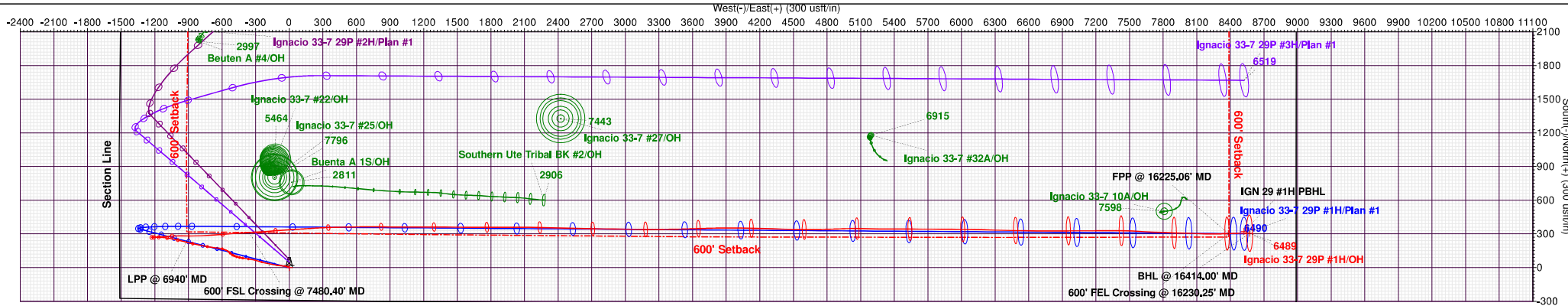


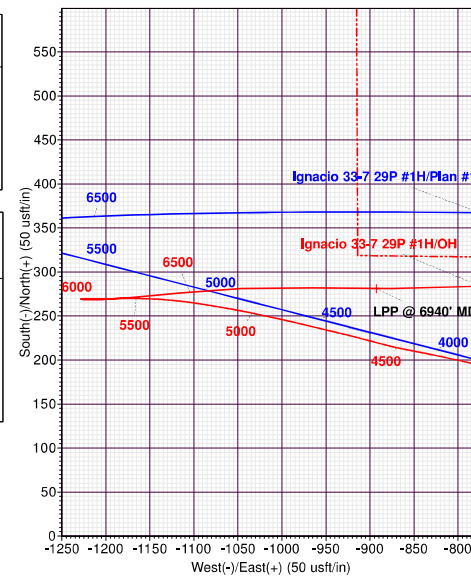


County: La Plata, CO (NAD83)
 Site: Ignacio 33-7 29P Pad
 Well: Ignacio 33-7 29P #1H
 Depth Reference: 6419.2+30 @ 6449.20usft (H&P 530)
 Rig: H&P 530
 Plan: OH
 Job #: 20175



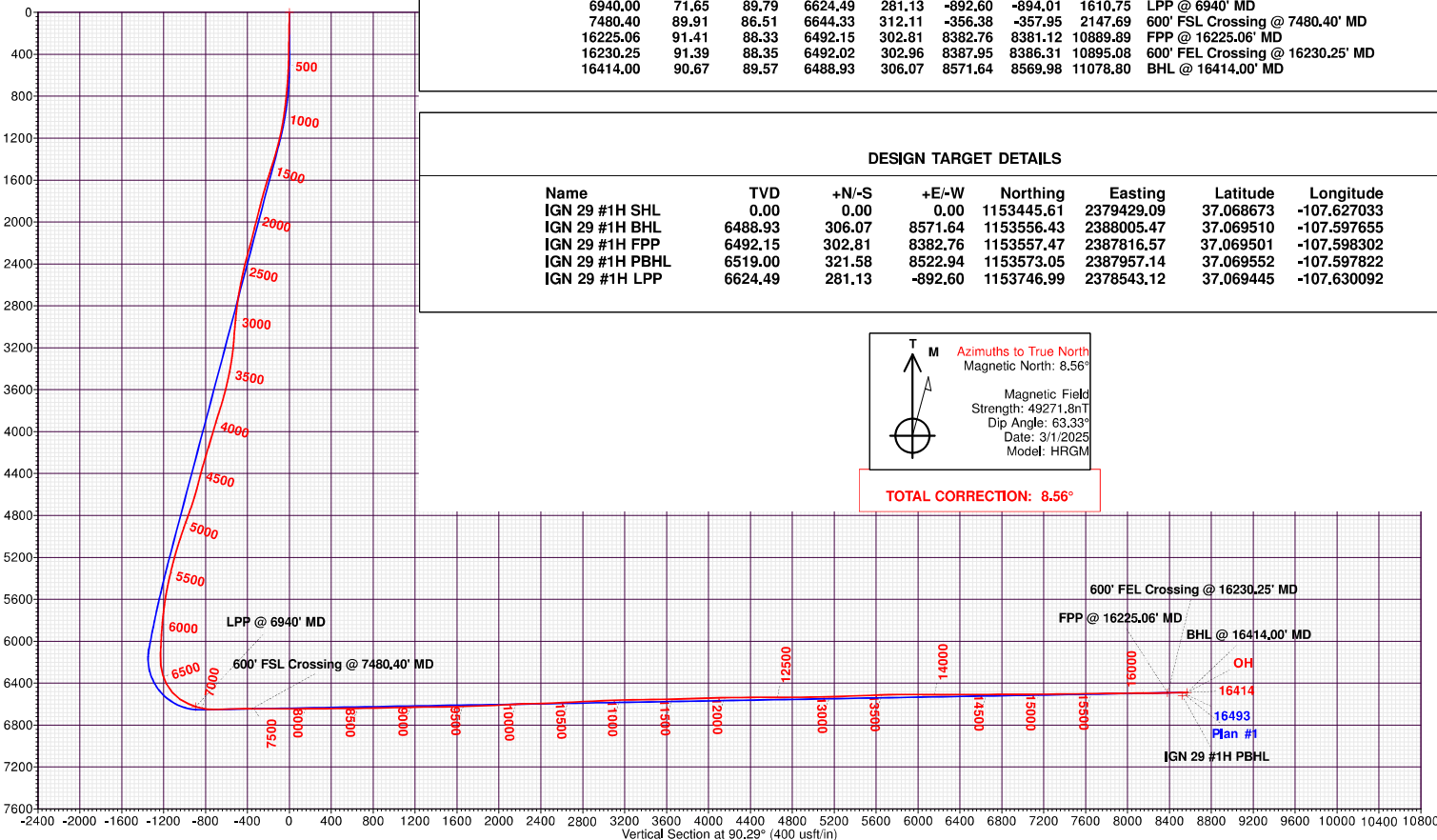
ANNOTATIONS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation	
6940.00	71.65	89.79	6624.49	281.13	-892.60	-894.01	1610.75	LPP @ 6940' MD	
7480.40	89.91	86.51	6644.33	312.11	-356.38	-357.95	2147.69	600' FSL Crossing @ 7480.40' MD	
16225.06	91.41	88.33	6492.15	302.81	8382.76	8381.12	10889.89	FPP @ 16225.06' MD	
16230.25	91.39	88.35	6492.02	302.96	8387.95	8386.31	10895.08	600' FEL Crossing @ 16230.25' MD	
16414.00	90.67	89.57	6488.93	306.07	8571.64	8569.98	11078.80	BHL @ 16414.00' MD	

DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
IGN 29 #1H SHL	0.00	0.00	0.00	1153445.61	2379429.09	37.068673	-107.627033
IGN 29 #1H BHL	6488.93	306.07	8571.64	1153556.43	2388005.47	37.069510	-107.597655
IGN 29 #1H FPP	6492.15	302.81	8382.76	1153557.47	2387816.57	37.069501	-107.598302
IGN 29 #1H PBHL	6519.00	321.58	8522.94	1153573.05	2387957.14	37.069552	-107.597822
IGN 29 #1H LPP	6624.49	281.13	-892.60	1153746.99	2378543.12	37.069445	-107.630092



TOTAL CORRECTION: 8.56°

T
 M
 Azimuths to True North
 Magnetic North: 8.56°
 Magnetic Field
 Strength: 49271.8nT
 Dip Angle: 63.33°
 Date: 3/1/2025
 Model: HRGM



Logos Operating LLC

La Plata, CO (NAD83)

Ignacio 33-7 29P Pad

Ignacio 33-7 29P #1H

OH

Design: OH

Standard Survey Report

14 April, 2025

SDT Survey Report

Company: Logos Operating LLC	Local Co-ordinate Reference: Well Ignacio 33-7 29P #1H
Project: La Plata, CO (NAD83)	TVD Reference: 6419.2+30 @ 6449.20usft (H&P 530)
Site: Ignacio 33-7 29P Pad	MD Reference: 6419.2+30 @ 6449.20usft (H&P 530)
Well: Ignacio 33-7 29P #1H	North Reference: True
Wellbore: OH	Survey Calculation Method: Minimum Curvature
Design: OH	Database: EDM 5000 Multi User Db

Project La Plata, CO (NAD83)		
Map System: US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum: North American Datum 1983		
Map Zone: Colorado Southern Zone		

Site Ignacio 33-7 29P Pad					
Site Position:		Northing:	1,154,205.95 usft	Latitude:	37.070751
From: Lat/Long		Easting:	2,379,275.54 usft	Longitude:	-107.627618
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "		

Well Ignacio 33-7 29P #1H						
Well Position	+N/-S	0.00 usft	Northing:	1,153,445.61 usft	Latitude:	37.068673
	+E/-W	0.00 usft	Easting:	2,379,429.09 usft	Longitude:	-107.627033
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	6,419.30 usft
Grid Convergence:		-1.30 °				

Wellbore OH					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HRGM	3/1/2025	8.56	63.33	49,271.84369294

Design OH					
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	90.29	

Survey Program		Date 4/14/2025		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
84.50	346.50	Survey #1 (OH)	Standard Keeper 105	Standard Wireline Keeper ver 1.0.5
441.00	2,323.00	Survey #2 (OH)	MWD+HRGM+MS	MWD + HRGM + Multi-Station Correction
2,347.08	3,012.99	Survey #3 (OH)	Standard Keeper 105	Standard Wireline Keeper ver 1.0.5
3,159.00	16,343.00	Survey #4 (OH)	MWD+HRGM+MS	MWD + HRGM + Multi-Station Correction
16,414.00	16,414.00	Survey #5 (OH)	A026Ua_BLIND	OWSG BLIND

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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84.50	1.19	309.88	84.49	0.56	-0.67	-0.68	1.41	1.41	0.00
119.50	1.17	304.59	119.49	1.00	-1.25	-1.25	0.32	-0.06	-15.11
201.50	1.07	310.10	201.47	1.97	-2.52	-2.53	0.18	-0.12	6.72
289.50	1.26	295.61	289.45	2.91	-4.02	-4.04	0.40	0.22	-16.47
346.50	0.98	318.22	346.44	3.55	-4.91	-4.93	0.91	-0.49	39.67

SDT Survey Report

Company:	Logos Operating LLC	Local Co-ordinate Reference:	Well Ignacio 33-7 29P #1H
Project:	La Plata, CO (NAD83)	TVD Reference:	6419.2+30 @ 6449.20usft (H&P 530)
Site:	Ignacio 33-7 29P Pad	MD Reference:	6419.2+30 @ 6449.20usft (H&P 530)
Well:	Ignacio 33-7 29P #1H	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000 Multi User Db

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)	
441.00	1.49	294.66	440.92	4.66	-6.57	-6.59	0.75	0.54	-24.93	
533.00	2.57	290.86	532.86	5.90	-9.58	-9.61	1.18	1.17	-4.13	
620.00	3.80	288.26	619.73	7.50	-14.14	-14.18	1.42	1.41	-2.99	
738.00	5.16	283.86	737.36	9.99	-23.01	-23.06	1.19	1.15	-3.73	
830.00	6.27	279.15	828.90	11.78	-31.98	-32.04	1.31	1.21	-5.12	
920.00	7.87	276.79	918.22	13.29	-42.96	-43.02	1.81	1.78	-2.62	
1,010.00	8.41	274.87	1,007.31	14.58	-55.63	-55.71	0.67	0.60	-2.13	
1,100.00	10.53	275.86	1,096.08	15.98	-70.37	-70.45	2.36	2.36	1.10	
1,191.00	12.72	276.19	1,185.21	17.91	-88.61	-88.70	2.41	2.41	0.36	
1,285.00	15.22	279.62	1,276.42	21.09	-111.06	-111.17	2.80	2.66	3.65	
1,379.00	16.51	280.44	1,366.84	25.57	-136.37	-136.49	1.39	1.37	0.87	
1,473.00	17.86	281.92	1,456.64	30.97	-163.61	-163.76	1.51	1.44	1.57	
1,568.00	18.05	279.84	1,547.01	36.49	-192.36	-192.54	0.70	0.20	-2.19	
1,662.00	17.10	282.46	1,636.63	41.96	-220.21	-220.42	1.31	-1.01	2.79	
1,757.00	16.23	286.29	1,727.64	48.70	-246.59	-246.83	1.47	-0.92	4.03	
1,851.00	15.14	287.61	1,818.14	56.10	-270.90	-271.18	1.22	-1.16	1.40	
1,945.00	14.47	284.93	1,909.02	62.84	-293.95	-294.26	1.02	-0.71	-2.85	
2,040.00	14.81	282.39	2,000.93	68.50	-317.27	-317.62	0.76	0.36	-2.67	
2,134.00	14.51	279.11	2,091.88	72.94	-340.64	-341.00	0.94	-0.32	-3.49	
2,229.00	14.86	278.48	2,183.77	76.62	-364.44	-364.82	0.40	0.37	-0.66	
2,323.00	15.56	278.79	2,274.48	80.33	-388.82	-389.22	0.75	0.74	0.33	
2,347.08	15.48	278.05	2,297.68	81.27	-395.19	-395.60	0.89	-0.33	-3.07	
2,371.36	15.54	278.68	2,321.08	82.22	-401.61	-402.02	0.74	0.25	2.59	
2,396.30	15.12	278.66	2,345.13	83.21	-408.13	-408.55	1.68	-1.68	-0.08	
2,424.77	14.61	279.11	2,372.65	84.34	-415.35	-415.77	1.84	-1.79	1.58	
2,448.81	14.10	279.71	2,395.94	85.31	-421.23	-421.65	2.21	-2.12	2.50	
2,473.21	13.53	280.78	2,419.63	86.35	-426.96	-427.39	2.56	-2.34	4.39	
2,497.79	13.24	281.65	2,443.54	87.45	-432.54	-432.98	1.44	-1.18	3.54	
2,521.69	12.97	282.27	2,466.82	88.57	-437.84	-438.29	1.27	-1.13	2.59	
2,546.22	12.62	283.22	2,490.74	89.77	-443.14	-443.59	1.66	-1.43	3.87	
2,574.58	12.17	283.99	2,518.44	91.20	-449.06	-449.52	1.69	-1.59	2.72	
2,598.38	12.11	284.61	2,541.71	92.44	-453.91	-454.37	0.60	-0.25	2.61	
2,622.78	11.98	285.22	2,565.57	93.75	-458.83	-459.30	0.75	-0.53	2.50	
2,646.96	11.70	286.08	2,589.24	95.09	-463.61	-464.08	1.37	-1.16	3.56	
2,674.58	11.38	287.24	2,616.30	96.67	-468.90	-469.38	1.43	-1.16	4.20	
2,699.19	10.88	288.50	2,640.44	98.13	-473.42	-473.91	2.26	-2.03	5.12	
2,723.66	10.59	290.00	2,664.49	99.63	-477.73	-478.22	1.65	-1.19	6.13	
2,747.56	10.26	290.41	2,687.99	101.12	-481.78	-482.29	1.42	-1.38	1.72	
2,772.09	9.34	290.80	2,712.16	102.59	-485.69	-486.21	3.76	-3.75	1.59	
2,796.61	8.97	291.96	2,736.37	104.01	-489.32	-489.85	1.69	-1.51	4.73	
2,824.46	8.60	293.09	2,763.89	105.64	-493.25	-493.78	1.47	-1.33	4.06	
2,847.44	8.10	294.54	2,786.63	106.99	-496.31	-496.84	2.36	-2.18	6.31	
2,873.09	8.02	296.45	2,812.03	108.54	-499.55	-500.10	1.09	-0.31	7.45	
2,898.11	7.83	298.67	2,836.81	110.13	-502.61	-503.16	1.44	-0.76	8.87	

SDT Survey Report

Company:	Logos Operating LLC	Local Co-ordinate Reference:	Well Ignacio 33-7 29P #1H
Project:	La Plata, CO (NAD83)	TVD Reference:	6419.2+30 @ 6449.20usft (H&P 530)
Site:	Ignacio 33-7 29P Pad	MD Reference:	6419.2+30 @ 6449.20usft (H&P 530)
Well:	Ignacio 33-7 29P #1H	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000 Multi User Db

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)	
2,921.91	7.58	299.51	2,860.39	111.68	-505.40	-505.96	1.15	-1.05	3.53	
2,949.38	7.30	302.24	2,887.63	113.51	-508.45	-509.02	1.64	-1.02	9.94	
2,973.78	6.94	302.91	2,911.84	115.13	-511.00	-511.58	1.51	-1.48	2.75	
2,999.49	6.87	306.70	2,937.37	116.90	-513.54	-514.12	1.79	-0.27	14.74	
3,012.99	6.84	306.82	2,950.77	117.86	-514.83	-515.42	0.25	-0.22	0.89	
3,159.00	5.99	317.95	3,095.87	128.73	-526.89	-527.54	1.03	-0.58	7.62	
3,254.00	7.14	311.90	3,190.25	136.35	-534.61	-535.29	1.41	1.21	-6.37	
3,348.00	9.74	303.67	3,283.22	144.66	-545.58	-546.30	3.04	2.77	-8.76	
3,443.00	11.08	296.36	3,376.66	153.17	-560.44	-561.21	1.98	1.41	-7.69	
3,537.00	12.38	289.92	3,468.70	160.62	-578.01	-578.82	1.96	1.38	-6.85	
3,631.00	13.82	283.74	3,560.26	166.72	-598.39	-599.23	2.14	1.53	-6.57	
3,726.00	15.34	278.94	3,652.20	171.37	-621.83	-622.69	2.04	1.60	-5.05	
3,820.00	16.92	276.18	3,742.50	174.77	-647.71	-648.59	1.87	1.68	-2.94	
3,915.00	18.13	277.62	3,833.09	178.22	-676.11	-677.00	1.35	1.27	1.52	
4,009.00	16.54	278.81	3,922.81	182.21	-703.83	-704.74	1.73	-1.69	1.27	
4,103.00	16.76	279.41	4,012.87	186.47	-730.42	-731.36	0.30	0.23	0.64	
4,197.00	16.77	279.68	4,102.88	190.97	-757.16	-758.12	0.08	0.01	0.29	
4,292.00	17.07	282.30	4,193.77	196.24	-784.30	-785.28	0.86	0.32	2.76	
4,386.00	17.19	282.52	4,283.60	202.19	-811.34	-812.35	0.15	0.13	0.23	
4,481.00	15.67	280.92	4,374.72	207.67	-837.64	-838.68	1.67	-1.60	-1.68	
4,575.00	14.03	281.31	4,465.57	212.31	-861.28	-862.34	1.75	-1.74	0.41	
4,669.00	15.95	284.79	4,556.37	217.84	-884.94	-886.03	2.25	2.04	3.70	
4,764.00	17.67	284.57	4,647.31	224.80	-911.52	-912.64	1.81	1.81	-0.23	
4,858.00	19.99	283.19	4,736.27	232.06	-940.97	-942.14	2.51	2.47	-1.47	
4,952.00	20.56	283.41	4,824.45	239.55	-972.67	-973.87	0.61	0.61	0.23	
5,015.00	20.03	283.04	4,883.54	244.55	-993.94	-995.17	0.87	-0.84	-0.59	
5,078.00	19.31	282.12	4,942.86	249.17	-1,014.64	-1,015.89	1.24	-1.14	-1.46	
5,141.00	18.63	281.78	5,002.44	253.41	-1,034.68	-1,035.94	1.09	-1.08	-0.54	
5,204.00	17.79	280.44	5,062.28	257.21	-1,053.99	-1,055.28	1.49	-1.33	-2.13	
5,266.00	16.78	279.40	5,121.48	260.39	-1,072.14	-1,073.44	1.70	-1.63	-1.68	
5,329.00	15.79	279.24	5,181.95	263.25	-1,089.57	-1,090.89	1.57	-1.57	-0.25	
5,393.00	14.79	277.61	5,243.69	265.73	-1,106.26	-1,107.59	1.70	-1.56	-2.55	
5,456.00	13.84	275.42	5,304.73	267.51	-1,121.73	-1,123.07	1.74	-1.51	-3.48	
5,519.00	13.30	274.31	5,365.97	268.77	-1,136.46	-1,137.81	0.95	-0.86	-1.76	
5,582.00	12.58	271.70	5,427.37	269.51	-1,150.54	-1,151.89	1.47	-1.14	-4.14	
5,645.00	11.31	271.25	5,489.01	269.85	-1,163.58	-1,164.93	2.02	-2.02	-0.71	
5,708.00	9.83	270.36	5,550.94	270.02	-1,175.13	-1,176.49	2.36	-2.35	-1.41	
5,771.00	8.44	268.67	5,613.14	269.95	-1,185.13	-1,186.49	2.25	-2.21	-2.68	
5,833.00	7.64	268.53	5,674.53	269.74	-1,193.80	-1,195.15	1.29	-1.29	-0.23	
5,896.00	6.65	269.94	5,737.04	269.62	-1,201.64	-1,202.99	1.60	-1.57	2.24	
5,959.00	5.49	270.98	5,799.68	269.67	-1,208.30	-1,209.65	1.85	-1.84	1.65	
6,022.00	4.48	271.07	5,862.44	269.77	-1,213.77	-1,215.12	1.60	-1.60	0.14	
6,085.00	3.83	268.70	5,925.28	269.77	-1,218.34	-1,219.69	1.07	-1.03	-3.76	

SDT
Survey Report

Company:	Logos Operating LLC	Local Co-ordinate Reference:	Well Ignacio 33-7 29P #1H
Project:	La Plata, CO (NAD83)	TVD Reference:	6419.2+30 @ 6449.20usft (H&P 530)
Site:	Ignacio 33-7 29P Pad	MD Reference:	6419.2+30 @ 6449.20usft (H&P 530)
Well:	Ignacio 33-7 29P #1H	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000 Multi User Db

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)	
6,179.00	2.67	267.77	6,019.12	269.61	-1,223.66	-1,225.01	1.24	-1.23	-0.99	
6,269.00	2.20	265.15	6,109.04	269.38	-1,227.48	-1,228.83	0.54	-0.52	-2.91	
6,297.00	2.21	264.65	6,137.02	269.29	-1,228.55	-1,229.90	0.08	0.04	-1.79	
6,391.00	6.71	97.56	6,230.85	268.39	-1,224.90	-1,226.25	9.44	4.79	-177.76	
6,486.00	16.65	85.91	6,323.78	268.64	-1,205.78	-1,207.12	10.70	10.46	-12.26	
6,580.00	28.49	85.81	6,410.43	271.24	-1,169.86	-1,171.22	12.60	12.60	-0.11	
6,675.00	41.48	83.99	6,488.10	276.21	-1,115.74	-1,117.12	13.72	13.67	-1.92	
6,769.00	54.74	87.21	6,550.73	281.37	-1,046.13	-1,047.54	14.33	14.11	3.43	
6,863.00	66.34	91.64	6,596.90	282.00	-964.45	-965.87	13.00	12.34	4.71	
6,940.00	71.65	89.79	6,624.49	281.13	-892.60	-894.01	7.26	6.90	-2.41	
LPP @ 6940' MD										
6,958.00	72.90	89.37	6,629.97	281.26	-875.46	-876.87	7.26	6.92	-2.31	
7,053.00	84.13	87.75	6,648.85	283.62	-782.54	-783.97	11.94	11.82	-1.71	
7,147.00	92.49	85.37	6,651.62	289.26	-688.84	-690.30	9.25	8.89	-2.53	
7,242.00	92.76	85.77	6,647.27	296.59	-594.23	-595.72	0.51	0.28	0.42	
7,337.00	90.47	86.47	6,644.60	303.01	-499.49	-501.02	2.52	-2.41	0.74	
7,431.00	89.93	86.24	6,644.27	308.99	-405.68	-407.24	0.62	-0.57	-0.24	
7,480.40	89.91	86.51	6,644.33	312.11	-356.38	-357.95	0.55	-0.03	0.55	
600' FSL Crossing @ 7480.40' MD										
7,526.00	89.90	86.76	6,644.41	314.79	-310.86	-312.45	0.55	-0.03	0.55	
7,621.00	89.70	86.21	6,644.74	320.61	-216.04	-217.66	0.62	-0.21	-0.58	
7,715.00	89.60	84.99	6,645.31	327.82	-122.32	-123.97	1.30	-0.11	-1.30	
7,810.00	90.44	86.40	6,645.28	334.95	-27.59	-29.28	1.73	0.88	1.48	
7,904.00	90.37	86.66	6,644.62	340.64	66.24	64.51	0.29	-0.07	0.28	
7,998.00	90.30	85.86	6,644.07	346.77	160.03	158.28	0.85	-0.07	-0.85	
8,092.00	90.20	86.87	6,643.66	352.73	253.84	252.05	1.08	-0.11	1.07	
8,187.00	90.67	88.37	6,642.94	356.68	348.76	346.95	1.65	0.49	1.58	
8,282.00	90.54	88.85	6,641.93	358.98	443.72	441.90	0.52	-0.14	0.51	
8,376.00	90.37	88.63	6,641.19	361.05	537.70	535.86	0.30	-0.18	-0.23	
8,470.00	90.61	89.66	6,640.38	362.45	631.68	629.84	1.13	0.26	1.10	
8,565.00	90.57	89.38	6,639.40	363.25	726.67	724.82	0.30	-0.04	-0.29	
8,659.00	91.28	91.24	6,637.89	362.74	820.65	818.81	2.12	0.76	1.98	
8,753.00	91.28	90.72	6,635.79	361.13	914.62	912.78	0.55	0.00	-0.55	
8,848.00	91.48	90.35	6,633.50	360.25	1,009.58	1,007.75	0.44	0.21	-0.39	
8,942.00	91.11	89.86	6,631.37	360.07	1,103.56	1,101.72	0.65	-0.39	-0.52	
9,036.00	91.01	88.97	6,629.64	361.03	1,197.54	1,195.70	0.95	-0.11	-0.95	
9,131.00	90.81	90.32	6,628.13	361.62	1,292.52	1,290.67	1.44	-0.21	1.42	
9,225.00	90.54	90.61	6,627.02	360.86	1,386.51	1,384.67	0.42	-0.29	0.31	
9,320.00	90.27	90.43	6,626.35	360.00	1,481.51	1,479.66	0.34	-0.28	-0.19	
9,414.00	91.75	90.35	6,624.69	359.36	1,575.49	1,573.65	1.58	1.57	-0.09	
9,509.00	91.61	89.66	6,621.91	359.35	1,670.44	1,668.60	0.74	-0.15	-0.73	
9,603.00	91.75	90.54	6,619.15	359.18	1,764.40	1,762.56	0.95	0.15	0.94	
9,698.00	91.65	90.53	6,616.33	358.30	1,859.36	1,857.52	0.11	-0.11	-0.01	
9,792.00	92.80	89.44	6,612.68	358.32	1,953.28	1,951.44	1.69	1.22	-1.16	

SDT
Survey Report

Company:	Logos Operating LLC	Local Co-ordinate Reference:	Well Ignacio 33-7 29P #1H
Project:	La Plata, CO (NAD83)	TVD Reference:	6419.2+30 @ 6449.20usft (H&P 530)
Site:	Ignacio 33-7 29P Pad	MD Reference:	6419.2+30 @ 6449.20usft (H&P 530)
Well:	Ignacio 33-7 29P #1H	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000 Multi User Db

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)
9,887.00	93.24	89.60	6,607.68	359.12	2,048.15	2,046.30	0.49	0.46	0.17
9,981.00	93.64	90.93	6,602.04	358.68	2,141.98	2,140.13	1.48	0.43	1.41
10,076.00	91.92	91.19	6,597.43	356.93	2,236.84	2,235.01	1.83	-1.81	0.27
10,170.00	90.03	91.18	6,595.83	354.98	2,330.81	2,328.98	2.01	-2.01	-0.01
10,265.00	92.02	91.81	6,594.13	352.51	2,425.75	2,423.94	2.20	2.09	0.66
10,359.00	92.62	91.78	6,590.32	349.56	2,519.63	2,517.83	0.64	0.64	-0.03
10,454.00	93.40	90.90	6,585.34	347.35	2,614.47	2,612.68	1.24	0.82	-0.93
10,549.00	92.42	90.80	6,580.51	345.94	2,709.34	2,707.55	1.04	-1.03	-0.11
10,643.00	93.17	90.70	6,575.93	344.71	2,803.22	2,801.44	0.80	0.80	-0.11
10,737.00	92.15	90.71	6,571.57	343.55	2,897.11	2,895.33	1.09	-1.09	0.01
10,832.00	92.32	91.10	6,567.86	342.05	2,992.02	2,990.25	0.45	0.18	0.41
10,926.00	92.66	90.96	6,563.78	340.37	3,085.92	3,084.16	0.39	0.36	-0.15
11,021.00	90.67	89.93	6,561.02	339.63	3,180.87	3,179.11	2.36	-2.09	-1.08
11,115.00	90.91	89.86	6,559.72	339.80	3,274.86	3,273.10	0.27	0.26	-0.07
11,210.00	90.77	89.33	6,558.33	340.47	3,369.85	3,368.08	0.58	-0.15	-0.56
11,304.00	91.01	89.03	6,556.87	341.82	3,463.83	3,462.05	0.41	0.26	-0.32
11,399.00	91.11	87.77	6,555.11	344.47	3,558.77	3,556.98	1.33	0.11	-1.33
11,493.00	91.58	88.70	6,552.91	347.36	3,652.70	3,650.89	1.11	0.50	0.99
11,587.00	91.92	87.95	6,550.04	350.11	3,746.61	3,744.79	0.88	0.36	-0.80
11,682.00	91.55	89.90	6,547.16	351.89	3,841.55	3,839.72	2.09	-0.39	2.05
11,776.00	91.82	89.53	6,544.39	352.36	3,935.51	3,933.67	0.49	0.29	-0.39
11,871.00	91.51	90.81	6,541.63	352.08	4,030.46	4,028.63	1.39	-0.33	1.35
11,966.00	91.61	90.91	6,539.05	350.65	4,125.42	4,123.59	0.15	0.11	0.11
12,060.00	90.50	91.29	6,537.32	348.85	4,219.38	4,217.56	1.25	-1.18	0.40
12,155.00	90.44	92.25	6,536.54	345.91	4,314.33	4,312.53	1.01	-0.06	1.01
12,249.00	90.81	92.52	6,535.51	342.00	4,408.25	4,406.46	0.49	0.39	0.29
12,343.00	89.87	89.68	6,534.95	340.20	4,502.22	4,500.44	3.18	-1.00	-3.02
12,437.00	89.83	91.01	6,535.20	339.63	4,596.21	4,594.43	1.42	-0.04	1.41
12,532.00	89.97	89.39	6,535.37	339.30	4,691.21	4,689.43	1.71	0.15	-1.71
12,626.00	90.40	88.84	6,535.06	340.75	4,785.20	4,783.41	0.74	0.46	-0.59
12,721.00	90.84	87.92	6,534.03	343.44	4,880.15	4,878.35	1.07	0.46	-0.97
12,815.00	90.64	88.34	6,532.82	346.50	4,974.09	4,972.28	0.49	-0.21	0.45
12,909.00	90.57	90.74	6,531.83	347.26	5,068.08	5,066.26	2.55	-0.07	2.55
13,004.00	91.55	91.21	6,530.07	345.64	5,163.05	5,161.23	1.14	1.03	0.49
13,098.00	92.05	90.10	6,527.12	344.57	5,256.99	5,255.18	1.29	0.53	-1.18
13,192.00	92.09	90.75	6,523.72	343.87	5,350.93	5,349.12	0.69	0.04	0.69
13,287.00	92.25	89.29	6,520.13	343.84	5,445.86	5,444.05	1.54	0.17	-1.54
13,381.00	92.19	91.26	6,516.48	343.39	5,539.78	5,537.97	2.10	-0.06	2.10
13,475.00	92.42	90.12	6,512.70	342.26	5,633.70	5,631.89	1.24	0.24	-1.21
13,570.00	91.18	90.03	6,509.72	342.13	5,728.65	5,726.84	1.31	-1.31	-0.09
13,664.00	90.67	90.37	6,508.20	341.80	5,822.63	5,820.83	0.65	-0.54	0.36
13,758.00	89.83	90.37	6,507.79	341.20	5,916.63	5,914.83	0.89	-0.89	0.00
13,853.00	88.99	90.75	6,508.77	340.27	6,011.62	6,009.82	0.97	-0.88	0.40

SDT
Survey Report

Company:	Logos Operating LLC	Local Co-ordinate Reference:	Well Ignacio 33-7 29P #1H
Project:	La Plata, CO (NAD83)	TVD Reference:	6419.2+30 @ 6449.20usft (H&P 530)
Site:	Ignacio 33-7 29P Pad	MD Reference:	6419.2+30 @ 6449.20usft (H&P 530)
Well:	Ignacio 33-7 29P #1H	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000 Multi User Db

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)	
13,947.00	90.07	90.92	6,509.54	338.90	6,105.61	6,103.81	1.16	1.15	0.18	
14,042.00	89.80	91.62	6,509.65	336.79	6,200.58	6,198.80	0.79	-0.28	0.74	
14,136.00	90.51	91.87	6,509.39	333.93	6,294.54	6,292.77	0.80	0.76	0.27	
14,230.00	90.24	91.08	6,508.78	331.51	6,388.50	6,386.74	0.89	-0.29	-0.84	
14,325.00	89.56	91.14	6,508.94	329.67	6,483.48	6,481.73	0.72	-0.72	0.06	
14,419.00	90.13	90.89	6,509.20	328.01	6,577.47	6,575.72	0.66	0.61	-0.27	
14,513.00	91.14	90.38	6,508.16	326.96	6,671.46	6,669.72	1.20	1.07	-0.54	
14,607.00	90.67	90.72	6,506.67	326.06	6,765.44	6,763.70	0.62	-0.50	0.36	
14,702.00	89.53	89.67	6,506.51	325.74	6,860.44	6,858.70	1.63	-1.20	-1.11	
14,796.00	89.90	88.90	6,506.97	326.91	6,954.43	6,952.68	0.91	0.39	-0.82	
14,891.00	90.71	90.44	6,506.47	327.46	7,049.42	7,047.67	1.83	0.85	1.62	
14,985.00	89.97	89.82	6,505.91	327.25	7,143.42	7,141.67	1.03	-0.79	-0.66	
15,080.00	90.67	89.19	6,505.38	328.07	7,238.41	7,236.66	0.99	0.74	-0.66	
15,174.00	91.24	89.78	6,503.81	328.91	7,332.39	7,330.63	0.87	0.61	0.63	
15,269.00	90.07	91.02	6,502.73	328.25	7,427.38	7,425.62	1.79	-1.23	1.31	
15,363.00	90.71	92.47	6,502.09	325.39	7,521.33	7,519.59	1.69	0.68	1.54	
15,458.00	91.14	93.03	6,500.55	320.83	7,616.21	7,614.49	0.74	0.45	0.59	
15,552.00	90.84	93.03	6,498.93	315.86	7,710.06	7,708.37	0.32	-0.32	0.00	
15,646.00	90.54	91.50	6,497.80	312.15	7,803.98	7,802.30	1.66	-0.32	-1.63	
15,741.00	89.83	91.71	6,497.49	309.49	7,898.94	7,897.28	0.78	-0.75	0.22	
15,836.00	90.64	92.60	6,497.10	305.91	7,993.87	7,992.22	1.27	0.85	0.94	
15,930.00	90.74	90.88	6,495.97	303.06	8,087.82	8,086.18	1.83	0.11	-1.83	
16,025.00	89.60	91.83	6,495.69	300.81	8,182.79	8,181.16	1.56	-1.20	1.00	
16,119.00	91.45	88.94	6,494.83	300.18	8,276.77	8,275.14	3.65	1.97	-3.07	
16,213.00	91.45	88.29	6,492.45	302.45	8,370.71	8,369.07	0.69	0.00	-0.69	
16,225.06	91.41	88.33	6,492.15	302.81	8,382.76	8,381.12	0.49	-0.33	0.37	
FPP @ 16225.06' MD										
16,230.25	91.39	88.35	6,492.02	302.96	8,387.95	8,386.31	0.49	-0.33	0.37	
600' FEL Crossing @ 16230.25' MD										
16,306.00	91.14	88.63	6,490.35	304.95	8,463.65	8,462.00	0.49	-0.33	0.37	
16,343.00	90.67	89.57	6,489.76	305.53	8,500.64	8,498.99	2.84	-1.27	2.54	
16,414.00	90.67	89.57	6,488.93	306.07	8,571.64	8,569.98	0.00	0.00	0.00	
BHL @ 16414.00' MD										

SDT Survey Report

Company: Logos Operating LLC	Local Co-ordinate Reference: Well Ignacio 33-7 29P #1H
Project: La Plata, CO (NAD83)	TVD Reference: 6419.2+30 @ 6449.20usft (H&P 530)
Site: Ignacio 33-7 29P Pad	MD Reference: 6419.2+30 @ 6449.20usft (H&P 530)
Well: Ignacio 33-7 29P #1H	North Reference: True
Wellbore: OH	Survey Calculation Method: Minimum Curvature
Design: OH	Database: EDM 5000 Multi User Db

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
IGN 29 #1H SHL - actual wellpath hits target center - Point	0.00	0.00	0.00	0.00	0.00	1,153,445.61	2,379,429.09	37.068673	-107.627033
IGN 29 #1H BHL - actual wellpath hits target center - Point	0.00	0.00	6,488.93	306.07	8,571.64	1,153,556.42	2,388,005.48	37.069510	-107.597655
IGN 29 #1H FPP - actual wellpath hits target center - Point	0.00	0.00	6,492.15	302.81	8,382.76	1,153,557.47	2,387,816.58	37.069501	-107.598303
IGN 29 #1H PBHL - actual wellpath misses target center by 40.12usft at 16343.00usft MD (6489.76 TVD, 305.53 N, 8500.64 E) - Point	0.00	0.00	6,519.00	321.58	8,522.94	1,153,573.05	2,387,957.15	37.069553	-107.597822
IGN 29 #1H LPP - actual wellpath hits target center - Point	0.00	0.00	6,624.49	281.13	-892.60	1,153,746.99	2,378,543.12	37.069445	-107.630092

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
6,940.00	6,624.49	281.13	-892.60	LPP @ 6940' MD	
7,480.40	6,644.33	312.11	-356.38	600' FSL Crossing @ 7480.40' MD	
16,225.06	6,492.15	302.81	8,382.76	FPP @ 16225.06' MD	
16,230.25	6,492.02	302.96	8,387.95	600' FEL Crossing @ 16230.25' MD	
16,414.00	6,488.93	306.07	8,571.64	BHL @ 16414.00' MD	

Checked By: _____ Approved By: _____ Date: _____

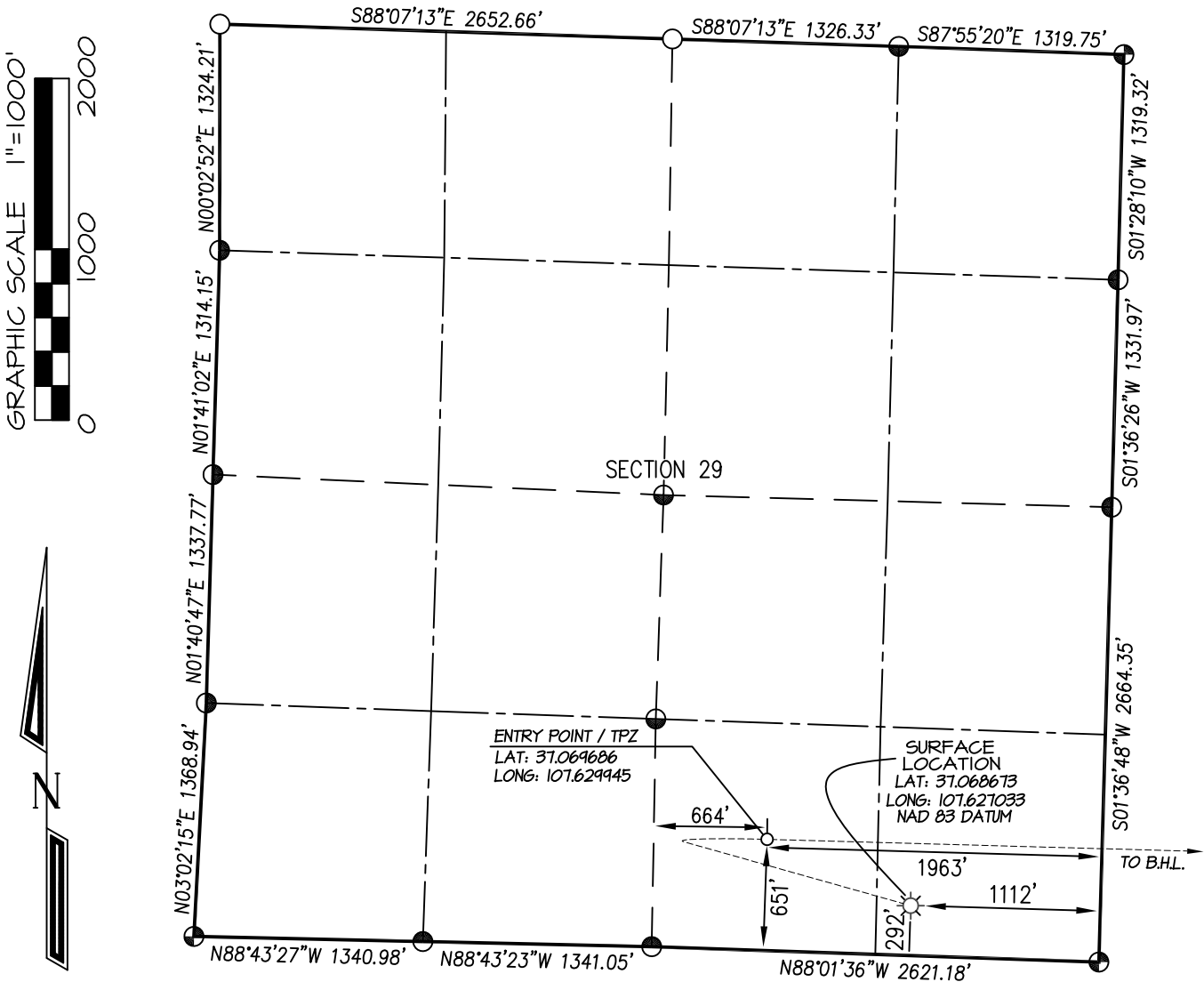
LOGOS OPERATING, LLC: IGNACIO 33-7 29P #1H

SURFACE LOCATION: 292' FSL & 1112' FEL

SECTION 29, T-33-N, R-7-W, N.M.P.M., LA PLATA COUNTY, COLORADO. GRADED PAD ELEVATION: 6419.2'

BOTTOM HOLE LOCATION: 649' FSL, 2169' FWL

SECTION 27, T-33-N, R-7-W, N.M.P.M., LA PLATA COUNTY, COLORADO.



○ denotes calculated position.

⊕ and ⊙ denote found 3-1/4" B.L.M.
Aluminum cap unless otherwise noted.

NOTE:

SEE SHEET 4 OF 4 FOR COORDINATE TABLE,
SURVEY NOTES, AND SURVEYOR'S CERTIFICATE.

SHEET 1 OF 4

DRAWN BY: K.R.	SURVEYED: 2/23/24	PREPARED FOR:
CHECKED BY: K.R.	DRAWN: 4/18/24	LOGOS OPERATING, LLC
FILE NO.: LGO3WPT	JOB NO. LGO3	<p>NORTHSTAR SURVEYING & MAPPING, INC.</p> <p>768 County Rd. 308 DURANGO, CO. 81303 (970) 385-0851</p>

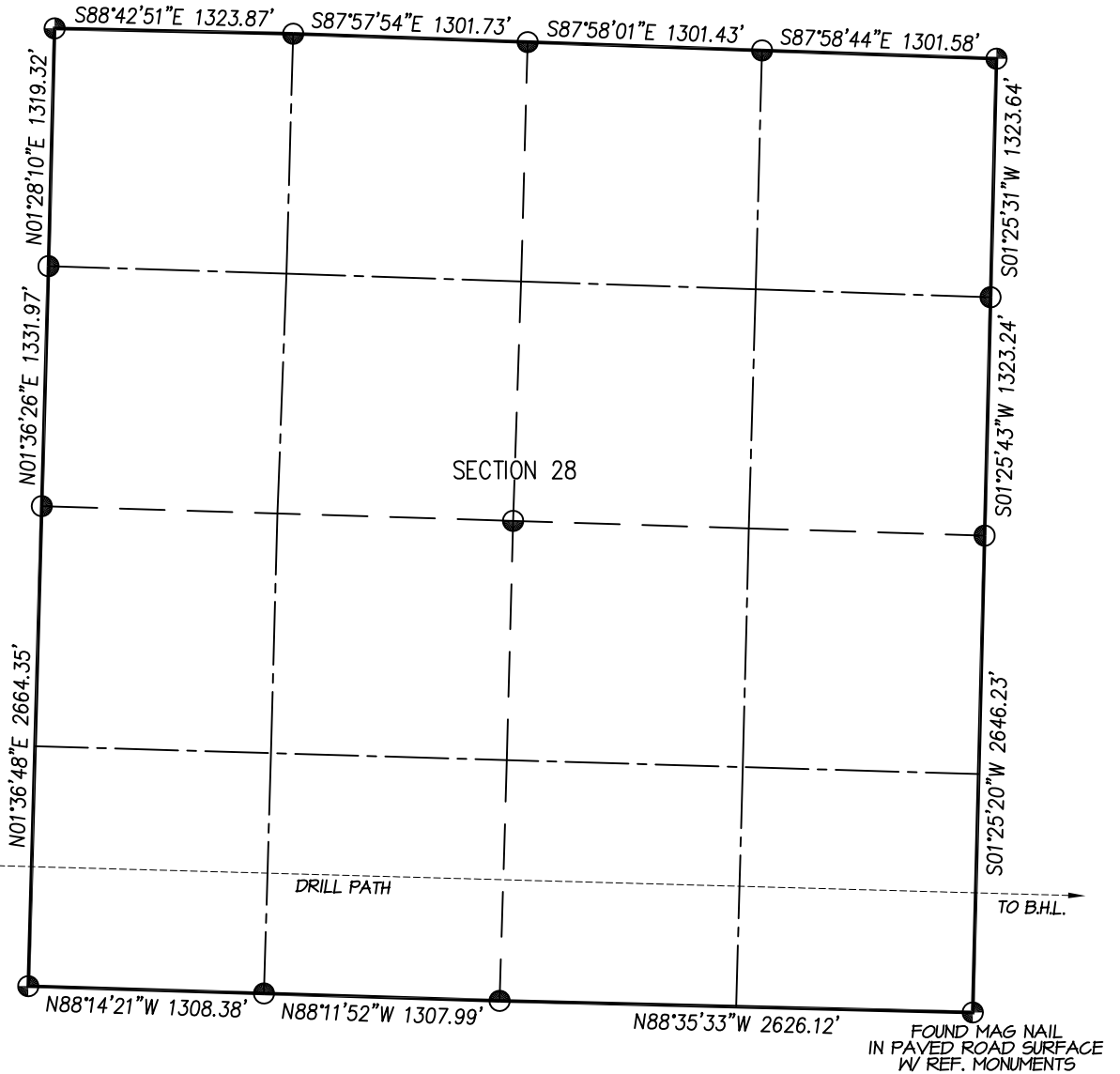
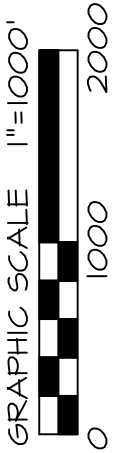
LOGOS OPERATING, LLC: IGNACIO 33-7 29P #1H

SURFACE LOCATION: 292' FSL & 1112' FEL

SECTION 29, T-33-N, R-7-W, N.M.P.M., LA PLATA COUNTY, COLORADO. GRADED PAD ELEVATION: 6419.2'

BOTTOM HOLE LOCATION: 649' FSL, 2169' FWL

SECTION 27, T-33-N, R-7-W, N.M.P.M., LA PLATA COUNTY, COLORADO.



⊕ and ⊙ denote found 3-1/4" B.L.M.
Aluminum cap unless otherwise noted.

NOTE:
SEE SHEET 4 OF 4 FOR COORDINATE TABLE,
SURVEY NOTES, AND SURVEYOR'S CERTIFICATE.

SHEET 2 OF 4

DRAWN BY: K.R.	SURVEYED: 2/23/24
CHECKED BY: K.R.	DRAWN: 4/18/24
FILE NO.: L003WP2	JOB NO. L003

PREPARED FOR:

LOGOS OPERATING, LLC

**NORTHSTAR
SURVEYING & MAPPING, INC.**

768 County Rd. 308
DURANGO, CO. 81303
(970) 385-0851

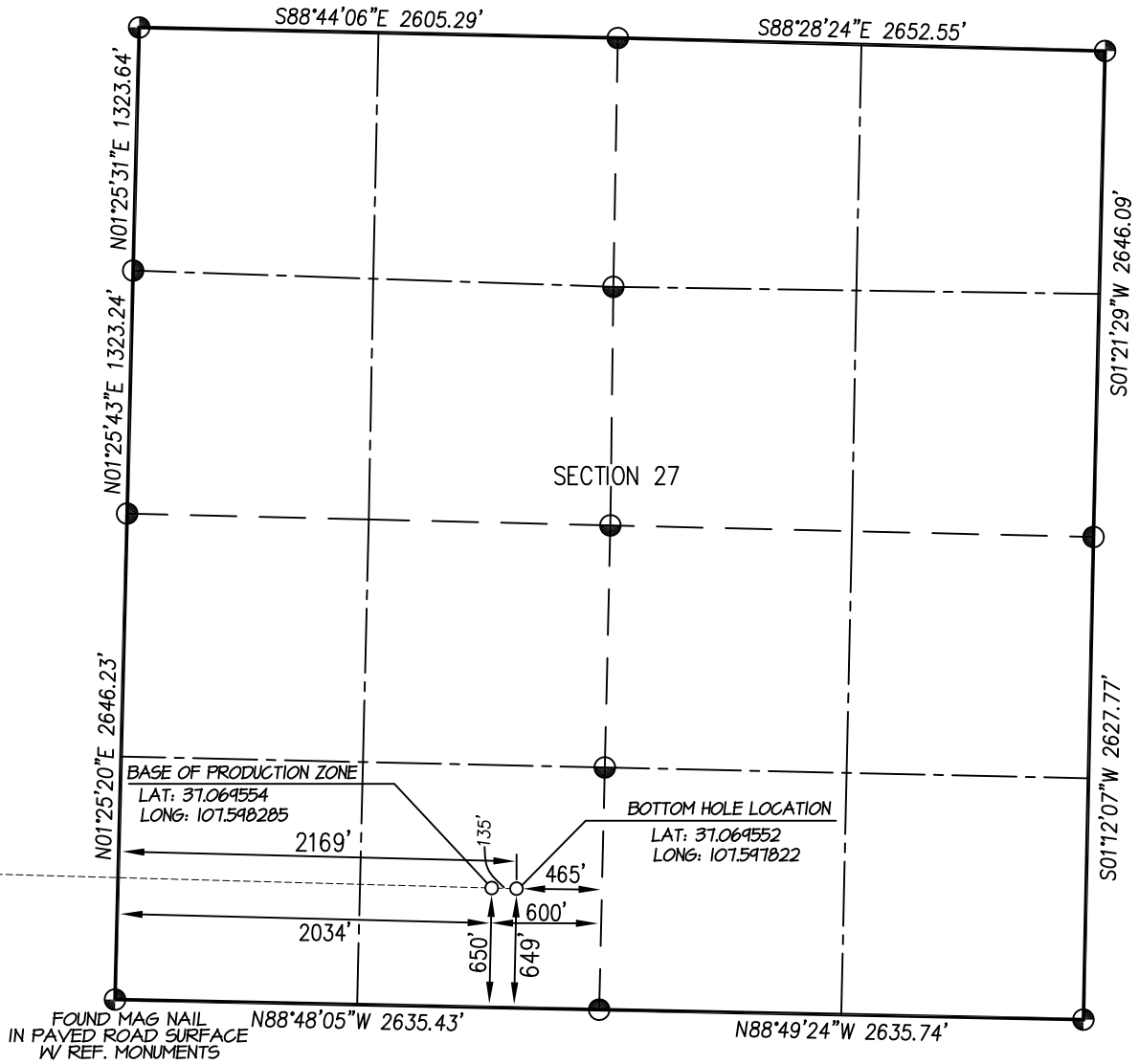
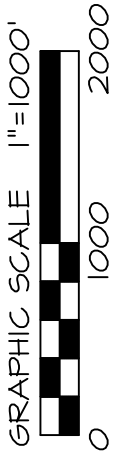
LOGOS OPERATING, LLC: IGNACIO 33-7 29P #1H

SURFACE LOCATION: 292' FSL & 1112' FEL

SECTION 29, T-33-N, R-7-W, N.M.P.M., LA PLATA COUNTY, COLORADO. GRADED PAD ELEVATION: 6419.2'

BOTTOM HOLE LOCATION: 649' FSL, 2169' FWL

SECTION 27, T-33-N, R-7-W, N.M.P.M., LA PLATA COUNTY, COLORADO.



⊕ and ⊙ denote found 3-1/4" B.L.M.
Aluminum cap unless otherwise noted.

NOTE:
SEE SHEET 4 OF 4 FOR COORDINATE TABLE,
SURVEY NOTES, AND SURVEYOR'S CERTIFICATE.

SHEET 3 OF 4

DRAWN BY: K.R.	SURVEYED: 2/23/24	PREPARED FOR:
CHECKED BY: K.R.	DRAWN: 4/18/24	LOGOS OPERATING, LLC
FILE NO.: L003WP3	JOB NO. L003	<p align="center">NORTHSTAR SURVEYING & MAPPING, INC.</p> <p align="center">768 County Rd. 308 DURANGO, CO. 81303 (970) 385-0851</p>

LOGOS OPERATING, LLC: IGNACIO 33-7 29P #1H

SURFACE LOCATION: 292' FSL & 1112' FEL

SECTION 29, T-33-N, R-7-W, N.M.P.M., LA PLATA COUNTY, COLORADO. GRADED PAD ELEVATION: 6419.2'

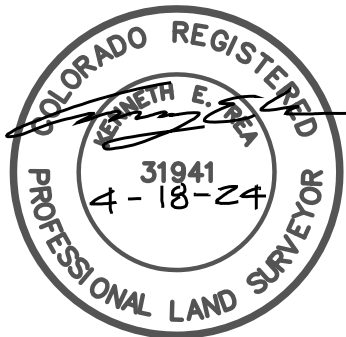
BOTTOM HOLE LOCATION: 649' FSL, 2169' FWL

SECTION 27, T-33-N, R-7-W, N.M.P.M., LA PLATA COUNTY, COLORADO.

IGNACIO 33-7 29P #1H	CSZ NAD '83	NAD '83	TIES	SEC/TWP/RNG
SURFACE HOLE LOCATION	N (Y) = 1,153,445.61' E (X) = 2,379,429.09'	LAT: 37.068673°N LONG: 107.627033°W	292' FSL 1112' FEL	SECTION 29 T-33-N, R-7-W
ENTRY POINT / TPZ	N (Y) = 1,153,833.85' E (X) = 2,378,588.03'	LAT: 37.069686°N LONG: 107.629945°W	651' FSL 1963' FEL	SECTION 29 T-33-N, R-7-W
BASE OF PRODUCTION ZONE	N (Y) = 1,153,576.80' E (X) = 2,387,822.20'	LAT: 37.069554°N LONG: 107.598285°W	650' FSL 2034' FWL	SECTION 27 T-33-N, R-7-W
BOTTOM HOLE LOCATION	N (Y) = 1,153,573.05' E (X) = 2,387,957.14'	LAT: 37.069552°N LONG: 107.597822°W	649' FSL 2169' FWL	SECTION 27 T-33-N, R-7-W

NOTES:

1. WELL LOCATION FOOTAGE CALLS MEASURED PERPENDICULAR TO SECTION LINES.
2. WELL GPS OBSERVATION PERFORMED BY KENNY REA ON 2/23/24 - PDOP VALUE = 1.7
3. BEARINGS & DISTANCE SHOWN ARE FIELD MEASURED UNLESS OTHERWISE NOTED.
4. ALL MEASURED DISTANCES SHOWN ARE GRID DISTANCE WITH NO SCALE FACTOR APPLIED.
5. BEARINGS ARE BASED ON THE NORTH AMERICAN DATUM OF 1983, COLORADO SOUTH STATE PLANE COORDINATE SYSTEM, ZONE 0503.
6. ELEVATION IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (GEOID18).



I, KENNETH E. REA, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THE WELL LOCATION SHOWN ON THIS PLAT IS ACCURATELY PLOTTED FROM FIELD NOTES OF ACTUAL SURVEYS MADE UNDER MY DIRECT SUPERVISION, AND THAT THIS PLAT IS NOT A LAND SURVEY PLAT OR IMPROVEMENT SURVEY PLAT, AND THAT IT IS NOT TO BE RELIED UPON FOR THE ESTABLISHMENT OF FENCE, BUILDING, OR OTHER FUTURE IMPROVEMENT LINES.

SHEET 4 OF 4

DRAWN BY: K.R. CHECKED BY: K.R. FILE NO.: L003WP4	SURVEYED: 2/23/24 DRAWN: 4/18/24 JOB NO. L003	PREPARED FOR: LOGOS OPERATING, LLC
		NORTHSTAR SURVEYING & MAPPING, INC. 768 County Rd. 308 DURANGO, CO. 81303 (970) 385-0851