

District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Avenue, Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico

Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

RCVD DEC 13 '07

¹ API Number 30-045-34405	² Pool Code 71599	³ Pool Name Basin Dakota	OIL CONS. DIV. DIST. 3
⁴ Property Code 26819	⁵ Property Name Heights Com		⁶ Well Number 001Z
⁷ OGRID No. 14634	⁸ Operator Name Merrion Oil & Gas		⁹ Elevation 5696

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	35	30N	13W	A	637	N	753	E	San Juan

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	36	30n	13W	L	2495.27	S	766.63	W	San Juan
¹² Dedicated Acres 320	¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.				

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

Section 35 Surface 637' fml 753' fel	Section 36 2589/S 199/W Bottom hole 2497.27' fsl 766.63' fwl	¹⁷ OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division</i> Signature 12/12/07 Date Tracy S. Foutz Printed Name
		¹⁸ SURVEYOR CERTIFICATION <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i> Date of Survey Signature and Seal of Professional Surveyor: GERALD HUDDLESTON LS 6844 Certificate Number



Job Number: Q070448
 Company: Merrion Oil & Gas Corp.
 Lease/Well: Heights #1Z
 Location: San Juan County
 Rig Name: ☐
 RKB: ☐
 G.L. or M.S.L.: 5696'

State/Country: New Mexico
 Declination: 10.50901
 Grid: 0.17
 File name: C:\LTSTDSB\TEMP\HARDDR~1\CUSTOM~1\MERRIO~1\RM-07424\Q07044
 Date/Time: 04-Nov-07 / 20:01
 Curve Name: As-Drilled Surveys

WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane 144.74
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Vertical Section FT	Dogleg Severity Deg/100	N-S FT	E-W FT	C L O S U R E			
								Distance FT	Direction Deg	FNL-FSL FT	FEL-FWL FT
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	637.00 FNL	753.00 FEL
483.00	.30	336.20	483.00	-1.24	.06	1.16	-.51	1.26	336.20	635.84 FNL	753.51 FEL
879.00	.10	46.00	879.00	-2.31	.07	2.35	-.68	2.44	343.83	634.65 FNL	753.68 FEL
1150.00	.20	31.20	1149.99	-2.53	.04	2.91	-.26	2.93	354.81	634.09 FNL	753.26 FEL
1423.00	.50	47.10	1422.99	-2.88	.11	4.13	.85	4.22	11.68	632.87 FNL	752.15 FEL
1605.00	.30	7.50	1604.99	-3.34	.18	5.15	1.50	5.36	16.24	631.85 FNL	751.50 FEL
1695.00	2.60	172.20	1694.96	-1.70	3.21	3.36	1.81	3.81	28.29	633.64 FNL	751.19 FEL
1784.00	6.90	165.20	1783.63	5.11	4.87	-3.82	3.45	5.14	137.91	640.82 FNL	749.55 FEL
1877.00	10.60	160.30	1875.53	18.58	4.05	-17.27	7.76	18.94	155.81	654.27 FNL	745.24 FEL
1970.00	14.00	156.60	1966.39	37.84	3.75	-35.66	15.11	38.73	157.03	672.66 FNL	737.89 FEL
2064.00	16.10	152.40	2057.16	61.89	2.52	-57.65	25.67	63.10	156.00	694.65 FNL	727.33 FEL
2157.00	19.00	150.40	2145.82	89.74	3.18	-82.24	39.12	91.07	154.56	719.24 FNL	713.88 FEL
2251.00	21.00	148.10	2234.15	121.78	2.29	-109.85	55.58	123.11	153.16	746.85 FNL	697.42 FEL
2343.00	22.30	147.40	2319.66	155.68	1.44	-138.55	73.70	156.93	151.99	775.55 FNL	679.30 FEL

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Vertical Section FT	Dogleg Severity Deg/100	N-S FT	E-W FT	C L O S U R E			
								Distance FT	Direction Deg	FNL-FSL FT	FEL-FWL FT
2437.00	22.80	147.50	2406.47	191.69	.53	-168.94	93.09	192.89	151.14	805.94 FNL	659.91 FEL
2529.00	22.20	147.70	2491.47	226.85	.66	-198.66	111.96	228.04	150.60	835.66 FNL	641.04 FEL
2623.00	23.80	146.10	2577.99	263.55	1.83	-229.42	132.03	264.70	150.08	866.42 FNL	620.97 FEL
2715.00	27.30	145.30	2660.99	303.22	3.82	-262.18	154.40	304.27	149.51	899.18 FNL	598.60 FEL
2808.00	32.80	144.30	2741.45	349.77	5.94	-300.20	181.26	350.68	148.88	937.20 FNL	571.74 FEL
2899.00	34.50	143.30	2817.20	400.18	1.96	-340.88	211.05	400.93	148.24	977.88 FNL	541.95 FEL
2993.00	36.00	140.40	2893.97	454.35	2.39	-383.52	244.57	454.87	147.47	1020.52 FNL	508.43 FEL
3086.00	36.10	139.40	2969.16	508.88	.64	-425.38	279.82	509.17	146.66	1062.38 FNL	473.18 FEL
3179.00	35.90	140.10	3044.40	563.34	.49	-467.10	315.14	563.47	145.99	1104.10 FNL	437.86 FEL
3273.00	35.80	142.60	3120.60	618.28	1.56	-510.09	349.52	618.35	145.58	1147.09 FNL	403.48 FEL
3366.00	36.30	143.40	3195.79	672.99	.74	-553.80	382.46	673.03	145.37	1190.80 FNL	370.54 FEL
3457.00	36.60	143.10	3268.99	727.03	.38	-597.12	414.81	727.06	145.21	1234.12 FNL	338.19 FEL
3551.00	35.40	142.60	3345.03	782.25	1.31	-641.16	448.17	782.26	145.05	1278.16 FNL	304.83 FEL
3644.00	35.50	145.10	3420.80	836.18	1.56	-684.70	479.98	836.18	144.97	1321.70 FNL	273.02 FEL
3738.00	34.20	144.30	3497.94	889.89	1.47	-728.54	511.01	889.89	144.95	1365.54 FNL	241.99 FEL
3829.00	35.10	144.80	3572.80	941.63	1.04	-770.69	541.02	941.63	144.93	1407.69 FNL	211.98 FEL
3920.00	32.50	145.70	3648.41	992.24	2.91	-812.27	569.88	992.25	144.95	1449.27 FNL	183.12 FEL
4012.00	33.70	146.30	3725.48	1042.47	1.35	-853.93	597.97	1042.48	145.00	1490.93 FNL	155.03 FEL
4105.00	33.30	146.60	3803.03	1093.78	.47	-896.71	626.34	1093.79	145.07	1533.71 FNL	126.66 FEL
4197.00	34.00	147.00	3879.62	1144.72	.80	-939.36	654.25	1144.75	145.14	1576.36 FNL	98.75 FEL
4291.00	33.20	144.30	3957.91	1196.72	1.80	-982.31	683.59	1196.75	145.17	1619.31 FNL	69.41 FEL
4384.00	31.10	143.30	4036.65	1246.20	2.33	-1022.25	712.80	1246.23	145.11	1659.25 FNL	40.20 FEL
4477.00	32.50	144.70	4115.69	1295.20	1.70	-1061.90	741.60	1295.22	145.07	1698.90 FNL	11.40 FEL
4571.00	32.60	144.80	4194.92	1345.77	.12	-1103.20	770.79	1345.79	145.06	1740.20 FNL	17.79 FWL
4663.00	33.90	144.50	4271.86	1396.21	1.42	-1144.34	799.97	1396.23	145.04	1781.34 FNL	46.97 FWL
4756.00	32.00	142.30	4349.90	1446.77	2.41	-1184.96	830.10	1446.79	144.99	1821.96 FNL	77.10 FWL
4849.00	33.40	141.30	4428.16	1496.95	1.61	-1224.43	861.18	1496.95	144.88	1861.43 FNL	108.18 FWL
4941.00	31.40	140.00	4505.83	1546.11	2.30	-1262.56	892.42	1546.11	144.75	1899.56 FNL	139.42 FWL
5034.00	29.50	142.00	4586.00	1593.14	2.32	-1299.17	922.09	1593.14	144.63	1936.17 FNL	169.09 FWL
5124.00	28.40	145.70	4664.76	1636.67	2.33	-1334.31	947.80	1636.68	144.61	1971.31 FNL	194.80 FWL
5214.00	28.50	146.60	4743.89	1679.54	.49	-1369.92	971.68	1679.54	144.65	2006.92 FNL	218.68 FWL
5307.00	30.00	147.40	4825.04	1724.94	1.67	-1408.03	996.42	1724.94	144.71	2045.03 FNL	243.42 FWL
5400.00	28.80	148.00	4906.06	1770.53	1.33	-1446.62	1020.82	1770.53	144.79	2083.62 FNL	267.82 FWL

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Vertical Section FT	Dogleg Severity Deg/100	N-S FT	E-W FT	C L O S U R E			
								Distance FT	Direction Deg	FNL-FSL FT	FEL-FWL FT
5492.00	28.10	143.90	4986.95	1814.33	2.25	-1482.92	1045.34	1814.33	144.82	2119.92 FNL	292.34 FWL
5584.00	28.00	145.30	5068.15	1857.58	.72	-1518.18	1070.40	1857.59	144.81	2155.18 FNL	317.40 FWL
5677.00	29.60	148.00	5149.65	1902.35	2.22	-1555.61	1095.00	1902.35	144.86	2192.61 FNL	342.00 FWL
5770.00	32.80	148.80	5229.18	1950.42	3.47	-1596.65	1120.22	1950.43	144.95	2233.65 FNL	367.22 FWL
5859.00	30.00	146.90	5305.14	1996.71	3.34	-1635.92	1144.87	1996.73	145.01	2272.92 FNL	391.87 FWL
5953.00	30.60	145.60	5386.30	2044.12	.95	-1675.34	1171.22	2044.15	145.04	2312.34 FNL	418.22 FWL
6046.00	28.30	141.30	5467.29	2089.80	3.36	-1712.09	1198.38	2089.82	145.01	2349.09 FNL	445.38 FWL
6139.00	30.50	144.78	5548.31	2135.42	2.99	-1748.58	1225.78	2135.43	144.97	2385.58 FNL	472.78 FWL
6229.00	31.30	147.40	5625.54	2181.61	1.74	-1786.94	1251.55	2181.63	144.99	2423.94 FNL	498.55 FWL
6322.00	32.70	146.80	5704.41	2230.85	1.54	-1828.31	1278.32	2230.88	145.04	2465.31 FNL	525.32 FWL
6412.00	33.70	149.50	5779.72	2280.03	1.98	-1870.17	1304.31	2280.08	145.11	2507.17 FNL	551.31 FWL
6505.00	32.50	142.70	5857.66	2330.73	4.19	-1912.29	1332.55	2330.78	145.13	2549.29 FNL	579.55 FWL
6599.00	30.10	139.60	5937.97	2379.45	3.07	-1950.34	1363.14	2379.49	145.05	2587.34 FNL	610.14 FWL
6692.00	31.70	140.30	6017.77	2427.05	1.76	-1986.90	1393.86	2427.06	144.95	2623.90 FNL	640.86 FWL
6786.00	29.20	138.40	6098.80	2474.47	2.85	-2023.05	1424.87	2474.47	144.84	2660.05 FNL	671.87 FWL
6875.00	26.20	139.80	6177.59	2515.63	3.45	-2054.30	1451.97	2515.63	144.75	2691.30 FNL	698.97 FWL
6964.00	26.50	142.90	6257.35	2555.05	1.58	-2085.15	1476.63	2555.05	144.70	2722.15 FNL	723.63 FWL
6996.00	26.80	144.40	6285.95	2569.40	2.30	-2096.71	1485.14	2569.40	144.69	2733.71 FNL	732.14 FWL
7059.00	26.50	146.40	6342.26	2597.65	1.50	-2119.96	1501.18	2597.65	144.70	2756.96 FNL	748.18 FWL
7089.00	25.90	146.40	6369.18	2610.89	2.00	-2130.99	1508.51	2610.89	144.71	2767.99 FNL	755.51 FWL

Projection to Bit

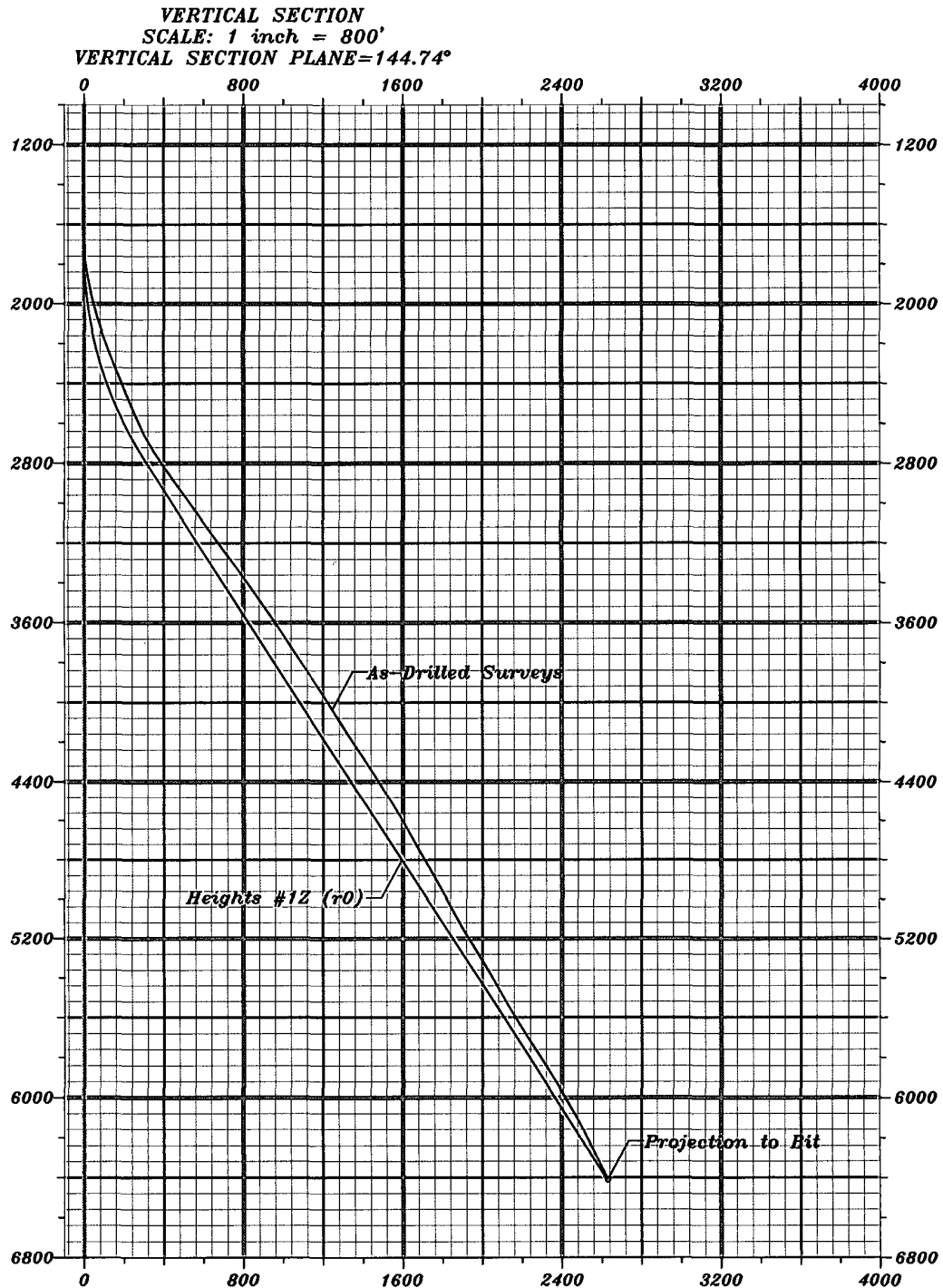
7135.00	25.90	146.40	6410.56	2630.97	.00	-2147.73	1519.63	2630.97	144.72	2784.73 FNL	766.63 FWL
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637/N 753/E

Top Bkt Bkt 2588/S

Merrion Oil & Gas

Heights #1Z As-Drilled
San Juan County, NM
RM-07424



Merrion Oil & Gas

Heights #1Z As-Drilled
San Juan County, NM
RM-07424

