

Results of Directional Survey

API number:	30-025-40572		
OGRID:		Operator:	VPR OPERATING, LLC
		Property:	HARRIER 35 FEDERAL COM # 1H

surface	ULSTR:	G	35	T	25S	R	32E
				1980	FNL	1500	FEL

BH Loc	ULSTR:	H	34	T	25S	R	32E
16394	MD	11920.1	TVD	1879	FNL	846	FEL

Top Perf/OH	ULSTR:	G	35	T	25S	R	32E
12500	MD	12058.8	TVD	1994	FNL	2238	FEL

Bot Perf/OH	ULSTR:	H	34	T	25S	R	32E
16238	MD	11926.2	TVD	1883	FNL	700	FEL

	MD	N/S	E/W	VD
	12479	-13.85	-717.22	12058.3
TOP PERFS/OH	12500	-14.47	-738.21	12058.78
	12511	-14.80	-749.20	12059.03
	13216	96.77	-4448.10	11927.64
BOT PERFS/OH	16238	97.44	-4479.95	11926.21
	16248	97.44	-4480.06	11926.21

NEXT TO LAST	16323	99.05	-4554.97	11922.95
LAST READING	16375	100.50	-4606.91	11920.87
TD	16394	101.03	-4625.89	11920.11

Surface Location	1980	FN	1500	FE
Projected BHL	1879	FN	6126	FE
Location of				
Top Perfs/OH	1994	FN	2238	FE
Bottom Perfs/OH	1883	FN	5980	FE

SUMMARY of Subsurface Locations

Surface Location	G-35-25S-32E	1980	FN	1500	FE	Vert. Depth
Top Perfs/OH	G-35-25S-32E	1994	FN	2238	FE	12058.78
Bottom Perfs/OH	G-34-25S-32E	1883	FN	5980	FE	11926.21
Projected TD	G-34-25S-32E	1879	FN	6126	FE	11920.11



Victory Park Resources

VPR Operating, LLC

Lea County, NM

Harrier "35" Fed. Com.

1H

Harrier 35 No.1H (ST01)

Design: Harrier 35 No.1H (ST01) - Final

ProDirectional X&Y Survey Report

19 September, 2012

SUR: G-35-25s-32e, 1980/N & 1500/E
BHL: G-34-25s-32e, 1879/N & 6126/E
API # 30-025-40572



VPR

Victory Park Resources

VPR Operating, LLC
Harrier "35" Fed. Com.
Lea County, NM
Plan No.7 (ST01)
PPD #12 RKB:18' + GL: 3363'



Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level

RKB Elevation: WELL @ 3381.00usft (PPD #12 RKB:18' + GL: 3363')

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	396726.67	755434.67	32° 5' 19.661 N	103° 38' 31.240 W	

Section Details

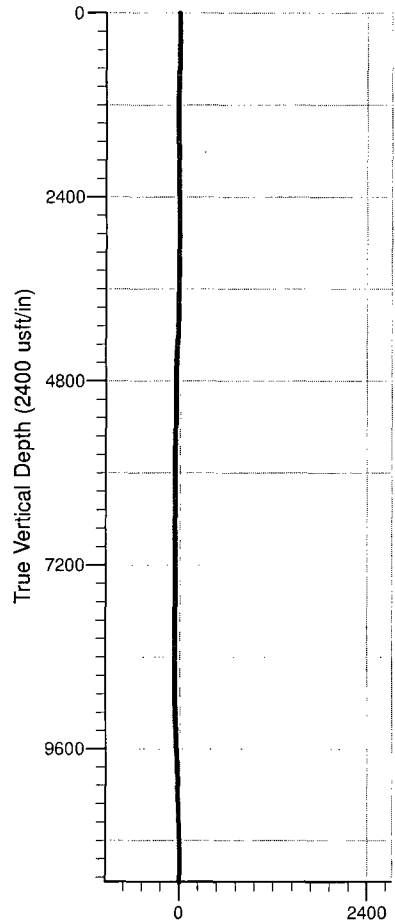
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	14918.00	90.90	270.30	11963.16	72.08	-3151.06	0.00	0.00	3150.43	
2	14970.00	90.90	270.30	11962.34	72.35	-3203.06	0.00	0.00	3202.42	
3	15039.14	92.25	270.00	11960.44	72.53	-3272.17	2.00	-12.57	3271.53	
4	16557.64	92.25	270.00	11900.83	72.50	-4789.50	0.00	0.00	4788.82	
5	16570.12	92.00	270.00	11900.37	72.50	-4801.97	2.00	179.71	4801.29	
6	17870.12	92.00	270.00	11855.00	72.50	-6101.18	0.00	0.00	6100.46	ST01 PBHL

T G M
Azimuths to Grid North
True North: -0.37°
Magnetic North: 7.09°
Magnetic Field
Strength: 48407.0snT
Dip Angle: 60.02°
Date: 8/28/2012
Model: IGRF2010

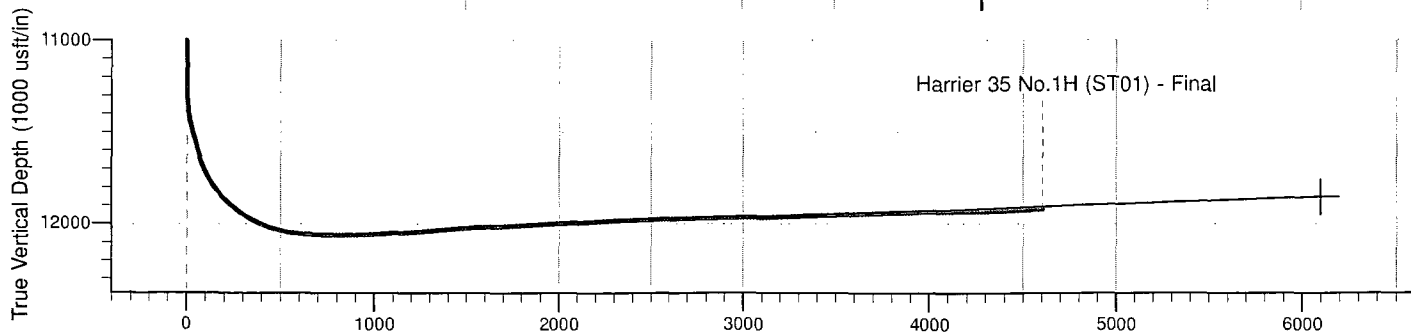
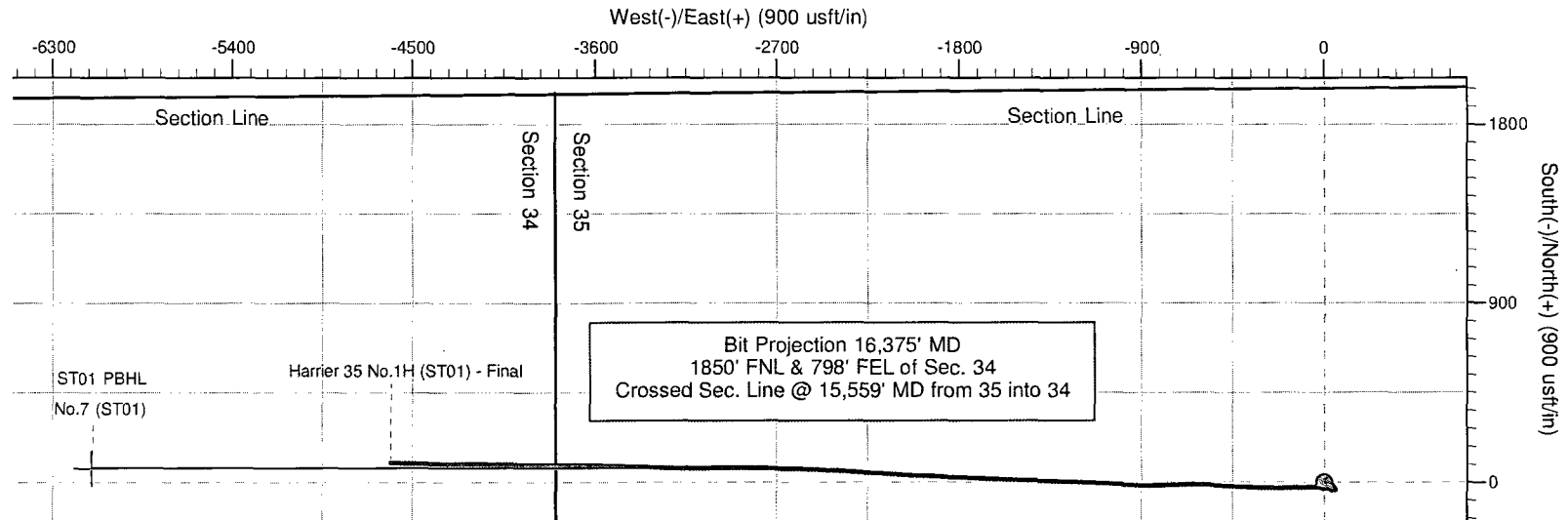
Azimuth Corrections

Total Magnetic Corr. (M to G): 7.09°

Declination (M to T): 7.46° East



Vertical Section at 269.57° (2400 usft/in)



Vertical Section at 269.57° (1000 usft/in)

Note: All lease lines and hand lines are estimates only and are subject to customer approval.

Plan: No.7 (ST01) (1H/Harrier 35 No.1H (ST01))

Created By: JRA Date: 14:25, September 19 2012



Victory Park Resources

Professional Directional ProDirectional X&Y Survey Report



Company:	VPR Operating, LLC	Local Co-ordinate Reference:	Well 1H
Project:	Lea County, NM	TVD Reference:	WELL @ 3381.00usft (PPD #12 RKB 18' + GL 3363')
Site:	Harrier, 35" Fed. Com.	MD Reference:	WELL @ 3381.00usft (PPD #12 RKB 18' + GL 3363')
Well:	1H	North Reference:	Grid
Wellbore:	Harrier 35 No 1H (ST01)	Survey Calculation Method:	Minimum Curvature
Design:	Harrier 35 No 1H (ST01) - Final	Database:	Well Planner

Project		Lea County, NM	
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site						Harrier, 35" Fed. Com.										
Site Position:						Northing:		396,726.67		usft		Latitude:		32° 5' 19.661 N		
From:		Map					Easting:		755,434.67		usft		Longitude:		103° 38' 31.240 W	
Position Uncertainty:			0.00 usft			Slot Radius:		13-3/16		"		Grid Convergence:		0.37 °		

Well	1H					
Well Position	+N/-S	0.00 usft	Northing:	396,726.67 usft	Latitude:	32° 5' 19.661 N
	+E/-W	0.00 usft	Easting:	755,434.67 usft	Longitude:	103° 38' 31.240 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,363.00 usft

Wellbore	Harrier 35 No.1H (ST01)				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	8/28/2012	7.46	60.02	48,407

Design					Harrier 35 No.1H (ST01) - Final						
Audit Notes:											
Version:		1.0		Phase:		ACTUAL		Tie On Depth:		12,605.00	
Vertical Section:		Depth From (TVD)		+N/-S		+E/-W		Direction			
		(usft)		(usft)		(usft)		(°)			
		0.00		0.00		0.00		269.57			



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Well:	1H	North Reference:	Grid
Wellbore:	Harrier 35 No. 1H (ST01)	Survey Calculation Method:	Minimum Curvature
Design:	Harrier 35 No. 1H (ST01) - Final	Database:	Well Planner1

Survey Program		Date:			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.00	4,794.30	Gyrodata (Harrier 35 #1H)	NS-GYRO-MS	North sensing gyrocompassing m/s	
4,800.00	11,250.00	Schlumberger (Harrier 35 #1H)	MWD	MWD - Standard	
11,286.00	12,605.00	ProDirectional (Harrier 35 #1H)	MWD	MWD - Standard	
12,637.00	16,375.00	ProDirectional (Harrier 35 No.1H (ST01))	MWD	MWD - Standard	

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	Closure Distance (usft)	Closure Azimuth (°)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	396,726.67	755,434.67	0.00	0.00
100.00	0.19	36.64	100.00	-0.10	0.13	0.10	396,726.80	755,434.77	0.17	36.64
200.00	0.46	15.10	200.00	-0.31	0.65	0.30	396,727.32	755,434.97	0.72	24.83
300.00	1.05	23.32	299.99	-0.78	1.88	0.77	396,728.55	755,435.44	2.03	22.24
400.00	1.13	26.48	399.97	-1.60	3.61	1.57	396,730.28	755,436.24	3.93	23.55
500.00	1.25	24.59	499.95	-2.51	5.48	2.47	396,732.15	755,437.13	6.01	24.22
600.00	1.46	27.97	599.92	-3.57	7.60	3.52	396,734.27	755,438.19	8.37	24.84
700.00	1.63	41.45	699.89	-5.13	9.79	5.06	396,736.46	755,439.72	11.02	27.32
800.00	1.94	41.80	799.84	-7.22	12.12	7.13	396,738.79	755,441.79	14.06	30.46
900.00	1.74	46.25	899.79	-9.46	14.43	9.35	396,741.10	755,444.02	17.19	32.95
1,000.00	1.41	51.32	999.75	-11.53	16.25	11.41	396,742.92	755,446.08	19.85	35.07
1,100.00	0.88	49.35	1,099.73	-13.08	17.52	12.95	396,744.19	755,447.62	21.78	36.48
1,200.00	0.65	43.02	1,199.72	-14.06	18.43	13.92	396,745.10	755,448.59	23.10	37.06
1,237.50	0.91	39.99	1,237.21	-14.40	18.82	14.26	396,745.48	755,448.92	23.61	37.15
1,333.60	0.64	24.91	1,333.31	-15.12	19.89	14.97	396,746.56	755,449.64	24.89	36.98
1,429.80	0.38	7.40	1,429.50	-15.40	20.69	15.24	396,747.36	755,449.91	25.70	36.38
1,525.90	0.24	301.19	1,525.60	-15.27	21.11	15.11	396,747.78	755,449.78	25.96	35.59
1,622.00	0.48	260.41	1,621.70	-14.70	21.15	14.54	396,747.82	755,449.21	25.66	34.51
1,718.20	0.66	229.88	1,717.89	-13.87	20.72	13.72	396,747.39	755,448.39	24.85	33.51
1,814.30	0.97	229.80	1,813.98	-12.82	19.84	12.68	396,746.51	755,447.34	23.54	32.57



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Project:	Lea County, NM	TVD Reference:	WELL @ 3381.00usft (PPD #12 RKB:18' + GL: 3363)
Site:	Harrier 35" Fed. Com.	MD Reference:	WELL @ 3381.00usft (PPD #12 RKB:18' + GL: 3363)
Well:	1H	North Reference:	Grid
Wellbore:	Harrier 35" No.1H (ST01)	Survey Calculation Method:	Minimum Curvature
Design:	Harrier 35" No.1H (ST01) - Final	Database:	Well_Planner1

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	Closure Distance (usft)	Closure Azimuth (°)	
1,910.40	1.01	228.42	1,910.07	-11.56	18.75	11.42	396,745.42	755,446.09	21.96	31.34	
2,006.50	1.07	227.68	2,006.15	-10.25	17.59	10.12	396,744.26	755,444.79	20.29	29.92	
2,102.70	1.03	226.75	2,102.34	-8.95	16.39	8.83	396,743.06	755,443.50	18.62	28.31	
2,198.80	1.14	206.63	2,198.42	-7.88	14.95	7.77	396,741.61	755,442.44	16.84	27.48	
2,294.90	1.16	204.86	2,294.50	-7.03	13.21	6.93	396,739.88	755,441.60	14.92	27.70	
2,391.10	1.09	195.22	2,390.68	-6.37	11.44	6.28	396,738.11	755,440.95	13.05	28.78	
2,487.20	0.92	188.62	2,486.77	-6.00	9.80	5.93	396,736.47	755,440.60	11.45	31.18	
2,583.30	0.67	178.64	2,582.86	-5.89	8.47	5.83	396,735.14	755,440.49	10.28	34.52	
2,679.40	1.19	179.32	2,678.95	-5.90	6.91	5.85	396,733.58	755,440.52	9.06	40.25	
2,775.60	1.47	185.31	2,775.12	-5.78	4.69	5.75	396,731.35	755,440.42	7.42	50.82	
2,871.70	1.57	198.89	2,871.19	-5.23	2.21	5.21	396,728.88	755,439.88	5.66	66.99	
2,967.80	1.44	199.21	2,967.25	-4.38	-0.17	4.39	396,726.50	755,439.05	4.39	92.27	
3,064.00	1.27	205.64	3,063.43	-3.51	-2.28	3.53	396,724.39	755,438.19	4.20	122.84	
3,160.10	0.66	199.28	3,159.51	-2.85	-3.76	2.88	396,722.91	755,437.55	4.74	142.51	
3,256.20	0.48	149.88	3,255.61	-2.87	-4.63	2.90	396,722.04	755,437.57	5.46	147.91	
3,352.40	1.15	96.97	3,351.80	-4.02	-5.10	4.06	396,721.57	755,438.73	6.52	141.43	
3,448.50	1.35	90.14	3,447.88	-6.11	-5.21	6.15	396,721.45	755,440.82	8.07	130.29	
3,544.60	1.40	88.84	3,543.95	-8.42	-5.19	8.46	396,721.48	755,443.13	9.93	121.55	
3,640.80	1.35	79.49	3,640.12	-10.71	-4.96	10.75	396,721.71	755,445.42	11.84	114.79	
3,736.90	1.37	72.57	3,736.19	-12.92	-4.41	12.96	396,722.26	755,447.62	13.69	108.81	
3,833.00	1.17	73.39	3,832.27	-14.96	-3.79	14.99	396,722.88	755,449.66	15.46	104.18	
3,929.10	0.74	78.02	3,928.36	-16.51	-3.38	16.54	396,723.29	755,451.21	16.88	101.55	
4,025.30	0.72	82.11	4,024.55	-17.72	-3.17	17.75	396,723.50	755,452.41	18.03	100.12	
4,121.40	1.06	97.40	4,120.64	-19.20	-3.20	19.23	396,723.47	755,453.89	19.49	99.45	
4,217.50	2.15	97.90	4,216.70	-21.87	-3.56	21.89	396,723.11	755,456.56	22.18	99.24	
4,313.70	2.37	105.19	4,312.82	-25.57	-4.33	25.60	396,722.34	755,460.27	25.96	99.60	
4,409.80	2.66	114.83	4,408.83	-29.50	-5.79	29.54	396,720.88	755,464.21	30.10	101.08	



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Well:	1H	North Reference:	Grid
Wellbore:	Harrier 35 No. 1H (ST01)	Survey Calculation Method:	Minimum Curvature
Design:	Harrier 35 No. 1H (ST01) - Final	Database:	Well_Planner1

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	Closure Distance (usft)	Closure Azimuth (°)	
4,505.90	2.77	125.01	4,504.82	-33.41	-8.06	33.47	396,718.61	755,468.13	34.42	103.53	
4,602.10	2.51	135.22	4,600.92	-36.77	-10.88	36.85	396,715.78	755,471.52	38.43	106.45	
4,698.20	2.02	140.94	4,696.95	-39.30	-13.69	39.40	396,712.98	755,474.07	41.72	109.16	
4,794.30	1.28	144.89	4,793.01	-40.97	-15.89	41.09	396,710.78	755,475.76	44.05	111.14	
4,800.00	1.06	141.20	4,798.71	-41.04	-15.98	41.16	396,710.69	755,475.83	44.15	111.22	
4,825.00	1.07	142.16	4,823.70	-41.32	-16.34	41.45	396,710.33	755,476.11	44.55	111.52	
4,850.00	1.14	142.29	4,848.70	-41.61	-16.72	41.74	396,709.95	755,476.41	44.97	111.83	
4,875.00	1.10	143.74	4,873.69	-41.90	-17.11	42.03	396,709.56	755,476.70	45.38	112.15	
4,900.00	1.09	143.18	4,898.69	-42.19	-17.50	42.32	396,709.17	755,476.99	45.79	112.46	
4,925.00	1.10	142.15	4,923.68	-42.47	-17.88	42.61	396,708.79	755,477.28	46.21	112.76	
4,950.00	1.09	142.47	4,948.68	-42.76	-18.26	42.90	396,708.41	755,477.57	46.63	113.05	
4,975.00	1.09	143.10	4,973.67	-43.05	-18.64	43.19	396,708.03	755,477.86	47.04	113.34	
5,000.00	1.11	142.98	4,998.67	-43.34	-19.02	43.48	396,707.65	755,478.15	47.46	113.63	
5,025.00	1.05	141.96	5,023.66	-43.62	-19.40	43.77	396,707.27	755,478.43	47.87	113.90	
5,050.00	0.95	140.03	5,048.66	-43.89	-19.73	44.04	396,706.93	755,478.71	48.26	114.14	
5,075.00	1.11	141.29	5,073.66	-44.17	-20.08	44.32	396,706.59	755,478.99	48.66	114.37	
5,100.00	1.10	143.40	5,098.65	-44.47	-20.46	44.62	396,706.20	755,479.29	49.09	114.64	
5,125.00	1.15	139.17	5,123.65	-44.77	-20.85	44.93	396,705.82	755,479.60	49.53	114.89	
5,150.00	1.10	136.17	5,148.64	-45.10	-21.21	45.26	396,705.46	755,479.93	49.98	115.11	
5,175.00	1.05	137.55	5,173.64	-45.42	-21.55	45.58	396,705.12	755,480.25	50.42	115.31	
5,200.00	1.03	135.98	5,198.63	-45.72	-21.88	45.89	396,704.79	755,480.56	50.84	115.49	
5,225.00	0.87	137.96	5,223.63	-46.00	-22.18	46.17	396,704.48	755,480.84	51.22	115.66	
5,250.00	0.95	139.86	5,248.63	-46.26	-22.48	46.43	396,704.19	755,481.10	51.59	115.84	
5,275.00	0.80	140.35	5,273.62	-46.50	-22.78	46.68	396,703.89	755,481.34	51.94	116.01	
5,300.00	0.74	141.57	5,298.62	-46.71	-23.04	46.89	396,703.63	755,481.56	52.24	116.17	
5,325.00	0.88	141.74	5,323.62	-46.93	-23.31	47.11	396,703.35	755,481.78	52.56	116.33	
5,350.00	0.86	141.15	5,348.62	-47.17	-23.61	47.34	396,703.06	755,482.01	52.91	116.51	



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Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	Closure Distance (usft)	Closure Azimuth (°)	
5,375.00	0.84	140.36	5,373.61	-47.40	-23.90	47.58	396,702.77	755,482.25	53.24	116.67	
5,400.00	0.87	140.89	5,398.61	-47.63	-24.19	47.82	396,702.48	755,482.48	53.59	116.83	
5,425.00	0.83	137.75	5,423.61	-47.87	-24.47	48.06	396,702.20	755,482.73	53.93	116.98	
5,450.00	0.82	136.12	5,448.61	-48.12	-24.73	48.30	396,701.94	755,482.97	54.27	117.11	
5,475.00	0.84	138.66	5,473.60	-48.36	-25.00	48.55	396,701.67	755,483.22	54.61	117.24	
5,500.00	0.88	139.39	5,498.60	-48.60	-25.28	48.79	396,701.39	755,483.46	54.96	117.39	
5,525.00	0.85	140.45	5,523.60	-48.85	-25.57	49.04	396,701.10	755,483.71	55.31	117.54	
5,550.00	0.83	141.95	5,548.59	-49.07	-25.86	49.27	396,700.81	755,483.94	55.64	117.69	
5,575.00	0.92	135.23	5,573.59	-49.32	-26.14	49.52	396,700.53	755,484.19	56.00	117.83	
5,600.00	0.73	135.82	5,598.59	-49.57	-26.40	49.77	396,700.27	755,484.44	56.34	117.94	
5,625.00	0.76	140.70	5,623.59	-49.79	-26.64	49.99	396,700.03	755,484.65	56.64	118.05	
5,650.00	0.76	145.98	5,648.59	-49.98	-26.90	50.18	396,699.77	755,484.85	56.94	118.20	
5,675.00	0.88	139.33	5,673.58	-50.20	-27.19	50.40	396,699.48	755,485.07	57.27	118.34	
5,700.00	0.78	141.20	5,698.58	-50.43	-27.46	50.63	396,699.21	755,485.30	57.60	118.48	
5,725.00	0.74	146.49	5,723.58	-50.62	-27.73	50.83	396,698.94	755,485.50	57.90	118.62	
5,750.00	0.76	149.61	5,748.58	-50.79	-28.01	51.00	396,698.66	755,485.67	58.19	118.77	
5,775.00	0.74	139.71	5,773.57	-50.98	-28.27	51.19	396,698.40	755,485.86	58.48	118.91	
5,800.00	0.73	137.33	5,798.57	-51.19	-28.51	51.40	396,698.16	755,486.07	58.78	119.02	
5,825.00	0.47	137.96	5,823.57	-51.36	-28.71	51.58	396,697.96	755,486.25	59.03	119.10	
5,850.00	0.59	147.68	5,848.57	-51.50	-28.89	51.71	396,697.78	755,486.38	59.24	119.19	
5,875.00	0.51	144.14	5,873.57	-51.63	-29.09	51.85	396,697.58	755,486.52	59.45	119.29	
5,900.00	0.45	154.92	5,898.57	-51.74	-29.27	51.96	396,697.40	755,486.62	59.63	119.40	
5,925.00	0.64	150.26	5,923.57	-51.85	-29.48	52.07	396,697.19	755,486.74	59.84	119.52	
5,950.00	0.59	142.38	5,948.56	-51.99	-29.70	52.22	396,696.97	755,486.88	60.07	119.63	
5,975.00	0.45	135.95	5,973.56	-52.14	-29.88	52.36	396,696.79	755,487.03	60.29	119.71	
6,000.00	0.37	141.36	5,998.56	-52.25	-30.01	52.48	396,696.66	755,487.15	60.46	119.76	
6,025.00	0.47	154.29	6,023.56	-52.35	-30.16	52.58	396,696.50	755,487.24	60.61	119.84	



Victory Park Resources

Professional Directional ProDirectional X&Y Survey Report



Company:	VPR Operating, LLC	Local Co-ordinate Reference:	Well 1H
Project:	Lea County, NM	TVD Reference:	WELL @ 3381.00usft (PPD #12.RKB: 18' + GL: 3363')
Site:	Harrier "35" Fed. Com.	MD Reference:	WELL @ 3381.00usft (PPD #12.RKB: 18' + GL: 3363')
Well:	1H	North Reference:	Grid
Wellbore:	Harrier 35 No. 1H (ST01)	Survey Calculation Method:	Minimum Curvature
Design:	Harrier 35 No. 1H (ST01) - Final	Database:	Well Planner1

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V.Sec (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	Closure Distance (usft)	Closure Azimuth (°)	
6,050.00	0.40	157.58	6,048.56	-52.42	-30.34	52.65	396,696.33	755,487.32	60.77	119.95	
6,075.00	0.52	152.68	6,073.56	-52.51	-30.52	52.74	396,696.15	755,487.41	60.93	120.06	
6,100.00	0.52	149.76	6,098.56	-52.61	-30.71	52.85	396,695.95	755,487.51	61.12	120.17	
6,125.00	0.41	143.96	6,123.56	-52.72	-30.88	52.96	396,695.78	755,487.62	61.30	120.25	
6,150.00	0.35	145.78	6,148.56	-52.82	-31.02	53.05	396,695.65	755,487.72	61.45	120.32	
6,175.00	0.32	152.79	6,173.56	-52.89	-31.14	53.13	396,695.52	755,487.79	61.58	120.38	
6,200.00	0.31	158.23	6,198.56	-52.95	-31.27	53.18	396,695.40	755,487.85	61.69	120.45	
6,225.00	0.37	158.78	6,223.56	-53.00	-31.41	53.24	396,695.26	755,487.91	61.81	120.54	
6,250.00	0.40	150.60	6,248.56	-53.07	-31.56	53.31	396,695.11	755,487.98	61.95	120.63	
6,275.00	0.29	143.11	6,273.56	-53.15	-31.69	53.39	396,694.98	755,488.06	62.08	120.69	
6,300.00	0.28	145.19	6,298.56	-53.22	-31.79	53.46	396,694.88	755,488.13	62.20	120.73	
6,325.00	0.31	158.06	6,323.56	-53.28	-31.90	53.52	396,694.77	755,488.19	62.31	120.79	
6,350.00	0.29	143.07	6,348.55	-53.34	-32.01	53.58	396,694.66	755,488.25	62.42	120.85	
6,375.00	0.27	156.43	6,373.55	-53.40	-32.11	53.65	396,694.55	755,488.31	62.52	120.91	
6,400.00	0.28	138.92	6,398.55	-53.47	-32.21	53.71	396,694.46	755,488.38	62.63	120.95	
6,425.00	0.20	145.60	6,423.55	-53.53	-32.30	53.77	396,694.37	755,488.44	62.73	120.99	
6,450.00	0.26	138.28	6,448.55	-53.59	-32.38	53.84	396,694.29	755,488.50	62.82	121.02	
6,475.00	0.16	128.63	6,473.55	-53.66	-32.44	53.90	396,694.23	755,488.57	62.91	121.04	
6,500.00	0.21	133.58	6,498.55	-53.72	-32.49	53.96	396,694.18	755,488.63	62.99	121.05	
6,525.00	0.14	113.30	6,523.55	-53.78	-32.54	54.02	396,694.13	755,488.69	63.07	121.06	
6,550.00	0.13	125.57	6,548.55	-53.83	-32.57	54.08	396,694.10	755,488.74	63.13	121.06	
6,575.00	0.13	124.21	6,573.55	-53.88	-32.60	54.12	396,694.07	755,488.79	63.18	121.06	
6,600.00	0.13	117.01	6,598.55	-53.93	-32.63	54.17	396,694.04	755,488.84	63.24	121.06	
6,625.00	0.17	90.49	6,623.55	-53.99	-32.64	54.24	396,694.03	755,488.90	63.30	121.04	
6,650.00	0.11	95.88	6,648.55	-54.05	-32.65	54.30	396,694.02	755,488.97	63.36	121.01	
6,675.00	0.17	100.44	6,673.55	-54.11	-32.65	54.36	396,694.01	755,489.03	63.41	120.99	
6,700.00	0.14	82.27	6,698.55	-54.18	-32.66	54.43	396,694.01	755,489.09	63.47	120.96	



Victory Park Resources

Professional Directional ProDirectional X&Y Survey Report



Company:	VPR Operating, LLC	Local Co-ordinate Reference:	Well 1H
Project:	Lea County, NM	TVD Reference:	WELL @ 3381.00usft (PPD #12 RKB 18' + GL 3363')
Site:	Harrier 35 Fed. Com	MD Reference:	WELL @ 3381.00usft (PPD #12 RKB 18' + GL 3363')
Well:	1H	North Reference:	Grid
Wellbore:	Harrier 35 No. 1H (ST01)	Survey Calculation Method:	Minimum Curvature
Design:	Harrier 35 No. 1H (ST01) - Final	Database:	Well-Planner1

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	Closure Distance (usft)	Closure Azimuth (°)	
6,725.00	0.11	76.91	6,723.55	-54.23	-32.65	54.48	396,694.02	755,489.15	63.51	120.93	
6,750.00	0.10	110.20	6,748.55	-54.28	-32.65	54.52	396,694.02	755,489.19	63.55	120.91	
6,775.00	0.13	111.96	6,773.55	-54.32	-32.67	54.57	396,694.00	755,489.24	63.60	120.91	
6,800.00	0.10	84.98	6,798.55	-54.37	-32.68	54.62	396,693.99	755,489.29	63.65	120.89	
6,825.00	0.10	120.19	6,823.55	-54.41	-32.69	54.66	396,693.98	755,489.33	63.68	120.88	
6,850.00	0.12	114.87	6,848.55	-54.45	-32.71	54.70	396,693.96	755,489.37	63.73	120.88	
6,875.00	0.08	99.03	6,873.55	-54.49	-32.72	54.74	396,693.95	755,489.41	63.77	120.87	
6,900.00	0.07	161.24	6,898.55	-54.51	-32.74	54.76	396,693.93	755,489.43	63.80	120.87	
6,925.00	0.09	138.89	6,923.55	-54.53	-32.77	54.78	396,693.90	755,489.45	63.83	120.89	
6,950.00	0.08	128.18	6,948.55	-54.56	-32.79	54.81	396,693.88	755,489.47	63.87	120.89	
6,975.00	0.06	193.49	6,973.55	-54.57	-32.82	54.82	396,693.85	755,489.48	63.89	120.91	
7,000.00	0.11	165.43	6,998.55	-54.57	-32.85	54.82	396,693.82	755,489.49	63.91	120.93	
7,025.00	0.07	164.45	7,023.55	-54.58	-32.89	54.83	396,693.78	755,489.50	63.94	120.96	
7,050.00	0.12	195.54	7,048.55	-54.58	-32.93	54.83	396,693.74	755,489.49	63.95	120.99	
7,075.00	0.13	175.49	7,073.55	-54.57	-32.98	54.82	396,693.68	755,489.49	63.98	121.03	
7,100.00	0.14	179.33	7,098.55	-54.57	-33.04	54.82	396,693.62	755,489.49	64.01	121.08	
7,125.00	0.16	183.99	7,123.55	-54.57	-33.11	54.82	396,693.56	755,489.49	64.04	121.13	
7,150.00	0.17	187.91	7,148.55	-54.56	-33.18	54.81	396,693.49	755,489.48	64.07	121.19	
7,175.00	0.19	191.79	7,173.55	-54.55	-33.26	54.80	396,693.41	755,489.47	64.10	121.26	
7,200.00	0.20	190.02	7,198.55	-54.53	-33.34	54.78	396,693.32	755,489.45	64.13	121.33	
7,225.00	0.18	209.49	7,223.55	-54.50	-33.42	54.76	396,693.25	755,489.42	64.15	121.40	
7,250.00	0.20	186.34	7,248.55	-54.48	-33.50	54.73	396,693.17	755,489.40	64.17	121.47	
7,275.00	0.16	187.61	7,273.55	-54.47	-33.58	54.72	396,693.09	755,489.39	64.20	121.53	
7,300.00	0.16	195.14	7,298.55	-54.45	-33.65	54.71	396,693.02	755,489.38	64.23	121.59	
7,325.00	0.17	192.48	7,323.55	-54.44	-33.72	54.69	396,692.95	755,489.36	64.25	121.65	
7,350.00	0.17	195.38	7,348.55	-54.42	-33.79	54.67	396,692.88	755,489.34	64.27	121.72	
7,375.00	0.17	192.75	7,373.55	-54.40	-33.86	54.66	396,692.81	755,489.32	64.30	121.78	



Victory Park Resources

Professional Directional ProDirectional X&Y Survey Report



Company:	VPR Operating, LLC	Local Co-ordinate Reference:	Well 1H
Project:	Lea County NM	TVD Reference:	WELL @ 3381.00usft (PPD #12 RKB: 18' + GL: 3363')
Site:	Harrier 35" Fed. Com	MD Reference:	WELL @ 3381.00usft (PPD #12 RKB: 18' + GL: 3363')
Well:	1H	North Reference:	Grid
Wellbore:	Harrier 35 No. 1H (ST01)	Survey Calculation Method:	Minimum Curvature
Design:	Harrier 35 No. 1H (ST01) - Final	Database:	Well Planner1

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V- Sec (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	Closure Distance (usft)	Closure Azimuth (°)	
7,400.00	0.21	197.33	7,398.55	-54.38	-33.94	54.63	396,692.73	755,489.30	64.32	121.85	
7,425.00	0.25	192.68	7,423.55	-54.35	-34.04	54.61	396,692.63	755,489.28	64.35	121.94	
7,450.00	0.25	185.94	7,448.55	-54.33	-34.15	54.59	396,692.52	755,489.26	64.39	122.03	
7,475.00	0.25	181.77	7,473.55	-54.32	-34.26	54.58	396,692.41	755,489.25	64.44	122.11	
7,500.00	0.24	180.88	7,498.55	-54.32	-34.37	54.58	396,692.30	755,489.25	64.50	122.20	
7,525.00	0.25	186.73	7,523.55	-54.31	-34.47	54.57	396,692.20	755,489.24	64.55	122.28	
7,550.00	0.27	180.23	7,548.55	-54.31	-34.58	54.57	396,692.08	755,489.23	64.60	122.37	
7,575.00	0.27	187.47	7,573.55	-54.30	-34.70	54.56	396,691.97	755,489.23	64.66	122.46	
7,600.00	0.28	187.05	7,598.55	-54.28	-34.82	54.54	396,691.85	755,489.21	64.71	122.56	
7,625.00	0.29	188.50	7,623.55	-54.26	-34.95	54.53	396,691.72	755,489.19	64.76	122.66	
7,650.00	0.32	189.14	7,648.55	-54.24	-35.08	54.51	396,691.59	755,489.17	64.82	122.76	
7,675.00	0.33	179.11	7,673.55	-54.23	-35.22	54.50	396,691.45	755,489.16	64.89	122.87	
7,700.00	0.32	190.07	7,698.55	-54.22	-35.36	54.49	396,691.31	755,489.15	64.95	122.98	
7,725.00	0.36	181.02	7,723.55	-54.20	-35.51	54.47	396,691.16	755,489.14	65.02	123.10	
7,750.00	0.32	182.19	7,748.55	-54.20	-35.66	54.47	396,691.01	755,489.14	65.10	123.21	
7,775.00	0.36	187.24	7,773.55	-54.18	-35.80	54.45	396,690.86	755,489.12	65.17	123.33	
7,800.00	0.37	181.43	7,798.55	-54.17	-35.96	54.44	396,690.71	755,489.11	65.25	123.45	
7,825.00	0.37	179.95	7,823.55	-54.17	-36.12	54.44	396,690.54	755,489.11	65.34	123.57	
7,850.00	0.37	179.94	7,848.54	-54.17	-36.29	54.44	396,690.38	755,489.11	65.43	123.68	
7,875.00	0.37	180.45	7,873.54	-54.17	-36.45	54.44	396,690.22	755,489.11	65.52	123.80	
7,900.00	0.39	179.82	7,898.54	-54.16	-36.61	54.44	396,690.05	755,489.11	65.61	123.92	
7,925.00	0.35	181.72	7,923.54	-54.16	-36.78	54.44	396,689.89	755,489.11	65.70	124.04	
7,950.00	0.37	183.43	7,948.54	-54.15	-36.93	54.43	396,689.74	755,489.10	65.78	124.16	
7,975.00	0.36	183.95	7,973.54	-54.14	-37.09	54.42	396,689.58	755,489.09	65.86	124.28	
8,000.00	0.35	183.66	7,998.54	-54.13	-37.25	54.41	396,689.42	755,489.08	65.94	124.39	
8,025.00	0.36	184.12	8,023.54	-54.12	-37.40	54.40	396,689.27	755,489.07	66.02	124.51	
8,050.00	0.37	182.32	8,048.54	-54.11	-37.56	54.39	396,689.11	755,489.06	66.10	124.63	



Victory Park Resources

Professional Directional ProDirectional X&Y Survey Report



Company:	VPR Operating, LLC	Local Co-ordinate Reference:	Well 1H
Project:	Lea County, NM	TVD Reference:	WELL @ 3381.00usft (PPD #12 RKB 18' + GL 3363')
Site:	Harrier 35 Fed. Com.	MD Reference:	WELL @ 3381.00usft (PPD #12 RKB 18' + GL 3363')
Well:	1H	North Reference:	Grid
Wellbore:	Harrier 35 No.1H (ST01)	Survey Calculation Method:	Minimum Curvature
Design:	Harrier 35 No.1H (ST01) - Final	Database:	Well Planner1

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	Closure Distance (usft)	Closure Azimuth (°)	
8,075.00	0.38	181.49	8,073.54	-54.10	-37.72	54.39	396,688.95	755,489.05	66.19	124.75	
8,100.00	0.38	171.41	8,098.54	-54.11	-37.89	54.40	396,688.78	755,489.06	66.29	124.86	
8,125.00	0.34	169.21	8,123.54	-54.13	-38.04	54.42	396,688.63	755,489.09	66.40	124.95	
8,150.00	0.31	169.40	8,148.54	-54.16	-38.18	54.45	396,688.49	755,489.12	66.50	125.04	
8,175.00	0.24	155.72	8,173.54	-54.19	-38.29	54.48	396,688.37	755,489.15	66.59	125.10	
8,200.00	0.31	161.61	8,198.54	-54.24	-38.41	54.53	396,688.26	755,489.19	66.70	125.16	
8,225.00	0.32	153.20	8,223.54	-54.29	-38.54	54.58	396,688.13	755,489.25	66.81	125.22	
8,250.00	0.32	155.31	8,248.54	-54.35	-38.66	54.64	396,688.00	755,489.31	66.94	125.28	
8,275.00	0.32	153.39	8,273.54	-54.41	-38.79	54.70	396,687.88	755,489.37	67.06	125.34	
8,300.00	0.30	141.77	8,298.54	-54.48	-38.90	54.77	396,687.76	755,489.44	67.18	125.39	
8,325.00	0.27	137.35	8,323.54	-54.56	-39.00	54.85	396,687.67	755,489.52	67.30	125.41	
8,350.00	0.26	137.26	8,348.54	-54.63	-39.08	54.93	396,687.59	755,489.60	67.41	125.43	
8,375.00	0.22	129.85	8,373.54	-54.71	-39.15	55.00	396,687.52	755,489.67	67.52	125.44	
8,400.00	0.27	132.98	8,398.54	-54.79	-39.22	55.08	396,687.44	755,489.75	67.62	125.45	
8,425.00	0.29	137.37	8,423.54	-54.87	-39.31	55.17	396,687.36	755,489.84	67.74	125.47	
8,450.00	0.29	138.07	8,448.53	-54.96	-39.40	55.26	396,687.27	755,489.92	67.87	125.49	
8,475.00	0.28	141.84	8,473.53	-55.04	-39.50	55.34	396,687.17	755,490.00	67.99	125.52	
8,500.00	0.23	136.41	8,498.53	-55.11	-39.58	55.41	396,687.09	755,490.08	68.09	125.54	
8,525.00	0.17	112.55	8,523.53	-55.18	-39.63	55.48	396,687.04	755,490.14	68.18	125.54	
8,550.00	0.15	28.52	8,548.53	-55.23	-39.62	55.53	396,687.05	755,490.19	68.21	125.51	
8,575.00	0.40	10.29	8,573.53	-55.26	-39.50	55.56	396,687.17	755,490.22	68.17	125.41	
8,600.00	0.43	21.29	8,598.53	-55.31	-39.33	55.61	396,687.34	755,490.27	68.11	125.27	
8,625.00	0.53	23.84	8,623.53	-55.39	-39.14	55.69	396,687.53	755,490.35	68.06	125.10	
8,650.00	0.67	22.96	8,648.53	-55.50	-38.90	55.79	396,687.77	755,490.46	68.01	124.88	
8,675.00	0.65	21.22	8,673.53	-55.61	-38.63	55.90	396,688.04	755,490.57	67.95	124.65	
8,700.00	0.58	25.55	8,698.53	-55.72	-38.38	56.01	396,688.29	755,490.67	67.89	124.42	
8,725.00	0.57	24.22	8,723.53	-55.82	-38.15	56.11	396,688.52	755,490.78	67.85	124.21	



Victory Park Resources

Professional Directional ProDirectional X&Y Survey Report



Company:	VPR Operating, LLC	Local Co-ordinate Reference:	Well 1H
Project:	Lea County - NM	TVD Reference:	WELL @ 3381.00usft (PPD #12 RKB: 18' + GL: 3363)
Site:	Harrier "35" Fed. Com	MD Reference:	WELL @ 3381.00usft (PPD #12 RKB: 18' + GL: 3363)
Well:	1H	North Reference:	Grid
Wellbore:	Harrier 35 No. 1H (ST01)	Survey Calculation Method:	Minimum Curvature
Design:	Harrier 35 No. 1H (ST01) - Final	Database:	Well Planner1

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	Closure Distance (usft)	Closure Azimuth (°)	
8,750.00	0.53	22.16	8,748.53	-55.92	-37.93	56.21	396,688.74	755,490.87	67.81	124.01	
8,775.00	0.56	21.25	8,773.52	-56.01	-37.71	56.29	396,688.96	755,490.96	67.76	123.82	
8,800.00	0.43	15.39	8,798.52	-56.08	-37.51	56.36	396,689.16	755,491.03	67.70	123.64	
8,825.00	0.32	1.87	8,823.52	-56.11	-37.34	56.39	396,689.32	755,491.06	67.64	123.51	
8,850.00	0.39	352.66	8,848.52	-56.10	-37.19	56.38	396,689.48	755,491.05	67.54	123.41	
8,875.00	0.33	335.94	8,873.52	-56.06	-37.04	56.34	396,689.63	755,491.01	67.43	123.32	
8,900.00	0.37	334.39	8,898.52	-56.00	-36.90	56.28	396,689.77	755,490.95	67.30	123.25	
8,925.00	0.40	304.70	8,923.52	-55.89	-36.78	56.17	396,689.89	755,490.84	67.14	123.21	
8,950.00	0.41	295.92	8,948.52	-55.74	-36.69	56.02	396,689.98	755,490.69	66.97	123.22	
8,975.00	0.53	289.70	8,973.52	-55.56	-36.61	55.83	396,690.06	755,490.50	66.77	123.26	
9,000.00	0.56	276.49	8,998.52	-55.33	-36.56	55.60	396,690.11	755,490.27	66.55	123.33	
9,025.00	0.66	271.55	9,023.52	-55.06	-36.54	55.34	396,690.13	755,490.01	66.31	123.44	
9,050.00	0.80	268.31	9,048.51	-54.74	-36.54	55.02	396,690.13	755,489.69	66.05	123.59	
9,075.00	0.92	267.90	9,073.51	-54.37	-36.56	54.65	396,690.11	755,489.31	65.75	123.78	
9,100.00	1.05	268.09	9,098.51	-53.94	-36.57	54.22	396,690.10	755,488.89	65.40	124.00	
9,125.00	1.18	268.42	9,123.50	-53.45	-36.59	53.73	396,690.08	755,488.40	65.00	124.25	
9,150.00	1.31	268.49	9,148.50	-52.91	-36.60	53.19	396,690.07	755,487.86	64.56	124.53	
9,175.00	1.47	267.09	9,173.49	-52.31	-36.62	52.58	396,690.04	755,487.25	64.08	124.86	
9,200.00	1.62	265.29	9,198.48	-51.63	-36.67	51.91	396,690.00	755,486.58	63.55	125.24	
9,225.00	1.84	263.17	9,223.47	-50.88	-36.75	51.16	396,689.92	755,485.83	62.99	125.69	
9,250.00	2.08	261.07	9,248.45	-50.03	-36.86	50.31	396,689.80	755,484.98	62.37	126.23	
9,275.00	2.18	258.53	9,273.44	-49.12	-37.03	49.40	396,689.64	755,484.07	61.74	126.86	
9,300.00	2.30	254.69	9,298.42	-48.17	-37.26	48.45	396,689.41	755,483.12	61.12	127.56	
9,325.00	2.35	254.77	9,323.40	-47.19	-37.52	47.47	396,689.15	755,482.14	60.51	128.33	
9,350.00	2.33	252.75	9,348.38	-46.20	-37.81	46.49	396,688.86	755,481.16	59.92	129.12	
9,375.00	2.36	252.54	9,373.36	-45.22	-38.11	45.51	396,688.55	755,480.18	59.36	129.95	
9,400.00	2.29	253.77	9,398.34	-44.25	-38.41	44.54	396,688.26	755,479.21	58.81	130.77	



Victory Park Resources

Professional Directional ProDirectional X&Y Survey Report



Company:	VPR Operating, LLC	Local Co-ordinate Reference:	Well 1H
Project:	Lea County, NM	TVD Reference:	WELL @ 3381.00usft (PPD #12 RKB: 18' + GL: 3363')
Site:	Harrier '35' Fed. Com	MD Reference:	WELL @ 3381.00usft (PPD #12 RKB: 18' + GL: 3363')
Well:	1H	North Reference:	Grid
Wellbore:	Harrier 35 No.1H (ST01)	Survey Calculation Method:	Minimum Curvature
Design:	Harrier 35 No.1H (ST01) - Final	Database:	Well Planner1

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	Closure Distance (usft)	Closure Azimuth (°)	
9,425.00	2.24	254.24	9,423.32	-43.30	-38.68	43.59	396,687.99	755,478.26	58.28	131.58	
9,450.00	2.23	253.46	9,448.30	-42.36	-38.95	42.66	396,687.72	755,477.32	57.76	132.40	
9,475.00	2.20	253.36	9,473.28	-41.43	-39.23	41.73	396,687.44	755,476.40	57.27	133.23	
9,500.00	2.02	256.57	9,498.26	-40.54	-39.47	40.84	396,687.20	755,475.51	56.80	134.02	
9,525.00	1.92	266.36	9,523.25	-39.70	-39.60	40.00	396,687.07	755,474.66	56.28	134.71	
9,550.00	1.78	277.38	9,548.23	-38.90	-39.57	39.19	396,687.10	755,473.86	55.70	135.28	
9,575.00	2.02	278.36	9,573.22	-38.08	-39.46	38.37	396,687.21	755,473.04	55.04	135.80	
9,600.00	2.07	284.62	9,598.20	-37.21	-39.28	37.50	396,687.39	755,472.17	54.31	136.33	
9,625.00	2.10	292.24	9,623.19	-36.35	-38.99	36.64	396,687.67	755,471.31	53.51	136.78	
9,650.00	2.33	293.66	9,648.17	-35.46	-38.62	35.75	396,688.05	755,470.42	52.63	137.21	
9,675.00	2.47	296.74	9,673.15	-34.52	-38.17	34.81	396,688.50	755,469.47	51.66	137.64	
9,700.00	2.57	298.87	9,698.12	-33.55	-37.66	33.83	396,689.01	755,468.50	50.62	138.06	
9,725.00	2.60	300.78	9,723.10	-32.57	-37.10	32.85	396,689.57	755,467.52	49.55	138.47	
9,750.00	2.51	302.92	9,748.07	-31.63	-36.51	31.91	396,690.16	755,466.58	48.49	138.85	
9,775.00	2.43	301.75	9,773.05	-30.73	-35.93	31.00	396,690.74	755,465.67	47.46	139.22	
9,800.00	2.28	299.83	9,798.03	-29.85	-35.41	30.12	396,691.26	755,464.78	46.48	139.62	
9,825.00	2.45	297.74	9,823.01	-28.95	-34.91	29.21	396,691.76	755,463.88	45.52	140.08	
9,850.00	2.42	295.66	9,847.98	-28.00	-34.43	28.26	396,692.24	755,462.93	44.55	140.62	
9,875.00	2.38	294.62	9,872.96	-27.06	-33.99	27.31	396,692.68	755,461.98	43.60	141.21	
9,900.00	2.32	293.21	9,897.94	-26.12	-33.57	26.37	396,693.10	755,461.04	42.69	141.85	
9,925.00	2.20	290.79	9,922.92	-25.21	-33.20	25.46	396,693.47	755,460.13	41.84	142.52	
9,950.00	2.13	290.07	9,947.90	-24.33	-32.87	24.57	396,693.80	755,459.24	41.04	143.22	
9,975.00	2.06	291.10	9,972.89	-23.47	-32.55	23.72	396,694.12	755,458.38	40.27	143.92	
10,000.00	1.96	291.17	9,997.87	-22.66	-32.23	22.90	396,694.44	755,457.57	39.54	144.61	
10,025.00	1.74	292.36	10,022.86	-21.91	-31.93	22.15	396,694.74	755,456.82	38.86	145.26	
10,050.00	1.92	292.83	10,047.85	-21.17	-31.63	21.41	396,695.04	755,456.08	38.19	145.90	
10,075.00	2.04	292.92	10,072.83	-20.38	-31.29	20.61	396,695.38	755,455.28	37.47	146.62	



Victory Park Resources

Professional Directional ProDirectional X&Y Survey Report



Company:	VPR Operating, LLC	Local Co-ordinate Reference:	Well 1H
Project:	Lea County, NM	TVD Reference:	WELL @ 3381.00usft (PPD #12 RKB:18' + GL: 3363')
Site:	Harrier "35" Fed. Com	MD Reference:	WELL @ 3381.00usft (PPD #12 RKB:18' + GL: 3363')
Well:	1H	North Reference:	Grid
Wellbore:	Harrier 35 No.1H (ST01)	Survey Calculation Method:	Minimum Curvature
Design:	Harrier 35 No.1H (ST01) - Final	Database:	Well Planner1

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	Closure Distance (usft)	Closure Azimuth (°)	
10,100.00	2.08	295.06	10,097.81	-19.56	-30.93	19.80	396,695.74	755,454.46	36.72	147.38	
10,125.00	2.06	294.68	10,122.80	-18.75	-30.55	18.98	396,696.12	755,453.64	35.96	148.15	
10,150.00	1.88	295.27	10,147.78	-17.97	-30.18	18.20	396,696.49	755,452.86	35.24	148.92	
10,175.00	1.95	293.24	10,172.77	-17.21	-29.84	17.43	396,696.83	755,452.10	34.56	149.70	
10,200.00	1.93	291.13	10,197.76	-16.43	-29.52	16.65	396,697.15	755,451.32	33.89	150.57	
10,225.00	1.87	289.07	10,222.74	-15.65	-29.24	15.87	396,697.43	755,450.54	33.27	151.50	
10,250.00	1.71	283.83	10,247.73	-14.91	-29.01	15.13	396,697.66	755,449.79	32.72	152.46	
10,275.00	1.76	280.12	10,272.72	-14.17	-28.86	14.39	396,697.81	755,449.05	32.24	153.50	
10,300.00	1.68	274.40	10,297.71	-13.43	-28.76	13.64	396,697.91	755,448.31	31.83	154.62	
10,325.00	1.53	270.04	10,322.70	-12.73	-28.73	12.94	396,697.94	755,447.61	31.51	155.75	
10,350.00	1.35	265.33	10,347.69	-12.10	-28.76	12.31	396,697.91	755,446.98	31.28	156.82	
10,375.00	1.17	259.95	10,372.68	-11.55	-28.82	11.77	396,697.84	755,446.44	31.14	157.79	
10,400.00	1.32	260.21	10,397.68	-11.02	-28.92	11.24	396,697.75	755,445.90	31.02	158.77	
10,425.00	1.42	259.93	10,422.67	-10.43	-29.02	10.65	396,697.65	755,445.32	30.91	159.85	
10,450.00	1.48	259.77	10,447.66	-9.81	-29.13	10.03	396,697.54	755,444.69	30.81	161.01	
10,475.00	1.57	258.82	10,472.65	-9.15	-29.26	9.37	396,697.41	755,444.04	30.72	162.24	
10,500.00	1.55	258.45	10,497.64	-8.49	-29.39	8.71	396,697.28	755,443.37	30.65	163.50	
10,525.00	1.58	258.83	10,522.63	-7.82	-29.52	8.04	396,697.14	755,442.70	30.60	164.77	
10,550.00	1.57	261.97	10,547.63	-7.14	-29.64	7.36	396,697.03	755,442.03	30.54	166.05	
10,575.00	1.46	260.04	10,572.62	-6.48	-29.74	6.71	396,696.93	755,441.38	30.49	167.29	
10,600.00	1.47	262.24	10,597.61	-5.85	-29.84	6.08	396,696.83	755,440.74	30.45	168.49	
10,625.00	1.31	263.06	10,622.60	-5.25	-29.92	5.47	396,696.75	755,440.14	30.42	169.63	
10,650.00	1.40	257.25	10,647.59	-4.67	-30.02	4.89	396,696.65	755,439.56	30.42	170.74	
10,675.00	1.38	258.62	10,672.59	-4.07	-30.15	4.30	396,696.52	755,438.97	30.45	171.89	
10,700.00	1.29	255.74	10,697.58	-3.50	-30.28	3.73	396,696.39	755,438.40	30.51	172.98	
10,725.00	1.31	254.37	10,722.57	-2.95	-30.42	3.18	396,696.25	755,437.85	30.59	174.03	
10,750.00	1.21	248.80	10,747.57	-2.43	-30.60	2.66	396,696.07	755,437.33	30.71	175.03	



Victory Park Resources

Professional Directional ProDirectional X&Y Survey Report



Company: VPR Operating, LLC
Project: Lea County, NM
Site: Harrier 35" Fed. Com
Well: 1H
Wellbore: Harrier 35 No. 1H (ST01)
Design: Harrier 35 No. 1H (ST01) - Final

Local Co-ordinate Reference: Well 1H
TVD Reference: WELL @ 3381.00usft (PPD #12 RKB 18' + GL 3363')
MD Reference: WELL @ 3381.00usft (PPD #12 RKB 18' + GL 3363')
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Well Planner1

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	Closure Distance (usft)	Closure Azimuth (°)	
10,775.00	1.16	240.22	10,772.56	-1.96	-30.82	2.20	396,695.85	755,436.86	30.89	175.93	
10,800.00	1.23	240.18	10,797.56	-1.51	-31.08	1.74	396,695.59	755,436.41	31.12	176.79	
10,825.00	1.27	241.85	10,822.55	-1.03	-31.34	1.27	396,695.33	755,435.94	31.36	177.68	
10,850.00	1.27	240.16	10,847.54	-0.55	-31.61	0.78	396,695.06	755,435.45	31.62	178.58	
10,875.00	1.30	245.85	10,872.54	-0.04	-31.86	0.28	396,694.81	755,434.95	31.86	179.49	
10,900.00	1.13	243.06	10,897.53	0.44	-32.09	-0.19	396,694.58	755,434.47	32.09	180.35	
10,925.00	0.71	233.60	10,922.53	0.78	-32.29	-0.54	396,694.38	755,434.13	32.30	180.96	
10,950.00	0.63	235.06	10,947.53	1.02	-32.46	-0.78	396,694.21	755,433.89	32.47	181.37	
10,975.00	0.64	246.32	10,972.53	1.26	-32.60	-1.02	396,694.07	755,433.65	32.61	181.79	
11,000.00	0.60	266.68	10,997.52	1.52	-32.66	-1.28	396,694.01	755,433.39	32.69	182.24	
11,025.00	0.77	282.19	11,022.52	1.82	-32.63	-1.57	396,694.03	755,433.10	32.67	182.76	
11,050.00	0.88	289.79	11,047.52	2.16	-32.53	-1.92	396,694.14	755,432.75	32.59	183.37	
11,075.00	0.96	298.26	11,072.52	2.52	-32.37	-2.28	396,694.30	755,432.39	32.45	184.03	
11,100.00	1.04	304.60	11,097.51	2.89	-32.14	-2.65	396,694.53	755,432.02	32.25	184.72	
11,125.00	1.01	316.77	11,122.51	3.23	-31.85	-2.99	396,694.82	755,431.68	31.99	185.36	
11,150.00	0.80	333.39	11,147.51	3.46	-31.54	-3.22	396,695.13	755,431.45	31.70	185.83	
11,175.00	0.87	343.41	11,172.50	3.59	-31.20	-3.35	396,695.47	755,431.32	31.38	186.13	
11,200.00	1.04	345.23	11,197.50	3.69	-30.80	-3.46	396,695.87	755,431.20	30.99	186.42	
11,225.00	1.20	348.58	11,222.50	3.80	-30.32	-3.57	396,696.35	755,431.09	30.53	186.72	
11,250.00	1.26	349.17	11,247.49	3.90	-29.79	-3.68	396,696.87	755,430.99	30.02	187.03	
11,287.00	1.60	344.80	11,284.48	4.10	-28.90	-3.89	396,697.77	755,430.78	29.16	187.66	
11,307.00	2.30	314.40	11,304.47	4.46	-28.35	-4.25	396,698.32	755,430.42	28.66	188.52	
11,339.00	5.10	288.60	11,336.40	6.26	-27.44	-6.06	396,699.22	755,428.61	28.10	192.44	
11,371.00	6.90	279.30	11,368.22	9.50	-26.68	-9.30	396,699.99	755,425.37	28.25	199.22	
11,403.00	8.50	277.70	11,399.93	13.74	-26.05	-13.54	396,700.62	755,421.13	29.36	207.46	
11,435.00	10.60	277.30	11,431.49	18.99	-25.36	-18.81	396,701.31	755,415.86	31.57	216.56	
11,466.00	12.80	274.60	11,461.84	25.24	-24.72	-25.06	396,701.95	755,409.61	35.20	225.38	



Victory Park Resources

Professional Directional ProDirectional X&Y Survey Report



Company: VPR Operating, LLC
Project: Lea County, NM
Site: Harrier, 35" Fed. Com.
Well: 1H
Wellbore: Harrier 35 No. 1H (ST01)
Design: Harrier 35 No. 1H (ST01) - Final

Local Co-ordinate Reference: Well 1H
TVD Reference: WELL @ 3381.00usft (PPD #12 RKB-18' + GL: 3363')
MD Reference: WELL @ 3381.00usft (PPD #12 RKB-18' + GL: 3363')
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Well Planner

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	Closure Distance (usft)	Closure Azimuth (°)	
11,498.00	14.60	272.00	11,492.93	32.80	-24.30	-32.62	396,702.37	755,402.05	40.68	233.32	
11,530.00	15.60	270.20	11,523.83	41.14	-24.14	-40.96	396,702.53	755,393.71	47.54	239.48	
11,562.00	15.20	271.40	11,554.68	49.63	-24.03	-49.45	396,702.64	755,385.22	54.98	244.09	
11,593.00	14.50	270.30	11,584.64	57.57	-23.91	-57.40	396,702.76	755,377.27	62.17	247.39	
11,625.00	15.10	269.70	11,615.58	65.75	-23.91	-65.57	396,702.76	755,369.10	69.79	249.97	
11,657.00	17.40	268.00	11,646.30	74.70	-24.10	-74.52	396,702.57	755,360.15	78.32	252.08	
11,689.00	20.90	266.50	11,676.52	85.19	-24.61	-85.00	396,702.06	755,349.67	88.49	253.85	
11,720.00	24.00	266.90	11,705.17	97.01	-25.29	-96.82	396,701.38	755,337.85	100.07	255.36	
11,752.00	26.90	267.50	11,734.06	110.75	-25.96	-110.55	396,700.71	755,324.11	113.56	256.79	
11,784.00	30.20	268.00	11,762.17	126.03	-26.55	-125.83	396,700.11	755,308.83	128.60	258.08	
11,816.00	33.60	267.70	11,789.33	142.93	-27.19	-142.73	396,699.48	755,291.94	145.30	259.21	
11,848.00	37.20	268.30	11,815.41	161.46	-27.83	-161.25	396,698.84	755,273.42	163.64	260.21	
11,880.00	41.00	267.60	11,840.24	181.62	-28.56	-181.42	396,698.11	755,253.25	183.65	261.05	
11,912.00	44.20	269.60	11,863.79	203.28	-29.08	-203.06	396,697.59	755,231.60	205.14	261.85	
11,943.00	46.90	270.40	11,885.50	225.40	-29.07	-225.19	396,697.60	755,209.48	227.06	262.64	
11,975.00	49.90	270.40	11,906.74	249.33	-28.91	-249.12	396,697.76	755,185.55	250.79	263.38	
12,007.00	53.00	270.80	11,926.68	274.35	-28.64	-274.14	396,698.03	755,160.53	275.63	264.04	
12,039.00	55.70	271.30	11,945.33	300.34	-28.16	-300.14	396,698.50	755,134.53	301.45	264.64	
12,070.00	58.20	272.20	11,962.24	326.30	-27.37	-326.10	396,699.30	755,108.56	327.25	265.20	
12,102.00	60.80	272.40	11,978.48	353.84	-26.26	-353.65	396,700.41	755,081.02	354.63	265.75	
12,134.00	64.30	272.80	11,993.23	382.19	-24.97	-382.02	396,701.70	755,052.65	382.83	266.26	
12,166.00	67.10	272.90	12,006.39	411.31	-23.52	-411.14	396,703.15	755,023.53	411.81	266.73	
12,198.00	70.20	273.00	12,018.04	441.06	-21.99	-440.90	396,704.68	754,993.77	441.45	267.15	
12,230.00	73.00	273.30	12,028.14	471.36	-20.32	-471.22	396,706.35	754,963.45	471.66	267.53	
12,261.00	75.70	273.70	12,036.50	501.13	-18.50	-501.01	396,708.17	754,933.66	501.35	267.89	
12,293.00	78.60	273.70	12,043.62	532.25	-16.48	-532.14	396,710.19	754,902.53	532.40	268.23	
12,325.00	82.10	272.70	12,048.98	563.73	-14.72	-563.63	396,711.95	754,871.04	563.83	268.50	



Victory Park Resources

Professional Directional ProDirectional X&Y Survey Report



Company:	VPR Operating, LLC	Local Co-ordinate Reference:	Well-1H
Project:	Lea County, NM	TVD Reference:	WELL @ 3381.00usft (PPD #12 RKB: 18' + GL: 3363')
Site:	Harrier 35" Fed. Com	MD Reference:	WELL @ 3381.00usft (PPD #12 RKB: 18' + GL: 3363')
Well:	1H	North Reference:	Grid
Wellbore:	Harrier 35 No. 1H (ST01)	Survey/Calculation Method:	Minimum Curvature
Design:	Harrier 35 No. 1H (ST01) - Final	Database:	Well Planner

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	Closure Distance (usft)	Closure Azimuth (°)	
12,356.00	85.10	272.00	12,052.44	594.49	-13.46	-594.41	396,713.21	754,840.26	594.56	268.70	
12,447.00	88.50	268.60	12,057.52	685.32	-12.99	-685.24	396,713.68	754,749.43	685.36	268.91	
12,479.00	88.70	268.30	12,058.30	717.30	-13.85	-717.22	396,712.81	754,717.45	717.35	268.89	
12,511.00	88.70	268.30	12,059.03	749.29	-14.80	-749.20	396,711.87	754,685.47	749.34	268.87	
12,542.00	89.00	268.20	12,059.65	780.27	-15.75	-780.18	396,710.92	754,654.49	780.33	268.84	
12,574.00	89.40	268.10	12,060.10	812.26	-16.78	-812.16	396,709.89	754,622.51	812.33	268.82	
12,605.00	90.90	268.80	12,060.01	843.25	-17.62	-843.14	396,709.05	754,591.52	843.33	268.80	
Tie-In for ST01 @ 12605' MD											
12,637.00	89.80	270.20	12,059.82	875.25	-17.90	-875.14	396,708.77	754,559.53	875.32	268.83	
First (ST01) Survey at 12637' MD											
12,669.00	89.50	272.30	12,060.01	907.23	-17.20	-907.13	396,709.47	754,527.54	907.29	268.91	
12,701.00	91.10	273.90	12,059.85	939.17	-15.47	-939.08	396,711.20	754,495.59	939.21	269.06	
12,732.00	92.50	274.10	12,058.87	970.06	-13.31	-969.99	396,713.36	754,464.68	970.08	269.21	
12,764.00	93.80	274.80	12,057.12	1,001.90	-10.83	-1,001.84	396,715.84	754,432.82	1,001.90	269.38	
12,796.00	93.30	273.80	12,055.13	1,033.73	-8.44	-1,033.69	396,718.23	754,400.98	1,033.73	269.53	
12,828.00	93.80	274.00	12,053.15	1,065.57	-6.27	-1,065.56	396,720.40	754,369.11	1,065.58	269.66	
12,858.00	93.50	273.70	12,051.24	1,095.43	-4.26	-1,095.43	396,722.41	754,339.24	1,095.44	269.78	
12,890.00	93.10	273.20	12,049.40	1,127.30	-2.33	-1,127.32	396,724.34	754,307.35	1,127.32	269.88	
9-6-12 PVA @ 12890' MD											
12,921.00	92.00	272.70	12,048.02	1,158.22	-0.74	-1,158.24	396,725.93	754,276.42	1,158.24	269.96	
12,953.00	91.20	271.70	12,047.13	1,190.17	0.49	-1,190.21	396,727.16	754,244.46	1,190.21	270.02	
12,985.00	92.10	272.00	12,046.21	1,222.13	1.52	-1,222.18	396,728.19	754,212.49	1,222.18	270.07	
13,017.00	94.00	272.20	12,044.50	1,254.05	2.69	-1,254.11	396,729.36	754,180.56	1,254.11	270.12	
9-7-12 PVA @ 13017' MD											
13,050.00	94.90	272.40	12,041.94	1,286.92	4.01	-1,286.98	396,730.68	754,147.68	1,286.99	270.18	
13,082.00	95.00	272.50	12,039.18	1,318.76	5.38	-1,318.83	396,732.04	754,115.83	1,318.85	270.23	
13,113.00	95.10	272.30	12,036.45	1,349.60	6.67	-1,349.69	396,733.34	754,084.98	1,349.70	270.28	



Victory Park Resources

Professional Directional ProDirectional X&Y Survey Report



Company:	VPR Operating, LLC	Local Co-ordinate Reference:	Well 1H
Project:	Lea County, NM	TVD Reference:	WELL @ 3381.00usft (PPD #12 RKB: 18' + GL: 3363')
Site:	Harrier 35" Fed. Com.	MD Reference:	WELL @ 3381.00usft (PPD #12 RKB: 18' + GL: 3363')
Well:	1H	North Reference:	Grid
Wellbore:	Harrier 35 No. 1H (ST01)	Survey Calculation Method:	Minimum Curvature
Design:	Harrier 35 No. 1H (ST01) - Final	Database:	Well-Planner1

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	Closure Distance (usft)	Closure Azimuth (°)	
13,145.00	95.60	272.30	12,033.47	1,381.42	7.95	-1,381.52	396,734.62	754,053.15	1,381.54	270.33	
13,177.00	94.40	272.30	12,030.68	1,413.26	9.23	-1,413.37	396,735.90	754,021.29	1,413.40	270.37	
13,209.00	94.00	271.80	12,028.34	1,445.15	10.37	-1,445.27	396,737.04	753,989.40	1,445.30	270.41	
13,240.00	94.60	271.80	12,026.01	1,476.04	11.34	-1,476.16	396,738.01	753,958.50	1,476.21	270.44	
13,272.00	95.10	271.70	12,023.31	1,507.90	12.31	-1,508.04	396,738.98	753,926.63	1,508.09	270.47	
13,303.00	94.30	272.10	12,020.77	1,538.77	13.34	-1,538.91	396,740.01	753,895.75	1,538.97	270.50	
13,335.00	92.20	272.50	12,018.95	1,570.68	14.62	-1,570.83	396,741.29	753,863.83	1,570.90	270.53	
13,367.00	91.10	272.50	12,018.03	1,602.63	16.01	-1,602.79	396,742.68	753,831.88	1,602.87	270.57	
13,399.00	91.50	272.50	12,017.31	1,634.57	17.41	-1,634.75	396,744.08	753,799.92	1,634.84	270.61	
13,430.00	92.00	272.60	12,016.36	1,665.52	18.79	-1,665.71	396,745.46	753,768.96	1,665.81	270.65	
13,462.00	92.00	272.50	12,015.24	1,697.46	20.21	-1,697.66	396,746.88	753,737.01	1,697.78	270.68	
13,494.00	92.80	272.50	12,013.90	1,729.39	21.61	-1,729.60	396,748.27	753,705.07	1,729.73	270.72	
13,525.00	93.20	272.50	12,012.28	1,760.30	22.96	-1,760.52	396,749.63	753,674.14	1,760.67	270.75	
13,557.00	93.10	272.30	12,010.52	1,792.22	24.29	-1,792.45	396,750.96	753,642.22	1,792.61	270.78	
13,588.00	92.50	272.20	12,009.01	1,823.14	25.51	-1,823.39	396,752.18	753,611.28	1,823.57	270.80	
9-12-12 PVA @ 13588' MD											
13,620.00	92.80	272.40	12,007.53	1,855.07	26.79	-1,855.33	396,753.46	753,579.34	1,855.52	270.83	
13,652.00	93.80	272.80	12,005.69	1,886.98	28.24	-1,887.24	396,754.91	753,547.43	1,887.45	270.86	
13,684.00	92.80	273.10	12,003.84	1,918.87	29.89	-1,919.14	396,756.55	753,515.52	1,919.38	270.89	
13,715.00	93.00	273.50	12,002.27	1,949.76	31.67	-1,950.05	396,758.34	753,484.61	1,950.31	270.93	
13,747.00	92.30	273.80	12,000.80	1,981.65	33.70	-1,981.95	396,760.37	753,452.71	1,982.24	270.97	
13,778.00	92.20	273.90	11,999.58	2,012.54	35.78	-2,012.86	396,762.45	753,421.81	2,013.18	271.02	
13,810.00	92.40	273.70	11,998.29	2,044.42	37.90	-2,044.76	396,764.57	753,389.90	2,045.12	271.06	
13,842.00	92.80	273.60	11,996.84	2,076.31	39.94	-2,076.67	396,766.61	753,358.00	2,077.05	271.10	
13,874.00	93.10	273.80	11,995.20	2,108.18	42.00	-2,108.56	396,768.67	753,326.11	2,108.98	271.14	
13,905.00	93.10	273.70	11,993.52	2,139.06	44.02	-2,139.45	396,770.69	753,295.22	2,139.90	271.18	
13,937.00	92.30	273.40	11,992.01	2,170.94	46.00	-2,171.35	396,772.67	753,263.32	2,171.84	271.21	



Victory Park Resources

Professional Directional ProDirectional X&Y Survey Report



Company:	VPR Operating, LLC	Local Co-ordinate Reference:	Well: 1H
Project:	Lea County, NM	TVD Reference:	WELL @ 3381.00usft (PPD #12 RKB: 18' + GL: 3363')
Site:	Harrier "35" Fed. Com	MD Reference:	WELL @ 3381.00usft (PPD #12 RKB: 18' + GL: 3363')
Well:	1H	North Reference:	Grid
Wellbore:	Harrier 35 No. 1H (ST01)	Survey Calculation Method:	Minimum Curvature
Design:	Harrier 35 No. 1H (ST01) - Final	Database:	Well Planner1

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	Closure Distance (usft)	Closure Azimuth (°)	
13,969.00	92.40	273.40	11,990.70	2,202.84	47.90	-2,203.27	396,774.57	753,231.40	2,203.79	271.25	
14,000.00	93.10	273.60	11,989.21	2,233.74	49.79	-2,234.17	396,776.46	753,200.50	2,234.73	271.28	
14,032.00	93.40	273.50	11,987.40	2,265.61	51.77	-2,266.06	396,778.44	753,168.61	2,266.65	271.31	
14,063.00	93.50	273.80	11,985.53	2,296.47	53.74	-2,296.94	396,780.41	753,137.73	2,297.57	271.34	
14,095.00	92.70	273.80	11,983.80	2,328.34	55.86	-2,328.82	396,782.52	753,105.85	2,329.49	271.37	
14,126.00	91.80	273.10	11,982.59	2,359.24	57.72	-2,359.74	396,784.39	753,074.93	2,360.45	271.40	
14,157.00	91.40	272.70	11,981.72	2,390.18	59.29	-2,390.69	396,785.96	753,043.98	2,391.43	271.42	
14,189.00	91.50	272.60	11,980.91	2,422.12	60.77	-2,422.65	396,787.44	753,012.02	2,423.41	271.44	
9-13-12 PVA @ 14189' MD											
14,221.00	91.90	272.80	11,979.96	2,454.06	62.27	-2,454.60	396,788.94	752,980.07	2,455.39	271.45	
14,253.00	92.10	273.00	11,978.84	2,485.99	63.89	-2,486.54	396,790.56	752,948.13	2,487.36	271.47	
14,284.00	92.50	273.00	11,977.60	2,516.91	65.51	-2,517.47	396,792.18	752,917.20	2,518.32	271.49	
14,316.00	92.50	272.40	11,976.20	2,548.83	67.02	-2,549.40	396,793.69	752,885.27	2,550.28	271.51	
14,348.00	92.30	271.90	11,974.86	2,580.77	68.22	-2,581.35	396,794.89	752,853.32	2,582.25	271.51	
14,379.00	91.90	271.80	11,973.73	2,611.72	69.22	-2,612.31	396,795.89	752,822.35	2,613.23	271.52	
14,411.00	92.00	272.10	11,972.64	2,643.68	70.31	-2,644.28	396,796.97	752,790.39	2,645.21	271.52	
14,442.00	91.50	271.80	11,971.69	2,674.63	71.36	-2,675.24	396,798.03	752,759.42	2,676.20	271.53	
14,474.00	91.30	271.80	11,970.91	2,706.60	72.36	-2,707.22	396,799.03	752,727.45	2,708.19	271.53	
14,506.00	90.70	271.20	11,970.35	2,738.58	73.20	-2,739.20	396,799.87	752,695.46	2,740.18	271.53	
14,538.00	91.10	270.50	11,969.85	2,770.56	73.68	-2,771.20	396,800.35	752,663.47	2,772.17	271.52	
14,570.00	91.20	270.50	11,969.21	2,802.55	73.96	-2,803.19	396,800.63	752,631.48	2,804.16	271.51	
14,601.00	91.70	271.10	11,968.42	2,833.54	74.39	-2,834.17	396,801.06	752,600.49	2,835.15	271.50	
14,633.00	91.70	271.00	11,967.47	2,865.51	74.97	-2,866.16	396,801.64	752,568.51	2,867.14	271.50	
14,665.00	91.70	270.50	11,966.52	2,897.49	75.39	-2,898.14	396,802.06	752,536.53	2,899.12	271.49	
14,697.00	90.60	269.50	11,965.88	2,929.48	75.39	-2,930.13	396,802.06	752,504.54	2,931.10	271.47	
14,729.00	91.90	269.70	11,965.18	2,961.47	75.17	-2,962.12	396,801.84	752,472.55	2,963.08	271.45	
14,760.00	91.60	269.30	11,964.24	2,992.46	74.90	-2,993.11	396,801.57	752,441.56	2,994.04	271.43	



Victory Park Resources

Professional Directional ProDirectional X&Y Survey Report



Company:	VPR Operating, LLC	Local Co-ordinate Reference:	Well 1H
Project:	Lea County, NM	TVD Reference:	WELL @ 3381.00usft (PPD #12 RKB: 18' + GL: 3363)
Site:	Harrier 35" Fed. Com.	MD Reference:	WELL @ 3381.00usft (PPD #12 RKB: 18' + GL: 3363)
Well:	1H	North Reference:	Grid
Wellbore:	Harrier 35 No. 1H (ST01)	Survey/Calculation Method:	Minimum Curvature
Design:	Harrier 35 No. 1H (ST01) - Final	Database:	Well-Planner1

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	Closure Distance (usft)	Closure Azimuth (°)	
14,792.00	90.60	268.80	11,963.62	3,024.45	74.37	-3,025.10	396,801.04	752,409.57	3,026.01	271.41	
14,824.00	89.60	268.00	11,963.57	3,056.44	73.48	-3,057.08	396,800.14	752,377.59	3,057.96	271.38	
9-14-12 PVA @ 14824' MD											
14,918.00	90.90	270.30	11,963.16	3,150.43	72.08	-3,151.06	396,798.75	752,283.61	3,151.89	271.31	
14,950.00	91.60	271.50	11,962.46	3,182.42	72.58	-3,183.05	396,799.25	752,251.62	3,183.88	271.31	
14,981.00	91.40	271.30	11,961.65	3,213.39	73.34	-3,214.03	396,800.01	752,220.64	3,214.87	271.31	
15,013.00	91.40	271.20	11,960.87	3,245.37	74.04	-3,246.01	396,800.71	752,188.65	3,246.86	271.31	
15,045.00	92.30	272.40	11,959.83	3,277.32	75.04	-3,277.98	396,801.71	752,156.69	3,278.84	271.31	
15,076.00	92.70	272.50	11,958.48	3,308.26	76.37	-3,308.92	396,803.04	752,125.75	3,309.80	271.32	
15,108.00	93.00	272.70	11,956.89	3,340.17	77.82	-3,340.85	396,804.49	752,093.82	3,341.76	271.33	
15,139.00	91.30	271.80	11,955.73	3,371.11	79.03	-3,371.80	396,805.70	752,062.87	3,372.73	271.34	
15,171.00	90.90	271.40	11,955.11	3,403.09	79.93	-3,403.78	396,806.60	752,030.88	3,404.72	271.35	
15,203.00	90.90	271.60	11,954.61	3,435.07	80.76	-3,435.77	396,807.43	751,998.90	3,436.72	271.35	
15,234.00	91.20	272.30	11,954.04	3,466.03	81.82	-3,466.75	396,808.49	751,967.92	3,467.71	271.35	
15,266.00	92.10	272.70	11,953.12	3,497.98	83.21	-3,498.70	396,809.88	751,935.97	3,499.69	271.36	
15,298.00	92.10	272.10	11,951.95	3,529.92	84.55	-3,530.65	396,811.22	751,904.02	3,531.66	271.37	
15,329.00	92.00	271.40	11,950.84	3,560.88	85.50	-3,561.62	396,812.17	751,873.05	3,562.64	271.38	
15,361.00	92.70	271.50	11,949.53	3,592.83	86.31	-3,593.58	396,812.98	751,841.09	3,594.62	271.38	
15,393.00	92.80	271.70	11,947.99	3,624.77	87.20	-3,625.53	396,813.87	751,809.14	3,626.58	271.38	
15,424.00	92.30	270.50	11,946.61	3,655.73	87.80	-3,656.49	396,814.46	751,778.17	3,657.55	271.38	
15,456.00	92.00	270.30	11,945.41	3,687.71	88.02	-3,688.47	396,814.69	751,746.20	3,689.52	271.37	
15,488.00	92.00	270.40	11,944.29	3,719.68	88.21	-3,720.45	396,814.88	751,714.22	3,721.50	271.36	
15,520.00	91.90	270.30	11,943.21	3,751.66	88.41	-3,752.43	396,815.08	751,682.24	3,753.47	271.35	
15,552.00	91.20	270.30	11,942.34	3,783.65	88.58	-3,784.42	396,815.25	751,650.25	3,785.45	271.34	
15,559.00	91.35	270.32	11,942.18	3,790.64	88.61	-3,791.42	396,815.28	751,643.25	3,792.45	271.34	
Crossed Sec Line from 35 into 34 @ 15559' MD											
15,584.00	91.90	270.40	11,941.47	3,815.63	88.77	-3,816.41	396,815.44	751,618.26	3,817.44	271.33	

Company:	VPR Operating, LLC	Local Co-ordinate Reference:	Well 1H
Project:	Lea County, NM	TVD Reference:	WELL @ 3381.00usft (PPD #12 RKB 18' + GL 3363')
Site:	Harrier 35" Fed. Com.	MD Reference:	WELL @ 3381.00usft (PPD #12 RKB 18' + GL 3363')
Well:	1H	North Reference:	Grid
Wellbore:	Harrier 35" No. 1H (ST01)	Survey Calculation Method:	Minimum Curvature
Design:	Harrier 35" No. 1H (ST01) - Final	Database:	Well Planner1

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec. (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	Closure Distance (usft)	Closure Azimuth (°)	
15,616.00	92.40	271.40	11,940.27	3,847.60	89.27	-3,848.38	396,815.94	751,586.29	3,849.41	271.33	
15,647.00	92.10	271.30	11,939.06	3,878.56	90.00	-3,879.35	396,816.67	751,555.32	3,880.39	271.33	
15,679.00	90.60	270.00	11,938.30	3,910.55	90.37	-3,911.33	396,817.04	751,523.33	3,912.38	271.32	
15,711.00	91.90	270.50	11,937.60	3,942.53	90.51	-3,943.33	396,817.18	751,491.34	3,944.36	271.31	
15,742.00	91.80	270.90	11,936.60	3,973.51	90.88	-3,974.31	396,817.55	751,460.36	3,975.35	271.31	
15,774.00	91.20	270.50	11,935.77	4,005.50	91.28	-4,006.29	396,817.94	751,428.38	4,007.33	271.31	
15,805.00	90.40	269.80	11,935.33	4,036.49	91.36	-4,037.29	396,818.03	751,397.38	4,038.32	271.30	
15,836.00	90.90	270.30	11,934.98	4,067.49	91.38	-4,068.29	396,818.05	751,366.38	4,069.31	271.29	
15,868.00	92.00	271.30	11,934.17	4,099.47	91.83	-4,100.27	396,818.50	751,334.40	4,101.30	271.28	
15,900.00	91.60	271.40	11,933.17	4,131.44	92.58	-4,132.25	396,819.25	751,302.42	4,133.29	271.28	
15,931.00	90.80	270.50	11,932.52	4,162.42	93.10	-4,163.24	396,819.77	751,271.43	4,164.28	271.28	
15,963.00	90.20	270.20	11,932.24	4,194.42	93.29	-4,195.23	396,819.96	751,239.43	4,196.27	271.27	
15,995.00	89.80	270.20	11,932.24	4,226.41	93.40	-4,227.23	396,820.07	751,207.43	4,228.27	271.27	
16,026.00	90.40	270.90	11,932.18	4,257.41	93.70	-4,258.23	396,820.37	751,176.44	4,259.26	271.26	
16,058.00	90.10	270.40	11,932.04	4,289.40	94.07	-4,290.23	396,820.73	751,144.44	4,291.26	271.26	
16,090.00	89.70	269.90	11,932.10	4,321.40	94.15	-4,322.23	396,820.82	751,112.44	4,323.25	271.25	
16,121.00	91.30	271.10	11,931.83	4,352.39	94.42	-4,353.23	396,821.09	751,081.44	4,354.25	271.24	
16,153.00	92.80	271.70	11,930.69	4,384.36	95.20	-4,385.19	396,821.87	751,049.47	4,386.23	271.24	
16,185.00	92.60	271.30	11,929.18	4,416.30	96.04	-4,417.15	396,822.71	751,017.52	4,418.19	271.25	
16,216.00	93.10	271.40	11,927.64	4,447.25	96.77	-4,448.10	396,823.44	750,986.57	4,449.15	271.25	
16,248.00	92.00	271.00	11,926.21	4,479.20	97.44	-4,480.06	396,824.11	750,954.61	4,481.12	271.25	
16,280.00	92.70	271.10	11,924.90	4,511.17	98.02	-4,512.03	396,824.69	750,922.64	4,513.09	271.24	
16,311.00	92.60	271.50	11,923.47	4,542.12	98.72	-4,542.99	396,825.39	750,891.68	4,544.06	271.24	
16,323.00	92.30	271.60	11,922.95	4,554.10	99.05	-4,554.97	396,825.72	750,879.70	4,556.05	271.25	
9-17-12 Final MWD Survey @ 16323' MD											
16,375.00	92.30	271.60	11,920.87	4,606.03	100.50	-4,606.91	396,827.17	750,827.76	4,608.01	271.25	
Bit Projection @ 16375' MD (1850' FNL & 798' FEL) Sec. 34											



Victory Park Resources

Professional Directional ProDirectional X&Y Survey Report



Company:	VPR Operating, LLC	Local Co-ordinate Reference:	Well 1H
Project:	Lea County, NM	TVD Reference:	WELL @ 3381.00usft (PPD #12 RKB 18' + GL: 3363')
Site:	Harrier 35" Fed. Com.	MD Reference:	WELL @ 3381.00usft (PPD #12 RKB 18' + GL: 3363')
Well:	1H	North Reference:	Grid
Wellbore:	Harrier 35 No. 1H (ST01)	Survey Calculation Method:	Minimum Curvature
Design:	Harrier 35 No. 1H (ST01) - Final	Database:	Well_Planner1

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
12,605.00	12,060.01	-17.62	-843.14	Tie-In for ST01 @ 12605' MD
12,637.00	12,059.82	-17.90	-875.14	First (ST01) Survey at 12637' MD
12,890.00	12,049.40	-2.33	-1,127.32	9-6-12 PVA @ 12890' MD
13,017.00	12,044.50	2.69	-1,254.11	9-7-12 PVA @ 13017' MD
13,588.00	12,009.01	25.51	-1,823.39	9-12-12 PVA @ 13588' MD
14,189.00	11,980.91	60.77	-2,422.65	9-13-12 PVA @ 14189' MD
14,824.00	11,963.57	73.48	-3,057.08	9-14-12 PVA @ 14824' MD
15,559.00	11,942.18	88.61	-3,791.42	Crossed Sec Line from 35 into 34 @ 15559' MD
16,323.00	11,922.95	99.05	-4,554.97	9-17-12 Final MWD Survey @ 16323' MD
16,375.00	11,920.87	100.50	-4,606.91	Bit Projection @ 16375' MD (1850' FNL & 798' FEL) Sec. 34