



CONCHO

NORTHERN DELAWARE BASIN

LEA COUNTY, NM

BULLDOG

DOMINATOR 25 FED #609H

OWB

Design: ACTUAL WELLPATH

Standard Survey Report

24 September, 2018

HOBBS OCD
MAR 26 2019

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Survey Report

Company: NORTHERN DELAWARE BASIN
Project: LEA COUNTY, NM
Site: BULLDOG
Well: DOMINATOR 25 FED #609H
Wellbore: OWB
Design: ACTUAL WELLPATH

Local Co-ordinate Reference: Well DOMINATOR 25 FED #609H
TVD Reference: RKB=3340.9+26 @ 3366.9usft (MCVAY 8)
MD Reference: RKB=3340.9+26 @ 3366.9usft (MCVAY 8)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM_Users

Project: LEA COUNTY, NM
Map System: US State Plane 1927 (Exact solution) **System Datum:** Mean Sea Level
Geo Datum: NAD 1927 (NADCON CONUS)
Map Zone: New Mexico East 3001

Site: BULLDOG
Site Position: **Northing:** 398,637.10 usft **Latitude:** 32° 5' 36.820 N
From: Map **Easting:** 741,887.40 usft **Longitude:** 103° 33' 8.116 W
Position Uncertainty: 0.0 usft **Slot Radius:** 13-3/16 " **Grid Convergence:** 0.42 °

Well: DOMINATOR 25 FED #609H
Well Position: **+N/-S** 0.0 usft **Northing:** 399,170.50 usft **Latitude:** 32° 5' 41.631 N
+E/-W 0.0 usft **Easting:** 748,329.90 usft **Longitude:** 103° 31' 53.184 W
Position Uncertainty: 3.0 usft **Wellhead Elevation:** usft **Ground Level:** 3,340.9 usft

Wellbore: OWB
Magnetics: **Model Name:** WMM2015 **Sample Date:** 1/25/2018 **Declination (°):** 6.88 **Dip Angle (°):** 59.93 **Field Strength (nT):** 47,790.47248362

Design: ACTUAL WELLPATH
Audit Notes:
Version: 1.0 **Phase:** ACTUAL **Tie On Depth:** 0.0
Vertical Section: **Depth From (TVD) (usft):** 0.0 **+N/-S (usft):** 0.0 **+E/-W (usft):** 0.0 **Direction (°):** 358.58

Survey Program: **Date:** 9/14/2018

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	11,779.0	GYRO (OWB)	Standard Keeper 104	Standard Wireline Keeper ver 1.0.4
11,897.0	17,227.0	MWD-CURVE/LATERAL (OWB)	MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.47	140.12	100.0	-0.3	0.3	-0.3	0.47	0.47	0.00
125.0	0.61	147.03	125.0	-0.5	0.4	-0.5	0.62	0.56	27.64
150.0	0.67	152.75	150.0	-0.7	0.5	-0.8	0.35	0.24	22.88
175.0	0.66	158.58	175.0	-1.0	0.7	-1.0	0.27	-0.04	23.32
200.0	0.85	161.35	200.0	-1.3	0.8	-1.3	0.77	0.76	11.08
225.0	0.85	161.23	225.0	-1.7	0.9	-1.7	0.01	0.00	-0.48
250.0	0.91	153.50	250.0	-2.0	1.0	-2.0	0.53	0.24	-30.92
275.0	1.09	156.15	275.0	-2.4	1.2	-2.4	0.74	0.72	10.60
300.0	1.21	158.79	300.0	-2.9	1.4	-2.9	0.52	0.48	10.56



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Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
325.0	1.13	162.46	325.0	-3.4	1.6	-3.4	0.44	-0.32	14.68
350.0	1.04	161.46	350.0	-3.8	1.7	-3.9	0.37	-0.36	-4.00
375.0	1.07	152.59	375.0	-4.2	1.9	-4.3	0.66	0.12	-35.48
400.0	1.18	158.36	400.0	-4.7	2.1	-4.7	0.63	0.44	23.08
425.0	1.18	159.23	425.0	-5.2	2.3	-5.2	0.07	0.00	3.48
450.0	1.18	161.39	449.9	-5.6	2.5	-5.7	0.18	0.00	8.64
475.0	1.10	161.83	474.9	-6.1	2.6	-6.2	0.32	-0.32	1.76
500.0	1.05	156.47	499.9	-6.6	2.8	-6.6	0.45	-0.20	-21.44
525.0	1.20	158.22	524.9	-7.0	3.0	-7.1	0.62	0.60	7.00
550.0	1.14	159.91	549.9	-7.5	3.2	-7.6	0.28	-0.24	6.76
575.0	1.15	161.20	574.9	-8.0	3.3	-8.0	0.11	0.04	5.16
600.0	0.98	157.83	599.9	-8.4	3.5	-8.5	0.72	-0.68	-13.48
625.0	0.91	149.21	624.9	-8.8	3.7	-8.9	0.63	-0.28	-34.48
650.0	0.76	140.43	649.9	-9.1	3.9	-9.2	0.79	-0.60	-35.12
675.0	0.62	116.75	674.9	-9.3	4.1	-9.3	1.26	-0.56	-94.72
700.0	0.46	97.49	699.9	-9.3	4.3	-9.4	0.96	-0.64	-77.04
725.0	0.36	77.27	724.9	-9.3	4.5	-9.4	0.70	-0.40	-80.88
750.0	0.43	55.66	749.9	-9.2	4.7	-9.4	0.65	0.28	-86.44
775.0	0.52	60.39	774.9	-9.1	4.8	-9.3	0.39	0.36	18.92
800.0	0.57	65.06	799.9	-9.0	5.0	-9.2	0.27	0.20	18.68
825.0	0.50	70.82	824.9	-8.9	5.3	-9.1	0.35	-0.28	23.04
850.0	0.44	80.55	849.9	-8.9	5.5	-9.0	0.40	-0.24	38.92
875.0	0.45	49.05	874.9	-8.8	5.6	-8.9	0.97	0.04	-126.00
900.0	0.51	53.47	899.9	-8.7	5.8	-8.8	0.28	0.24	17.68
925.0	0.55	62.09	924.9	-8.6	6.0	-8.7	0.36	0.16	34.48
950.0	0.53	59.36	949.9	-8.4	6.2	-8.6	0.13	-0.08	-10.92
975.0	0.45	69.57	974.9	-8.4	6.4	-8.5	0.47	-0.32	40.84
1,000.0	0.39	77.49	999.9	-8.3	6.6	-8.5	0.33	-0.24	31.68
1,025.0	0.30	55.33	1,024.9	-8.2	6.7	-8.4	0.64	-0.36	-88.64
1,050.0	0.36	50.74	1,049.9	-8.2	6.8	-8.3	0.26	0.24	-18.36
1,075.0	0.45	57.60	1,074.9	-8.1	7.0	-8.2	0.41	0.36	27.44
1,100.0	0.45	52.94	1,099.9	-7.9	7.1	-8.1	0.15	0.00	-18.64
1,125.0	0.39	54.56	1,124.9	-7.8	7.3	-8.0	0.24	-0.24	6.48
1,150.0	0.36	62.87	1,149.9	-7.7	7.4	-7.9	0.25	-0.12	33.24
1,175.0	0.21	76.39	1,174.9	-7.7	7.5	-7.9	0.65	-0.60	54.08
1,200.0	0.21	54.69	1,199.9	-7.7	7.6	-7.8	0.32	0.00	-86.80
1,225.0	0.28	35.27	1,224.9	-7.6	7.7	-7.8	0.43	0.28	-77.68
1,250.0	0.31	42.63	1,249.9	-7.5	7.8	-7.7	0.19	0.12	29.44
1,275.0	0.32	57.87	1,274.9	-7.4	7.9	-7.6	0.34	0.04	60.96
1,300.0	0.28	76.60	1,299.9	-7.3	8.0	-7.5	0.42	-0.16	74.92
1,325.0	0.28	66.23	1,324.9	-7.3	8.1	-7.5	0.20	0.00	-41.48
1,350.0	0.29	67.23	1,349.9	-7.3	8.2	-7.5	0.04	0.04	4.00
1,375.0	0.24	76.06	1,374.9	-7.2	8.3	-7.4	0.26	-0.20	35.32



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1,400.0	0.18	93.10	1,399.9	-7.2	8.4	-7.4	0.34	-0.24	68.16
1,425.0	0.19	70.89	1,424.9	-7.2	8.5	-7.4	0.29	0.04	-88.84
1,450.0	0.22	68.35	1,449.9	-7.2	8.6	-7.4	0.13	0.12	-10.16
1,475.0	0.29	35.83	1,474.9	-7.1	8.7	-7.3	0.63	0.28	-130.08
1,500.0	0.28	52.88	1,499.9	-7.0	8.7	-7.2	0.34	-0.04	68.20
1,525.0	0.26	82.09	1,524.9	-7.0	8.8	-7.2	0.55	-0.08	116.84
1,550.0	0.30	171.74	1,549.9	-7.0	8.9	-7.2	1.58	0.16	358.60
1,575.0	0.47	195.41	1,574.9	-7.2	8.9	-7.4	0.92	0.68	94.68
1,600.0	0.64	200.21	1,599.9	-7.4	8.8	-7.6	0.70	0.68	19.20
1,625.0	0.90	200.13	1,624.9	-7.7	8.7	-7.9	1.04	1.04	-0.32
1,650.0	1.19	206.16	1,649.9	-8.2	8.5	-8.4	1.24	1.16	24.12
1,675.0	1.33	207.46	1,674.9	-8.6	8.3	-8.8	0.57	0.56	5.20
1,700.0	1.68	206.04	1,699.9	-9.2	8.0	-9.4	1.41	1.40	-5.68
1,725.0	1.85	205.45	1,724.9	-9.9	7.6	-10.1	0.68	0.68	-2.36
1,750.0	2.13	205.30	1,749.8	-10.7	7.3	-10.9	1.12	1.12	-0.60
1,775.0	2.49	211.31	1,774.8	-11.6	6.8	-11.8	1.73	1.44	24.04
1,800.0	2.58	212.02	1,799.8	-12.5	6.2	-12.7	0.38	0.36	2.84
1,825.0	2.81	214.92	1,824.8	-13.5	5.6	-13.6	1.07	0.92	11.60
1,850.0	3.17	215.94	1,849.7	-14.6	4.8	-14.7	1.46	1.44	4.08
1,875.0	3.22	216.31	1,874.7	-15.7	4.0	-15.8	0.22	0.20	1.48
1,900.0	3.44	215.86	1,899.7	-16.9	3.1	-16.9	0.89	0.88	-1.80
1,925.0	3.58	217.44	1,924.6	-18.1	2.2	-18.2	0.68	0.56	6.32
1,950.0	3.92	217.13	1,949.6	-19.4	1.2	-19.4	1.36	1.36	-1.24
1,975.0	3.96	216.92	1,974.5	-20.8	0.2	-20.8	0.17	0.16	-0.84
2,000.0	4.05	216.34	1,999.4	-22.2	-0.9	-22.1	0.39	0.36	-2.32
2,025.0	3.98	216.09	2,024.4	-23.6	-1.9	-23.5	0.29	-0.28	-1.00
2,050.0	4.06	217.64	2,049.3	-25.0	-2.9	-24.9	0.54	0.32	6.20
2,075.0	4.08	216.95	2,074.2	-26.4	-4.0	-26.3	0.20	0.00	-2.76
2,100.0	4.10	216.64	2,099.2	-27.8	-5.1	-27.7	0.18	0.16	-1.24
2,125.0	4.12	216.90	2,124.1	-29.3	-6.2	-29.1	0.11	0.08	1.04
2,150.0	4.07	216.68	2,149.1	-30.7	-7.2	-30.5	0.21	-0.20	-0.88
2,175.0	4.18	216.10	2,174.0	-32.1	-8.3	-31.9	0.47	0.44	-2.32
2,200.0	4.12	215.31	2,198.9	-33.6	-9.3	-33.4	0.33	-0.24	-3.16
2,225.0	4.15	214.00	2,223.9	-35.1	-10.4	-34.8	0.40	0.12	-5.24
2,250.0	4.06	213.70	2,248.8	-36.6	-11.4	-36.3	0.37	-0.36	-1.20
2,275.0	4.10	213.21	2,273.7	-38.1	-12.3	-37.7	0.21	0.16	-1.96
2,300.0	4.07	212.39	2,298.7	-39.6	-13.3	-39.2	0.26	-0.12	-3.28
2,325.0	4.06	212.08	2,323.6	-41.1	-14.3	-40.7	0.10	-0.04	-1.32
2,350.0	3.96	212.14	2,348.5	-42.5	-15.2	-42.1	0.40	-0.40	0.32
2,375.0	4.20	212.66	2,373.5	-44.0	-16.1	-43.6	0.97	0.96	2.08
2,400.0	4.18	210.92	2,398.4	-45.6	-17.1	-45.2	0.51	-0.08	-6.96
2,425.0	4.10	210.58	2,423.4	-47.1	-18.0	-46.7	0.33	-0.32	-1.36
2,450.0	4.08	210.13	2,448.3	-48.7	-18.9	-48.2	0.15	-0.08	-1.80



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2,475.0	4.20	208.72	2,473.2	-50.2	-19.8	-49.7	0.63	0.48	-5.64
2,500.0	4.06	205.87	2,498.2	-51.8	-20.6	-51.3	0.99	-0.56	-11.40
2,525.0	3.90	203.45	2,523.1	-53.4	-21.4	-52.9	0.93	-0.64	-9.68
2,550.0	3.88	202.64	2,548.0	-55.0	-22.0	-54.4	0.23	-0.08	-3.24
2,575.0	3.69	200.96	2,573.0	-56.5	-22.6	-55.9	0.88	-0.76	-6.72
2,600.0	3.61	199.76	2,597.9	-58.0	-23.2	-57.4	0.44	-0.32	-4.80
2,625.0	3.70	195.47	2,622.9	-59.5	-23.7	-58.9	1.15	0.36	-17.16
2,650.0	3.67	193.55	2,647.8	-61.1	-24.1	-60.5	0.51	-0.12	-7.68
2,675.0	3.63	190.53	2,672.8	-62.6	-24.4	-62.0	0.79	-0.16	-12.08
2,700.0	3.67	187.84	2,697.7	-64.2	-24.7	-63.6	0.70	0.16	-10.76
2,725.0	3.63	184.19	2,722.7	-65.8	-24.8	-65.2	0.94	-0.16	-14.60
2,750.0	3.67	181.55	2,747.6	-67.4	-24.9	-66.7	0.69	0.16	-10.56
2,775.0	3.68	179.73	2,772.6	-69.0	-24.9	-68.3	0.47	0.04	-7.28
2,800.0	3.56	179.26	2,797.5	-70.6	-24.9	-69.9	0.49	-0.48	-1.88
2,825.0	3.60	179.28	2,822.5	-72.1	-24.9	-71.5	0.16	0.16	0.08
2,850.0	3.50	179.38	2,847.4	-73.7	-24.9	-73.0	0.40	-0.40	0.40
2,875.0	3.55	177.62	2,872.4	-75.2	-24.8	-74.6	0.48	0.20	-7.04
2,900.0	3.50	173.24	2,897.3	-76.7	-24.7	-76.1	1.10	-0.20	-17.52
2,925.0	3.56	172.89	2,922.3	-78.3	-24.5	-77.6	0.26	0.24	-1.40
2,950.0	3.46	173.21	2,947.2	-79.8	-24.3	-79.2	0.41	-0.40	1.28
2,975.0	3.30	172.61	2,972.2	-81.2	-24.2	-80.6	0.66	-0.64	-2.40
3,000.0	2.72	169.52	2,997.2	-82.5	-24.0	-81.9	2.41	-2.32	-12.36
3,025.0	1.51	165.53	3,022.1	-83.4	-23.8	-82.8	4.87	-4.84	-15.96
3,050.0	0.52	163.82	3,047.1	-83.9	-23.7	-83.3	3.96	-3.96	-6.84
3,075.0	0.12	130.74	3,072.1	-84.0	-23.6	-83.4	1.70	-1.60	-132.32
3,100.0	0.16	168.69	3,097.1	-84.1	-23.6	-83.4	0.39	0.16	151.80
3,125.0	0.18	149.57	3,122.1	-84.1	-23.5	-83.5	0.24	0.08	-76.48
3,150.0	0.12	176.91	3,147.1	-84.2	-23.5	-83.6	0.37	-0.24	109.36
3,175.0	0.16	149.67	3,172.1	-84.2	-23.5	-83.6	0.31	0.16	-108.96
3,200.0	0.10	164.28	3,197.1	-84.3	-23.5	-83.7	0.27	-0.24	58.44
3,225.0	0.11	192.88	3,222.1	-84.3	-23.5	-83.7	0.21	0.04	114.40
3,250.0	0.19	158.09	3,247.1	-84.4	-23.5	-83.8	0.47	0.32	-139.16
3,275.0	0.14	150.07	3,272.1	-84.5	-23.4	-83.9	0.22	-0.20	-32.08
3,300.0	0.13	159.14	3,297.1	-84.5	-23.4	-83.9	0.09	-0.04	36.28
3,325.0	0.08	194.11	3,322.1	-84.6	-23.4	-83.9	0.32	-0.20	139.88
3,350.0	0.12	194.22	3,347.1	-84.6	-23.4	-84.0	0.16	0.16	0.44
3,375.0	0.16	177.81	3,372.1	-84.7	-23.4	-84.1	0.23	0.16	-65.64
3,400.0	0.09	205.07	3,397.1	-84.7	-23.4	-84.1	0.36	-0.28	109.04
3,425.0	0.07	215.30	3,422.1	-84.7	-23.5	-84.1	0.10	-0.08	40.92
3,450.0	0.09	226.98	3,447.1	-84.8	-23.5	-84.2	0.10	0.08	46.72
3,475.0	0.06	245.95	3,472.1	-84.8	-23.5	-84.2	0.15	-0.12	75.88
3,500.0	0.05	303.82	3,497.1	-84.8	-23.5	-84.2	0.22	-0.04	231.48
3,525.0	0.03	268.70	3,522.1	-84.8	-23.5	-84.2	0.12	-0.08	-140.48
3,550.0	0.07	286.42	3,547.1	-84.8	-23.6	-84.2	0.17	0.16	70.88



Survey Report

Company: NORTHERN DELAWARE BASIN
Project: LEA COUNTY, NM
Site: BULLDOG
Well: DOMINATOR 25 FED #609H
Wellbore: OWB
Design: ACTUAL WELLPATH

Local Co-ordinate Reference: Well DOMINATOR 25 FED #609H
TVD Reference: RKB=3340.9+26 @ 3366.9usft (MCVAY 8)
MD Reference: RKB=3340.9+26 @ 3366.9usft (MCVAY 8)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM_Users

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,575.0	0.06	314.15	3,572.1	-84.8	-23.6	-84.2	0.13	-0.04	110.92
3,600.0	0.13	205.88	3,597.1	-84.8	-23.6	-84.2	0.64	0.28	-433.08
3,625.0	0.09	241.50	3,622.1	-84.8	-23.6	-84.2	0.31	-0.16	142.48
3,650.0	0.03	293.22	3,647.1	-84.8	-23.7	-84.2	0.30	-0.24	206.88
3,675.0	0.13	332.46	3,672.1	-84.8	-23.7	-84.2	0.43	0.40	156.96
3,700.0	0.05	68.36	3,697.1	-84.8	-23.7	-84.2	0.58	-0.32	383.60
3,725.0	0.04	46.04	3,722.1	-84.8	-23.7	-84.1	0.08	-0.04	-89.28
3,750.0	0.05	47.83	3,747.1	-84.7	-23.7	-84.1	0.04	0.04	7.16
3,775.0	0.14	159.23	3,772.1	-84.8	-23.6	-84.1	0.66	0.36	445.60
3,800.0	0.25	231.39	3,797.1	-84.8	-23.7	-84.2	0.99	0.44	288.64
3,825.0	1.31	196.61	3,822.1	-85.1	-23.8	-84.5	4.46	4.24	-139.12
3,850.0	1.58	196.41	3,847.1	-85.7	-24.0	-85.1	1.08	1.08	-0.80
3,875.0	1.66	190.62	3,872.1	-86.4	-24.1	-85.8	0.73	0.32	-23.16
3,900.0	1.59	178.61	3,897.1	-87.1	-24.2	-86.5	1.39	-0.28	-48.04
3,925.0	1.55	153.20	3,922.1	-87.8	-24.0	-87.2	2.77	-0.16	-101.64
3,950.0	1.71	130.38	3,947.1	-88.3	-23.6	-87.7	2.65	0.64	-91.28
3,975.0	1.87	125.13	3,972.1	-88.8	-23.0	-88.2	0.92	0.64	-21.00
4,000.0	1.79	117.63	3,997.1	-89.2	-22.3	-88.6	1.01	-0.32	-30.00
4,025.0	1.82	117.26	4,022.1	-89.6	-21.6	-89.0	0.13	0.12	-1.48
4,050.0	1.51	116.32	4,047.0	-89.9	-20.9	-89.4	1.24	-1.24	-3.76
4,075.0	1.60	125.19	4,072.0	-90.2	-20.4	-89.7	1.03	0.36	35.48
4,100.0	1.16	127.88	4,097.0	-90.6	-19.9	-90.1	1.78	-1.76	10.76
4,125.0	0.81	143.67	4,122.0	-90.9	-19.6	-90.4	1.76	-1.40	63.16
4,150.0	0.41	174.33	4,147.0	-91.1	-19.5	-90.6	2.01	-1.60	122.64
4,175.0	0.43	179.97	4,172.0	-91.3	-19.5	-90.8	0.18	0.08	22.56
4,200.0	0.43	187.58	4,197.0	-91.5	-19.5	-91.0	0.23	0.00	30.44
4,225.0	0.44	188.17	4,222.0	-91.7	-19.5	-91.2	0.04	0.04	2.36
4,250.0	0.43	205.03	4,247.0	-91.9	-19.5	-91.4	0.51	-0.04	67.44
4,275.0	0.43	241.17	4,272.0	-92.0	-19.7	-91.5	1.07	0.00	144.56
4,300.0	0.68	270.61	4,297.0	-92.0	-19.9	-91.5	1.49	1.00	117.76
4,325.0	0.93	280.93	4,322.0	-92.0	-20.2	-91.5	1.15	1.00	41.28
4,350.0	1.09	279.18	4,347.0	-91.9	-20.7	-91.4	0.65	0.64	-7.00
4,375.0	1.03	282.90	4,372.0	-91.8	-21.1	-91.3	0.37	-0.24	14.88
4,400.0	1.06	278.94	4,397.0	-91.8	-21.6	-91.2	0.31	0.12	-15.84
4,425.0	1.11	279.36	4,422.0	-91.7	-22.0	-91.1	0.20	0.20	1.68
4,450.0	1.14	263.47	4,447.0	-91.7	-22.5	-91.1	1.25	0.12	-63.56
4,475.0	1.31	251.89	4,472.0	-91.8	-23.1	-91.2	1.20	0.68	-46.32
4,500.0	1.42	234.78	4,497.0	-92.1	-23.6	-91.4	1.68	0.44	-68.44
4,525.0	1.42	229.50	4,522.0	-92.4	-24.1	-91.8	0.52	0.00	-21.12
4,550.0	0.71	214.17	4,547.0	-92.8	-24.4	-92.1	3.04	-2.84	-61.32
4,575.0	0.32	189.75	4,572.0	-93.0	-24.5	-92.3	1.76	-1.56	-97.68
4,600.0	0.39	132.65	4,597.0	-93.1	-24.4	-92.5	1.38	0.28	-228.40
4,625.0	0.72	131.31	4,622.0	-93.2	-24.3	-92.6	1.32	1.32	-5.36



Survey Report

Company: NORTHERN DELAWARE BASIN
Project: LEA COUNTY, NM
Site: BULLDOG
Well: DOMINATOR 25 FED #609H
Wellbore: OWB
Design: ACTUAL WELLPATH

Local Co-ordinate Reference: Well DOMINATOR 25 FED #609H
TVD Reference: RKB=3340.9+26 @ 3366.9usft (MCVAY 8)
MD Reference: RKB=3340.9+26 @ 3366.9usft (MCVAY 8)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM_Users

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,650.0	1.39	130.66	4,647.0	-93.5	-23.9	-92.9	2.68	2.68	-2.60
4,675.0	2.37	130.86	4,671.9	-94.1	-23.3	-93.5	3.92	3.92	0.80
4,700.0	2.58	130.98	4,696.9	-94.8	-22.5	-94.2	0.84	0.84	0.48
4,725.0	2.55	129.27	4,721.9	-95.5	-21.6	-94.9	0.33	-0.12	-6.84
4,750.0	2.44	131.73	4,746.9	-96.2	-20.8	-95.7	0.61	-0.44	9.84
4,775.0	2.23	131.61	4,771.9	-96.9	-20.0	-96.4	0.84	-0.84	-0.48
4,800.0	2.26	135.03	4,796.8	-97.6	-19.3	-97.1	0.55	0.12	13.68
4,825.0	2.44	134.26	4,821.8	-98.3	-18.6	-97.8	0.73	0.72	-3.08
4,850.0	2.50	132.74	4,846.8	-99.0	-17.8	-98.6	0.36	0.24	-6.08
4,875.0	2.32	135.77	4,871.8	-99.8	-17.1	-99.3	0.88	-0.72	12.12
4,900.0	1.97	140.08	4,896.8	-100.5	-16.4	-100.0	1.54	-1.40	17.24
4,925.0	1.20	156.43	4,921.7	-101.0	-16.0	-100.6	3.54	-3.08	65.40
4,950.0	0.59	187.91	4,946.7	-101.4	-16.0	-101.0	3.05	-2.44	125.92
4,975.0	0.34	236.99	4,971.7	-101.6	-16.0	-101.1	1.79	-1.00	198.32
5,000.0	0.27	303.63	4,996.7	-101.6	-16.1	-101.1	1.36	-0.28	266.56
5,025.0	0.27	333.51	5,021.7	-101.5	-16.2	-101.0	0.56	0.00	119.52
5,050.0	0.33	1.87	5,046.7	-101.4	-16.2	-100.9	0.63	0.24	113.44
5,075.0	0.43	358.62	5,071.7	-101.2	-16.2	-100.8	0.41	0.40	-13.00
5,100.0	0.46	352.60	5,096.7	-101.0	-16.3	-100.6	0.22	0.12	-24.08
5,125.0	0.49	353.32	5,121.7	-100.8	-16.3	-100.4	0.12	0.12	2.88
5,150.0	0.52	344.03	5,146.7	-100.6	-16.3	-100.1	0.35	0.12	-37.16
5,175.0	1.35	340.46	5,171.7	-100.2	-16.5	-99.7	3.33	3.32	-14.28
5,200.0	1.73	341.59	5,196.7	-99.6	-16.7	-99.1	1.52	1.52	4.52
5,225.0	1.74	342.75	5,221.7	-98.8	-16.9	-98.4	0.15	0.04	4.64
5,250.0	1.72	339.92	5,246.7	-98.1	-17.2	-97.7	0.35	-0.08	-11.32
5,275.0	1.76	341.72	5,271.7	-97.4	-17.4	-96.9	0.27	0.16	7.20
5,300.0	1.84	342.39	5,296.7	-96.7	-17.6	-96.2	0.33	0.32	2.68
5,325.0	1.72	344.16	5,321.7	-95.9	-17.9	-95.4	0.53	-0.48	7.08
5,350.0	1.73	339.90	5,346.7	-95.2	-18.1	-94.7	0.51	0.04	-17.04
5,375.0	0.68	342.25	5,371.6	-94.7	-18.3	-94.2	4.20	-4.20	9.40
5,400.0	0.32	352.61	5,396.6	-94.5	-18.3	-94.0	1.48	-1.44	41.44
5,425.0	0.27	3.50	5,421.6	-94.4	-18.3	-93.9	0.30	-0.20	43.56
5,450.0	0.26	4.47	5,446.6	-94.2	-18.3	-93.8	0.04	-0.04	3.88
5,475.0	0.26	10.78	5,471.6	-94.1	-18.3	-93.7	0.11	0.00	25.24
5,500.0	0.30	350.54	5,496.6	-94.0	-18.3	-93.5	0.42	0.16	-80.96
5,525.0	0.23	344.74	5,521.6	-93.9	-18.3	-93.4	0.30	-0.28	-23.20
5,550.0	0.19	355.99	5,546.6	-93.8	-18.4	-93.3	0.23	-0.16	45.00
5,575.0	0.25	352.56	5,571.6	-93.7	-18.4	-93.2	0.25	0.24	-13.72
5,600.0	0.22	353.60	5,596.6	-93.6	-18.4	-93.1	0.12	-0.12	4.16
5,625.0	0.22	0.94	5,621.6	-93.5	-18.4	-93.0	0.11	0.00	29.36
5,650.0	0.27	352.12	5,646.6	-93.4	-18.4	-92.9	0.25	0.20	-35.28
5,675.0	0.28	352.52	5,671.6	-93.3	-18.4	-92.8	0.04	0.04	1.60
5,700.0	0.24	335.41	5,696.6	-93.2	-18.4	-92.7	0.35	-0.16	-68.44



Survey Report

Company: NORTHERN DELAWARE BASIN
Project: LEA COUNTY, NM
Site: BULLDOG
Well: DOMINATOR 25 FED #609H
Wellbore: OWB
Design: ACTUAL WELLPATH

Local Co-ordinate Reference: Well DOMINATOR 25 FED #609H
TVD Reference: RKB=3340.9+26 @ 3366.9usft (MCVAY 8)
MD Reference: RKB=3340.9+26 @ 3366.9usft (MCVAY 8)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM_Users

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Bulld Rate (°/100usft)	Turn Rate (°/100usft)
5,725.0	0.28	324.40	5,721.6	-93.1	-18.5	-92.6	0.26	0.16	-44.04
5,750.0	0.26	320.81	5,746.6	-93.0	-18.6	-92.5	0.10	-0.08	-14.36
5,775.0	0.24	313.80	5,771.6	-92.9	-18.6	-92.4	0.15	-0.08	-28.04
5,800.0	0.27	312.67	5,796.6	-92.8	-18.7	-92.3	0.12	0.12	-4.52
5,825.0	0.32	314.31	5,821.6	-92.7	-18.8	-92.3	0.20	0.20	6.56
5,850.0	0.27	299.77	5,846.6	-92.7	-18.9	-92.2	0.36	-0.20	-58.16
5,875.0	0.37	297.11	5,871.6	-92.6	-19.0	-92.1	0.40	0.40	-10.64
5,900.0	0.34	295.42	5,896.6	-92.5	-19.2	-92.0	0.13	-0.12	-6.76
5,925.0	0.31	288.07	5,921.6	-92.5	-19.3	-92.0	0.21	-0.12	-29.40
5,950.0	0.24	289.13	5,946.6	-92.4	-19.4	-91.9	0.28	-0.28	4.24
5,975.0	0.27	309.60	5,971.6	-92.4	-19.5	-91.9	0.38	0.12	81.88
6,000.0	0.49	309.52	5,996.6	-92.3	-19.6	-91.8	0.88	0.88	-0.32
6,025.0	0.40	307.78	6,021.6	-92.2	-19.8	-91.6	0.36	-0.36	-6.96
6,050.0	0.44	305.36	6,046.6	-92.1	-19.9	-91.5	0.17	0.16	-9.68
6,075.0	0.45	310.62	6,071.6	-91.9	-20.1	-91.4	0.17	0.04	21.04
6,100.0	0.42	305.75	6,096.6	-91.8	-20.2	-91.3	0.19	-0.12	-19.48
6,125.0	0.46	300.95	6,121.6	-91.7	-20.4	-91.2	0.22	0.16	-19.20
6,150.0	0.46	302.46	6,146.6	-91.6	-20.6	-91.1	0.05	0.00	6.04
6,175.0	0.46	304.25	6,171.6	-91.5	-20.7	-91.0	0.06	0.00	7.16
6,200.0	0.51	303.16	6,196.6	-91.4	-20.9	-90.8	0.20	0.20	-4.36
6,225.0	0.50	305.49	6,221.6	-91.3	-21.1	-90.7	0.09	-0.04	9.32
6,250.0	0.50	303.46	6,246.6	-91.1	-21.3	-90.6	0.07	0.00	-8.12
6,275.0	0.40	303.53	6,271.6	-91.0	-21.4	-90.5	0.40	-0.40	0.28
6,300.0	0.47	303.61	6,296.6	-90.9	-21.6	-90.4	0.28	0.28	0.32
6,325.0	0.45	301.81	6,321.6	-90.8	-21.8	-90.2	0.10	-0.08	-7.20
6,350.0	0.56	302.95	6,346.6	-90.7	-22.0	-90.1	0.44	0.44	4.56
6,375.0	0.48	299.51	6,371.6	-90.6	-22.1	-90.0	0.34	-0.32	-13.76
6,400.0	0.51	304.27	6,396.6	-90.5	-22.3	-89.9	0.20	0.12	19.04
6,425.0	0.49	297.66	6,421.6	-90.3	-22.5	-89.8	0.24	-0.08	-26.44
6,450.0	0.40	297.99	6,446.6	-90.3	-22.7	-89.7	0.36	-0.36	1.32
6,475.0	0.34	295.34	6,471.6	-90.2	-22.8	-89.6	0.25	-0.24	-10.60
6,500.0	0.50	302.79	6,496.6	-90.1	-23.0	-89.5	0.67	0.64	29.80
6,525.0	0.36	295.39	6,521.6	-90.0	-23.2	-89.4	0.60	-0.56	-29.60
6,550.0	0.32	295.51	6,546.6	-89.9	-23.3	-89.3	0.16	-0.16	0.48
6,575.0	0.35	292.29	6,571.6	-89.9	-23.4	-89.3	0.14	0.12	-12.88
6,600.0	0.26	289.60	6,596.6	-89.8	-23.5	-89.2	0.36	-0.36	-10.76
6,625.0	0.20	285.60	6,621.6	-89.8	-23.6	-89.2	0.25	-0.24	-16.00
6,650.0	0.18	317.79	6,646.6	-89.8	-23.7	-89.1	0.43	-0.08	128.76
6,675.0	0.33	315.70	6,671.6	-89.7	-23.8	-89.1	0.60	0.60	-8.36
6,700.0	0.33	308.66	6,696.6	-89.6	-23.9	-89.0	0.16	0.00	-28.16
6,725.0	0.30	297.69	6,721.6	-89.5	-24.0	-88.9	0.27	-0.12	-43.88
6,750.0	0.39	300.43	6,746.6	-89.4	-24.1	-88.8	0.37	0.36	10.96
6,775.0	0.29	293.60	6,771.6	-89.4	-24.3	-88.7	0.43	-0.40	-27.32
6,800.0	0.25	313.27	6,796.6	-89.3	-24.4	-88.7	0.40	-0.16	78.68



Survey Report

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Project: LEA COUNTY, NM
Site: BULLDOG
Well: DOMINATOR 25 FED #609H
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Design: ACTUAL WELLPATH

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TVD Reference: RKB=3340.9+26 @ 3366.9usft (MCVAY 8)
MD Reference: RKB=3340.9+26 @ 3366.9usft (MCVAY 8)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM_Users

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,825.0	0.30	308.33	6,821.6	-89.2	-24.5	-88.6	0.22	0.20	-19.76
6,850.0	0.34	306.81	6,846.6	-89.1	-24.6	-88.5	0.16	0.16	-6.08
6,875.0	0.29	302.90	6,871.6	-89.1	-24.7	-88.4	0.22	-0.20	-15.64
6,900.0	0.30	304.86	6,896.6	-89.0	-24.8	-88.3	0.06	0.04	7.84
6,925.0	0.37	304.21	6,921.6	-88.9	-24.9	-88.3	0.28	0.28	-2.60
6,950.0	0.31	278.81	6,946.6	-88.8	-25.0	-88.2	0.64	-0.24	-101.60
6,975.0	0.39	289.30	6,971.6	-88.8	-25.2	-88.2	0.41	0.32	41.96
7,000.0	0.43	302.09	6,996.6	-88.7	-25.3	-88.1	0.40	0.16	51.16
7,025.0	0.40	296.20	7,021.6	-88.6	-25.5	-88.0	0.21	-0.12	-23.56
7,050.0	0.42	291.99	7,046.6	-88.6	-25.7	-87.9	0.14	0.08	-16.84
7,075.0	0.42	273.54	7,071.6	-88.5	-25.8	-87.9	0.54	0.00	-73.80
7,100.0	0.45	250.55	7,096.6	-88.6	-26.0	-87.9	0.70	0.12	-91.96
7,125.0	0.45	241.40	7,121.6	-88.6	-26.2	-88.0	0.29	0.00	-36.60
7,150.0	0.36	228.28	7,146.6	-88.7	-26.4	-88.1	0.51	-0.36	-52.48
7,175.0	0.28	235.61	7,171.6	-88.8	-26.5	-88.1	0.36	-0.32	29.32
7,200.0	0.35	233.33	7,196.6	-88.9	-26.6	-88.2	0.28	0.28	-9.12
7,225.0	0.45	240.91	7,221.6	-89.0	-26.7	-88.3	0.45	0.40	30.32
7,250.0	0.48	221.88	7,246.6	-89.1	-26.9	-88.4	0.63	0.12	-76.12
7,275.0	0.62	202.45	7,271.6	-89.3	-27.0	-88.6	0.93	0.56	-77.72
7,300.0	0.84	194.12	7,296.6	-89.6	-27.1	-88.9	0.97	0.88	-33.32
7,325.0	0.93	182.19	7,321.6	-90.0	-27.1	-89.3	0.82	0.36	-47.72
7,350.0	0.80	190.24	7,346.6	-90.4	-27.2	-89.7	0.71	-0.52	32.20
7,375.0	0.88	189.20	7,371.6	-90.7	-27.2	-90.0	0.33	0.32	-4.16
7,400.0	0.98	185.55	7,396.6	-91.1	-27.3	-90.4	0.46	0.40	-14.60
7,425.0	0.96	188.26	7,421.6	-91.6	-27.3	-90.9	0.20	-0.08	10.84
7,450.0	0.93	187.95	7,446.6	-92.0	-27.4	-91.3	0.12	-0.12	-1.24
7,475.0	0.96	187.01	7,471.6	-92.4	-27.5	-91.7	0.14	0.12	-3.76
7,500.0	0.94	189.12	7,496.6	-92.8	-27.5	-92.1	0.16	-0.08	8.44
7,525.0	1.02	181.20	7,521.6	-93.2	-27.6	-92.5	0.63	0.32	-31.68
7,550.0	0.88	186.90	7,546.6	-93.6	-27.6	-92.9	0.67	-0.56	22.80
7,575.0	0.99	186.82	7,571.6	-94.0	-27.6	-93.3	0.44	0.44	-0.32
7,600.0	0.99	189.29	7,596.6	-94.5	-27.7	-93.7	0.17	0.00	9.88
7,625.0	1.15	182.96	7,621.6	-94.9	-27.7	-94.2	0.79	0.64	-25.32
7,650.0	1.30	194.35	7,646.6	-95.5	-27.8	-94.7	1.14	0.60	45.56
7,675.0	1.82	194.33	7,671.5	-96.1	-28.0	-95.4	2.08	2.08	-0.08
7,700.0	1.96	198.18	7,696.5	-96.9	-28.2	-96.2	0.76	0.56	15.40
7,725.0	2.13	200.75	7,721.5	-97.7	-28.5	-97.0	0.77	0.68	10.28
7,750.0	2.06	199.17	7,746.5	-98.6	-28.8	-97.9	0.36	-0.28	-6.32
7,775.0	2.15	199.15	7,771.5	-99.5	-28.1	-98.7	0.36	0.36	-0.08
7,800.0	2.14	198.80	7,796.5	-100.4	-29.4	-99.6	0.07	-0.04	-1.40
7,825.0	2.15	199.62	7,821.4	-101.2	-29.7	-100.5	0.13	0.04	3.28
7,850.0	2.13	200.58	7,846.4	-102.1	-30.1	-101.3	0.16	-0.08	3.84
7,875.0	2.02	201.14	7,871.4	-103.0	-30.4	-102.2	0.45	-0.44	2.24



Survey Report

Company: NORTHERN DELAWARE BASIN
Project: LEA COUNTY, NM
Site: BULLDOG
Well: DOMINATOR 25 FED #609H
Wellbore: OWB
Design: ACTUAL WELLPATH

Local Co-ordinate Reference: Well DOMINATOR 25 FED #609H
TVD Reference: RKB=3340.9+26 @ 3366.9usft (MCVAY 8)
MD Reference: RKB=3340.9+26 @ 3366.9usft (MCVAY 8)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM_Users

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,900.0	2.07	199.22	7,896.4	-103.8	-30.7	-103.0	0.34	0.20	-7.68
7,925.0	2.02	200.67	7,921.4	-104.6	-31.0	-103.8	0.29	-0.20	5.80
7,950.0	2.04	200.14	7,946.4	-105.5	-31.3	-104.7	0.11	0.08	-2.12
7,975.0	2.05	196.46	7,971.3	-106.3	-31.6	-105.5	0.53	0.04	-14.72
8,000.0	2.02	202.38	7,996.3	-107.1	-31.9	-106.3	0.85	-0.12	23.68
8,025.0	2.09	197.77	8,021.3	-108.0	-32.2	-107.2	0.72	0.28	-18.44
8,050.0	2.05	199.27	8,046.3	-108.8	-32.5	-108.0	0.27	-0.16	6.00
8,075.0	2.03	200.79	8,071.3	-109.7	-32.8	-108.8	0.23	-0.08	6.08
8,100.0	2.08	199.22	8,096.3	-110.5	-33.1	-109.7	0.30	0.20	-6.28
8,125.0	2.01	197.17	8,121.3	-111.4	-33.4	-110.5	0.40	-0.28	-8.20
8,150.0	1.97	198.04	8,146.2	-112.2	-33.6	-111.3	0.20	-0.16	3.48
8,175.0	1.99	196.82	8,171.2	-113.0	-33.9	-112.2	0.19	0.08	-4.88
8,200.0	2.12	197.47	8,196.2	-113.9	-34.2	-113.0	0.53	0.52	2.60
8,225.0	1.95	195.72	8,221.2	-114.7	-34.4	-113.8	0.72	-0.68	-7.00
8,250.0	2.05	194.67	8,246.2	-115.6	-34.6	-114.7	0.43	0.40	-4.20
8,275.0	1.96	192.99	8,271.2	-116.4	-34.8	-115.5	0.43	-0.36	-6.72
8,300.0	1.98	190.73	8,296.1	-117.3	-35.0	-116.4	0.32	0.08	-9.04
8,325.0	2.17	193.10	8,321.1	-118.1	-35.2	-117.2	0.83	0.76	9.48
8,350.0	1.78	190.22	8,346.1	-119.0	-35.4	-118.1	1.61	-1.56	-11.52
8,375.0	1.81	191.93	8,371.1	-119.8	-35.5	-118.8	0.25	0.12	6.84
8,400.0	1.93	191.44	8,396.1	-120.6	-35.7	-119.6	0.48	0.48	-1.96
8,425.0	1.88	191.06	8,421.1	-121.4	-35.9	-120.4	0.21	-0.20	-1.52
8,450.0	1.87	192.57	8,446.1	-122.2	-36.0	-121.2	0.20	-0.04	6.04
8,475.0	1.89	194.56	8,471.0	-123.0	-36.2	-122.0	0.27	0.08	7.96
8,500.0	1.83	191.17	8,496.0	-123.8	-36.4	-122.8	0.50	-0.24	-13.56
8,525.0	1.85	193.08	8,521.0	-124.5	-36.6	-123.6	0.26	0.08	7.64
8,550.0	1.89	191.70	8,546.0	-125.3	-36.7	-124.4	0.24	0.16	-5.52
8,575.0	1.75	190.24	8,571.0	-126.1	-36.9	-125.2	0.59	-0.56	-5.84
8,600.0	1.71	192.51	8,596.0	-126.9	-37.0	-125.9	0.32	-0.16	9.08
8,625.0	1.77	192.61	8,621.0	-127.6	-37.2	-126.6	0.24	0.24	0.40
8,650.0	1.69	192.35	8,646.0	-128.3	-37.4	-127.4	0.32	-0.32	-1.04
8,675.0	1.77	191.21	8,671.0	-129.1	-37.5	-128.1	0.35	0.32	-4.56
8,700.0	1.61	192.53	8,695.9	-129.8	-37.7	-128.8	0.66	-0.64	5.28
8,725.0	1.69	193.48	8,720.9	-130.5	-37.8	-129.5	0.34	0.32	3.80
8,750.0	1.67	192.64	8,745.9	-131.2	-38.0	-130.2	0.13	-0.08	-3.36
8,775.0	1.71	193.67	8,770.9	-131.9	-38.2	-130.9	0.20	0.16	4.12
8,800.0	1.70	193.51	8,795.9	-132.7	-38.4	-131.7	0.04	-0.04	-0.64
8,825.0	1.58	194.51	8,820.9	-133.4	-38.5	-132.4	0.49	-0.48	4.00
8,850.0	1.43	193.09	8,845.9	-134.0	-38.7	-133.0	0.62	-0.60	-5.68
8,875.0	1.61	190.33	8,870.9	-134.6	-38.8	-133.6	0.78	0.72	-11.04
8,900.0	1.69	193.21	8,895.9	-135.3	-39.0	-134.3	0.46	0.32	11.52
8,925.0	1.56	193.21	8,920.8	-136.0	-39.1	-135.0	0.52	-0.52	0.00
8,950.0	1.59	195.10	8,945.8	-136.7	-39.3	-135.7	0.24	0.12	7.56



Survey Report

Company: NORTHERN DELAWARE BASIN
 Project: LEA COUNTY, NM
 Site: BULLDOG
 Well: DOMINATOR 25 FED #609H
 Wellbore: OWB
 Design: ACTUAL WELLPATH

Local Co-ordinate Reference: Well DOMINATOR 25 FED #609H
 TVD Reference: RKB=3340.9+26 @ 3366.9usft (MCVAY 8)
 MD Reference: RKB=3340.9+26 @ 3366.9usft (MCVAY 8)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM_Users

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,975.0	1.57	196.35	8,970.8	-137.4	-39.5	-136.3	0.16	-0.08	5.00
9,000.0	1.50	195.74	8,995.8	-138.0	-39.7	-137.0	0.29	-0.28	-2.44
9,025.0	1.56	196.55	9,020.8	-138.6	-39.9	-137.6	0.26	0.24	3.24
9,050.0	1.59	198.39	9,045.8	-139.3	-40.1	-138.3	0.24	0.12	7.36
9,075.0	1.50	197.58	9,070.8	-139.9	-40.3	-138.9	0.37	-0.36	-3.24
9,100.0	1.51	195.89	9,095.8	-140.6	-40.5	-139.5	0.18	0.04	-6.76
9,125.0	1.46	196.12	9,120.8	-141.2	-40.6	-140.1	0.20	-0.20	0.92
9,150.0	1.42	198.92	9,145.8	-141.8	-40.8	-140.7	0.32	-0.16	11.20
9,175.0	1.40	200.51	9,170.8	-142.4	-41.0	-141.3	0.18	-0.08	6.36
9,200.0	1.53	203.71	9,195.8	-143.0	-41.3	-141.9	0.61	0.52	12.80
9,225.0	1.40	206.49	9,220.7	-143.5	-41.5	-142.5	0.59	-0.52	11.12
9,250.0	1.40	205.08	9,245.7	-144.1	-41.8	-143.0	0.14	0.00	-5.64
9,275.0	1.43	207.60	9,270.7	-144.6	-42.1	-143.6	0.28	0.12	10.08
9,300.0	1.49	212.41	9,295.7	-145.2	-42.4	-144.1	0.55	0.24	19.24
9,325.0	1.42	213.64	9,320.7	-145.7	-42.7	-144.6	0.31	-0.28	4.92
9,350.0	1.45	213.87	9,345.7	-146.3	-43.1	-145.1	0.12	0.12	0.92
9,375.0	1.51	215.08	9,370.7	-146.8	-43.5	-145.7	0.27	0.24	4.84
9,400.0	1.54	220.48	9,395.7	-147.3	-43.9	-146.2	0.59	0.12	21.60
9,425.0	1.53	222.79	9,420.7	-147.8	-44.3	-146.7	0.25	-0.04	9.24
9,450.0	1.59	223.97	9,445.7	-148.3	-44.8	-147.1	0.27	0.24	4.72
9,475.0	1.68	226.07	9,470.7	-148.8	-45.3	-147.6	0.43	0.36	8.40
9,500.0	1.52	222.66	9,495.7	-149.3	-45.8	-148.1	0.74	-0.64	-13.64
9,525.0	1.74	226.33	9,520.6	-149.8	-46.3	-148.6	0.97	0.88	14.68
9,550.0	1.61	225.34	9,545.6	-150.3	-46.8	-149.1	0.53	-0.52	-3.96
9,575.0	1.57	225.08	9,570.6	-150.8	-47.3	-149.6	0.16	-0.16	-1.04
9,600.0	1.53	223.65	9,595.6	-151.3	-47.8	-150.1	0.22	-0.16	-5.72
9,625.0	1.27	223.36	9,620.6	-151.7	-48.2	-150.5	1.04	-1.04	-1.16
9,650.0	1.13	221.44	9,645.6	-152.1	-48.5	-150.9	0.58	-0.56	-7.68
9,675.0	1.16	224.00	9,670.6	-152.5	-48.9	-151.2	0.24	0.12	10.24
9,700.0	1.26	221.88	9,695.6	-152.9	-49.2	-151.6	0.44	0.40	-8.48
9,725.0	1.10	220.12	9,720.6	-153.3	-49.6	-152.0	0.66	-0.64	-7.04
9,750.0	1.16	220.85	9,745.6	-153.6	-49.9	-152.4	0.25	0.24	2.92
9,775.0	1.18	221.26	9,770.6	-154.0	-50.2	-152.7	0.09	0.08	1.64
9,800.0	1.24	216.18	9,795.6	-154.4	-50.6	-153.1	0.49	0.24	-20.32
9,825.0	1.48	211.05	9,820.6	-154.9	-50.9	-153.6	1.08	0.96	-20.52
9,850.0	1.73	209.76	9,845.5	-155.5	-51.2	-154.2	1.01	1.00	-5.16
9,875.0	1.67	205.70	9,870.5	-156.2	-51.6	-154.9	0.54	-0.24	-16.24
9,900.0	1.69	204.14	9,895.5	-156.9	-51.9	-155.5	0.20	0.08	-6.24
9,925.0	1.73	203.93	9,920.5	-157.5	-52.2	-156.2	0.16	0.16	-0.84
9,950.0	1.72	207.85	9,945.5	-158.2	-52.5	-156.9	0.47	-0.04	15.68
9,975.0	1.80	210.58	9,970.5	-158.9	-52.9	-157.5	0.46	0.32	10.92
10,000.0	1.90	213.10	9,995.5	-159.6	-53.3	-158.2	0.52	0.40	10.08
10,025.0	1.81	214.47	10,020.5	-160.2	-53.8	-158.9	0.40	-0.36	5.48
10,050.0	1.93	214.25	10,045.5	-160.9	-54.2	-159.5	0.48	0.48	-0.88



Survey Report

Company: NORTHERN DELAWARE BASIN
 Project: LEA COUNTY, NM
 Site: BULLDOG
 Well: DOMINATOR 25 FED #609H
 Wellbore: OWB
 Design: ACTUAL WELLPATH

Local Co-ordinate Reference: Well DOMINATOR 25 FED #609H
 TVD Reference: RKB=3340.9+26 @ 3366.9usft (MCVAY 8)
 MD Reference: RKB=3340.9+26 @ 3366.9usft (MCVAY 8)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM_Users

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,075.0	1.98	210.89	10,070.4	-161.6	-54.7	-160.2	0.50	0.20	-13.44
10,100.0	1.98	212.25	10,095.4	-162.4	-55.1	-161.0	0.19	0.00	5.44
10,125.0	1.92	215.09	10,120.4	-163.1	-55.6	-161.6	0.45	-0.24	11.36
10,150.0	1.86	219.01	10,145.4	-163.7	-56.1	-162.3	0.57	-0.24	15.68
10,175.0	1.79	219.51	10,170.4	-164.3	-56.6	-162.9	0.29	-0.28	2.00
10,200.0	1.73	223.91	10,195.4	-164.9	-57.1	-163.5	0.59	-0.24	17.60
10,225.0	1.60	224.49	10,220.4	-165.4	-57.6	-164.0	0.52	-0.52	2.32
10,250.0	1.37	227.72	10,245.4	-165.9	-58.1	-164.4	0.98	-0.92	12.92
10,275.0	1.36	230.48	10,270.3	-166.3	-58.5	-164.8	0.27	-0.04	11.04
10,300.0	1.31	231.24	10,295.3	-166.7	-59.0	-165.1	0.21	-0.20	3.04
10,325.0	1.30	232.41	10,320.3	-167.0	-59.4	-165.5	0.11	-0.04	4.68
10,350.0	1.19	236.09	10,345.3	-167.3	-59.9	-165.8	0.54	-0.44	14.72
10,375.0	1.26	236.44	10,370.3	-167.6	-60.3	-166.1	0.28	0.28	1.40
10,400.0	1.24	238.05	10,395.3	-167.9	-60.8	-166.4	0.16	-0.08	6.44
10,425.0	1.32	235.12	10,420.3	-168.2	-61.3	-166.7	0.41	0.32	-11.72
10,450.0	1.38	238.32	10,445.3	-168.5	-61.7	-167.0	0.39	0.24	12.80
10,475.0	1.30	239.33	10,470.3	-168.8	-62.2	-167.3	0.33	-0.32	4.04
10,500.0	1.25	239.38	10,495.3	-169.1	-62.7	-167.5	0.20	-0.20	0.20
10,525.0	1.21	243.94	10,520.3	-169.4	-63.2	-167.8	0.42	-0.16	18.24
10,550.0	1.19	238.37	10,545.3	-169.6	-63.7	-168.0	0.47	-0.08	-22.28
10,575.0	1.24	242.24	10,570.3	-169.9	-64.1	-168.3	0.38	0.20	15.48
10,600.0	1.23	238.72	10,595.3	-170.2	-64.6	-168.5	0.31	-0.04	-14.08
10,625.0	1.04	245.71	10,620.3	-170.4	-65.0	-168.7	0.94	-0.76	27.96
10,650.0	1.03	250.43	10,645.3	-170.6	-65.4	-168.9	0.34	-0.04	18.88
10,675.0	1.14	259.65	10,670.3	-170.7	-65.9	-169.0	0.82	0.44	36.88
10,700.0	1.27	257.36	10,695.2	-170.8	-66.4	-169.1	0.55	0.52	-9.16
10,725.0	1.38	259.90	10,720.2	-170.9	-67.0	-169.2	0.50	0.44	10.16
10,750.0	1.13	255.64	10,745.2	-171.0	-67.5	-169.3	1.07	-1.00	-17.04
10,775.0	1.12	267.97	10,770.2	-171.1	-68.0	-169.4	0.97	-0.04	49.32
10,800.0	1.22	272.17	10,795.2	-171.1	-68.5	-169.3	0.53	0.40	16.80
10,825.0	1.19	269.12	10,820.2	-171.1	-69.0	-169.3	0.28	-0.12	-12.20
10,850.0	0.95	271.52	10,845.2	-171.1	-69.5	-169.3	0.98	-0.96	9.60
10,875.0	0.99	283.80	10,870.2	-171.0	-69.9	-169.2	0.85	0.16	49.12
10,900.0	0.87	284.52	10,895.2	-170.9	-70.3	-169.1	0.48	-0.48	2.88
10,925.0	0.66	289.86	10,920.2	-170.8	-70.6	-169.0	0.89	-0.84	21.36
10,950.0	0.75	286.66	10,945.2	-170.7	-70.9	-168.9	0.39	0.36	-12.80
10,975.0	0.71	294.62	10,970.2	-170.6	-71.2	-168.8	0.44	-0.16	31.84
11,000.0	0.75	288.82	10,995.2	-170.5	-71.5	-168.7	0.34	0.16	-23.20
11,025.0	0.75	297.84	11,020.2	-170.4	-71.8	-168.5	0.47	0.00	36.08
11,050.0	0.58	308.69	11,045.2	-170.2	-72.1	-168.4	0.84	-0.68	43.40
11,075.0	0.62	307.96	11,070.2	-170.1	-72.3	-168.2	0.16	0.16	-2.92
11,100.0	0.67	304.95	11,095.2	-169.9	-72.5	-168.0	0.24	0.20	-12.04
11,125.0	0.72	314.96	11,120.2	-169.7	-72.7	-167.8	0.52	0.20	40.04



Survey Report

Company: NORTHERN DELAWARE BASIN
 Project: LEA COUNTY, NM
 Site: BULLDOG
 Well: DOMINATOR 25 FED #609H
 Wellbore: OWB
 Design: ACTUAL WELLPATH

Local Co-ordinate Reference: Well DOMINATOR 25 FED #609H
 TVD Reference: RKB=3340.9+26 @ 3366.9usft (MCVAY 8)
 MD Reference: RKB=3340.9+26 @ 3366.9usft (MCVAY 8)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM_Users

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,150.0	0.72	328.33	11,145.2	-169.4	-72.9	-167.6	0.67	0.00	53.48
11,175.0	0.77	336.30	11,170.2	-169.2	-73.1	-167.3	0.46	0.20	31.88
11,200.0	0.87	333.39	11,195.2	-168.8	-73.2	-167.0	0.43	0.40	-11.64
11,225.0	0.76	344.65	11,220.2	-168.5	-73.3	-166.6	0.78	-0.44	45.04
11,250.0	0.91	340.59	11,245.2	-168.2	-73.5	-166.3	0.64	0.60	-18.24
11,275.0	0.89	335.85	11,270.2	-167.8	-73.6	-165.9	0.31	-0.08	-18.96
11,300.0	0.98	339.03	11,295.2	-167.4	-73.8	-165.5	0.42	0.36	12.72
11,325.0	0.93	340.23	11,320.2	-167.0	-73.9	-165.1	0.22	-0.20	4.80
11,350.0	0.98	340.24	11,345.2	-166.6	-74.0	-164.8	0.20	0.20	0.04
11,375.0	0.89	337.42	11,370.2	-166.3	-74.2	-164.4	0.40	-0.36	-11.28
11,400.0	0.72	337.55	11,395.2	-165.9	-74.3	-164.0	0.68	-0.68	0.52
11,425.0	0.67	331.14	11,420.2	-165.7	-74.5	-163.8	0.37	-0.20	-25.64
11,450.0	0.56	325.76	11,445.2	-165.4	-74.6	-163.5	0.50	-0.44	-21.52
11,475.0	0.46	313.66	11,470.2	-165.3	-74.7	-163.4	0.59	-0.40	-48.40
11,500.0	0.44	313.85	11,495.2	-165.1	-74.9	-163.2	0.08	-0.08	0.76
11,525.0	0.46	287.13	11,520.2	-165.0	-75.0	-163.1	0.84	0.08	-106.88
11,550.0	0.34	270.25	11,545.2	-165.0	-75.2	-163.1	0.67	-0.48	-67.52
11,575.0	0.32	252.19	11,570.2	-165.0	-75.4	-163.1	0.42	-0.08	-72.24
11,600.0	0.43	236.15	11,595.2	-165.1	-75.5	-163.2	0.60	0.44	-64.16
11,625.0	0.45	224.63	11,620.2	-165.2	-75.6	-163.3	0.36	0.08	-46.08
11,650.0	0.53	221.19	11,645.2	-165.4	-75.8	-163.4	0.34	0.32	-13.76
11,675.0	0.58	222.20	11,670.2	-165.6	-76.0	-163.6	0.20	0.20	4.04
11,700.0	0.58	211.26	11,695.1	-165.8	-76.1	-163.8	0.44	0.00	-43.76
11,725.0	0.68	211.04	11,720.1	-166.0	-76.2	-164.1	0.40	0.40	-0.88
11,750.0	0.81	206.98	11,745.1	-166.3	-76.4	-164.3	0.56	0.52	-16.24
11,775.0	0.79	199.31	11,770.1	-166.6	-76.5	-164.6	0.44	-0.08	-30.68
11,779.0	0.77	214.61	11,774.1	-166.6	-76.6	-164.7	5.22	-0.50	382.50
11,897.0	1.01	223.26	11,892.1	-168.1	-77.7	-166.1	0.23	0.20	7.33
11,992.0	1.80	292.62	11,987.1	-168.1	-79.7	-166.1	1.82	0.83	73.01
12,022.0	5.50	337.25	12,017.0	-166.6	-80.7	-164.5	14.68	12.33	148.77
12,054.0	10.48	343.58	12,048.7	-162.4	-82.1	-160.3	15.78	15.56	19.78
12,085.0	15.38	344.20	12,078.9	-155.7	-84.0	-153.6	15.81	15.81	2.00
12,116.0	20.21	342.27	12,108.4	-146.6	-86.8	-144.5	15.69	15.58	-6.23
12,148.0	24.59	342.66	12,138.0	-135.0	-90.4	-132.7	13.70	13.69	1.22
12,180.0	24.73	346.44	12,167.1	-122.2	-94.0	-119.8	4.95	0.44	11.81
12,212.0	27.21	349.08	12,195.9	-108.5	-96.9	-106.0	8.55	7.75	8.25
12,243.0	31.53	353.06	12,222.9	-93.4	-99.3	-91.0	15.29	13.94	12.84
12,275.0	35.03	354.30	12,249.6	-76.0	-101.2	-73.5	11.14	10.94	3.88
12,306.0	37.70	353.69	12,274.6	-57.7	-103.1	-55.2	8.69	8.61	-1.97
12,356.0	46.10	351.45	12,311.8	-24.7	-107.5	-22.0	17.06	16.80	-4.48
12,388.0	49.87	353.57	12,333.2	-1.1	-110.6	1.7	12.77	11.78	6.63
12,419.0	53.11	355.72	12,352.5	23.1	-112.8	25.8	11.78	10.45	6.94
12,451.0	55.53	358.05	12,371.2	49.0	-114.2	51.8	9.60	7.56	7.28



Survey Report

Company: NORTHERN DELAWARE BASIN
 Project: LEA COUNTY, NM
 Site: BULLDOG
 Well: DOMINATOR 25 FED #609H
 Wellbore: OWB
 Design: ACTUAL WELLPATH

Local Co-ordinate Reference: Well DOMINATOR 25 FED #609H
 TVD Reference: RKB=3340.9+26 @ 3366.9usft (MCVAY 8)
 MD Reference: RKB=3340.9+26 @ 3366.9usft (MCVAY 8)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM_Users

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,483.0	58.93	359.89	12,388.5	75.9	-114.7	78.7	11.67	10.63	5.75
12,530.0	64.49	1.10	12,410.7	117.3	-114.3	120.1	12.04	11.83	2.57
12,577.0	69.52	2.49	12,429.1	160.5	-113.0	163.3	11.04	10.70	2.96
12,624.0	72.97	2.70	12,444.2	205.0	-110.9	207.6	7.35	7.34	0.45
12,671.0	72.93	3.58	12,458.0	249.8	-108.5	252.4	1.79	-0.09	1.87
12,708.0	73.53	3.88	12,468.7	285.2	-106.2	287.7	1.80	1.62	0.81
12,736.0	76.33	3.38	12,475.9	312.2	-104.5	314.6	10.15	10.00	-1.79
12,768.0	79.37	2.78	12,482.7	343.4	-102.8	345.8	9.68	9.50	-1.88
12,799.0	80.34	2.50	12,488.1	373.9	-101.4	376.3	3.25	3.13	-0.90
12,831.0	80.82	2.69	12,493.4	405.4	-99.9	407.8	1.61	1.50	0.59
12,862.0	81.93	4.04	12,498.0	436.0	-98.1	438.3	5.60	3.58	4.35
12,894.0	86.06	3.43	12,501.4	467.8	-96.1	470.0	13.04	12.91	-1.91
12,957.0	87.60	4.31	12,504.9	530.5	-91.8	532.6	2.81	2.44	1.40
13,052.0	89.82	3.28	12,507.0	625.3	-85.5	627.2	2.58	2.34	-1.08
13,146.0	90.49	359.42	12,506.7	719.2	-83.3	721.1	4.17	0.71	-4.11
13,240.0	90.05	359.02	12,506.3	813.2	-84.6	815.1	0.63	-0.47	-0.43
13,335.0	89.76	357.47	12,506.4	908.2	-87.5	910.1	1.66	-0.31	-1.63
13,431.0	91.86	358.46	12,505.1	1,004.1	-90.9	1,006.0	2.42	2.19	1.03
13,524.0	93.40	358.11	12,500.8	1,096.9	-93.7	1,098.9	1.70	1.66	-0.38
13,618.0	93.78	357.13	12,494.9	1,190.7	-97.6	1,192.7	1.12	0.40	-1.04
13,710.0	94.06	357.72	12,488.6	1,282.4	-101.7	1,284.5	0.71	0.30	0.64
13,805.0	93.50	358.97	12,482.4	1,377.1	-104.5	1,379.3	1.44	-0.59	1.32
13,899.0	91.20	359.20	12,478.5	1,471.0	-106.0	1,473.2	2.46	-2.45	0.24
13,993.0	91.09	359.38	12,476.7	1,565.0	-107.1	1,567.2	0.22	-0.12	0.19
14,088.0	88.12	358.39	12,477.3	1,660.0	-109.0	1,662.2	3.30	-3.13	-1.04
14,182.0	89.50	358.08	12,479.3	1,753.9	-111.9	1,756.1	1.50	1.47	-0.33
14,277.0	87.37	0.16	12,481.9	1,848.8	-113.3	1,851.1	3.13	-2.24	2.19
14,372.0	88.01	2.32	12,485.7	1,943.7	-111.3	1,945.9	2.37	0.67	2.27
14,468.0	87.03	4.05	12,489.8	2,039.5	-108.0	2,041.5	2.07	-1.02	1.80
14,562.0	89.39	2.79	12,492.8	2,133.3	-100.3	2,135.1	2.85	2.51	-1.34
14,657.0	89.47	3.53	12,493.7	2,228.1	-95.1	2,229.8	0.78	0.08	0.78
14,752.0	89.58	359.58	12,494.5	2,323.1	-92.5	2,324.6	4.18	0.12	-4.16
14,847.0	88.80	357.97	12,495.9	2,418.0	-94.6	2,419.6	1.88	-0.82	-1.69
14,942.0	89.16	358.48	12,497.5	2,513.0	-97.5	2,514.6	0.68	0.38	0.54
15,037.0	91.71	0.54	12,496.8	2,608.0	-98.3	2,609.6	3.45	2.68	2.17
15,131.0	92.02	2.19	12,493.8	2,701.9	-96.1	2,703.4	1.79	0.33	1.76
15,226.0	90.56	1.01	12,491.6	2,796.8	-93.4	2,798.3	1.98	-1.54	-1.24
15,320.0	90.79	355.66	12,490.5	2,890.7	-96.2	2,892.2	5.70	0.24	-5.69
15,415.0	90.73	355.37	12,489.3	2,985.4	-103.6	2,987.1	0.31	-0.06	-0.31
15,510.0	91.37	355.87	12,487.5	3,080.1	-110.8	3,081.9	0.85	0.67	0.53
15,605.0	91.43	356.11	12,485.2	3,174.9	-117.5	3,176.8	0.26	0.06	0.25
15,700.0	91.54	355.26	12,482.7	3,269.6	-124.6	3,271.7	0.90	0.12	-0.89
15,794.0	91.37	355.42	12,480.3	3,363.2	-132.3	3,365.5	0.25	-0.18	0.17
15,890.0	90.06	356.18	12,479.1	3,459.0	-139.3	3,461.4	1.58	-1.36	0.79



Survey Report

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Wellbore: OWB
Design: ACTUAL WELLPATH

Local Co-ordinate Reference: Well DOMINATOR 25 FED #609H
TVD Reference: RKB=3340.9+26 @ 3366.9usft (MCVAY 8)
MD Reference: RKB=3340.9+26 @ 3366.9usft (MCVAY 8)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM_Users

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,985.0	90.76	357.56	12,478.5	3,553.8	-144.5	3,556.3	1.63	0.74	1.45
16,079.0	89.05	358.05	12,478.6	3,647.7	-148.1	3,650.3	1.89	-1.82	0.52
16,174.0	88.07	359.44	12,481.0	3,742.7	-150.2	3,745.3	1.79	-1.03	1.46
16,269.0	88.18	0.94	12,484.1	3,837.6	-149.8	3,840.2	1.58	0.12	1.58
16,364.0	86.97	0.87	12,488.1	3,932.5	-148.3	3,935.0	1.28	-1.27	-0.07
16,459.0	87.28	1.00	12,492.9	4,027.4	-146.8	4,029.8	0.35	0.33	0.14
16,554.0	89.61	2.21	12,495.5	4,122.3	-144.1	4,124.6	2.76	2.45	1.27
16,649.0	90.14	3.24	12,495.7	4,217.2	-139.6	4,219.4	1.22	0.56	1.08
16,722.0	89.80	3.50	12,495.7	4,290.1	-135.3	4,292.1	0.59	-0.47	0.36
16,818.0	91.26	3.01	12,494.8	4,385.9	-129.9	4,387.8	1.60	1.52	-0.51
16,912.0	92.10	2.45	12,492.1	4,479.8	-125.4	4,481.5	1.07	0.89	-0.60
17,006.0	93.48	3.26	12,487.5	4,573.5	-120.7	4,575.1	1.70	1.47	0.86
17,101.0	94.46	3.45	12,480.9	4,668.2	-115.2	4,669.6	1.05	1.03	0.20
17,169.0	95.72	3.19	12,474.9	4,735.8	-111.3	4,737.1	1.89	1.85	-0.38
17,227.0	95.72	3.19	12,469.1	4,793.4	-108.0	4,794.6	0.00	0.00	0.00

Checked By: _____ Approved By: _____ Date: _____