

Noble Energy

CO, Weld County (NAD 83 NZ)
Sec 29 Twn 09 N Rng 59 W
Tina LC29-75-1HNA Original Hole
05-123-38781
H&P 273



A Schlumberger Company

Final Survey Report

24-Sep-2014

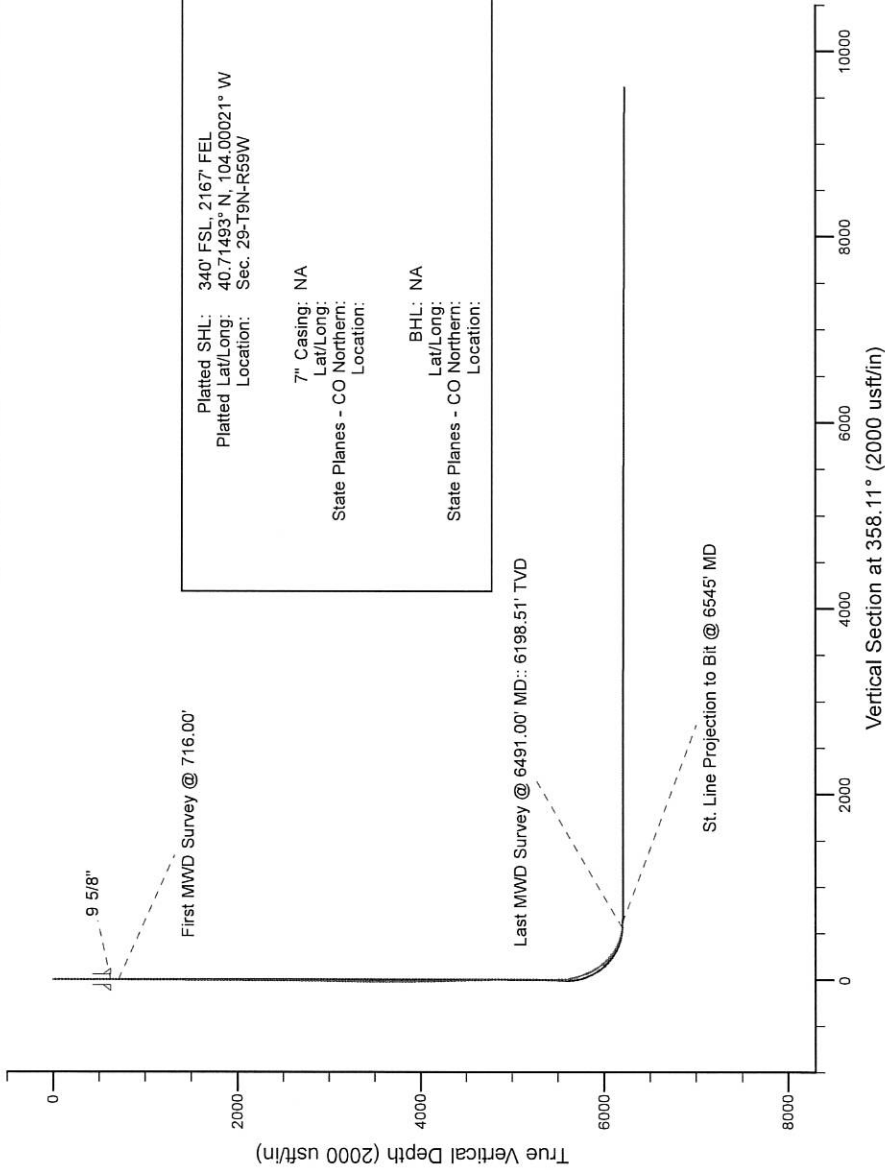
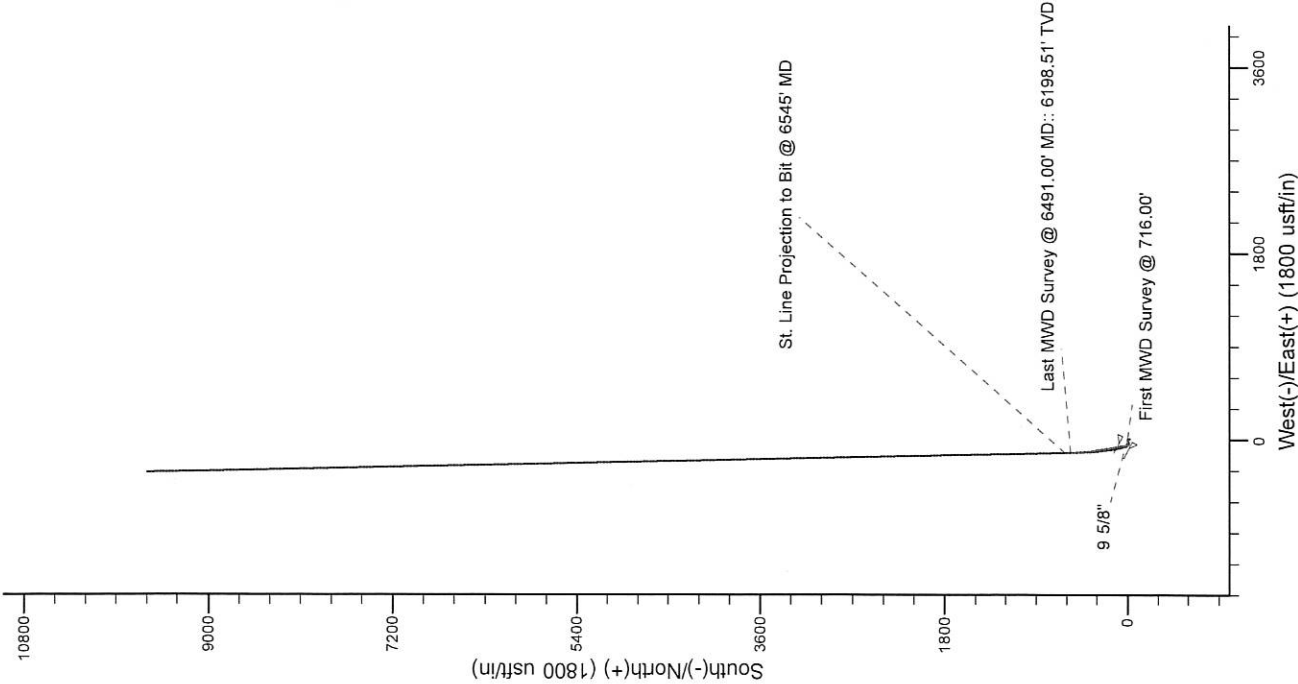
Well Coordinates:	NAD83 Colorado State Plane
	N 40° 42' 53.75000" W 104° 0' 0.76000"
	1506809.06 usFt 3415746.4 usFt
Ground Level:	4872.00 ft MSL
TVD Reference:	le: RKB @ 4896.00 ft MSL
Local Coordinate Origin:	Tina LC29-75-1HNA well head
Vertical Section Azimuth:	358.112 ° (Grid North)
North Reference:	Grid North

DOX Version: 2.8

Project: Weld County, CO (NAD 83)
Site: Sec. 29-T9N-R59W (LC29-15-A)
Well: Tina LC29-75-1HNA
Wellbore: Plan B
Design: Field Surveys

Noble Energy

HALLIBURTON
Sperry Drilling



LEGEND

- Tina LC29-75-1HNA, Plan B, Rev B0 - PROPOSAL V0
- Field Surveys

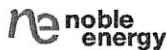
Platted SHL: 340' FSL, 2167' FEL
Platted Lat/Long: 40.71493° N, 104.00021° W
Location: Sec. 29-T9N-R59W

7" Casing: NA
Lat/Long:
State Planes - CO Northern:
Location:

BHL: NA
Lat/Long:
State Planes - CO Northern:
Location:

WELL DETAILS: Tina LC29-75-1HNA
Ground Level: 4872.00
RXB=24ft @ 4896.00usft (H&P 273)

Created By: Paul Amanlou
Created On: 06/22/2014



Tina LC29-75-1HNA MWD+IFR 0' to 15534' Definitive Survey Geodetic



Report (Def Survey)

Report Date: September 24, 2014 - 03:00 PM
Client: Noble Energy
Field: CO, Weld County (NAD 83 NZ)
Structure / Slot: Noble 29-09N-59W (LC29-15-A Pad) / Tina LC29-75-1HNA
Well: Tina LC29-75-1HNA
Borehole: Original Hole
UWI / API#: Unknown / Unknown
Survey Name: Tina LC29-75-1HNA MWD+IFR 0' to 15534' Definitive
Survey Date: June 06, 2014
Tort / AHD / DDI / ERD Ratio: 223.171' / 9715.323 ft / 6.733' / 1.561
Coordinate Reference System: NAD83 Colorado State Plane, Northern Zone, US Feet
Location Lat / Long: N 40° 42' 53.75000", W 104° 0' 0.76000"
Location Grid N/E Y/X: N 1506809.061 ftUS, E 3415746.399 ftUS
CRS Grid Convergence Angle: 0.9691 °
Grid Scale Factor: 0.99998962
Version / Patch: 2.8.551.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 358.112 ° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 4896.000 ft above MSL
Seabed / Ground Elevation: 4872.000 ft above MSL
Magnetic Declination: 8.144 °
Total Gravity Field Strength: 999.0845mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 52961.227 nT
Magnetic Dip Angle: 67.315 °
Declination Date: June 06, 2014
Magnetic Declination Model: BGM 2014
North Reference: Grid North
Grid Convergence Used: 0.9691 °
Total Corr Mag North->Grid North: 7.1747 °
Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
Surface	0.00	0.00	249.99	0.00	0.00	0.00	0.00	N/A	1506809.06	3415746.40	N 40 42 53.75 W 104 0 0.76	
Begin EMS	280.00	1.00	98.18	279.99	-0.43	-0.35	2.42	0.36	1506808.71	3415748.82	N 40 42 53.75 W 104 0 0.73	
Survey												
Last EMS	627.00	0.20	116.78	626.96	-1.25	-1.05	5.96	0.23	1506808.01	3415752.36	N 40 42 53.74 W 104 0 0.68	
Survey												
Begin IFR	716.00	0.24	163.31	715.96	-1.50	-1.30	6.15	0.20	1506807.76	3415752.55	N 40 42 53.74 W 104 0 0.68	
Survey												
	809.00	0.33	202.14	808.96	-1.93	-1.73	6.10	0.22	1506807.33	3415752.50	N 40 42 53.73 W 104 0 0.68	
	995.00	0.28	212.74	994.96	-2.80	-2.61	5.66	0.04	1506806.45	3415752.06	N 40 42 53.72 W 104 0 0.69	
	1180.00	0.22	216.89	1179.96	-3.45	-3.28	5.20	0.03	1506805.78	3415751.60	N 40 42 53.72 W 104 0 0.69	
	1365.00	0.11	239.58	1364.96	-3.81	-3.65	4.83	0.07	1506805.41	3415751.23	N 40 42 53.71 W 104 0 0.70	
	1551.00	0.10	201.03	1550.96	-4.04	-3.89	4.62	0.04	1506805.17	3415751.02	N 40 42 53.71 W 104 0 0.70	
	1737.00	0.23	261.55	1736.96	-4.24	-4.10	4.19	0.11	1506804.96	3415750.59	N 40 42 53.71 W 104 0 0.71	
	1831.00	0.18	286.29	1830.96	-4.21	-4.09	3.86	0.11	1506804.97	3415750.26	N 40 42 53.71 W 104 0 0.71	
	1926.00	0.14	142.76	1925.96	-4.26	-4.14	3.79	0.32	1506804.92	3415750.19	N 40 42 53.71 W 104 0 0.71	
	2020.00	0.34	164.23	2019.95	-4.62	-4.50	3.94	0.23	1506804.56	3415750.34	N 40 42 53.70 W 104 0 0.71	
	2115.00	0.32	162.16	2114.95	-5.15	-5.02	4.09	0.02	1506804.04	3415750.49	N 40 42 53.70 W 104 0 0.71	
	2210.00	0.42	175.92	2209.95	-5.76	-5.62	4.20	0.14	1506803.44	3415750.60	N 40 42 53.69 W 104 0 0.71	
	2399.00	0.71	186.77	2398.94	-7.61	-7.47	4.11	0.16	1506801.59	3415750.51	N 40 42 53.68 W 104 0 0.71	
	2494.00	0.76	175.52	2493.93	-8.82	-8.69	4.09	0.16	1506800.37	3415750.49	N 40 42 53.66 W 104 0 0.71	
	2589.00	0.81	175.96	2588.93	-10.12	-9.98	4.19	0.05	1506799.08	3415750.59	N 40 42 53.65 W 104 0 0.71	
	2684.00	0.78	173.19	2683.92	-11.43	-11.30	4.31	0.05	1506797.76	3415750.71	N 40 42 53.64 W 104 0 0.71	
	2778.00	0.94	168.88	2777.91	-12.83	-12.69	4.54	0.18	1506796.37	3415750.94	N 40 42 53.62 W 104 0 0.70	
	2968.00	0.74	187.38	2967.89	-15.58	-15.43	4.68	0.18	1506793.63	3415751.08	N 40 42 53.60 W 104 0 0.70	
	3063.00	0.77	189.83	3062.88	-16.81	-16.67	4.49	0.05	1506792.39	3415750.89	N 40 42 53.58 W 104 0 0.71	
	3158.00	1.00	197.41	3157.87	-18.22	-18.09	4.13	0.27	1506790.97	3415750.53	N 40 42 53.57 W 104 0 0.71	
	3252.00	1.43	162.67	3251.85	-20.12	-19.99	4.24	0.89	1506789.07	3415750.64	N 40 42 53.55 W 104 0 0.71	
	3347.00	1.32	149.07	3346.82	-22.22	-22.06	5.15	0.36	1506787.00	3415751.55	N 40 42 53.53 W 104 0 0.70	
	3537.00	0.47	48.33	3536.80	-23.64	-23.42	6.86	0.78	1506785.64	3415753.26	N 40 42 53.52 W 104 0 0.68	
	3727.00	0.28	48.29	3726.80	-22.84	-22.60	7.79	0.10	1506786.46	3415754.19	N 40 42 53.53 W 104 0 0.66	
	3822.00	0.36	43.49	3821.79	-22.48	-22.23	8.17	0.09	1506786.84	3415754.57	N 40 42 53.53 W 104 0 0.66	
	3916.00	0.19	20.31	3915.79	-22.13	-21.86	8.43	0.21	1506787.20	3415754.82	N 40 42 53.53 W 104 0 0.66	
	4011.00	1.08	350.49	4010.79	-21.10	-20.83	8.33	0.97	1506788.23	3415754.73	N 40 42 53.54 W 104 0 0.66	
	4106.00	1.31	341.82	4105.77	-19.17	-18.92	7.85	0.31	1506790.14	3415754.25	N 40 42 53.56 W 104 0 0.66	
	4201.00	1.40	330.65	4200.74	-17.10	-16.88	6.94	0.29	1506792.18	3415753.34	N 40 42 53.58 W 104 0 0.67	
	4296.00	1.58	326.71	4295.71	-14.95	-14.77	5.65	0.22	1506794.29	3415752.05	N 40 42 53.60 W 104 0 0.69	
	4391.00	2.06	323.44	4390.66	-12.43	-12.30	3.91	0.52	1506796.76	3415750.31	N 40 42 53.63 W 104 0 0.71	
	4486.00	2.14	337.44	4485.60	-9.36	-9.29	2.22	0.55	1506799.77	3415748.62	N 40 42 53.66 W 104 0 0.73	
	4581.00	2.00	326.73	4580.53	-6.29	-6.27	0.63	0.43	1506802.79	3415747.03	N 40 42 53.69 W 104 0 0.75	
	4675.00	2.04	346.71	4674.48	-3.25	-3.27	-0.66	0.75	1506805.79	3415745.74	N 40 42 53.72 W 104 0 0.77	
	4770.00	0.96	353.31	4769.44	-0.80	-0.83	-1.14	1.15	1506808.23	3415745.26	N 40 42 53.74 W 104 0 0.77	
	4865.00	0.99	336.52	4864.43	0.76	0.71	-1.56	0.30	1506809.77	3415744.84	N 40 42 53.76 W 104 0 0.78	
	4960.00	1.05	332.36	4959.42	2.31	2.23	-2.29	0.10	1506811.29	3415744.11	N 40 42 53.77 W 104 0 0.79	
	5055.00	0.09	194.49	5054.41	3.02	2.93	-2.71	1.18	1506811.99	3415743.69	N 40 42 53.78 W 104 0 0.79	
	5150.00	2.68	257.04	5149.37	2.52	2.36	-4.90	2.78	1506811.42	3415741.50	N 40 42 53.77 W 104 0 0.82	
	5244.00	3.47	261.95	5243.24	1.79	1.47	-9.85	0.89	1506810.53	3415736.55	N 40 42 53.77 W 104 0 0.89	
	5339.00	5.31	258.65	5337.96	0.76	0.20	-17.01	1.95	1506809.26	3415729.39	N 40 42 53.75 W 104 0 0.98	
	5434.00	6.93	264.74	5432.41	-0.30	-1.19	-27.03	1.83	1506807.87	3415719.37	N 40 42 53.74 W 104 0 1.11	
	5526.00	7.13	267.17	5523.72	-0.72	-1.98	-38.26	0.39	1506807.08	3415708.14	N 40 42 53.74 W 104 0 1.26	
	5574.00	7.90	295.27	5571.32	0.74	-0.72	-44.22	7.74	1506808.34	3415702.18	N 40 42 53.75 W 104 0 1.33	
	5621.00	11.88	326.33	5617.65	6.33	4.69	-49.83	13.87	1506813.75	3415696.57	N 40 42 53.80 W 104 0 1.41	
	5669.00	14.01	341.30	5664.44	16.10	14.31	-54.43	8.24	1506823.37	3415691.97	N 40 42 53.90 W 104 0 1.46	
	5716.00	16.83	346.85	5709.74	28.22	26.33	-57.80	6.77	1506835.39	3415688.60	N 40 42 54.02 W 104 0 1.50	
	5764.00	20.27	354.47	5755.25	43.34	41.38	-60.19	8.75	1506850.44	3415686.21	N 40 42 54.17 W 104 0 1.53	
	5811.00	22.13	356.47	5799.07	60.32	58.32	-61.52	4.25	1506867.38	3415684.88	N 40 42 54.34 W 104 0 1.55	
	5859.00	24.64	352.62	5843.13	79.32	77.27	-63.36	6.12	1506886.33	3415683.04	N 40 42 54.52 W 104 0 1.57	
	5906.00	28.88	348.58	5885.09	100.27	98.12	-66.87	9.81	1506907.18	3415679.53	N 40 42 54.73 W 104 0 1.61	
	5954.00	33.63	347.63	5926.11	124.79	122.48	-72.01	9.95	1506931.54	3415674.39	N 40 42 54.97 W 104 0 1.67	
	6000.00	38.17	349.79	5963.36	151.39	148.93	-77.26	10.25	1506957.99	3415669.14	N 40 42 55.23 W 104 0 1.73	
	6048.00	42.38	349.83	5999.97	182.09	179.46	-82.75	8.77	1506988.52	3415663.65	N 40 42 55.54 W 104 0 1.80	
	6095.00	44.72	349.99	6034.04	214.14	211.34	-88.42	4.98	1507020.40	3415657.98	N 40 42 55.85 W 104 0 1.86	
	6143.00	48.92	349.58	6066.88	248.77	245.78	-94.63	8.77	1507054.84	3415651.77	N 40 42 56.19 W 104 0 1.93	
	6190.00	54.05	350.18	6096.13	285.15	281.97	-101.09	10.96	1507091.03	3415645.31	N 40 42 56.55 W 104 0 2.01	
	6238.00	58.82	351.72	6122.67	324.82	321.46	-107.36	10.29	1507130.52	3415639.04	N 40 42 56.94 W 104 0 2.08	
	6285.00	64.44	352.89	6144.99	365.95	362.43	-112.89	12.16	1507171.48	3415633.52	N 40 42 57.35 W 104 0 2.15	
	6333.00	69.46	354.15	6163.78	409.96	406.30	-117.86	10.73	1507215.35	3415628.54	N 40 42 57.78 W 104 0 2.20	
	6380.00	73.52	355.96	6178.70	454.46	450.69	-121.69	9.38	1507259.75	3415624.71	N 40 42 58.22 W 104 0 2.24	
	6428.00	79.08	356.72	6190.06	501.05	497.21	-124.66	11.68	1507306.27	3415621.74	N 40 42 58.68 W 104 0 2.27	
	6474.00	83.67	358.00	6196.96	546.51	542.63	-126.75	10.35	1507351.68	3415619.65	N 40 42 59.13 W 104 0 2.29	
	6491.00	85.83	358.44	6198.51	563.44	559.55	-127.28	12.96	1507368.60	3415619.12	N 40 42 59.30 W 104 0 2.29	
	6572.00	89.42	358.96	6201.87	644.35	640.45	-129.12	4.48	1507449.50	3415617.29	N 40 43 0.10 W 104 0 2.30	
	6629.00	89.59	358.17	6202.36	701.35	697.43	-130.54	1.42	1507506.48	3415615.86	N 40 43 0.66 W 104 0 2.30	
	6724.00	89.55	357.02	6203.07	796.34	792.34	-134.53	1.21	1507601.39	3415611.87	N 40 43 1.60 W 104 0 2.33	
7" Casing Point	6753.00	89.72	357.07	6203.26	825.33	821.30	-136.03	0.61	1507630.35	3415610.38	N 40 43 1.89 W 104 0 2.35	
	6818.00	90.10	357.17	6203.36	890.32	886.22	-139.29	0.61	1507695.27	3415607.11	N 40 43 2.53 W 104 0 2.37	

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	7292.00	90.17	359.92	6203.14	1364.25	1360.04	-150.16	0.22	1508169.09	3415596.24	N 40 43 7.21 W 104	0 2.41
	7387.00	90.34	358.99	6202.72	1459.22	1455.03	-151.06	1.00	1508264.07	3415595.34	N 40 43 8.15 W 104	0 2.40
	7482.00	91.07	358.23	6201.55	1554.21	1550.00	-153.37	1.11	1508359.04	3415593.03	N 40 43 9.09 W 104	0 2.41
	7577.00	90.14	358.58	6200.54	1649.20	1644.95	-156.01	1.05	1508453.99	3415590.39	N 40 43 10.03 W 104	0 2.42
	7671.00	90.07	359.37	6200.37	1743.19	1738.94	-157.69	0.84	1508547.97	3415588.71	N 40 43 10.96 W 104	0 2.43
	7766.00	89.66	358.28	6200.60	1838.18	1833.91	-159.64	1.23	1508642.95	3415586.76	N 40 43 11.90 W 104	0 2.43
	7861.00	90.34	357.69	6200.60	1933.18	1928.85	-162.98	0.95	1508737.89	3415583.42	N 40 43 12.83 W 104	0 2.45
	7956.00	90.07	358.58	6200.26	2028.17	2023.80	-166.07	0.98	1508832.84	3415580.33	N 40 43 13.77 W 104	0 2.47
	8050.00	89.72	358.29	6200.43	2122.17	2117.77	-168.64	0.48	1508926.80	3415577.76	N 40 43 14.70 W 104	0 2.48
	8145.00	89.17	358.55	6201.35	2217.17	2212.73	-171.26	0.64	1509021.76	3415575.14	N 40 43 15.64 W 104	0 2.50
	8240.00	89.59	359.15	6202.38	2312.15	2307.70	-173.16	0.77	1509116.73	3415573.24	N 40 43 16.58 W 104	0 2.50
	8335.00	90.58	358.38	6202.24	2407.14	2402.68	-175.21	1.32	1509211.71	3415571.19	N 40 43 17.52 W 104	0 2.51
	8430.00	89.48	359.61	6202.19	2502.13	2497.66	-176.88	1.74	1509306.69	3415569.52	N 40 43 18.46 W 104	0 2.51
	8525.00	89.97	359.68	6202.64	2597.09	2592.66	-177.47	0.52	1509401.68	3415568.93	N 40 43 19.39 W 104	0 2.50
	8619.00	89.76	359.89	6202.86	2691.05	2686.65	-177.82	0.32	1509495.68	3415568.58	N 40 43 20.32 W 104	0 2.48
	8714.00	89.42	1.14	6203.54	2785.97	2781.65	-176.97	1.36	1509590.67	3415569.44	N 40 43 21.26 W 104	0 2.45
	8809.00	89.55	0.21	6204.40	2880.87	2876.73	-175.85	0.99	1509685.66	3415570.55	N 40 43 22.20 W 104	0 2.41
	8904.00	89.35	0.04	6205.31	2975.80	2971.63	-175.64	0.28	1509780.65	3415570.76	N 40 43 23.14 W 104	0 2.39
	8999.00	89.72	358.59	6206.08	3070.78	3066.62	-176.78	1.58	1509875.64	3415569.63	N 40 43 24.08 W 104	0 2.38
	9094.00	89.66	359.61	6206.59	3165.76	3161.60	-178.27	1.08	1509970.62	3415568.13	N 40 43 25.02 W 104	0 2.38
	9188.00	89.38	356.98	6207.38	3259.75	3255.55	-181.06	2.81	1510064.57	3415565.34	N 40 43 25.94 W 104	0 2.40
	9283.00	89.79	358.43	6208.07	3354.74	3350.47	-184.87	1.59	1510159.49	3415561.53	N 40 43 26.88 W 104	0 2.42
	9378.00	89.90	359.08	6208.33	3449.73	3445.44	-186.93	0.69	1510254.46	3415559.47	N 40 43 27.82 W 104	0 2.43
	9473.00	88.93	357.52	6209.30	3544.72	3540.39	-189.75	1.93	1510349.41	3415556.65	N 40 43 28.76 W 104	0 2.45
	9568.00	89.42	356.13	6210.66	3639.69	3635.24	-195.01	1.55	1510444.25	3415551.39	N 40 43 29.70 W 104	0 2.49
	9663.00	90.00	358.43	6211.15	3734.67	3730.12	-199.52	2.50	1510539.14	3415546.88	N 40 43 30.64 W 104	0 2.53
	9758.00	89.90	358.66	6211.23	3829.67	3825.09	-201.93	0.26	1510634.10	3415544.47	N 40 43 31.57 W 104	0 2.54
	9853.00	89.55	358.55	6211.68	3924.66	3920.06	-204.24	0.39	1510729.07	3415542.16	N 40 43 32.51 W 104	0 2.55
	9947.00	89.97	358.25	6212.08	4018.66	4014.02	-206.87	0.55	1510823.03	3415539.53	N 40 43 33.44 W 104	0 2.56
	10042.00	89.59	358.27	6212.44	4113.66	4108.98	-209.75	0.40	1510917.99	3415536.65	N 40 43 34.38 W 104	0 2.58
	10137.00	90.34	358.97	6212.50	4208.65	4203.95	-212.04	1.08	1511012.96	3415534.36	N 40 43 35.32 W 104	0 2.59
	10230.00	89.07	357.60	6212.98	4301.65	4296.90	-214.82	2.01	1511105.91	3415531.58	N 40 43 36.24 W 104	0 2.61
	10323.00	89.45	358.15	6214.18	4394.64	4389.83	-218.27	0.72	1511198.84	3415528.13	N 40 43 37.16 W 104	0 2.63
	10415.00	89.24	358.94	6215.23	4486.63	4481.79	-220.61	0.89	1511290.80	3415525.79	N 40 43 38.07 W 104	0 2.64
	10508.00	88.73	359.86	6216.88	4579.59	4574.77	-221.58	1.13	1511383.78	3415524.82	N 40 43 38.98 W 104	0 2.63
	10601.00	89.93	2.36	6217.97	4672.45	4667.74	-219.78	2.98	1511476.74	3415526.62	N 40 43 39.90 W 104	0 2.59
	10694.00	89.48	1.50	6218.45	4765.24	4760.68	-216.65	1.04	1511569.69	3415529.75	N 40 43 40.82 W 104	0 2.53
	10787.00	89.62	359.77	6219.18	4858.14	4853.67	-215.62	1.87	1511662.67	3415530.78	N 40 43 41.74 W 104	0 2.49
	10879.00	89.45	359.49	6219.92	4950.11	4945.67	-216.21	0.36	1511754.67	3415530.19	N 40 43 42.65 W 104	0 2.48
	10972.00	89.69	1.27	6220.62	5043.03	5038.66	-215.59	1.93	1511847.66	3415530.81	N 40 43 43.57 W 104	0 2.45
	11065.00	89.59	0.04	6221.21	5135.93	5131.65	-214.53	1.33	1511940.65	3415531.87	N 40 43 44.48 W 104	0 2.42
	11158.00	89.21	358.30	6222.18	5228.91	5224.63	-215.88	1.91	1512033.63	3415530.52	N 40 43 45.40 W 104	0 2.42
	11250.00	89.62	0.54	6223.12	5320.87	5316.61	-216.81	2.48	1512125.61	3415529.59	N 40 43 46.31 W 104	0 2.41
	11343.00	89.76	359.88	6223.62	5413.81	5409.61	-216.47	0.73	1512218.61	3415529.93	N 40 43 47.23 W 104	0 2.38
	11436.00	90.28	357.14	6223.59	5506.80	5502.57	-218.89	3.00	1512311.56	3415527.52	N 40 43 48.15 W 104	0 2.39
	11531.00	90.48	359.20	6222.96	5601.79	5597.52	-221.92	2.18	1512406.51	3415524.48	N 40 43 49.09 W 104	0 2.41
	11626.00	90.62	359.37	6222.05	5696.76	5692.50	-223.11	0.23	1512501.49	3415523.30	N 40 43 50.03 W 104	0 2.41
	11721.00	89.79	356.74	6221.71	5791.75	5787.44	-226.33	2.90	1512596.43	3415520.07	N 40 43 50.97 W 104	0 2.43
	11815.00	90.07	358.07	6221.82	5885.75	5881.34	-230.59	1.45	1512690.33	3415515.82	N 40 43 51.89 W 104	0 2.46
	11910.00	89.97	358.59	6221.79	5980.74	5976.30	-233.35	0.56	1512785.29	3415513.05	N 40 43 52.83 W 104	0 2.48
	12005.00	90.03	359.13	6221.79	6075.74	6071.28	-235.24	0.57	1512880.27	3415511.16	N 40 43 53.77 W 104	0 2.48
	12100.00	90.07	358.13	6221.71	6170.73	6166.25	-237.52	1.05	1512975.24	3415508.89	N 40 43 54.71 W 104	0 2.49
	12195.00	90.21	358.64	6221.47	6265.73	6261.21	-240.19	1.56	1513070.20	3415506.21	N 40 43 55.65 W 104	0 2.50
	12290.00	89.69	357.81	6221.56	6360.73	6356.17	-243.14	1.03	1513165.15	3415503.27	N 40 43 56.59 W 104	0 2.52
	12384.00	89.93	358.92	6221.87	6454.72	6450.13	-245.82	1.21	1513259.11	3415500.58	N 40 43 57.52 W 104	0 2.54
	12479.00	90.03	358.30	6221.90	6549.72	6545.10	-248.12	0.66	1513354.08	3415498.28	N 40 43 58.45 W 104	0 2.54
	12574.00	89.62	357.30	6222.19	6644.72	6640.03	-251.77	1.14	1513449.01	3415494.63	N 40 43 59.39 W 104	0 2.57
	12669.00	90.07	358.75	6222.45	6739.71	6734.97	-255.04	1.60	1513543.94	3415491.36	N 40 44 0.33 W 104	0 2.59
	12764.00	89.93	359.67	6222.45	6834.70	6829.96	-256.35	0.98	1513638.93	3415490.05	N 40 44 1.27 W 104	0 2.59
	12859.00	89.66	358.70	6222.79	6929.68	6924.95	-257.70	1.06	1513733.92	3415488.70	N 40 44 2.21 W 104	0 2.59
	12954.00	90.24	359.00	6222.87	7024.67	7019.93	-259.61	0.69	1513828.90	3415486.79	N 40 44 3.15 W 104	0 2.59
	13048.00	90.24	357.96	6222.48	7118.66	7113.89	-262.10	1.11	1513922.86	3415484.30	N 40 44 4.08 W 104	0 2.60
	13143.00	90.24	358.72	6222.08	7213.66	7208.85	-264.86	0.80	1514017.77	3415481.55	N 40 44 5.02 W 104	0 2.62
	13238.00	89.86	357.63	6222.00	7308.66	7303.80	-267.88	1.22	1514112.77	3415478.52	N 40 44 5.95 W 104	0 2.63
	13333.00	90.03	357.59	6222.09	7403.66	7398.72	-271.84	1.18	1514207.69	3415474.56	N 40 44 6.89 W 104	0 2.67
	13428.00	90.10	359.36	6221.98	7498.65	7493.68	-274.37	1.86	1514302.65	3415472.03	N 40 44 7.83 W 104	0 2.68
	13523.00	89.72	357.63	6222.13	7593.64	7588.64	-276.87	1.86	1514397.61	3415469.54	N 40 44 8.77 W 104	0 2.69
	13618.00	90.76	359.03	6221.73	7688.64	7683.60	-279.63	1.84	1514492.56	3415466.77	N 40 44 9.71 W 104	0 2.70
	13712.00	90.17	357.27	6220.97	7783.63	7777.54	-282.67	1.97	1514586.51	3415463.73	N 40 44 10.64 W 104	0 2.72
	13807.00	90.17	357.26	6220.69	7877.62	7872.43	-287.20	0.01	1514681.40	3415459.20	N 40 44 11.57 W 104	0 2.76
	13902.00	90.55	358.88	6220.09	7972.62	7967.37	-290.40	1.75	1514776.34	3415456.00	N 40 44 12.51 W 104	0 2.78
	13997.00	90.62	359.47	6219.12	8067.59	8062.36	-291.77	0.63	1514871.32	3415454.63	N 40 44 13.45 W 104	0 2.78
	14092.00	90.55	359.18	6218.15	8162.57	8157.35	-292.89	0.31	1514966.31	3415453.51	N 40 44 14.39 W 104	0 2.77
	14187.00	90.65	358.98	6217.16	8257.55	8252.33	-294.41	0.24	1515061.29	3415451.99	N 40 44 15.33 W 104	0 2.77
	14281.00	90.62	358.96	6216.11	8351.53	8346.31	-296.10	0.04	1515155.27	3415450.30	N 40 44 16.26 W 104	0 2.77
	14376.00	90.07	358.23	6215.54	8446.53	8441.28	-298.43	0.96	1515250.23	341		

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
Bit Projection		1	15490.000	15534.000	Act Stns	6.125	4.500	SLB_BLIND+TREND				
Original Hole / Tina LC29-75-1HNA MWD+IFR 0' to 15534'												