

Archer

DIRECTIONAL SURVEY REPORT

30-015 42238

RKI EXPLORATION & PRODUCTION, LLC.

LONGVIEW FEDERAL 12 4H
ORIGINAL HOLE
EDDY COUNTY, NEW MEXICO

Fax (432) 563-7966
Archer, DDS

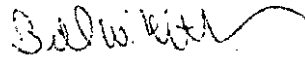
10600 County Road 128 W
Odessa, Texas 79765
Tel. (432) 563-7962

Archer

MWD Survey Certification

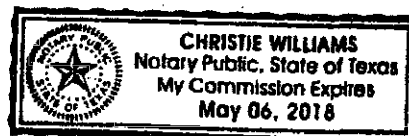
State of New Mexico
County of Eddy

I, Bill Kitchens, certify that; I am employed by Archer Directional Drilling Services; that I did on the day(s) of 10/30/15 through 11/17/15, conduct or supervise the taking of MWD surveys from a depth of 122 feet to a depth of 13898 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 RKI Exploration & Production, LLC. for the Longview Federal 12 4H, (API# 30-015-42238), 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. RKI Exploration & Production, LLC.



Fax (432) 563-7966
Archer, DDS

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

Archer

January 18, 2016

RKI Exploration & Production, LLC.
210 Park Avenue, Suite 900
Oklahoma City, Oklahoma 73102

RE: RKI Exploration & Production, LLC.
Longview Federal 12 4H
Eddy County, New Mexico
API Well No. 30-015-42238
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 RILEY RASMUSSEN
3. POSITION OF SAID PERSON(S): MWD OPERATOR
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 10/30/15 - 11/17/15
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:

RKI EXPLORATION & PRODUCTION, LLC.
LONGVIEW FEDERAL 12 4H
RKI EXPLORATION & PRODUCTION, LLC.
EDDY COUNTY, NEW MEXICO
API WELL NO. 30-015-42238
RIG: SILVER OAK 14

9. SURVEY CERTIFIED FROM: 122 TO 13898 FEET MEASURED DEPTH

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE DISPLACED AT 5529.75 FEET ON A BEARING OF 358.90 DEGREES FROM THE CENTER OF THE ROTARY TABLE AT A PROJECTED DEPTH OF 13950 FEET, ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.



Juan Alcocer
MWD Coordinator

North Aligned To: GRID NORTH
Total Magnetic Correction: 7.27

Proposed Azimuth: 359.31

Horizontal Reference: Wellhead

Vertical Reference: 17' Kelly Bushing To Ground

Ground Elevation: 3028' Ground To MSL

Grid Reference: NAD 83 New Mexico East Lambert

Grid Coordinates: X: 634,086.10 Y: 482,437.60

Ref. Coordinates: LAT: 32° 10' 33.37"N LON: 104° 1' 59.04"W

ARCHER DIRECTIONAL DRILLING SURVEY REPORT

Archer

Archer MWD Operators:
BILL KITCHENS RILEY RASMUSSEN

RKI EXPLORATION & PRODUCTION, LLC.
LONGVIEW FEDERAL 12 4H / 30-015-42238

Rig: SILVER OAK 14
EDDY COUNTY, NEW MEXICO

Tie-In Date: 10/30/15
Date Completed: 11/17/15

Measured Depth (ft)	Incl (deg)	Azimuth (deg)	Course Length (ft)	TVD (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)	Closure Dist (ft)	Dir (deg)	DLS (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									
122	0.10	231.30	122.00	122.00	-0.07	0.07 S	0.08 W	0.11	231.30
184	0.20	159.50	62.00	184.00	-0.20	0.20 S	0.09 W	0.22	203.43
284	0.20	155.50	100.00	284.00	-0.52	0.52 S	0.05 E	0.53	174.97
345	0.10	66.90	61.00	345.00	-0.50	0.50 S	0.14 E	0.62	155.94
436	0.10	83.80	91.00	436.00	-0.56	0.56 S	0.29 E	0.63	152.54
527	0.30	200.30	91.00	527.00	-0.78	0.78 S	0.29 E	0.83	159.65
620	0.30	204.00	93.00	620.00	-1.23	1.23 S	0.10 E	1.23	175.15
711	0.20	184.90	91.00	711.00	-1.60	1.60 S	0.05 E	1.60	178.26
803	0.40	254.90	92.00	803.00	-1.83	1.84 S	0.22 W	1.85	188.83
895	0.60	253.20	92.00	894.99	-2.05	2.06 S	0.99 W	2.28	205.71
987	0.70	242.30	92.00	986.99	-2.44	2.46 S	1.95 W	3.14	218.41
1079	0.70	246.20	92.00	1078.98	-2.91	2.95 S	2.96 W	4.18	225.14
1170	0.50	258.00	91.00	1169.97	-3.21	3.25 S	3.88 W	5.05	229.88
1262	0.40	259.00	92.00	1261.97	-3.34	3.40 S	4.57 W	5.89	233.34
1353	0.30	251.30	91.00	1352.97	-3.47	3.54 S	5.10 W	6.21	235.29
1444	0.30	310.70	91.00	1443.97	-3.32	3.46 S	5.51 W	6.50	237.90
1536	0.30	303.90	92.00	1535.97	-3.09	3.17 S	5.89 W	6.59	241.76
1627	0.40	299.50	91.00	1626.96	-2.80	2.88 S	6.37 W	6.99	245.69
1719	0.20	276.70	92.00	1718.96	-2.62	2.70 S	6.81 W	7.32	248.37
1811	0.10	313.70	92.00	1810.96	-2.54	2.62 S	7.02 W	7.60	249.51
1905	0.10	310.10	94.00	1904.96	-2.43	2.52 S	7.15 W	7.58	250.61
2000	0.40	131.20	95.00	1999.98	-2.60	2.68 S	6.96 W	7.46	248.94
2095	0.50	141.10	95.00	2094.98	-3.14	3.22 S	6.45 W	7.21	243.48
2190	0.70	116.90	95.00	2189.95	-3.74	3.81 S	5.87 W	6.83	236.13
2285	0.80	124.60	95.00	2284.95	-4.39	4.45 S	4.61 W	6.40	228.03
2379	1.10	125.00	94.00	2378.93	-5.30	5.34 S	3.33 W	6.29	211.98
2474	1.10	147.70	95.00	2473.92	-6.60	6.63 S	2.09 W	6.95	197.53
2569	0.90	137.60	95.00	2568.90	-7.94	7.95 S	1.10 W	8.03	187.91
2664	0.70	136.60	95.00	2663.89	-8.92	8.92 S	0.20 W	8.93	181.30
2759	0.50	154.80	95.00	2758.89	-9.72	9.72 S	0.37 E	9.73	177.80
2853	0.40	134.40	94.00	2852.88	-10.23	10.32 S	0.78 E	10.35	175.67
2948	0.60	162.50	95.00	2947.88	-11.04	11.03 S	1.17 E	11.09	173.95
3043	0.50	162.60	95.00	3042.88	-11.91	11.90 S	1.44 E	11.98	173.09
3138	0.50	122.10	95.00	3137.87	-12.54	12.51 S	1.92 E	12.66	171.29
3233	0.70	154.80	95.00	3232.87	-13.29	13.26 S	2.52 E	13.50	169.26
3328	0.60	167.30	95.00	3327.86	-14.30	14.27 S	2.87 E	14.56	168.02
3422	0.70	151.80	94.00	3421.86	-15.29	15.26 S	3.25 E	15.60	167.97
3517	0.50	128.70	95.00	3516.85	-16.07	16.03 S	3.85 E	16.48	166.50
3612	0.50	126.50	95.00	3611.85	-16.58	16.53 S	4.51 E	17.13	164.76
3707	0.60	151.80	95.00	3706.84	-17.28	17.22 S	5.07 E	17.95	163.58
3801	0.40	128.80	94.00	3800.84	-17.92	17.88 S	5.56 E	18.70	162.70
3896	1.00	162.70	95.00	3895.83	-18.86	18.89 S	5.78 E	19.76	162.98
3978	0.90	191.30	82.00	3977.82	-20.30	20.24 S	5.62 E	21.00	164.48
4046	1.10	195.00	88.00	4045.81	-21.46	21.39 S	5.35 E	22.05	165.96
4141	1.70	195.90	95.00	4140.78	-23.68	23.63 S	4.73 E	24.10	168.69
4234	2.90	192.50	93.00	4233.71	-27.30	27.25 S	3.84 E	27.52	171.98
4329	4.80	180.30	95.00	4328.49	-33.54	33.51 S	2.81 E	33.61	175.55
4423	6.60	189.80	94.00	4422.02	-42.71	42.70 S	0.99 E	42.71	178.58
4518	7.00	189.90	95.00	4516.35	-53.77	53.79 S	0.94 W	53.79	181.00
4612	7.20	189.80	94.00	4609.83	-65.19	65.23 S	2.93 W	65.30	182.57
4706	7.30	189.50	94.00	4702.86	-76.85	76.93 S	4.92 W	77.08	183.86
4801	7.60	189.60	95.00	4797.07	-88.98	89.07 S	6.96 W	89.35	184.47
4896	7.90	189.80	95.00	4891.21	-101.59	101.71 S	9.10 W	102.11	185.11
4990	7.20	193.90	94.00	4984.39	-113.65	113.79 S	11.59 W	114.38	185.81
5084	6.60	197.30	94.00	5077.71	-124.48	124.67 S	14.61 W	125.52	186.68
5179	7.60	200.60	95.00	5171.98	-136.53	136.76 S	18.44 W	137.01	187.74
5273	8.10	201.90	94.00	5265.10	-147.44	147.73 S	23.10 W	149.52	188.89
5368	8.30	197.90	95.00	5359.13	-160.12	160.46 S	27.70 W	162.84	189.80
5461	7.50	200.70	93.00	5451.25	-172.13	172.53 S	31.91 W	175.45	190.48
5556	7.10	201.30	95.00	5545.48	-183.35	183.80 S	36.24 W	187.33	191.15
5650	7.10	194.70	94.00	5638.78	-194.33	194.83 S	39.82 W	198.88	191.55
5746	7.00	192.50	96.00	5734.04	-205.90	206.41 S	41.58 W	210.56	191.39
5840	6.90	192.20	94.00	5827.35	-217.12	217.65 S	43.03 W	221.87	191.18
5935	6.90	192.50	95.00	5921.66	-228.24	228.80 S	45.47 W	233.28	191.24
6030	6.70	192.10	95.00	6015.99	-239.20	239.78 S	47.86 W	244.52	191.29
6125	6.60	192.70	95.00	6110.35	-249.91	250.54 S	50.23 W	255.52	191.34
6220	6.40	193.30	95.00	6204.74	-260.36	261.02 S	52.64 W	266.27	191.40
6314	6.30	194.20	94.00	6298.17	-270.43	271.11 S	55.11 W	276.66	191.49

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/100ft)
6408	6.20	194.50	94.00	6391.61	-280.31	281.03 S	57.65 W	288.88 191.59 0.11
6503	4.70	194.50	95.00	6488.16	-289.02	289.76 S	59.91 W	295.69 191.68 1.58
6597	3.50	196.70	94.00	6579.93	-295.43	295.19 S	61.84 W	302.58 191.79 1.34
6682	2.40	216.50	95.00	6674.81	-299.73	300.52 S	64.00 W	307.26 192.02 1.48
6787	2.00	238.50	95.00	6769.74	-302.21	303.04 S	68.57 W	310.26 192.39 0.60
6881	1.80	331.20	94.00	6863.71	-301.80	302.85 S	69.85 W	310.34 192.78 2.98
6974	2.40	337.60	93.00	6956.64	-298.70	299.57 S	70.09 W	307.66 193.17 0.69
7069	1.50	342.50	95.00	7051.59	-295.66	296.54 S	71.22 W	304.98 193.51 0.96
7163	1.30	311.70	94.00	7145.56	-293.77	294.58 S	72.39 W	303.42 193.80 0.82
7258	1.10	258.90	95.00	7240.54	-293.05	293.95 S	74.10 W	303.16 194.15 0.94
7352	1.80	247.80	94.00	7334.51	-293.59	294.53 S	76.37 W	304.28 194.54 0.92
7447	0.30	47.50	95.00	7429.50	-293.98	294.93 S	77.57 W	304.96 194.74 2.19
7541	0.50	64.30	94.00	7523.50	-293.64	294.59 S	77.02 W	304.49 194.65 0.24
7635	0.40	61.20	95.00	7618.49	-293.31	294.25 S	76.35 W	303.99 194.55 0.11
7712	0.80	341.80	78.00	7694.49	-292.80	293.74 S	76.25 W	303.48 194.55 0.86
7744	1.40	348.70	32.00	7726.48	-292.28	293.20 S	76.38 W	302.98 194.60 2.52
7807	7.60	4.90	32.00	7789.26	-287.32	288.26 S	76.05 W	298.12 194.78 10.63
7839	10.40	1.50	32.00	7820.85	-282.27	283.20 S	75.79 W	293.17 194.98 8.29
7871	13.40	358.90	32.00	7852.16	-275.67	276.81 S	75.78 W	285.80 195.32 9.52
7902	17.2	358.90	31.00	7882.06	-267.50	268.43 S	75.94 W	278.97 195.80 12.26
7933	21.40	0.40	31.00	7911.31	-257.25	258.19 S	75.99 W	269.14 196.40 13.64
7985	24.10	0.90	32.00	7940.82	-244.88	245.81 S	75.85 W	257.25 197.15 8.48
7995	25.80	0.60	30.00	7968.01	-232.23	233.16 S	75.68 W	245.14 197.96 5.68
8027	27.30	0.50	32.00	7996.64	-217.93	218.86 S	75.54 W	231.53 199.04 4.69
8058	27.80	0.90	31.00	8024.12	-203.60	204.52 S	75.37 W	217.97 200.23 1.72
8089	29.30	2.20	31.00	8051.35	-188.80	189.71 S	74.96 W	203.99 201.56 5.24
8120	31.50	2.80	31.00	8078.09	-173.14	174.04 S	74.28 W	189.23 203.11 7.16
8151	33.80	2.70	31.00	8104.22	-158.48	157.38 S	73.48 W	173.89 205.03 6.78
8183	36.10	2.20	32.00	8130.48	-138.23	139.12 S	72.68 W	156.98 207.58 7.85
8214	38.70	359.90	31.00	8155.10	-119.42	120.30 S	72.33 W	140.37 211.02 9.61
8246	42.20	358.80	32.00	8179.45	-98.66	99.54 S	72.57 W	123.19 216.10 11.16
8277	46.40	358.70	31.00	8201.63	-77.01	77.90 S	73.05 W	106.79 223.16 13.55
8309	49.50	358.40	32.00	8223.27	-53.44	54.33 S	73.65 W	91.52 233.58 6.60
8340	49.40	358.30	31.00	8243.63	-30.07	30.97 S	74.32 W	80.51 247.38 2.91
8372	50.80	357.60	32.00	8264.13	-5.51	5.41 S	75.13 W	75.41 265.12 4.78
8403	54.40	359.30	31.00	8282.94	19.13	18.22 N	75.73 W	77.89 283.53 11.85
8435	58.70	0.50	32.00	8301.04	45.51	44.60 N	75.77 W	87.92 300.48 7.82
8467	57.30	359.90	32.00	8318.47	72.35	71.44 N	75.68 W	104.07 313.35 2.45
8498	60.10	359.60	31.00	8334.57	98.83	97.93 N	75.79 W	123.83 322.26 9.07
8530	63.00	0.10	32.00	8349.82	126.96	126.06 N	75.87 W	147.13 328.96 9.17
8561	65.10	359.40	31.00	8363.38	154.83	153.93 N	75.99 W	171.66 333.73 7.07
8592	67.20	358.20	31.00	8375.91	183.18	182.27 N	76.59 W	197.71 337.21 7.64
8624	69.80	358.50	32.00	8387.84	212.95	212.03 N	77.44 W	225.73 339.94 8.17
8656	72.40	359.20	32.00	8398.01	243.22	242.30 N	78.05 W	254.56 342.15 8.38
8687	75.00	359.40	31.00	8406.71	272.97	272.05 N	78.41 W	283.12 343.92 8.41
8719	77.40	0.00	32.00	8414.34	304.05	303.12 N	78.67 W	313.14 345.47 7.72
8751	79.30	0.50	32.00	8420.80	335.38	334.46 N	78.41 W	343.53 346.61 6.21
8782	81.50	0.50	31.00	8425.97	365.94	365.02 N	78.12 W	373.29 347.92 7.10
8814	83.40	0.90	32.00	8430.17	397.55	396.74 N	77.73 W	404.28 348.92 5.07
8846	85.80	2.00	32.00	8433.19	429.48	428.69 N	76.92 W	435.43 349.83 8.24
8877	87.60	3.20	31.00	8434.97	460.38	459.50 N	75.52 W	465.67 350.67 5.97
8909	89.70	3.10	32.00	8435.72	492.29	491.44 N	73.76 W	496.95 351.46 6.57
8941	91.10	3.80	32.00	8435.50	524.21	523.38 N	71.83 W	528.28 352.19 4.89
8973	91.30	2.30	95.00	8433.51	618.98	618.22 N	66.78 W	621.82 353.83 1.59
9005	91.40	1.00	94.00	8431.30	712.88	712.16 N	64.07 W	715.03 354.86 1.39
9037	90.00	359.20	98.00	8430.12	808.85	808.14 N	63.91 W	810.67 355.48 2.38
9069	90.40	359.70	93.00	8428.80	901.85	901.14 N	64.80 W	903.46 355.89 0.69
9101	88.40	358.70	94.00	8430.78	995.84	995.12 N	66.11 W	997.31 356.20 2.38
9133	88.70	358.50	95.00	8433.19	1090.80	1090.08 N	68.43 W	1092.20 356.41 0.38
9165	88.40	358.70	95.00	8435.59	1185.77	1185.00 N	70.76 W	1187.11 356.58 0.38
9197	90.50	358.10	94.00	8438.49	1279.74	1278.95 N	73.38 W	1281.06 356.72 2.32
9229	88.90	358.00	95.00	8438.99	1374.72	1373.89 N	76.61 W	1376.03 356.81 1.89
9261	91.10	358.20	94.00	8438.99	1468.69	1467.84 N	79.73 W	1470.00 356.89 2.35
9293	89.10	358.10	95.00	8438.82	1563.67	1562.78 N	82.79 W	1564.97 356.97 2.11
9325	89.60	357.40	59.00	8437.49	1622.64	1621.73 N	85.11 W	1623.96 357.00 1.46
9357	89.40	358.70	95.00	8438.32	1717.61	1716.87 N	88.34 W	1718.94 357.05 1.38
9389	89.30	1.00	94.00	8439.39	1811.59	1810.66 N	88.59 W	1812.82 357.20 2.45
9421	89.80	1.40	93.00	8440.04	1904.54	1903.64 N	86.64 W	1905.61 357.39 0.78
9453	91.80	0.80	95.00	8438.80	1999.48	1998.60 N	84.73 W	2000.40 357.57 1.87
9485	92.50	1.10	95.00	8435.40	2094.38	2093.53 N	83.08 W	2095.18 357.73 0.87
9517	91.70	1.90	94.00	8431.95	2188.24	2187.43 N	80.62 W	2189.92 357.89 1.20
9549	91.40	2.30	95.00	8429.38	2283.10	2282.33 N	77.14 W	2283.64 358.06 0.53
9581	90.90	2.10	94.00	8427.60	2376.96	2376.24 N	73.53 W	2377.38 358.23 0.57
9613	91.70	2.20	94.00	8425.38	2470.82	2470.15 N	70.00 W	2471.14 358.38 0.86
9645	90.40	1.00	95.00	8423.62	2565.72	2565.10 N	67.35 W	2565.98 358.50 1.86
9677	91.00	0.30	94.00	8422.47	2659.59	2658.98 N	66.29 W	2659.91 358.57 0.98
9709	92.70	0.10	93.00	8419.47	2752.62	2752.03 N	65.96 W	2752.82 358.63 1.84
9741	92.00	0.20	93.00	8415.86	2845.54	2844.95 N	65.72 W	2845.71 358.68 0.76
9773	90.20	359.80	94.00	8413.85	2939.51	2938.93 N	65.72 W	2939.66 358.72 1.96
9805	91.00	359.40	96.00	8412.85	3035.50	3034.92 N	64.39 W	3035.65 358.78 0.93
9837	91.80	0.10	95.00	8410.53	3130.47	3129.89 N	64.80 W	3130.60 358.78 1.12
9869	89.70	358.40	95.00	8409.28	3225.45	3224.87 N	67.22 W	3225.58 358.81 2.33

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)
11739	91.60	359.40	95.00	8408.21	3320.44	3319.86 N	68.21 W	3320.56	358.82 2.00
11834	91.60	358.60	95.00	8405.55	3415.40	3414.81 N	69.87 W	3415.52	358.83 0.84
11929	92.90	359.40	95.00	8401.82	3510.32	3509.72 N	71.53 W	3510.44	358.83 1.61
12024	89.80	0.40	95.00	8399.59	3605.28	3604.68 N	71.89 W	3605.39	358.86 3.43
12117	90.80	0.70	93.00	8399.10	3698.25	3697.67 N	70.80 W	3698.35	358.90 1.12
12211	91.70	0.30	94.00	8397.05	3792.21	3791.64 N	69.98 W	3792.29	358.94 1.05
12308	89.20	0.20	95.00	8398.30	3887.19	3886.63 N	69.56 W	3887.25	358.97 2.63
12401	88.70	0.20	95.00	8398.04	3982.16	3981.61 N	69.23 W	3982.22	359.00 0.53
12496	90.90	359.40	95.00	8398.38	4077.15	4076.61 N	69.56 W	4077.20	359.02 2.45
12590	91.60	359.80	94.00	8398.32	4171.12	4170.58 N	70.22 W	4171.17	359.04 0.88
12684	92.20	359.60	94.00	8393.21	4265.07	4264.53 N	70.71 W	4265.11	359.05 0.67
12777	90.00	359.80	93.00	8391.42	4358.05	4357.50 N	71.20 W	4358.09	359.06 2.38
12872	92.20	0.10	95.00	8389.60	4453.02	4452.48 N	71.28 W	4453.05	359.08 2.34
12968	91.60	359.90	96.00	8386.42	4548.96	4548.43 N	71.37 W	4548.99	359.10 0.70
13062	93.10	359.70	94.00	8382.68	4642.87	4642.34 N	71.76 W	4642.90	359.11 1.60
13157	92.70	359.10	95.00	8377.76	4737.75	4737.22 N	72.77 W	4737.78	359.12 0.76
13252	91.80	358.20	95.00	8374.03	4832.67	4832.12 N	75.01 W	4832.70	359.11 1.34
13346	92.90	357.60	94.00	8370.17	4926.56	4926.07 N	76.45 W	4926.60	359.09 1.33
13441	90.90	357.70	95.00	8367.02	5021.46	5020.83 N	82.34 W	5021.51	359.06 2.11
13535	91.60	357.30	94.00	8364.81	5115.39	5114.72 N	85.44 W	5115.45	359.03 1.05
13630	92.40	357.30	95.00	8361.33	5210.27	5209.55 N	90.91 W	5210.34	359.00 0.83
13725	91.30	357.40	95.00	8358.26	5305.16	5304.40 N	95.30 W	5305.25	358.97 1.16
13820	93.20	357.40	95.00	8354.53	5400.03	5399.22 N	99.61 W	5400.14	358.94 2.00
13898	94.40	357.00	76.00	8349.38	5477.80	5476.95 N	103.41 W	5477.93	358.92 1.82
STRAIGHT LINE PROJECTION TO BIT AT 13950' MD									
13950	94.40	357.00	52.00	8345.37	5529.61	5528.73 N	105.12 W	5529.75	358.90 0.00