



PO Box 1370
Artesia, NM 88211-1370
(575) 748-1288

NM OIL CONSERVATION
ARTESIA DISTRICT

JAN 19 2016

RECEIVED

October 19, 2015

RKI Exploration
210 Park Ave.
Suite 900
Oklahoma City, OK 73102

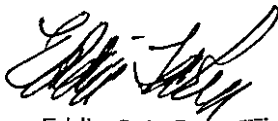
30 015 42752

RE: RDX Federal Com 17-26H
200' FSL & 1425' FEL
Sec. 17, T26S, R30E
Eddy County, New Mexico

Dear Sir,

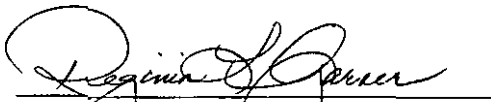
The attached is the Deviation Survey for the above captioned well.

Very truly yours,

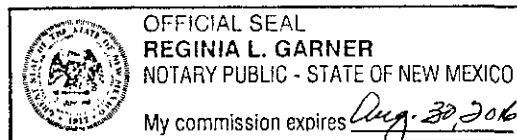

Eddie C. LaRue
Operations Manager

State of New Mexico }
County of Eddy }

The foregoing was acknowledged before me this 19th day of October, 2015.



Notary Public



Date	Depth	Deviation	Direction	TVD	Horiz Disp
9/8/2015	240	0.50			
9/8/2015	490	0.70			
9/9/2015	758	0.70			
9/11/2015	1193	2.50	201.30		
9/11/2015	1285	2.90	209.60	1284.60	
9/11/2015	1376	4.10	227.10	1375.40	
9/11/2015	1467	4.50	239.30	1466.10	
9/11/2015	1558	4.40	250.70	1556.80	
9/11/2015	1652	4.70	252.40	1650.60	
9/11/2015	1750	5.10	251.60	1748.23	
9/11/2015	1810	6.10	250.80	1807.90	
9/11/2015	1904	5.90	264.60	1901.39	
9/12/2015	1999	4.40	279.90	1996.01	
9/12/2015	2093	4.20	284.90	2089.74	
9/12/2015	2188	5.20	289.10	2184.42	
9/12/2015	2282	5.70	276.80	2278.00	
9/12/2015	2377	6.00	268.80	2372.51	
9/12/2015	2471	5.10	256.10	2460.07	
9/12/2015	2566	5.20	246.90	2560.69	
9/12/2015	2660	6.50	247.80	2654.20	
9/12/2015	2755	5.80	254.10	2748.65	
9/12/2015	2849	4.40	253.40	2842.30	
9/12/2015	2943	4.10	247.90	2936.02	
9/12/2015	3038	4.60	246.80	3030.74	
9/12/2015	3132	5.30	246.20	3124.39	
9/12/2015	3228	5.80	242.60	3219.94	
9/13/2015	3323	6.70	240.40	3314.38	
9/13/2015	3418	6.00	248.80	3408.80	
9/13/2015	3512	4.30	269.90	3502.42	
9/13/2015	3607	4.70	280.90	3597.13	
9/13/2015	3701	5.80	284.50		
9/13/2015	3796	7.40	286.80	3785.10	
9/13/2015	3890	7.50	181.50	3878.31	
9/14/2015	3985	7.90	278.00	3972.45	
9/14/2015	4079	7.30	275.60	4065.63	
9/14/2015	4174	6.30	265.30	4159.90	
9/14/2015	4269	6.40	263.00	4254.38	
9/15/2015	4363	6.20	259.90	4347.81	
9/15/2015	4459	4.40	255.30	4475.40	
9/15/2015	4554	3.80	245.20	4538.15	
9/15/2015	4648	3.30	242.90	4631.97	
9/15/2015	4743	3.00	235.60	4726.83	
9/15/2015	4837	3.30	233.20	4820.69	
9/15/2015	4932	2.70	213.98	4915.56	
9/15/2015	5026	2.70	242.40	5009.45	

Date	Depth	Deviation	Direction	TVD	Horiz Disp
9/15/2015	5120	2.20	241.20	5103.40	
9/15/2015	5215	2.30	239.40	5198.29	
9/16/2015	5310	2.20	237.90	5293.22	
9/16/2015	5404	2.20	225.80	5387.15	
9/17/2015	5499	3.70	227.00	5482.02	
9/17/2015	5593	3.60	228.90	5575.83	
9/17/2015	5686	3.70	232.10	5670.64	
9/17/2015	5782	3.10	231.40	5764.50	
9/17/2015	5877	2.70	233.60	5859.35	
9/17/2015	5971	2.60	233.60	5953.25	
9/18/2015	6066	1.90	265.40	6048.18	
9/18/2015	6160	1.80	287.00	6142.13	
9/19/2015	6283	1.60	282.20	6265.08	
9/19/2015	6378	1.60	272.30	6360.04	
9/19/2015	6472	1.40	273.90	6454.01	
9/20/2015	6566	1.40	275.10	6547.98	
9/20/2015	6660	1.50	279.00	6641.95	
9/20/2015	6754	1.10	270.80	6735.93	
9/20/2015	6849	1.10	267.60		
9/20/2015	6943	0.80	262.60	6924.90	
9/20/2015	7038	0.90	248.40	7019.88	
9/21/2015	7132	1.10	227.10	7113.87	
9/21/2015	7227	0.80	224.50	7208.86	
9/21/2015	7321	0.80	191.90	7302.85	
9/22/2015	7415	0.70	166.70	7396.84	
9/22/2015	7422	0.70	157.40	7403.84	
9/26/2015	7509	0.90	133.00	7490.83	
9/26/2015	7603	0.80	114.60	7584.82	
9/26/2015	7698	0.80	91.00	7679.80	
9/26/2015	7793	0.70	63.80	7774.81	
9/26/2015	7888	0.40	52.40	7869.80	
9/26/2015	7981	0.60	329.90	7962.80	
9/26/2015	8075	0.50	317.70	8056.79	
9/26/2015	8168	1.10	211.50	8149.79	
9/27/2015	8262	1.50	205.10	8343.76	
9/27/2015	8357	1.00	204.90	8338.74	
9/27/2015	8452	0.70	200.70	8433.73	
9/28/2015	8547	0.50	218.30	8528.72	
9/28/2015	8641	0.70	193.70	8622.72	
9/28/2015	8735	0.70	181.70	8716.71	
9/28/2015	8830	1.20	158.00	8811.70	
9/28/2015	8924	1.10	152.40	8905.68	
9/28/2015	9019	1.10	181.10	9000.66	
9/29/2015	9113	1.40	167.90	9094.64	
9/29/2015	9207	1.30	143.60	9188.62	
9/29/2015	9301	1.00	125.50	9282.60	
9/29/2015	9396	1.00	147.40	9377.60	

Date	Depth	Deviation	Direction	TVD	Horiz Disp
9/29/2015	9491	0.40	96.70	9472.58	
9/29/2015	9585	0.60	119.00	9566.60	
9/29/2015	9680	1.00	147.60	9661.56	
9/30/2015	9774	0.90	154.20	9755.55	
9/30/2015	9869	0.90	153.90	9850.54	
9/30/2015	9964	0.80	148.70	9945.53	
9/30/2015	10027	0.90	156.60	10008.52	
10/1/2015	10033	0.80	161.40		
10/2/2015	10064	1.10	188.40	10045.52	
10/2/2015	10096	0.70	116.90	10077.51	
10/2/2015	10127	1.40	40.10	10108.51	
10/2/2015	10159	3.30	14.80	10140.48	
10/2/2015	10190	5.00	11.10		
10/2/2015	10222	6.70	11.10	10203.00	
10/2/2015	10253	8.70	11.10	10282.00	
10/2/2015	10284	10.70	11.30	10264.51	
10/2/2015	10315	12.90	13.30	10295.50	
10/2/2015	10346	14.20	12.70	10324.99	
10/2/2015	10377	16.20	9.10	10354.90	
10/2/2015	10409	18.20	8.60	10385.50	
10/2/2015	10440	20.80	7.70	10414.69	
10/2/2015	10471	22.10	8.60	10443.63	
10/3/2015	10502	24.10	8.60	10472.15	
10/3/2015	10524	26.30	9.30	10501.10	
10/3/2015	10566	28.80	10.10	10529.47	
10/3/2015	10597	31.80	10.20	10556.23	
10/3/2015	10628	35.10	10.00	10582.09	
10/3/2015	10660	38.00	10.10	10607.80	
10/3/2015	10692	41.00	9.60	10632.49	
10/3/2015	10723	43.80	9.00	10655.40	
10/3/2015	10765	46.70	7.90	10677.90	
10/3/2015	10786	49.80	7.10	40698.54	
10/3/2015	10818	52.80	6.40	10718.55	
10/4/2015	10850	55.90	5.60	10737.20	
10/4/2015	10913	62.20	4.10	10769.58	
10/4/2015	10945	65.70	4.00	10785.63	
10/4/2015	10976	64.40	3.80	10795.40	
10/4/2015	11008	72.90	3.80	10805.80	
10/4/2015	11039	76.50	3.70	10813.95	
10/4/2015	11070	79.90	3.20	10820.32	
10/4/2015	11102	83.10	2.30	10825.05	
10/4/2015	11134	86.90	1.40	10827.84	
10/5/2015	11150	89.20	359.80	10828.38	
10/5/2015	11245	92.50	358.70	10828.42	
10/5/2015	11341	93.80	358.90	10823.15	
10/5/2015	11435	92.90	358.70	10817.65	
10/5/2015	11530	92.00	358.80	10813.59	

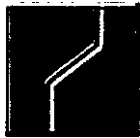
Date	Depth	Deviation	Direction	TVD	Horiz Disp
10/6/2015	11625	89.50	358.60	10812.35	
10/6/2015	11718	90.10	357.40	10812.67	
10/6/2015	11813	91.20	357.00	10811.60	
10/6/2015	11905	91.40	357.80	10809.51	
10/6/2015	11998	90.50	358.40	10807.97	
10/6/2015	12090	90.20	358.30	10807.40	
10/6/2015	12183	90.90	357.30	10806.51	
10/6/2015	12277	90.90	356.20	10805.04	
10/7/2015	12371	88.50	357.90	10805.53	
10/7/2015	12464	88.40	357.70	10808.04	
10/7/2015	12558	88.00	358.20	10811.00	
10/7/2015	12651	88.40	0.50	10813.12	
10/7/2015	12745	88.70	359.90	10816.30	
10/7/2015	12838	89.00	359.10	10818.16	
10/7/2015	12932	90.70	359.10	10818.41	
10/9/2015	13029	90.40	0.30	10817.48	
10/9/2015	13119	88.70	0.60	10818.18	
10/9/2015	13214	89.50	0.30	10819.00	2513.00
10/9/2015	13310	91.10	0.60	10819.00	2609.00
10/9/2015	13404	89.20	0.80	10818.00	2702.00
10/9/2015	13499	90.00	0.60	10819.00	
10/9/2015	13595	90.90	0.40	10818.00	
10/9/2015	13690	91.60	0.10	10816.00	
10/10/2015	13785	91.60	0.70	10814.11	
10/10/2015	13879	90.70	0.40	10862.23	
10/10/2015	13974	91.80	359.99	10810.15	
10/10/2015	14163	90.90	358.80	10802.00	3664.00
10/10/2015	14258	89.20	358.40	10802.00	
10/10/2015	14353	89.50	357.50	10803.00	
10/11/2015	14448	89.90	359.10	10804.00	3744.00
10/11/2015	14543	88.50	359.20	10800.00	3839.00
10/11/2015	14638	88.70	358.90	10812.00	3934.00
10/11/2015	14733	88.70	357.70	10812.00	4029.00
10/11/2015	14828	89.00	357.20	10812.00	
10/11/2015	14923	91.10	357.80	10812.00	
10/11/2015	15018	90.40	357.00	10810.00	
10/12/2015	15113	90.60	355.80	10810.00	4409.00
10/12/2015	15208	91.20	356.10	10808.00	4504.00
10/12/2015	15304	92.50	355.70	10805.00	4600.00
10/12/2015	15399	93.30	355.60	10800.00	4695.00
10/12/2015	15498	94.70	353.10	10793.00	4793.00



State of: New Mexico
County of: Eddy

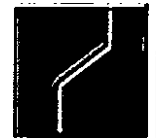
I, Dennis Boudreaux, an authorized employed of Ranger Directional Services have verified the MWD surveys from 09-11-15 through 10-12-15, from a measured depth of 100 feet to a measured depth of 15,498 feet. The data is true, correct, complete and within the limitations of the tool set forth by Ranger Directional Services. These surveys were conducted at the request of RKI Exploration & Production for the RDX Fed 17-26H, API No. 30-015-42752 in Eddy County, New Mexico. This report conforms to the principles and procedures as set forth by Ranger Directional Services.

Dennis Boudreaux
MWD Coordinator
Ranger Directional Services

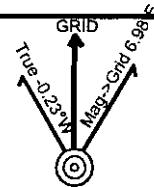


Job Number: RDS 15-33
Company: RKI Exploration
Lease/Well: RDX Fed 17-26H
Location: 17-26S-30E
Rig Name: Silver Oak 14
State/County: New Mexico/ Eddy County
Country: USA
API Number: 30-015-42752

Elev. GL: 0.00 ft RKB: 0.00 ft
System: US State Plane 1983
Group: New Mexico Eastern Zone
Datum: GRS80
Mag. Decl.: 7.21° (C:\HawkEye\IGRF2005.MIF)
Grid Conv.: 0.23012 E
Date: Monday, October 12, 2015



Calculated by HawkEye Software
Minimum Curvature Method
Vertical Section Plane 356.32°
Northing (US ft): 377031.00 Easting (US ft): 675763.30
Latitude: 32°02'8.8660" N Longitude: -103°53'58.2656" W
Direction Reference: Grid North



Measured Depth (Ft)	INC Deg	AZM Deg	TVD (Ft)	NS (Ft)	EW (Ft)	VS (Ft)	DLS */100 Ft	Easting (US ft)	Northing (US ft)	UD/NS From-Plan (Ft)	LR/EW From-Plan (Ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	675763.30	377031.00	0.00 (N)	0.00 (E)
100.00	0.40	136.60	100.00	-0.25	0.24	-0.27	0.40	675763.54	377030.75	-0.25 (S)	0.24 (E)
200.00	0.30	147.70	200.00	-0.73	0.62	-0.77	0.12	675763.92	377030.27	-0.73 (S)	0.62 (E)
300.00	0.30	153.40	300.00	-1.18	0.88	-1.24	0.03	675764.18	377029.82	-1.18 (S)	0.88 (E)
400.00	0.30	185.60	399.99	-1.68	0.97	-1.74	0.17	675764.27	377029.32	-1.68 (S)	0.97 (E)
500.00	0.70	170.20	499.99	-2.54	1.05	-2.60	0.42	675764.35	377028.46	-2.54 (S)	1.05 (E)
600.00	1.00	164.60	599.98	-3.98	1.38	-4.06	0.31	675764.68	377027.02	-3.98 (S)	1.38 (E)
700.00	1.10	161.10	699.96	-5.73	1.93	-5.85	0.12	675765.23	377025.27	-5.73 (S)	1.93 (E)
800.00	1.30	166.70	799.94	-7.75	2.50	-7.89	0.23	675765.80	377023.25	-7.75 (S)	2.50 (E)
900.00	2.00	172.20	899.90	-10.58	2.99	-10.75	0.72	675766.30	377020.42	-10.58 (S)	2.99 (E)
990.00	2.10	182.90	989.84	-13.78	3.12	-13.95	0.44	675766.43	377017.22	-13.78 (S)	3.12 (E)
1102.00	2.30	190.80	1101.76	-18.04	2.60	-18.17	0.32	675765.90	377012.96	-18.04 (S)	2.60 (E)
1193.00	2.50	201.30	1192.68	-21.68	1.54	-21.74	0.53	675764.84	377009.32	-21.68 (S)	1.54 (E)
1285.00	2.90	209.60	1284.58	-25.57	-0.34	-25.50	0.61	675762.96	377005.43	-25.57 (S)	-0.34 (W)
1376.00	4.10	227.10	1375.41	-29.79	-3.86	-29.48	1.75	675759.44	377001.21	22.43 (U)	-19.52 (L)
1467.00	4.50	239.30	1466.15	-33.83	-9.32	-33.16	1.09	675753.99	376997.17	21.71 (U)	-25.11 (L)
1558.00	4.40	250.70	1556.88	-36.80	-15.68	-35.72	0.98	675747.62	376994.20	18.26 (U)	-29.65 (L)
1652.00	4.70	252.40	1650.59	-39.16	-22.75	-37.62	0.35	675740.55	376991.84	18.30 (U)	-30.17 (L)
1715.00	5.10	251.60	1713.36	-40.82	-27.87	-38.95	0.64	675735.43	376990.18	19.72 (U)	-29.85 (L)
1810.00	6.10	250.80	1807.90	-43.82	-36.64	-41.38	1.06	675726.66	376987.18	22.80 (U)	-29.58 (L)
1904.00	5.90	264.60	1901.39	-45.91	-46.17	-42.86	1.55	675717.13	376985.09	18.42 (U)	-33.84 (L)
1999.00	4.40	277.90	1996.01	-45.87	-54.64	-42.27	2.01	675708.66	376985.13	12.62 (U)	-35.34 (L)
2093.00	4.20	284.90	2089.74	-44.49	-61.54	-40.45	0.60	675701.76	376986.51	9.79 (U)	-33.44 (L)
2188.00	5.20	289.10	2184.42	-42.19	-68.97	-37.68	1.11	675694.33	376988.81	9.86 (U)	-30.26 (L)
2282.00	5.70	276.80	2278.00	-40.24	-77.63	-35.18	1.35	675685.67	376990.76	19.00 (U)	-23.73 (L)
2377.00	6.00	268.80	2372.51	-39.79	-87.28	-34.10	0.91	675676.02	376991.21	25.45 (U)	-18.22 (L)
2471.00	5.10	256.10	2466.07	-40.89	-96.25	-34.63	1.61	675667.05	376990.11	31.26 (U)	-10.59 (L)
2566.00	5.20	246.90	2560.69	-43.60	-104.31	-36.81	0.87	675658.99	376987.40	34.43 (U)	-5.31 (L)
2660.00	6.50	247.80	2654.20	-47.28	-113.15	-39.92	1.39	675650.15	376983.72	37.42 (U)	-6.32 (L)
2755.00	5.80	254.10	2748.65	-50.63	-122.75	-42.64	1.02	675640.55	376980.37	40.04 (U)	-10.64 (L)
2849.00	4.40	253.40	2842.28	-52.96	-130.77	-44.46	1.49	675632.53	376978.04	41.96 (U)	-9.86 (L)
2943.00	4.10	247.90	2936.02	-55.25	-137.34	-46.32	0.54	675625.96	376975.75	43.12 (U)	-5.86 (L)
3038.00	4.60	246.80	3030.74	-58.03	-143.99	-48.67	0.53	675619.31	376972.97	43.83 (U)	-5.49 (L)
3132.00	5.30	246.20	3124.39	-61.27	-151.42	-51.42	0.75	675611.88	376969.73	45.48 (U)	-5.59 (L)
3228.00	5.80	242.60	3219.94	-65.29	-159.79	-54.90	0.63	675603.51	376965.71	48.43 (U)	-3.48 (L)
3323.00	6.70	240.40	3314.38	-70.24	-168.87	-59.25	0.98	675594.43	376960.76	52.41 (U)	-2.71 (L)
3418.00	6.00	248.80	3408.80	-74.77	-178.32	-63.17	1.22	675584.98	376956.23	55.28 (U)	-11.39 (L)
3512.00	4.30	269.90	3502.42	-76.55	-186.42	-64.43	2.68	675576.88	376954.45	49.38 (U)	-30.15 (L)
3607.00	4.70	280.90	3597.13	-75.82	-193.81	-63.23	1.00	675569.50	376955.18	44.36 (U)	-36.41 (L)
3701.00	5.80	284.50	3690.73	-73.90	-202.19	-60.78	1.22	675561.12	376957.10	45.13 (U)	-35.74 (L)
3796.00	7.40	286.80	3785.10	-70.93	-212.69	-57.14	1.71	675550.61	376960.07	49.28 (U)	-33.81 (L)
3890.00	7.50	281.50	3878.31	-67.96	-224.50	-53.41	0.74	675538.80	376963.04	58.74 (U)	-25.28 (L)
3985.00	7.90	278.00	3972.45	-65.82	-237.04	-50.47	0.65	675526.26	376965.18	67.05 (U)	-18.30 (L)
4079.00	7.30	275.60	4065.63	-64.34	-249.38	-48.20	0.72	675513.92	376966.67	74.20 (U)	-12.55 (L)

Measured Depth (Ft)	INC Deg	AZM Deg	TVD (Ft)	NS (Ft)	EW (Ft)	VS (Ft)	DLS °/100 Ft	Easting (US ft)	Northing (US ft)	UD/NS From-Plan (Ft)	LR/EW From-Plan (Ft)
4174.00	6.30	265.30	4159.96	-64.17	-260.58	-47.32	1.66	675502.72	376966.83	79.94 (U)	3.47 (R)
4269.00	6.40	263.00	4254.38	-65.25	-271.03	-47.72	0.29	675492.27	376965.75	83.78 (U)	8.21 (R)
4363.00	6.20	259.90	4347.81	-66.77	-281.23	-48.59	0.42	675482.07	376964.23	87.04 (U)	13.95 (R)
4459.00	4.40	255.30	4443.40	-68.62	-289.90	-49.87	1.93	675473.41	376962.38	87.77 (U)	21.71 (R)
4554.00	3.80	245.20	4538.15	-70.86	-296.28	-51.70	0.99	675467.02	376960.14	82.77 (U)	36.66 (R)
4648.00	3.30	242.90	4631.97	-73.40	-301.51	-53.90	0.55	675461.79	376957.60	80.58 (U)	39.11 (R)
4743.00	3.00	235.60	4726.83	-76.05	-306.00	-56.26	0.53	675457.30	376954.95	73.79 (N)	47.58 (E)
4837.00	3.30	233.20	4820.69	-79.06	-310.20	-58.99	0.35	675453.11	376951.94	70.67 (U)	48.68 (R)
4932.00	2.70	239.80	4915.56	-81.83	-314.32	-61.48	0.73	675448.98	376949.17	-3.94 (S)	-83.53 (W)
5026.00	2.70	242.40	5009.45	-83.97	-318.19	-63.37	0.13	675445.11	376947.03	-3.98 (S)	-81.19 (W)
5120.00	2.20	241.20	5103.37	-85.86	-321.74	-65.03	0.53	675441.56	376945.14	-3.79 (S)	-78.57 (W)
5215.00	2.30	239.40	5198.29	-87.71	-324.98	-66.67	0.13	675438.33	376943.29	-3.52 (S)	-75.52 (W)
5310.00	2.20	237.90	5293.22	-89.65	-328.16	-68.40	0.12	675435.14	376941.35	-3.35 (S)	-72.44 (W)
5404.00	2.20	225.80	5387.15	-91.87	-330.98	-70.43	0.49	675432.32	376939.14	-3.47 (S)	-69.07 (W)
5499.00	3.70	227.00	5482.02	-95.23	-334.53	-73.56	1.58	675428.77	376935.77	51.76 (U)	41.76 (R)
5593.00	3.60	228.90	5575.83	-99.24	-338.97	-77.27	0.17	675424.33	376931.76	53.04 (U)	37.42 (R)
5688.00	3.70	232.10	5670.64	-103.08	-343.64	-80.81	0.24	675419.66	376927.92	54.83 (U)	32.05 (R)
5782.00	3.10	231.40	5764.48	-106.53	-348.02	-83.97	0.64	675415.28	376924.47	53.85 (U)	30.53 (R)
5877.00	2.70	233.60	5859.35	-109.46	-351.83	-86.65	0.44	675411.47	376921.54	-10.51 (S)	-58.62 (W)
5971.00	2.60	233.60	5953.25	-112.04	-355.33	-89.00	0.11	675407.97	376918.96	-11.09 (S)	-56.20 (W)
6066.00	1.90	265.40	6048.18	-113.44	-358.63	-90.19	1.48	675404.67	376917.56	-11.12 (S)	-55.43 (W)
6160.00	1.80	287.00	6142.13	-113.14	-361.60	-89.69	0.74	675401.70	376917.86	-10.19 (S)	-56.55 (W)
6283.00	1.60	282.20	6265.08	-112.21	-365.12	-88.54	0.20	675398.18	376918.79	-9.21 (S)	-59.92 (W)
6378.00	1.60	272.30	6360.04	-111.87	-367.74	-88.04	0.29	675395.56	376919.13	-8.87 (S)	-62.54 (W)
6472.00	1.40	273.90	6454.01	-111.74	-370.20	-87.75	0.22	675393.10	376919.26	-8.74 (S)	-65.00 (W)
6566.00	1.40	275.10	6547.98	-111.56	-372.49	-87.43	0.03	675390.81	376919.44	-8.56 (S)	-67.29 (W)
6660.00	1.50	279.00	6641.95	-111.27	-374.85	-86.98	0.15	675388.45	376919.73	-8.27 (S)	-69.65 (W)
6754.00	1.10	270.80	6735.93	-111.06	-376.97	-86.64	0.47	675386.33	376919.94	-8.06 (S)	-71.77 (W)
6849.00	1.20	273.50	6830.91	-110.99	-378.87	-86.44	0.12	675384.43	376920.01	-7.99 (S)	-73.67 (W)
6943.00	0.80	262.60	6924.90	-111.02	-380.50	-86.36	0.47	675382.80	376919.99	-8.02 (S)	-75.30 (W)
7038.00	0.90	248.40	7019.88	-111.38	-381.86	-86.64	0.24	675381.45	376919.62	-8.38 (S)	-76.65 (W)
7132.00	1.10	227.10	7113.87	-112.26	-383.20	-87.43	0.45	675380.10	376918.74	-9.26 (S)	-78.00 (W)
7227.00	0.80	224.50	7208.86	-113.36	-384.34	-88.45	0.32	675378.97	376917.65	-10.36 (S)	-79.13 (W)
7321.00	0.80	191.90	7302.85	-114.47	-384.93	-89.52	0.48	675378.37	376916.54	-11.47 (S)	-79.73 (W)
7415.00	0.70	166.70	7396.84	-115.67	-384.93	-90.72	0.36	675378.37	376915.33	-12.67 (S)	-79.73 (W)
7422.00	0.70	157.40	7403.84	-115.75	-384.91	-90.80	1.62	675378.39	376915.25	-12.75 (S)	-79.71 (W)
7509.00	0.90	133.00	7490.83	-116.70	-384.20	-91.80	0.45	675379.10	376914.30	-13.70 (S)	-79.00 (W)
7603.00	0.80	114.60	7584.82	-117.48	-383.07	-92.65	0.31	675380.23	376913.52	-14.48 (S)	-77.87 (W)
7698.00	0.80	91.00	7679.81	-117.77	-381.80	-93.02	0.34	675381.50	376913.23	-14.77 (S)	-76.60 (W)
7793.00	0.70	63.80	7774.81	-117.52	-380.62	-92.85	0.39	675382.68	376913.48	-14.52 (S)	-75.42 (W)
7888.00	0.40	52.40	7869.80	-117.07	-379.83	-92.44	0.33	675383.47	376913.94	-14.07 (S)	-74.63 (W)
7981.00	0.60	329.90	7962.80	-116.45	-379.82	-91.83	0.73	675383.48	376914.55	-13.45 (S)	-74.62 (W)
8075.00	0.50	317.70	8056.79	-115.72	-380.34	-91.07	0.16	675382.96	376915.28	-12.72 (S)	-75.14 (W)
8168.00	1.10	212.30	8149.79	-116.17	-381.09	-91.47	1.42	675382.21	376914.83	-13.17 (S)	-75.89 (W)
8262.00	1.50	205.10	8243.76	-118.05	-382.10	-93.28	0.46	675381.20	376912.95	-15.05 (S)	-76.90 (W)
8357.00	1.00	204.90	8338.74	-119.93	-382.98	-95.10	0.53	675380.33	376911.07	-16.93 (S)	-77.77 (W)
8452.00	0.70	200.70	8433.73	-121.22	-383.53	-96.35	0.32	675379.77	376909.78	-18.22 (S)	-78.33 (W)
8547.00	0.50	218.30	8528.72	-122.09	-383.99	-97.19	0.28	675379.31	376908.91	-19.09 (S)	-78.79 (W)
8641.00	0.70	193.70	8622.72	-122.97	-384.38	-98.04	0.34	675378.92	376908.03	-19.97 (S)	-79.18 (W)
8735.00	0.70	181.70	8716.71	-124.10	-384.53	-99.16	0.16	675378.77	376906.90	-21.10 (S)	-79.33 (W)
8830.00	1.20	158.00	8811.70	-125.60	-384.18	-100.69	0.66	675379.12	376905.40	-22.60 (S)	-78.98 (W)
8924.00	1.10	152.40	8905.68	-127.31	-383.39	-102.44	0.16	675379.91	376903.69	-24.32 (S)	-78.19 (W)
9019.00	1.10	181.10	9000.66	-129.03	-382.99	-104.19	0.57	675380.31	376901.97	-26.04 (S)	-77.79 (W)
9113.00	1.40	167.90	9094.64	-131.06	-382.76	-106.22	0.44	675380.54	376899.94	-28.06 (S)	-77.56 (W)
9207.00	1.30	143.60	9188.62	-133.04	-381.89	-108.26	0.61	675381.41	376897.96	-30.04 (S)	-76.69 (W)
9301.00	1.00	125.50	9282.60	-134.38	-380.59	-109.67	0.50	675382.71	376896.63	-31.38 (S)	-75.39 (W)

Measured Depth (Ft)	INC Deg	AZM Deg	TVD (Ft)	NS (Ft)	EW (Ft)	VS (Ft)	DLS */100 Ft	Easting (US ft)	Northing (US ft)	UD/NS From-Plan (Ft)	LR/EW From-Plan (Ft)
9396.00	1.00	147.00	9377.58	-135.55	-379.46	-110.92	0.39	675383.84	376895.45	-32.55 (S)	-74.26 (W)
9491.00	0.40	96.70	9472.58	-136.29	-378.68	-111.70	0.85	675384.62	376894.71	-33.29 (S)	-73.48 (W)
9585.00	0.60	119.00	9566.57	-136.56	-377.93	-112.02	0.29	675385.37	376894.44	-33.57 (S)	-72.73 (W)
9680.00	1.00	147.60	9661.56	-137.50	-377.05	-113.02	0.58	675386.25	376893.50	-34.51 (S)	-71.85 (W)
9774.00	0.90	154.20	9755.55	-138.86	-376.29	-114.42	0.16	675387.01	376892.14	-35.86 (S)	-71.09 (W)
9869.00	0.90	153.90	9850.54	-140.20	-375.63	-115.80	0.00	675387.67	376890.80	-37.21 (S)	-70.43 (W)
9964.00	0.80	148.70	9945.53	-141.44	-374.96	-117.08	0.13	675388.34	376889.56	-38.44 (S)	-69.76 (W)
10027.00	0.90	156.60	10008.52	-142.27	-374.54	-117.94	0.24	675388.77	376888.73	-39.27 (S)	-69.33 (W)
10033.00	0.80	161.40	10014.52	-142.35	-374.50	-118.02	2.04	675388.80	376888.65	-39.36 (S)	-69.30 (W)
10064.00	1.10	158.40	10045.52	-142.83	-374.32	-118.51	0.98	675388.98	376888.17	-39.84 (S)	-69.12 (W)
10096.00	0.70	116.90	10077.51	-143.21	-374.04	-118.91	2.31	675389.26	376887.79	-40.21 (S)	-68.84 (W)
10127.00	1.40	40.10	10108.51	-143.00	-373.62	-118.73	4.56	675389.68	376888.00	-40.01 (S)	-68.42 (W)
10159.00	3.30	14.80	10140.48	-141.81	-373.14	-117.57	6.63	675390.16	376889.19	-54.98 (D)	-55.77 (L)
10190.00	5.00	11.10	10171.40	-139.63	-372.65	-115.42	5.55	675390.65	376891.37	-49.12 (D)	-59.13 (L)
10222.00	6.70	11.10	10203.23	-136.43	-372.02	-112.27	5.31	675391.28	376894.57	-46.54 (D)	-59.03 (L)
10253.00	8.70	11.10	10233.95	-132.35	-371.22	-108.25	6.45	675392.08	376898.65	-44.41 (D)	-58.66 (L)
10284.00	10.70	11.30	10264.51	-127.23	-370.21	-103.20	6.45	675393.09	376903.77	-42.95 (D)	-57.85 (L)
10315.00	12.90	13.30	10294.85	-121.04	-368.85	-97.11	7.22	675394.45	376909.96	-43.62 (D)	-55.33 (L)
10346.00	14.20	12.70	10324.99	-113.96	-367.21	-90.16	4.22	675396.09	376917.04	-42.32 (D)	-54.29 (L)
10377.00	16.20	9.10	10354.90	-105.98	-365.69	-82.29	7.13	675397.61	376925.02	-39.01 (D)	-55.22 (L)
10409.00	18.20	8.60	10385.47	-96.63	-364.24	-73.05	6.27	675399.06	376934.37	-39.17 (D)	-54.02 (L)
10440.00	20.30	7.60	10414.73	-86.51	-362.81	-63.05	6.86	675400.50	376944.49	-39.42 (D)	-53.10 (L)
10471.00	22.10	8.60	10443.63	-75.41	-361.22	-52.07	5.92	675402.08	376955.59	-41.89 (D)	-50.69 (L)
10502.00	24.10	8.60	10472.15	-63.39	-359.40	-40.19	6.45	675403.90	376967.61	-44.04 (D)	-48.61 (L)
10534.00	26.30	9.30	10501.10	-49.93	-357.28	-26.90	6.94	675406.02	376981.07	-47.19 (D)	-45.69 (L)
10566.00	28.80	10.10	10529.47	-35.34	-354.78	-12.50	7.90	675408.52	376995.66	-50.64 (D)	-42.27 (L)
10597.00	31.80	10.20	10556.23	-19.95	-352.03	2.68	9.68	675411.27	377011.05	-53.54 (D)	-39.18 (L)
10628.00	35.10	10.00	10582.09	-3.13	-349.03	19.28	10.65	675414.27	377027.87	-56.08 (D)	-36.17 (L)
10660.00	38.00	10.10	10607.80	15.63	-345.71	37.79	9.06	675417.60	377046.63	-58.76 (D)	-32.61 (L)
10692.00	41.00	9.60	10632.49	35.68	-342.23	57.58	9.43	675421.07	377066.68	-60.78 (D)	-29.48 (L)
10723.00	43.80	9.00	10655.38	56.31	-338.85	77.94	9.13	675424.45	377087.31	-61.65 (D)	-26.67 (L)
10755.00	46.70	7.90	10677.90	78.79	-335.52	100.16	9.39	675427.78	377109.79	-61.01 (D)	-24.41 (L)
10786.00	49.80	7.10	10698.54	101.72	-332.50	122.85	10.18	675430.80	377132.72	-59.13 (D)	-22.34 (L)
10818.00	52.80	6.40	10718.55	126.51	-329.57	147.41	9.53	675433.73	377157.51	-56.47 (D)	-20.24 (L)
10850.00	55.90	5.60	10737.20	152.37	-326.86	173.04	9.90	675436.44	377183.37	-53.78 (D)	-18.31 (L)
10881.00	59.00	4.80	10753.87	178.39	-324.49	198.85	10.23	675438.81	377209.39	-51.14 (D)	-16.61 (L)
10913.00	62.20	4.10	10769.58	206.18	-322.33	226.45	10.18	675440.97	377237.18	-48.33 (D)	-14.98 (L)
10945.00	65.70	4.00	10783.63	234.85	-320.30	254.93	10.94	675443.00	377265.86	-45.44 (D)	-13.21 (L)
10976.00	69.40	3.60	10795.47	263.44	-318.41	283.33	11.99	675444.89	377294.44	-42.28 (D)	-11.63 (L)
11008.00	72.90	3.80	10805.80	293.65	-316.45	313.36	10.95	675446.85	377324.65	-38.64 (D)	-9.80 (L)
11039.00	76.50	3.70	10813.98	323.49	-314.50	343.00	11.62	675448.80	377354.49	-34.79 (D)	-8.02 (L)
11070.00	79.90	3.20	10820.32	353.77	-312.67	373.11	11.08	675450.63	377384.77	-30.58 (D)	-6.37 (L)
11102.00	83.10	2.30	10825.05	385.38	-311.15	404.56	10.38	675452.15	377416.38	-25.99 (D)	-4.97 (L)
11134.00	86.90	1.40	10827.84	417.23	-310.13	436.28	12.20	675453.17	377448.23	-21.19 (D)	-3.98 (L)
11245.00	92.50	358.70	10828.42	528.18	-310.03	546.99	5.60	675453.27	377559.18	-8.77 (D)	-3.70 (L)
11341.00	93.80	358.90	10823.15	624.01	-312.04	642.75	1.37	675451.26	377655.01	-3.16 (D)	-5.54 (L)
11435.00	92.90	358.70	10817.65	717.83	-314.00	736.50	0.98	675449.30	377748.83	2.35 (U)	-7.34 (L)
11530.00	92.00	358.80	10813.59	812.72	-316.07	831.33	0.95	675447.23	377843.72	6.41 (U)	-9.24 (L)
11625.00	89.50	358.60	10812.35	907.68	-318.23	926.23	2.64	675445.07	377938.68	7.65 (U)	-11.21 (L)
11718.00	90.10	357.40	10812.67	1000.62	-321.47	1019.19	1.44	675441.83	378031.62	7.32 (U)	-14.30 (L)
11813.00	91.20	357.00	10811.60	1095.50	-326.11	1114.17	1.23	675437.19	378126.50	8.40 (U)	-18.78 (L)
11905.00	91.40	357.80	10809.51	1187.38	-330.29	1206.13	0.90	675433.01	378218.38	10.49 (U)	-22.78 (L)
11998.00	90.50	358.40	10807.97	1280.31	-333.37	1299.07	1.16	675429.93	378311.31	12.03 (U)	-25.68 (L)
12090.00	90.20	358.30	10807.40	1372.27	-336.02	1391.01	0.34	675427.28	378403.27	12.59 (U)	-28.16 (L)
12183.00	90.90	357.30	10806.51	1465.20	-339.59	1483.97	1.31	675423.71	378496.20	13.49 (U)	-31.59 (L)
12277.00	90.90	356.20	10805.04	1559.03	-344.92	1577.96	1.17	675418.38	378590.03	14.96 (U)	-36.80 (L)

Measured Depth (Ft)	INC Deg	AZM Deg	TVD (Ft)	NS (Ft)	EW (Ft)	VS (Ft)	DLS */100 Ft	Easting (US ft)	Northing (US ft)	UD/NS From-Plan (Ft)	LR/EW From-Plan (Ft)
12371.00	88.50	357.90	10805.53	1652.90	-349.75	1671.94	3.13	675413.55	378683.90	14.48 (U)	-41.38 (L)
12464.00	88.40	357.70	10808.04	1745.79	-353.32	1764.87	0.24	675409.98	378776.80	11.96 (U)	-44.79 (L)
12558.00	88.00	358.20	10811.00	1839.69	-356.68	1858.79	0.68	675406.62	378870.69	9.01 (U)	-47.97 (L)
12651.00	88.40	0.50	10813.92	1932.63	-357.74	1951.61	2.51	675405.56	378963.63	6.08 (U)	-48.84 (L)
12745.00	88.70	359.90	10816.30	2026.60	-357.41	2045.36	0.71	675405.89	379057.60	3.70 (U)	-48.34 (L)
12838.00	89.00	359.10	10818.16	2119.58	-358.22	2138.20	0.92	675405.08	379150.58	1.84 (U)	-48.98 (L)
12932.00	90.70	359.10	10818.41	2213.56	-359.70	2232.08	1.81	675403.60	379244.56	1.59 (U)	-50.29 (L)
13029.00	90.40	0.30	10817.48	2310.55	-360.21	2328.91	1.28	675403.10	379341.55	2.52 (U)	-50.62 (L)
13119.00	88.70	0.60	10818.18	2400.54	-359.50	2418.67	1.92	675403.80	379431.54	1.81 (U)	-49.75 (L)
13214.00	89.50	0.30	10819.68	2495.53	-358.75	2513.41	0.90	675404.55	379526.53	0.32 (U)	-48.82 (L)
13310.00	91.10	0.60	10819.17	2591.52	-358.00	2609.15	1.70	675405.30	379622.52	0.82 (U)	-47.90 (L)
13404.00	89.20	0.80	10818.93	2685.51	-356.85	2702.88	2.03	675406.45	379716.51	1.07 (U)	-46.58 (L)
13499.00	90.00	0.60	10819.59	2780.50	-355.69	2797.59	0.87	675407.61	379811.50	0.41 (U)	-45.24 (L)
13595.00	90.90	0.40	10818.84	2876.49	-354.85	2893.34	0.96	675408.45	379907.49	1.16 (U)	-44.23 (L)
13690.00	91.60	0.10	10816.76	2971.47	-354.44	2988.09	0.80	675408.86	380002.47	3.23 (U)	-43.64 (L)
13785.00	91.60	0.70	10814.11	3066.43	-353.77	3082.81	0.63	675409.53	380097.43	5.89 (U)	-42.80 (L)
13879.00	90.70	0.40	10812.23	3160.40	-352.87	3176.53	1.01	675410.43	380191.40	7.77 (U)	-41.72 (L)
13974.00	91.80	359.90	10810.15	3255.38	-352.62	3271.30	1.27	675410.68	380286.38	9.85 (U)	-41.30 (L)
14068.00	93.00	359.80	10806.22	3349.29	-352.87	3365.04	1.28	675410.43	380380.29	13.80 (U)	-41.38 (L)
14163.00	90.90	358.80	10802.98	3444.22	-354.03	3459.85	2.45	675409.27	380475.22	17.02 (U)	-42.37 (L)
14258.00	89.20	358.40	10802.90	3539.19	-356.35	3554.77	1.84	675406.95	380570.19	17.10 (U)	-44.52 (L)
14353.00	89.50	357.50	10803.98	3634.12	-359.75	3649.72	1.00	675403.55	380665.12	16.02 (U)	-47.77 (L)
14448.00	89.90	359.10	10804.48	3729.08	-362.57	3744.66	1.74	675400.73	380760.08	15.52 (U)	-50.38 (L)
14543.00	88.50	359.20	10805.80	3824.06	-363.98	3839.53	1.48	675399.32	380855.06	14.20 (U)	-51.61 (L)
14638.00	88.70	358.90	10808.12	3919.01	-365.55	3934.40	0.38	675397.75	380950.01	11.88 (U)	-53.01 (L)
14733.00	88.70	357.70	10810.28	4013.95	-368.37	4029.31	1.26	675394.93	381044.95	9.72 (U)	-55.69 (L)
14828.00	89.00	357.20	10812.19	4108.83	-372.59	4124.28	0.61	675390.71	381139.83	7.81 (U)	-59.77 (L)
14923.00	91.10	357.80	10812.10	4203.74	-376.74	4219.25	2.30	675386.56	381234.74	7.90 (U)	-63.72 (L)
15018.00	90.40	357.00	10810.86	4298.63	-381.05	4314.22	1.12	675382.25	381329.63	9.14 (U)	-67.90 (L)
15113.00	90.60	355.80	10810.03	4393.44	-387.01	4409.22	1.28	675376.29	381424.44	9.97 (U)	-73.80 (L)
15208.00	91.20	356.10	10808.54	4488.19	-393.72	4504.20	0.71	675369.58	381519.19	11.46 (U)	-80.33 (L)
15304.00	92.50	355.70	10805.44	4583.89	-400.58	4600.15	1.42	675362.72	381614.89	14.57 (U)	-87.10 (L)
15399.00	93.30	355.60	10800.63	4678.49	-407.78	4695.02	0.85	675355.52	381709.49	19.40 (U)	-94.19 (L)
15498.00	94.70	355.10	10793.73	4776.92	-415.78	4793.76	1.50	675347.52	381807.92	26.36 (U)	-102.21 (L)
PTB @ TD											
15550.00	94.70	355.10	10789.47	4828.56	-420.21	4845.57	0.00	675343.09	381859.56	30.63 (U)	-106.58 (L)