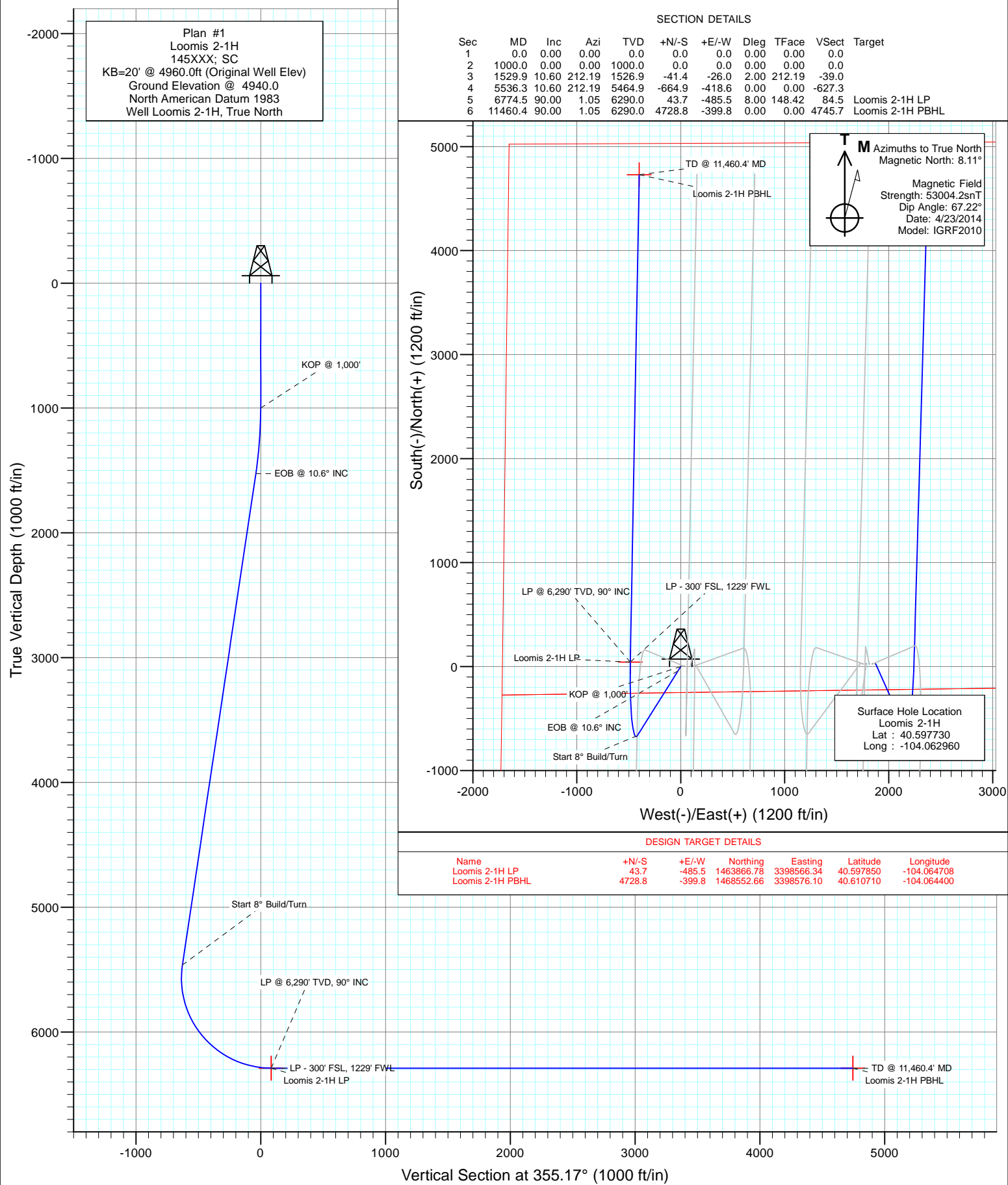
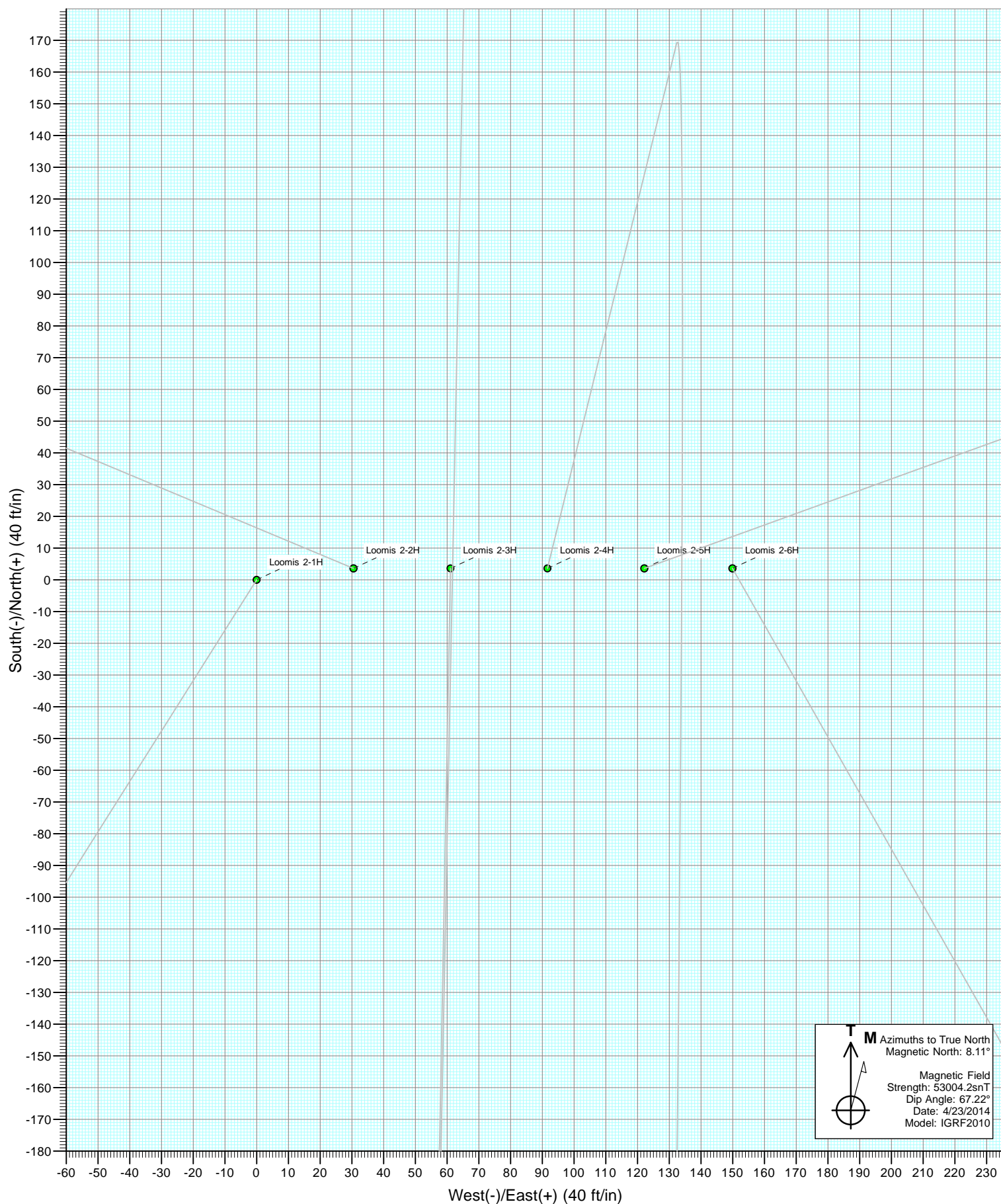




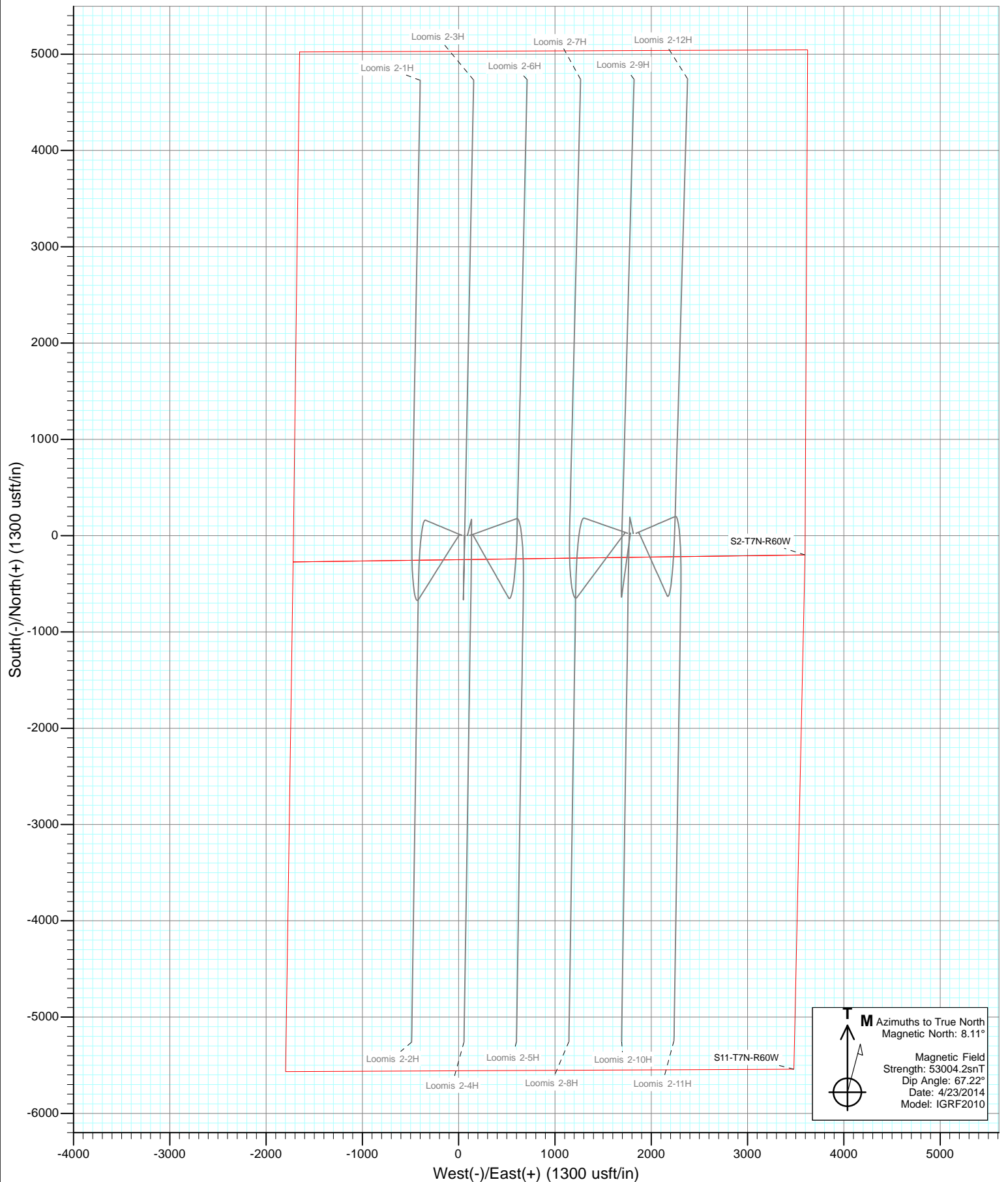
Project: Weld County, Colorado  
 Site: S2-T7N-R60W (Loomis Pad)  
 Well: Loomis 2-1H  
 Wellbore: HZ  
 Design: Plan #1







Project: Weld County, Colorado  
Site: S2-T7N-R60W (Loomis Pad)



## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Loomis 2-1H
<b>Company:</b>	Red Hawk Petroleum	<b>TVD Reference:</b>	KB=20' @ 4960.0ft (Original Well Elev)
<b>Project:</b>	Weld County, Colorado	<b>MD Reference:</b>	KB=20' @ 4960.0ft (Original Well Elev)
<b>Site:</b>	S2-T7N-R60W (Loomis Pad)	<b>North Reference:</b>	True
<b>Well:</b>	Loomis 2-1H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	HZ		
<b>Design:</b>	Plan #1		

<b>Project</b>	Weld County, Colorado		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Northern Zone		

Site		S2-T7N-R60W (Loomis Pad)			
Site Position:		Northing:	1,463,830.93 ft	Latitude:	40.597730
From:	Lat/Long	Easting:	3,399,052.49 ft	Longitude:	-104.062960
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.93 °

Well	Loomis 2-1H					
Well Position	+N/-S	0.0 ft	Northing:	1,463,830.92 ft	Latitude:	40.597730
	+E/-W	0.0 ft	Easting:	3,399,052.49 ft	Longitude:	-104.062960
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,940.0 ft

<b>Wellbore</b>	HZ				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	4/23/2014	8.11	67.22	53,004

<b>Design</b>	Plan #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	355.17

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,529.9	10.60	212.19	1,526.9	-41.4	-26.0	2.00	2.00	0.00	212.19	
5,536.3	10.60	212.19	5,464.9	-664.9	-418.6	0.00	0.00	0.00	0.00	
6,774.5	90.00	1.05	6,290.0	43.7	-485.5	8.00	6.41	12.02	148.42	Loomis 2-1H LP
11,460.4	90.00	1.05	6,290.0	4,728.8	-399.8	0.00	0.00	0.00	0.00	Loomis 2-1H PBHL

# Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Loomis 2-1H
<b>Company:</b>	Red Hawk Petroleum	<b>TVD Reference:</b>	KB=20' @ 4960.0ft (Original Well Elev)
<b>Project:</b>	Weld County, Colorado	<b>MD Reference:</b>	KB=20' @ 4960.0ft (Original Well Elev)
<b>Site:</b>	S2-T7N-R60W (Loomis Pad)	<b>North Reference:</b>	True
<b>Well:</b>	Loomis 2-1H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	HZ		
<b>Design:</b>	Plan #1		

## Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	KOP @ 1,000'
1,100.0	2.00	212.19	1,100.0	-1.5	-0.9	-1.4	2.00	2.00	
1,200.0	4.00	212.19	1,199.8	-5.9	-3.7	-5.6	2.00	2.00	
1,300.0	6.00	212.19	1,299.5	-13.3	-8.4	-12.5	2.00	2.00	
1,400.0	8.00	212.19	1,398.7	-23.6	-14.9	-22.3	2.00	2.00	
1,500.0	10.00	212.19	1,497.5	-36.8	-23.2	-34.7	2.00	2.00	
1,529.9	10.60	212.19	1,526.9	-41.4	-26.0	-39.0	2.00	2.00	EOB @ 10.6° INC
1,600.0	10.60	212.19	1,595.8	-52.3	-32.9	-49.3	0.00	0.00	
1,700.0	10.60	212.19	1,694.1	-67.8	-42.7	-64.0	0.00	0.00	
1,800.0	10.60	212.19	1,792.4	-83.4	-52.5	-78.7	0.00	0.00	
1,900.0	10.60	212.19	1,890.7	-99.0	-62.3	-93.4	0.00	0.00	
2,000.0	10.60	212.19	1,989.0	-114.5	-72.1	-108.0	0.00	0.00	
2,100.0	10.60	212.19	2,087.3	-130.1	-81.9	-122.7	0.00	0.00	
2,200.0	10.60	212.19	2,185.6	-145.6	-91.7	-137.4	0.00	0.00	
2,300.0	10.60	212.19	2,283.8	-161.2	-101.5	-152.1	0.00	0.00	
2,400.0	10.60	212.19	2,382.1	-176.8	-111.3	-166.8	0.00	0.00	
2,500.0	10.60	212.19	2,480.4	-192.3	-121.1	-181.4	0.00	0.00	
2,600.0	10.60	212.19	2,578.7	-207.9	-130.9	-196.1	0.00	0.00	
2,700.0	10.60	212.19	2,677.0	-223.5	-140.7	-210.8	0.00	0.00	
2,800.0	10.60	212.19	2,775.3	-239.0	-150.5	-225.5	0.00	0.00	
2,900.0	10.60	212.19	2,873.6	-254.6	-160.3	-240.2	0.00	0.00	
3,000.0	10.60	212.19	2,971.9	-270.2	-170.1	-254.9	0.00	0.00	
3,100.0	10.60	212.19	3,070.2	-285.7	-179.9	-269.5	0.00	0.00	
3,200.0	10.60	212.19	3,168.5	-301.3	-189.7	-284.2	0.00	0.00	
3,300.0	10.60	212.19	3,266.8	-316.8	-199.5	-298.9	0.00	0.00	
3,400.0	10.60	212.19	3,365.1	-332.4	-209.3	-313.6	0.00	0.00	
3,500.0	10.60	212.19	3,463.4	-348.0	-219.1	-328.3	0.00	0.00	
3,600.0	10.60	212.19	3,561.7	-363.5	-228.9	-343.0	0.00	0.00	
3,700.0	10.60	212.19	3,660.0	-379.1	-238.7	-357.6	0.00	0.00	
3,800.0	10.60	212.19	3,758.3	-394.7	-248.5	-372.3	0.00	0.00	
3,900.0	10.60	212.19	3,856.6	-410.2	-258.3	-387.0	0.00	0.00	
4,000.0	10.60	212.19	3,954.9	-425.8	-268.1	-401.7	0.00	0.00	
4,100.0	10.60	212.19	4,053.1	-441.4	-277.9	-416.4	0.00	0.00	
4,200.0	10.60	212.19	4,151.4	-456.9	-287.7	-431.1	0.00	0.00	
4,300.0	10.60	212.19	4,249.7	-472.5	-297.5	-445.7	0.00	0.00	
4,400.0	10.60	212.19	4,348.0	-488.0	-307.3	-460.4	0.00	0.00	
4,500.0	10.60	212.19	4,446.3	-503.6	-317.1	-475.1	0.00	0.00	
4,600.0	10.60	212.19	4,544.6	-519.2	-326.9	-489.8	0.00	0.00	
4,700.0	10.60	212.19	4,642.9	-534.7	-336.7	-504.5	0.00	0.00	
4,800.0	10.60	212.19	4,741.2	-550.3	-346.5	-519.2	0.00	0.00	
4,900.0	10.60	212.19	4,839.5	-565.9	-356.3	-533.8	0.00	0.00	
5,000.0	10.60	212.19	4,937.8	-581.4	-366.1	-548.5	0.00	0.00	

# Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Loomis 2-1H
<b>Company:</b>	Red Hawk Petroleum	<b>TVD Reference:</b>	KB=20' @ 4960.0ft (Original Well Elev)
<b>Project:</b>	Weld County, Colorado	<b>MD Reference:</b>	KB=20' @ 4960.0ft (Original Well Elev)
<b>Site:</b>	S2-T7N-R60W (Loomis Pad)	<b>North Reference:</b>	True
<b>Well:</b>	Loomis 2-1H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	HZ		
<b>Design:</b>	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
5,100.0	10.60	212.19	5,036.1	-597.0	-375.9	-563.2	0.00	0.00	
5,200.0	10.60	212.19	5,134.4	-612.5	-385.7	-577.9	0.00	0.00	
5,300.0	10.60	212.19	5,232.7	-628.1	-395.5	-592.6	0.00	0.00	
5,400.0	10.60	212.19	5,331.0	-643.7	-405.2	-607.2	0.00	0.00	
5,500.0	10.60	212.19	5,429.3	-659.2	-415.0	-621.9	0.00	0.00	
5,536.3	10.60	212.19	5,464.9	-664.9	-418.6	-627.3	0.00	0.00	Start 8° Build/Turn
5,550.0	9.68	215.61	5,478.4	-666.9	-419.9	-629.1	8.00	-6.69	
5,600.0	6.80	235.35	5,527.9	-672.0	-424.8	-633.8	8.00	-5.77	
5,650.0	5.53	271.47	5,577.6	-673.6	-429.7	-635.0	8.00	-2.54	
5,700.0	6.84	307.30	5,627.4	-671.7	-434.5	-632.8	8.00	2.63	
5,750.0	9.75	326.76	5,676.9	-666.4	-439.1	-627.0	8.00	5.81	
5,800.0	13.23	336.74	5,725.9	-657.6	-443.7	-617.9	8.00	6.97	
5,850.0	16.94	342.53	5,774.1	-645.4	-448.2	-605.3	8.00	7.42	
5,900.0	20.76	346.26	5,821.4	-629.8	-452.5	-589.5	8.00	7.63	
5,950.0	24.63	348.86	5,867.6	-611.0	-456.6	-570.3	8.00	7.74	
6,000.0	28.54	350.80	5,912.3	-589.0	-460.5	-548.1	8.00	7.81	
6,050.0	32.46	352.30	5,955.3	-563.9	-464.2	-522.8	8.00	7.85	
6,100.0	36.41	353.51	5,996.6	-535.8	-467.7	-494.5	8.00	7.88	
6,150.0	40.36	354.51	6,035.8	-504.9	-470.9	-463.5	8.00	7.90	
6,200.0	44.32	355.36	6,072.7	-471.4	-473.9	-429.8	8.00	7.92	
6,250.0	48.28	356.10	6,107.2	-435.4	-476.6	-393.7	8.00	7.93	
6,300.0	52.25	356.75	6,139.2	-397.0	-479.0	-355.2	8.00	7.94	
6,350.0	56.22	357.34	6,168.4	-356.5	-481.1	-314.7	8.00	7.94	
6,400.0	60.19	357.87	6,194.8	-314.0	-482.8	-272.3	8.00	7.95	
6,450.0	64.17	358.36	6,218.1	-269.9	-484.3	-228.1	8.00	7.95	
6,500.0	68.15	358.82	6,238.3	-224.1	-485.4	-182.5	8.00	7.96	
6,550.0	72.13	359.26	6,255.3	-177.1	-486.2	-135.5	8.00	7.96	
6,600.0	76.11	359.68	6,269.0	-129.1	-486.6	-87.6	8.00	7.96	
6,650.0	80.09	0.08	6,279.3	-80.1	-486.7	-38.9	8.00	7.96	
6,700.0	84.07	0.47	6,286.2	-30.6	-486.5	10.5	8.00	7.96	
6,750.0	88.05	0.86	6,289.6	19.2	-485.9	60.1	8.00	7.96	
6,774.5	90.00	1.05	6,290.0	43.7	-485.5	84.5	8.00	7.96	LP @ 6,290' TVD, 90° INC
6,800.0	90.00	1.05	6,290.0	69.2	-485.0	109.8	0.00	0.00	
6,900.0	90.00	1.05	6,290.0	169.2	-483.2	209.3	0.00	0.00	
7,000.0	90.00	1.05	6,290.0	269.2	-481.4	308.8	0.00	0.00	
7,100.0	90.00	1.05	6,290.0	369.2	-479.5	408.3	0.00	0.00	
7,200.0	90.00	1.05	6,290.0	469.2	-477.7	507.7	0.00	0.00	
7,300.0	90.00	1.05	6,290.0	569.1	-475.9	607.2	0.00	0.00	
7,400.0	90.00	1.05	6,290.0	669.1	-474.1	706.7	0.00	0.00	
7,500.0	90.00	1.05	6,290.0	769.1	-472.2	806.2	0.00	0.00	
7,600.0	90.00	1.05	6,290.0	869.1	-470.4	905.6	0.00	0.00	
7,700.0	90.00	1.05	6,290.0	969.1	-468.6	1,005.1	0.00	0.00	
7,800.0	90.00	1.05	6,290.0	1,069.1	-466.7	1,104.6	0.00	0.00	
7,900.0	90.00	1.05	6,290.0	1,169.0	-464.9	1,204.1	0.00	0.00	
8,000.0	90.00	1.05	6,290.0	1,269.0	-463.1	1,303.5	0.00	0.00	
8,100.0	90.00	1.05	6,290.0	1,369.0	-461.3	1,403.0	0.00	0.00	
8,200.0	90.00	1.05	6,290.0	1,469.0	-459.4	1,502.5	0.00	0.00	
8,300.0	90.00	1.05	6,290.0	1,569.0	-457.6	1,601.9	0.00	0.00	
8,400.0	90.00	1.05	6,290.0	1,669.0	-455.8	1,701.4	0.00	0.00	
8,500.0	90.00	1.05	6,290.0	1,768.9	-453.9	1,800.9	0.00	0.00	
8,600.0	90.00	1.05	6,290.0	1,868.9	-452.1	1,900.4	0.00	0.00	
8,700.0	90.00	1.05	6,290.0	1,968.9	-450.3	1,999.8	0.00	0.00	

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Loomis 2-1H
<b>Company:</b>	Red Hawk Petroleum	<b>TVD Reference:</b>	KB=20' @ 4960.0ft (Original Well Elev)
<b>Project:</b>	Weld County, Colorado	<b>MD Reference:</b>	KB=20' @ 4960.0ft (Original Well Elev)
<b>Site:</b>	S2-T7N-R60W (Loomis Pad)	<b>North Reference:</b>	True
<b>Well:</b>	Loomis 2-1H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	HZ		
<b>Design:</b>	Plan #1		

### Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
8,800.0	90.00	1.05	6,290.0	2,068.9	-448.5	2,099.3	0.00	0.00	
8,900.0	90.00	1.05	6,290.0	2,168.9	-446.6	2,198.8	0.00	0.00	
9,000.0	90.00	1.05	6,290.0	2,268.9	-444.8	2,298.3	0.00	0.00	
9,100.0	90.00	1.05	6,290.0	2,368.8	-443.0	2,397.7	0.00	0.00	
9,200.0	90.00	1.05	6,290.0	2,468.8	-441.1	2,497.2	0.00	0.00	
9,300.0	90.00	1.05	6,290.0	2,568.8	-439.3	2,596.7	0.00	0.00	
9,400.0	90.00	1.05	6,290.0	2,668.8	-437.5	2,696.2	0.00	0.00	
9,500.0	90.00	1.05	6,290.0	2,768.8	-435.7	2,795.6	0.00	0.00	
9,600.0	90.00	1.05	6,290.0	2,868.8	-433.8	2,895.1	0.00	0.00	
9,700.0	90.00	1.05	6,290.0	2,968.7	-432.0	2,994.6	0.00	0.00	
9,800.0	90.00	1.05	6,290.0	3,068.7	-430.2	3,094.1	0.00	0.00	
9,900.0	90.00	1.05	6,290.0	3,168.7	-428.3	3,193.5	0.00	0.00	
10,000.0	90.00	1.05	6,290.0	3,268.7	-426.5	3,293.0	0.00	0.00	
10,100.0	90.00	1.05	6,290.0	3,368.7	-424.7	3,392.5	0.00	0.00	
10,200.0	90.00	1.05	6,290.0	3,468.7	-422.9	3,492.0	0.00	0.00	
10,300.0	90.00	1.05	6,290.0	3,568.6	-421.0	3,591.4	0.00	0.00	
10,400.0	90.00	1.05	6,290.0	3,668.6	-419.2	3,690.9	0.00	0.00	
10,500.0	90.00	1.05	6,290.0	3,768.6	-417.4	3,790.4	0.00	0.00	
10,600.0	90.00	1.05	6,290.0	3,868.6	-415.5	3,889.8	0.00	0.00	
10,700.0	90.00	1.05	6,290.0	3,968.6	-413.7	3,989.3	0.00	0.00	
10,800.0	90.00	1.05	6,290.0	4,068.6	-411.9	4,088.8	0.00	0.00	
10,900.0	90.00	1.05	6,290.0	4,168.5	-410.1	4,188.3	0.00	0.00	
11,000.0	90.00	1.05	6,290.0	4,268.5	-408.2	4,287.7	0.00	0.00	
11,100.0	90.00	1.05	6,290.0	4,368.5	-406.4	4,387.2	0.00	0.00	
11,200.0	90.00	1.05	6,290.0	4,468.5	-404.6	4,486.7	0.00	0.00	
11,300.0	90.00	1.05	6,290.0	4,568.5	-402.7	4,586.2	0.00	0.00	
11,400.0	90.00	1.05	6,290.0	4,668.5	-400.9	4,685.6	0.00	0.00	
11,460.4	90.00	1.05	6,290.0	4,728.8	-399.8	4,745.7	0.00	0.00	TD @ 11,460.4' MD

### Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Loomis 2-1H LP - plan hits target center - Point	0.00	0.00	6,290.0	43.7	-485.5	1,463,866.78	3,398,566.34	40.597850	-104.064708
Loomis 2-1H PBHL - plan hits target center - Point	0.00	0.00	6,290.0	4,728.8	-399.8	1,468,552.66	3,398,576.10	40.610710	-104.064400

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Loomis 2-1H
<b>Company:</b>	Red Hawk Petroleum	<b>TVD Reference:</b>	KB=20' @ 4960.0ft (Original Well Elev)
<b>Project:</b>	Weld County, Colorado	<b>MD Reference:</b>	KB=20' @ 4960.0ft (Original Well Elev)
<b>Site:</b>	S2-T7N-R60W (Loomis Pad)	<b>North Reference:</b>	True
<b>Well:</b>	Loomis 2-1H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	HZ		
<b>Design:</b>	Plan #1		

### Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,000.0	1,000.0	0.0	0.0	KOP @ 1,000'
1,529.9	1,526.9	-41.4	-26.0	EOB @ 10.6° INC
5,536.3	5,464.9	-664.9	-418.6	Start 8° Build/Turn
6,774.5	6,290.0	43.7	-485.5	LP @ 6,290' TVD, 90° INC
11,460.4	6,290.0	4,728.8	-399.8	TD @ 11,460.4' MD