

CRESTONE PEAK RESOURCES

ARAPAHOE COUNTY

SEC 10-T4S-R65W

PROSPER FARMS 4-65 11-12 4BH

OWB

Design: FINAL SURVEY

Standard Survey Report

04 January, 2023

Project: ARAPAHOE COUNTY
 Site: SEC 10-T4S-R65W
 Well: PROSPER FARMS 4-65 11-12 4BH
 Wellbore: OWB
 Design: FINAL SURVEY

PROJECT DETAILS: ARAPAHOE COUNTY
 Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: Colorado Central Zone
 System Datum: Mean Sea Level



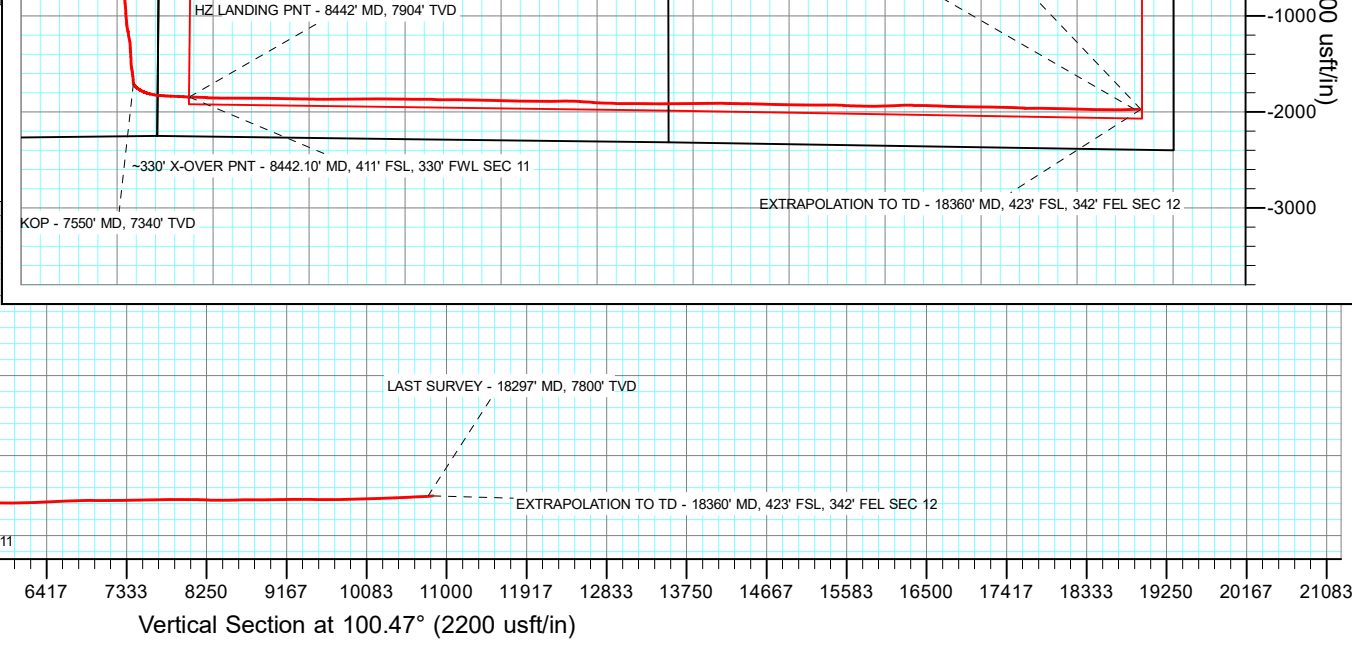
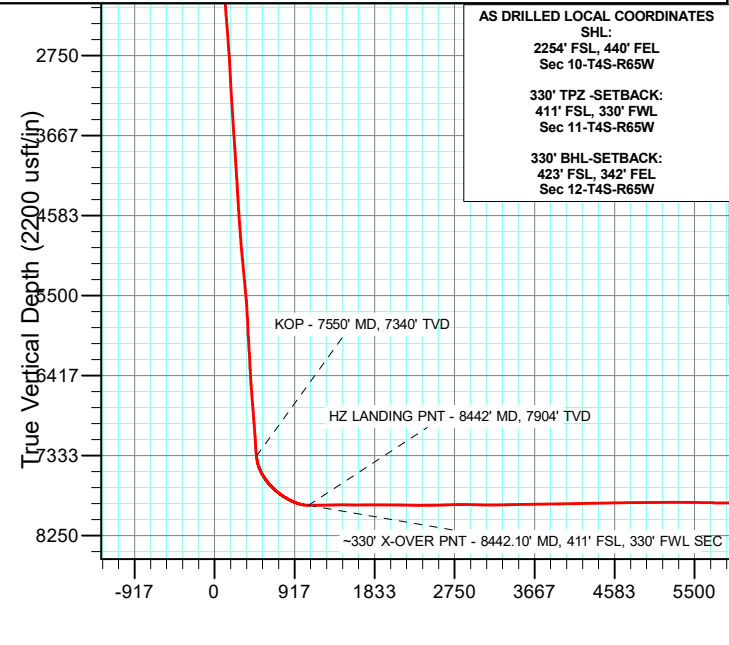
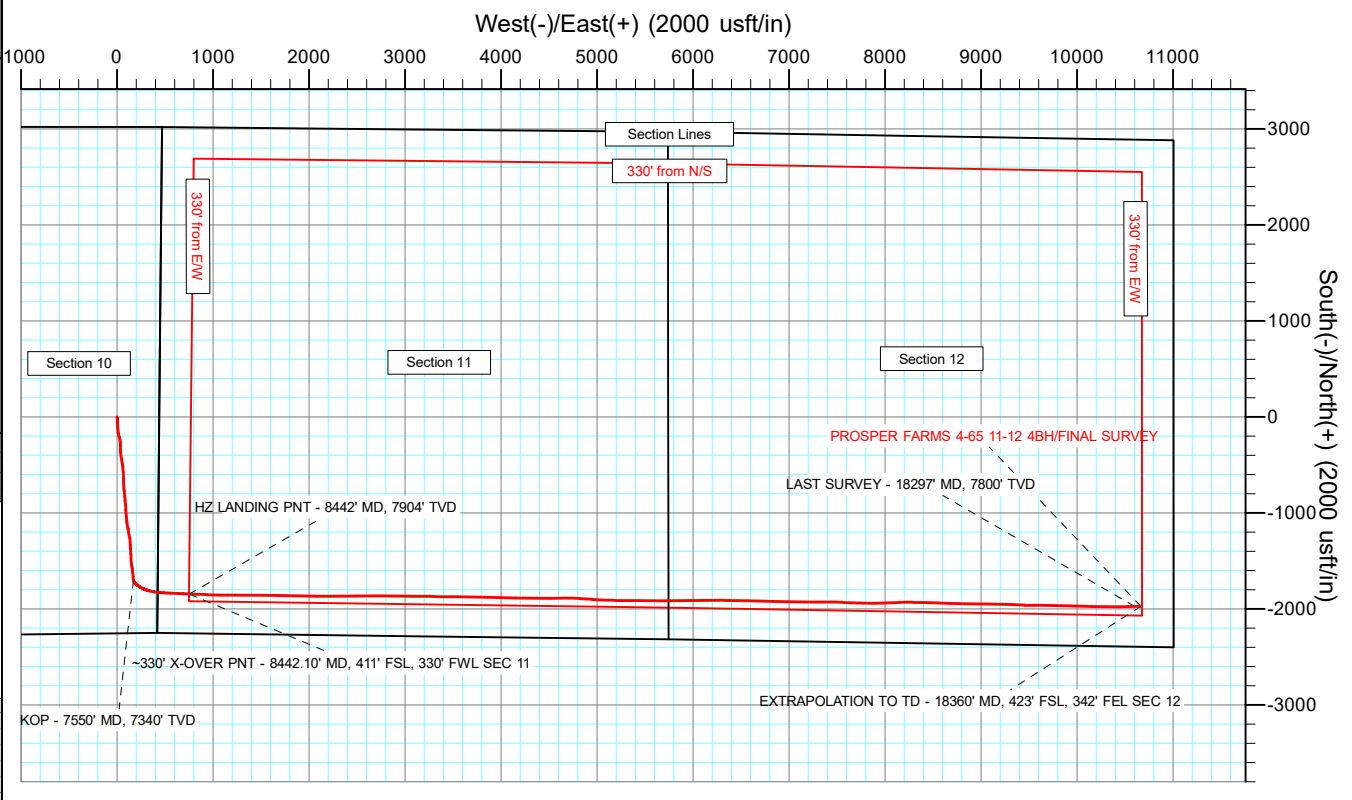
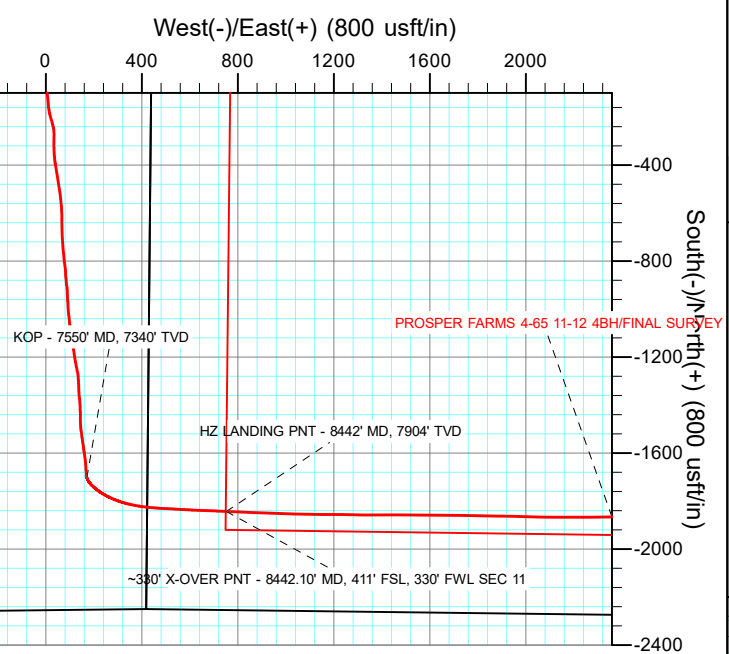
Azimuths to True North
 Magnetic North: 7.61°
 Magnetic Field
 Strength: 51484.7nT
 Dip Angle: 66.08°
 Date: 7/21/2022
 Model: IGRF2020

WELL DETAILS: PROSPER FARMS 4-65 11-12 4BH

5682.00						Slot
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0.00	0.00	1687306.63	3241250.75	39.717333°N	104.642399°W	

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
7550.00	14.49	161.54	7340.41	-1702.89	171.69	478.18	1716.42	KOP - 7550' MD, 7340' TVD
8442.00	88.42	92.44	7904.33	-1842.45	752.47	1074.65	2336.75	HZ LANDING PNT - 8442' MD, 7904' TVD
8442.10	88.44	92.44	7904.34	-1842.45	752.57	1074.75	2336.85	-330' X-OVER PNT - 8442.10' MD, 411' FSL, 330' FWL SEC 11
18297.00	93.82	88.29	7799.94	-1971.98	10601.76	10783.60	12188.99	LAST SURVEY - 18297' MD, 7800' TVD
18360.00	93.82	88.29	7795.74	-1970.10	10664.60	10845.04	12251.85	EXTRAPOLATION TO TD - 18360' MD, 423' FSL, 342' FEL SEC 12



AS DRILLED LOCAL COORDINATES
 SHL:
 2254' FSL, 440' FEL
 Sec 10-T4S-R65W
 330' TPZ -SETBACK:
 411' FSL, 330' FWL
 Sec 11-T4S-R65W
 330' BHL-SETBACK:
 423' FSL, 342' FEL
 Sec 12-T4S-R65W

Survey Report

Company: CRESTONE PEAK RESOURCES	Local Co-ordinate Reference: Well PROSPER FARMS 4-65 11-12 4BH
Project: ARAPAHOE COUNTY	TVD Reference: KB 25' @ 5707.00usft
Site: SEC 10-T4S-R65W	MD Reference: KB 25' @ 5707.00usft
Well: PROSPER FARMS 4-65 11-12 4BH	North Reference: True
Wellbore: OWB	Survey Calculation Method: Minimum Curvature
Design: FINAL SURVEY	Database: EDT_32Bit_ODBC

Project ARAPAHOE COUNTY		
Map System: US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum: North American Datum 1983		
Map Zone: Colorado Central Zone		Using geodetic scale factor

Site SEC 10-T4S-R65W		
Site Position:	Northing: 1,685,061.36 usft	Latitude: 39.711158°N
From: Lat/Long	Easting: 3,241,690.88 usft	Longitude: 104.640910°W
Position Uncertainty: 0.00 usft	Slot Radius: 13.200 in	Grid Convergence: 0.54 °

Well PROSPER FARMS 4-65 11-12 4BH		
Well Position +N/-S 0.00 usft	Northing: 1,687,306.63 usft	Latitude: 39.717333°N
+E/-W 0.00 usft	Easting: 3,241,250.75 usft	Longitude: 104.642399°W
Position Uncertainty 0.00 usft	Wellhead Elevation: usft	Ground Level: 5,682.00 usft

Wellbore OWB					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	7/21/2022	7.61	66.08	51,484.68957388

Design FINAL SURVEY				
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	100.47

Survey Program		Date 1/4/2023		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
182.00	3,488.00	SURFACE SURVEY (OWB)	MWD OWSG	OWSG MWD - Standard
3,603.00	18,360.00	FINAL SURVEY (OWB)	MWD OWSG	OWSG MWD - Standard

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
182.00	0.40	169.40	182.00	-0.62	0.12	0.23	0.22	0.22	0.00
287.00	2.90	173.90	286.95	-3.63	0.47	1.12	2.38	2.38	4.29
377.00	3.90	165.90	376.79	-8.86	1.45	3.04	1.23	1.11	-8.89
469.00	5.50	171.00	468.48	-16.25	2.91	5.81	1.80	1.74	5.54
558.00	7.50	176.50	556.90	-26.26	3.93	8.63	2.35	2.25	6.18
648.00	10.20	181.80	645.82	-40.09	4.04	11.25	3.13	3.00	5.89
740.00	12.20	177.80	736.07	-57.95	4.15	14.61	2.33	2.17	-4.35
832.00	13.40	178.00	825.78	-78.32	4.90	19.04	1.31	1.30	0.22
924.00	14.70	174.60	915.03	-100.59	6.37	24.54	1.67	1.41	-3.70

Survey Report

Company:	CRESTONE PEAK RESOURCES	Local Co-ordinate Reference:	Well PROSPER FARMS 4-65 11-12 4BH
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5707.00usft
Site:	SEC 10-T4S-R65W	MD Reference:	KB 25' @ 5707.00usft
Well:	PROSPER FARMS 4-65 11-12 4BH	North Reference:	True
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEY	Database:	EDT_32Bit_ODBC

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
1,016.00	16.10	173.80	1,003.72	-124.90	8.85	31.39	1.54	1.52	-0.87	
1,105.00	16.80	175.00	1,089.08	-149.98	11.30	38.36	0.87	0.79	1.35	
1,197.00	15.40	170.40	1,177.47	-175.27	14.50	46.09	2.06	-1.52	-5.00	
1,289.00	14.30	163.70	1,266.40	-198.22	19.72	55.40	2.21	-1.20	-7.28	
1,377.00	14.90	163.80	1,351.56	-219.52	25.93	65.38	0.68	0.68	0.11	
1,468.00	14.30	168.00	1,439.62	-241.75	31.53	74.92	1.34	-0.66	4.62	
1,558.00	13.50	177.20	1,527.00	-263.11	34.35	81.58	2.61	-0.89	10.22	
1,649.00	13.40	180.60	1,615.50	-284.27	34.76	85.82	0.88	-0.11	3.74	
1,740.00	13.30	182.20	1,704.05	-305.27	34.25	89.14	0.42	-0.11	1.76	
1,830.00	15.50	177.00	1,791.22	-327.63	34.48	93.43	2.83	2.44	-5.78	
1,922.00	16.00	178.00	1,879.76	-352.58	35.57	99.03	0.62	0.54	1.09	
2,014.00	15.70	173.10	1,968.27	-377.61	37.51	105.48	1.49	-0.33	-5.33	
2,104.00	13.20	169.90	2,055.42	-399.82	40.77	112.72	2.92	-2.78	-3.56	
2,195.00	13.20	170.80	2,144.01	-420.30	44.26	119.87	0.23	0.00	0.99	
2,283.00	13.60	171.80	2,229.62	-440.46	47.34	126.56	0.53	0.45	1.14	
2,374.00	13.20	170.80	2,318.14	-461.31	50.52	133.48	0.51	-0.44	-1.10	
2,462.00	12.90	168.70	2,403.87	-480.86	54.06	140.51	0.64	-0.34	-2.39	
2,554.00	13.70	171.70	2,493.40	-501.71	57.64	147.82	1.15	0.87	3.26	
2,644.00	14.20	174.40	2,580.75	-523.24	60.26	154.31	0.91	0.56	3.00	
2,736.00	14.30	174.80	2,669.91	-545.79	62.39	160.50	0.15	0.11	0.43	
2,827.00	14.20	174.50	2,758.11	-568.09	64.48	166.60	0.14	-0.11	-0.33	
2,920.00	14.30	175.70	2,848.25	-590.90	66.43	172.67	0.34	0.11	1.29	
3,013.00	14.10	178.30	2,938.41	-613.67	67.63	177.98	0.72	-0.22	2.80	
3,104.00	14.20	180.50	3,026.65	-635.91	67.86	182.25	0.60	0.11	2.42	
3,197.00	14.90	179.70	3,116.67	-659.28	67.82	186.46	0.78	0.75	-0.86	
3,290.00	14.70	178.50	3,206.58	-683.03	68.19	191.14	0.39	-0.22	-1.29	
3,380.00	14.60	175.90	3,293.66	-705.76	69.30	196.36	0.74	-0.11	-2.89	
3,488.00	14.40	176.50	3,398.22	-732.74	71.10	203.02	0.23	-0.19	0.56	
3,603.00	13.76	175.06	3,509.76	-760.64	73.15	210.11	0.63	-0.56	-1.25	
3,698.00	12.87	171.95	3,602.21	-782.37	75.60	216.47	1.20	-0.94	-3.27	
3,887.00	12.59	173.17	3,786.56	-823.67	81.00	229.28	0.21	-0.15	0.65	
3,982.00	15.31	178.01	3,878.76	-846.49	82.67	235.06	3.11	2.86	5.09	
4,076.00	13.41	175.09	3,969.82	-869.75	84.03	240.63	2.16	-2.02	-3.11	
4,266.00	12.74	172.54	4,154.89	-912.48	88.64	252.92	0.47	-0.35	-1.34	
4,360.00	14.77	178.88	4,246.20	-934.74	90.22	258.52	2.69	2.16	6.74	
4,455.00	12.38	175.30	4,338.54	-957.00	91.29	263.62	2.67	-2.52	-3.77	
4,550.00	14.44	178.18	4,430.94	-978.99	92.50	268.80	2.28	2.17	3.03	
4,645.00	14.44	175.59	4,522.94	-1,002.64	93.79	274.36	0.68	0.00	-2.73	
4,741.00	14.16	173.03	4,615.97	-1,026.23	96.13	280.96	0.72	-0.29	-2.67	
4,835.00	14.46	174.12	4,707.05	-1,049.31	98.73	287.70	0.43	0.32	1.16	
4,930.00	16.05	175.67	4,798.70	-1,074.21	100.94	294.40	1.73	1.67	1.63	
5,025.00	14.46	174.22	4,890.35	-1,099.11	103.12	301.07	1.72	-1.67	-1.53	
5,120.00	15.48	171.11	4,982.13	-1,123.43	106.28	308.59	1.37	1.07	-3.27	

Survey Report

Company:	CRESTONE PEAK RESOURCES	Local Co-ordinate Reference:	Well PROSPER FARMS 4-65 11-12 4BH
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5707.00usft
Site:	SEC 10-T4S-R65W	MD Reference:	KB 25' @ 5707.00usft
Well:	PROSPER FARMS 4-65 11-12 4BH	North Reference:	True
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEY	Database:	EDT_32Bit_ODBC

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
5,216.00	13.86	164.66	5,075.00	-1,147.18	111.30	317.84	2.39	-1.69	-6.72	
5,310.00	14.51	171.10	5,166.14	-1,169.68	116.10	326.65	1.81	0.69	6.85	
5,406.00	15.85	171.40	5,258.79	-1,194.52	119.92	334.92	1.40	1.40	0.31	
5,501.00	14.80	170.01	5,350.41	-1,219.30	123.96	343.40	1.17	-1.11	-1.46	
5,691.00	13.58	167.48	5,534.61	-1,264.98	133.01	360.59	0.72	-0.64	-1.33	
5,786.00	15.13	178.25	5,626.66	-1,288.26	135.81	367.57	3.24	1.63	11.34	
6,072.00	10.72	175.94	5,905.35	-1,352.13	138.83	382.15	1.55	-1.54	-0.81	
6,167.00	12.66	174.50	5,998.37	-1,371.31	140.46	387.23	2.06	2.04	-1.52	
6,262.00	13.09	174.19	6,090.98	-1,392.38	142.54	393.11	0.46	0.45	-0.33	
6,357.00	14.05	179.05	6,183.33	-1,414.61	143.82	398.41	1.57	1.01	5.12	
6,452.00	16.16	179.39	6,275.05	-1,439.36	144.15	403.23	2.22	2.22	0.36	
6,547.00	13.60	179.44	6,366.85	-1,463.76	144.40	407.91	2.69	-2.69	0.05	
6,641.00	14.60	175.85	6,458.02	-1,486.62	145.37	413.01	1.41	1.06	-3.82	
6,736.00	12.46	171.69	6,550.38	-1,508.71	147.72	419.33	2.47	-2.25	-4.38	
6,831.00	13.39	172.52	6,642.97	-1,529.76	150.63	426.02	1.00	0.98	0.87	
6,926.00	14.37	170.88	6,735.20	-1,552.30	153.93	433.36	1.11	1.03	-1.73	
7,021.00	14.85	173.09	6,827.13	-1,576.03	157.27	440.95	0.77	0.51	2.33	
7,116.00	12.54	170.50	6,919.42	-1,598.29	160.43	448.11	2.52	-2.43	-2.73	
7,211.00	14.25	172.57	7,011.83	-1,620.06	163.65	455.22	1.87	1.80	2.18	
7,307.00	13.95	174.43	7,104.94	-1,643.29	166.30	462.05	0.57	-0.31	1.94	
7,402.00	15.38	177.57	7,196.85	-1,667.28	167.94	468.03	1.72	1.51	3.31	
7,498.00	13.09	176.07	7,289.89	-1,690.84	169.23	473.57	2.42	-2.39	-1.56	
7,550.00	14.49	161.54	7,340.41	-1,702.89	171.69	478.18	7.17	2.70	-27.95	
KOP - 7550' MD, 7340' TVD										
7,593.00	16.21	151.84	7,381.88	-1,713.29	176.23	484.54	7.17	3.99	-22.55	
7,688.00	24.14	133.12	7,471.07	-1,738.33	196.72	509.23	10.67	8.35	-19.71	
7,782.00	32.48	122.91	7,553.80	-1,765.24	232.03	548.84	10.23	8.87	-10.86	
7,877.00	38.58	113.13	7,631.14	-1,790.78	280.77	601.41	8.76	6.42	-10.29	
7,971.00	45.76	104.33	7,700.82	-1,810.67	340.47	663.73	9.88	7.64	-9.36	
8,066.00	52.17	96.86	7,763.21	-1,823.60	410.82	735.26	8.98	6.75	-7.86	
8,162.00	59.02	92.93	7,817.44	-1,830.24	489.68	814.01	7.89	7.14	-4.09	
8,257.00	66.57	93.34	7,860.84	-1,834.87	573.98	897.75	7.96	7.95	0.43	
8,353.00	75.56	91.98	7,891.96	-1,839.05	664.59	987.62	9.46	9.36	-1.42	
8,442.00	88.42	92.44	7,904.33	-1,842.45	752.47	1,074.65	14.46	14.45	0.52	
HZ LANDING PNT - 8442' MD, 7904' TVD										
8,442.10	88.44	92.44	7,904.34	-1,842.45	752.57	1,074.75	14.46	14.45	0.50	
-330' X-OVER PNT - 8442.10' MD, 411' FSL, 330' FWL SEC 11										
8,448.00	89.29	92.47	7,904.45	-1,842.70	758.47	1,080.59	14.46	14.45	0.50	
8,543.00	90.22	92.38	7,904.86	-1,846.72	853.38	1,174.66	0.98	0.98	-0.09	
8,638.00	92.83	92.23	7,902.33	-1,850.54	948.26	1,268.65	2.75	2.75	-0.16	
8,733.00	92.63	91.36	7,897.81	-1,853.51	1,043.11	1,362.46	0.94	-0.21	-0.92	
8,828.00	89.03	90.35	7,896.43	-1,854.93	1,138.07	1,456.10	3.94	-3.79	-1.06	
8,921.00	88.44	90.69	7,898.48	-1,855.77	1,231.04	1,547.68	0.73	-0.63	0.37	
9,016.00	89.31	90.61	7,900.35	-1,856.85	1,326.02	1,641.27	0.92	0.92	-0.08	

Survey Report

Company:	CRESTONE PEAK RESOURCES	Local Co-ordinate Reference:	Well PROSPER FARMS 4-65 11-12 4BH
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5707.00usft
Site:	SEC 10-T4S-R65W	MD Reference:	KB 25' @ 5707.00usft
Well:	PROSPER FARMS 4-65 11-12 4BH	North Reference:	True
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEY	Database:	EDT_32Bit_ODBC

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
9,111.00	90.41	90.25	7,900.58	-1,857.57	1,421.01	1,734.81	1.22	1.16	-0.38	
9,206.00	91.78	89.23	7,898.76	-1,857.13	1,515.99	1,828.13	1.80	1.44	-1.07	
9,302.00	89.94	91.02	7,897.32	-1,857.34	1,611.97	1,922.55	2.67	-1.92	1.86	
9,490.00	88.95	91.08	7,899.14	-1,860.79	1,799.93	2,108.01	0.53	-0.53	0.03	
9,585.00	87.84	90.68	7,901.81	-1,862.25	1,894.88	2,201.65	1.24	-1.17	-0.42	
9,680.00	89.01	91.75	7,904.42	-1,864.26	1,989.82	2,295.37	1.67	1.23	1.13	
9,775.00	90.82	90.69	7,904.56	-1,866.28	2,084.79	2,389.13	2.21	1.91	-1.12	
9,965.00	91.28	89.66	7,901.08	-1,866.86	2,274.76	2,576.04	0.59	0.24	-0.54	
10,059.00	92.26	88.78	7,898.17	-1,865.59	2,368.70	2,668.19	1.40	1.04	-0.94	
10,154.00	91.82	89.41	7,894.79	-1,864.09	2,463.63	2,761.26	0.81	-0.46	0.66	
10,249.00	88.62	88.13	7,894.43	-1,862.05	2,558.59	2,854.28	3.63	-3.37	-1.35	
10,343.00	89.00	91.21	7,896.38	-1,861.51	2,652.56	2,946.58	3.30	0.40	3.28	
10,436.00	89.18	90.75	7,897.86	-1,863.10	2,745.53	3,038.30	0.53	0.19	-0.49	
10,531.00	89.63	90.75	7,898.84	-1,864.34	2,840.52	3,131.93	0.47	0.47	0.00	
10,627.00	89.90	90.51	7,899.24	-1,865.40	2,936.51	3,226.52	0.38	0.28	-0.25	
10,846.00	91.90	90.01	7,895.80	-1,866.39	3,155.47	3,442.01	0.94	0.91	-0.23	
10,942.00	91.25	91.81	7,893.16	-1,867.91	3,251.42	3,536.64	1.99	-0.68	1.87	
11,036.00	91.77	91.07	7,890.68	-1,870.28	3,345.35	3,629.45	0.96	0.55	-0.79	
11,132.00	89.93	90.42	7,889.26	-1,871.52	3,441.33	3,724.05	2.03	-1.92	-0.68	
11,226.00	90.30	90.50	7,889.07	-1,872.28	3,535.33	3,816.62	0.40	0.39	0.09	
11,321.00	91.33	90.77	7,887.72	-1,873.33	3,630.31	3,910.22	1.12	1.08	0.28	
11,415.00	92.46	90.13	7,884.61	-1,874.07	3,724.25	4,002.73	1.38	1.20	-0.68	
11,510.00	91.39	91.74	7,881.42	-1,875.62	3,819.18	4,096.36	2.03	-1.13	1.69	
11,605.00	89.51	91.93	7,880.67	-1,878.66	3,914.13	4,190.28	1.99	-1.98	0.20	
11,699.00	89.38	91.66	7,881.58	-1,881.60	4,008.08	4,283.20	0.32	-0.14	-0.29	
11,794.00	91.20	91.62	7,881.10	-1,884.32	4,103.03	4,377.07	1.92	1.92	-0.04	
11,888.00	90.59	91.18	7,879.63	-1,886.62	4,196.99	4,469.88	0.80	-0.65	-0.47	
11,983.00	90.62	90.65	7,878.63	-1,888.14	4,291.97	4,563.56	0.56	0.03	-0.56	
12,174.00	92.02	88.73	7,874.23	-1,887.10	4,482.91	4,751.13	1.24	0.73	-1.01	
12,268.00	90.12	89.85	7,872.47	-1,885.94	4,576.88	4,843.32	2.35	-2.02	1.19	
12,362.00	91.60	90.10	7,871.06	-1,885.90	4,670.86	4,935.74	1.60	1.57	0.27	
12,457.00	90.76	91.91	7,869.11	-1,887.56	4,765.83	5,029.42	2.10	-0.88	1.91	
12,552.00	89.84	94.15	7,868.61	-1,892.59	4,860.68	5,123.62	2.55	-0.97	2.36	
12,646.00	91.12	94.36	7,867.82	-1,899.56	4,954.42	5,217.06	1.38	1.36	0.22	
12,742.00	88.95	92.55	7,867.76	-1,905.34	5,050.24	5,312.33	2.94	-2.26	-1.89	
12,837.00	88.63	91.62	7,869.77	-1,908.80	5,145.15	5,406.29	1.04	-0.34	-0.98	
12,932.00	89.41	90.55	7,871.39	-1,910.60	5,240.12	5,500.01	1.39	0.82	-1.13	
13,027.00	89.10	89.72	7,872.63	-1,910.82	5,335.11	5,593.46	0.93	-0.33	-0.87	
13,122.00	89.19	89.57	7,874.05	-1,910.23	5,430.10	5,686.76	0.18	0.09	-0.16	
13,218.00	89.90	91.33	7,874.81	-1,910.99	5,526.09	5,781.29	1.98	0.74	1.83	
13,313.00	89.90	90.98	7,874.97	-1,912.90	5,621.07	5,875.04	0.37	0.00	-0.37	
13,408.00	89.49	90.50	7,875.48	-1,914.13	5,716.06	5,968.67	0.66	-0.43	-0.51	
13,503.00	90.13	89.68	7,875.79	-1,914.28	5,811.05	6,062.11	1.09	0.67	-0.86	

Survey Report

Company:	CRESTONE PEAK RESOURCES	Local Co-ordinate Reference:	Well PROSPER FARMS 4-65 11-12 4BH
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5707.00usft
Site:	SEC 10-T4S-R65W	MD Reference:	KB 25' @ 5707.00usft
Well:	PROSPER FARMS 4-65 11-12 4BH	North Reference:	True
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEY	Database:	EDT_32Bit_ODBC

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
13,597.00	90.02	88.98	7,875.67	-1,913.18	5,905.05	6,154.34	0.75	-0.12	-0.74	
13,693.00	92.74	89.14	7,873.36	-1,911.61	6,001.00	6,248.41	2.84	2.83	0.17	
13,788.00	92.33	88.00	7,869.16	-1,909.24	6,095.87	6,341.28	1.27	-0.43	-1.20	
13,883.00	92.42	91.29	7,865.22	-1,908.65	6,190.78	6,434.49	3.46	0.09	3.46	
13,978.00	92.79	90.26	7,860.90	-1,909.93	6,285.67	6,528.04	1.15	0.39	-1.08	
14,073.00	93.26	89.83	7,855.89	-1,910.01	6,380.54	6,621.34	0.67	0.49	-0.45	
14,168.00	91.72	91.87	7,851.76	-1,911.42	6,475.43	6,714.91	2.69	-1.62	2.15	
14,263.00	91.56	90.68	7,849.04	-1,913.53	6,570.36	6,808.65	1.26	-0.17	-1.25	
14,356.00	89.88	92.06	7,847.87	-1,915.75	6,663.32	6,900.47	2.34	-1.81	1.48	
14,452.00	89.84	91.47	7,848.11	-1,918.71	6,759.28	6,995.36	0.62	-0.04	-0.61	
14,546.00	89.71	90.64	7,848.48	-1,920.44	6,853.26	7,088.10	0.89	-0.14	-0.88	
14,641.00	91.85	91.45	7,847.18	-1,922.17	6,948.23	7,181.80	2.41	2.25	0.85	
14,736.00	91.09	91.40	7,844.75	-1,924.53	7,043.17	7,275.59	0.80	-0.80	-0.05	
14,831.00	89.94	90.92	7,843.89	-1,926.46	7,138.14	7,369.33	1.31	-1.21	-0.51	
14,926.00	90.37	90.26	7,843.64	-1,927.43	7,233.14	7,462.92	0.83	0.45	-0.69	
15,021.00	91.32	89.49	7,842.24	-1,927.23	7,328.12	7,556.29	1.29	1.00	-0.81	
15,116.00	90.22	89.95	7,840.96	-1,926.76	7,423.11	7,649.62	1.26	-1.16	0.48	
15,212.00	90.91	92.27	7,840.01	-1,928.62	7,519.08	7,744.33	2.52	0.72	2.42	
15,307.00	90.95	92.81	7,838.47	-1,932.83	7,613.98	7,838.41	0.57	0.04	0.57	
15,402.00	91.39	91.90	7,836.53	-1,936.74	7,708.88	7,932.44	1.06	0.46	-0.96	
15,497.00	88.97	90.96	7,836.23	-1,939.11	7,803.84	8,026.25	2.73	-2.55	-0.99	
15,591.00	88.70	90.21	7,838.14	-1,940.07	7,897.81	8,118.84	0.85	-0.29	-0.80	
15,686.00	88.34	87.49	7,840.60	-1,938.16	7,992.75	8,211.85	2.89	-0.38	-2.86	
15,782.00	87.95	86.46	7,843.70	-1,933.10	8,088.57	8,305.15	1.15	-0.41	-1.07	
15,876.00	89.84	89.04	7,845.52	-1,929.41	8,182.46	8,396.82	3.40	2.01	2.74	
15,971.00	90.57	91.38	7,845.18	-1,929.76	8,277.46	8,490.29	2.58	0.77	2.46	
16,066.00	91.56	90.57	7,843.41	-1,931.37	8,372.42	8,583.97	1.35	1.04	-0.85	
16,161.00	91.27	91.62	7,841.07	-1,933.19	8,467.38	8,677.67	1.15	-0.31	1.11	
16,256.00	90.11	92.84	7,839.92	-1,936.88	8,562.29	8,771.68	1.77	-1.22	1.28	
16,352.00	90.21	92.13	7,839.65	-1,941.05	8,658.20	8,866.75	0.75	0.10	-0.74	
16,447.00	90.17	91.12	7,839.34	-1,943.74	8,753.16	8,960.62	1.06	-0.04	-1.06	
16,541.00	90.66	91.02	7,838.66	-1,945.50	8,847.14	9,053.36	0.53	0.52	-0.11	
16,636.00	90.48	90.24	7,837.71	-1,946.54	8,942.13	9,146.96	0.84	-0.19	-0.82	
16,732.00	90.99	89.78	7,836.48	-1,946.56	9,038.12	9,241.35	0.72	0.53	-0.48	
16,826.00	89.78	91.90	7,835.85	-1,947.93	9,132.10	9,334.02	2.60	-1.29	2.26	
16,920.00	89.81	92.19	7,836.19	-1,951.29	9,226.04	9,427.01	0.31	0.03	0.31	
17,015.00	89.05	91.42	7,837.13	-1,954.28	9,320.99	9,520.92	1.14	-0.80	-0.81	
17,111.00	89.44	93.06	7,838.40	-1,958.03	9,416.91	9,615.92	1.76	0.41	1.71	
17,205.00	91.37	91.69	7,837.73	-1,961.93	9,510.82	9,708.97	2.52	2.05	-1.46	
17,300.00	91.26	90.50	7,835.55	-1,963.74	9,605.77	9,802.68	1.26	-0.12	-1.25	
17,395.00	90.42	88.57	7,834.16	-1,962.97	9,700.75	9,895.94	2.22	-0.88	-2.03	
17,491.00	90.91	90.88	7,833.04	-1,962.51	9,796.74	9,990.24	2.46	0.51	2.41	
17,585.00	92.36	92.49	7,830.36	-1,965.27	9,890.65	10,083.10	2.30	1.54	1.71	

Survey Report

Company:	CRESTONE PEAK RESOURCES	Local Co-ordinate Reference:	Well PROSPER FARMS 4-65 11-12 4BH
Project:	ARAPAHOE COUNTY	TVD Reference:	KB 25' @ 5707.00usft
Site:	SEC 10-T4S-R65W	MD Reference:	KB 25' @ 5707.00usft
Well:	PROSPER FARMS 4-65 11-12 4BH	North Reference:	True
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEY	Database:	EDT_32Bit_ODBC

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
17,680.00	91.98	91.71	7,826.77	-1,968.75	9,985.52	10,177.02	0.91	-0.40	-0.82	
17,775.00	92.38	91.61	7,823.15	-1,971.50	10,080.41	10,270.83	0.43	0.42	-0.11	
17,870.00	92.70	91.44	7,818.94	-1,974.03	10,175.29	10,364.58	0.38	0.34	-0.18	
17,965.00	91.76	90.81	7,815.24	-1,975.89	10,270.19	10,458.25	1.19	-0.99	-0.66	
18,061.00	91.90	89.70	7,812.18	-1,976.32	10,366.14	10,552.68	1.16	0.15	-1.16	
18,156.00	92.83	89.15	7,808.26	-1,975.37	10,461.05	10,645.84	1.14	0.98	-0.58	
18,251.00	93.61	88.37	7,802.92	-1,973.31	10,555.88	10,738.72	1.16	0.82	-0.82	
18,297.00	93.82	88.29	7,799.94	-1,971.98	10,601.77	10,783.60	0.49	0.46	-0.17	
LAST SURVEY - 18297' MD, 7800' TVD										
18,360.00	93.82	88.29	7,795.74	-1,970.10	10,664.60	10,845.04	0.00	0.00	0.00	
EXTRAPOLATION TO TD - 18360' MD, 423' FSL, 342' FEL SEC 12										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
PBHL-PF 4-65 11-12 4B - hit/miss target - Shape	0.00	0.00	7,820.00	-1,993.22	10,676.73	1,685,414.30	3,251,945.76	39.711855°N	104.604449°W	
- actual wellpath misses target center by 35.64usft at 18360.00usft MD (7795.74 TVD, -1970.10 N, 10664.60 E)										
- Point										
LP-PF 4-65 11-12 4BH - hit/miss target - Shape	0.00	0.00	7,905.00	-1,853.38	752.57	1,685,460.45	3,242,020.78	39.712245°N	104.639724°W	
- actual wellpath misses target center by 10.93usft at 8442.58usft MD (7904.35 TVD, -1842.47 N, 753.05 E)										
- Point										

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
7,550.00	7,340.41	-1,702.89	171.69	KOP - 7550' MD, 7340' TVD	
8,442.00	7,904.33	-1,842.45	752.47	HZ LANDING PNT - 8442' MD, 7904' TVD	
8,442.10	7,904.34	-1,842.45	752.57	~330' X-OVER PNT - 8442.10' MD, 411' FSL, 330' FWL SEC 11	
18,297.00	7,799.94	-1,971.98	10,601.77	LAST SURVEY - 18297' MD, 7800' TVD	
18,360.00	7,795.74	-1,970.10	10,664.60	EXTRAPOLATION TO TD - 18360' MD, 423' FSL, 342' FEL SEC 12	

Checked By: _____ Approved By: _____ Date: _____