359.39
10430	89.20	0.70	95.00	8632.80	1963.89	1963.63 N	18.47 W	1963.72	359.46
10526	86.50	0.60	96.00	8636.50	2059.60	2059.55 N	17.21 W	2059.82	359.52
10619	89.50	1.00	93.00	8640.56	2152.49	2152.45 N	15.75 W	2152.50	359.58
10713	90.20	0.50	94.00	8641.83	2246.46	2246.43 N	14.52 W	2246.47	359.63
10808	89.20	359.40	95.00	8642.12	2341.45	2341.42 N	14.60 W	2341.47	359.64
10902	91.30	359.40	94.00	8641.71	2435.45	2435.41 N	15.59 W	2435.46	359.63
10995	89.80	358.90	93.00	8640.82	2528.44	2528.39 N	16.97 W	2528.45	359.62
11090	91.80	358.70	95.00	8639.50	2623.41	2623.36 N	18.98 W	2623.43	359.59
11184	91.80	359.60	94.00	8638.71	2717.35	2717.30 N	21.01 W	2717.38	359.56
11278	90.30	0.10	94.00	8635.15	2811.33	2811.27 N	21.91 W	2811.36	359.55
11372	89.00	359.80	94.00	8635.72	2906.33	2906.27 N	21.99 W	2906.36	359.57
11465	90.10	359.90	93.00	8635.45	2998.32	2998.27 N	22.23 W	2998.35	359.58
11559	87.90	0.10	94.00	8638.09	3092.30	3092.25 N	22.23 W	3092.33	359.59
11654	88.40	0.80	95.00	8641.16	3187.25	3187.19 N	21.65 W	3187.27	359.61
11750	87.50	0.90	96.00	8644.51	3283.18	3283.13 N	20.40 W	3283.19	359.64
11842	87.60	1.00	92.00	8648.36	3375.08	3375.03 N	18.87 W	3375.09	359.68
11937	89.50	0.90	95.00	8650.77	3470.02	3469.99 N	17.30 W	3470.03	359.71
12032	89.10	1.00	95.00	8651.93	3565.00	3564.98 N	15.72 W	3565.00	359.75
12126	89.50	0.10	94.00	8653.08	3658.98	3658.96 N	14.82 W	3658.98	359.77
12220	89.10	358.90	94.00	8654.22	3752.97	3752.94 N	15.64 W	3752.97	359.78
12316	89.70	358.90	96.00	8656.07	3848.94	3848.90 N	17.46 W	3848.94	359.74
12409	89.80	359.30	93.00	8658.10	3941.91	3941.87 N	18.94 W	3941.92	359.72
12503	88.70	358.70	94.00	8660.15	4035.88	4035.83 N	20.58 W	4035.89	359.71
12597	89.20	358.60	94.00	8662.89	4129.83	4129.78 N	22.63 W	4129.84	359.69
12692	90.40	359.60	95.00	8663.65	4224.81	4224.75 N	23.96 W	4224.82	359.68
12786	87.80	359.60	94.00	8665.33	4318.79	4318.73 N	24.46 W	4318.80	359.68
12879	87.30	359.60	93.00	8668.30	4411.70	4411.65 N	24.94 W	4411.72	359.68
12974	89.60	358.90	95.00	8671.87	4506.66	4506.60 N	26.18 W	4506.67	359.67
13069	89.60	0.30	95.00	8672.37	4601.65	4601.59 N	26.85 W	4601.67	359.67
13163	89.20	358.50	94.00	8673.19	4695.64	4695.58 N	27.83 W	4695.65	359.66
13251	89.00	357.70	88.00	8674.57	4783.59	4783.52 N	30.75 W	4783.62	359.63
STRAIGHT LINE PROJECTION TO BIT AT 13305' MD									
13305	89.00	357.70	54.00	8675.51	4837.55	4837.47 N	32.91 W	4837.58	359.61