



Enseco Survey Report

27 June, 2012

Wexpro Company

Moffat County, Colorado

Sec 15, T11N, R97W, 6 PM

Powder Wash Government #17

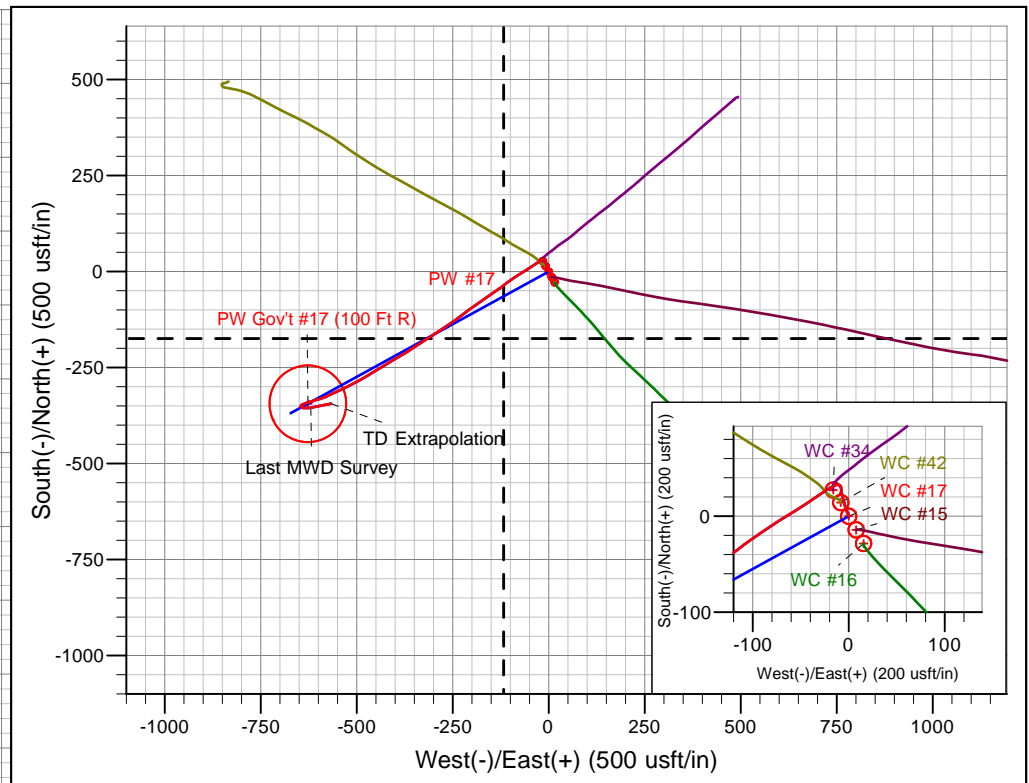
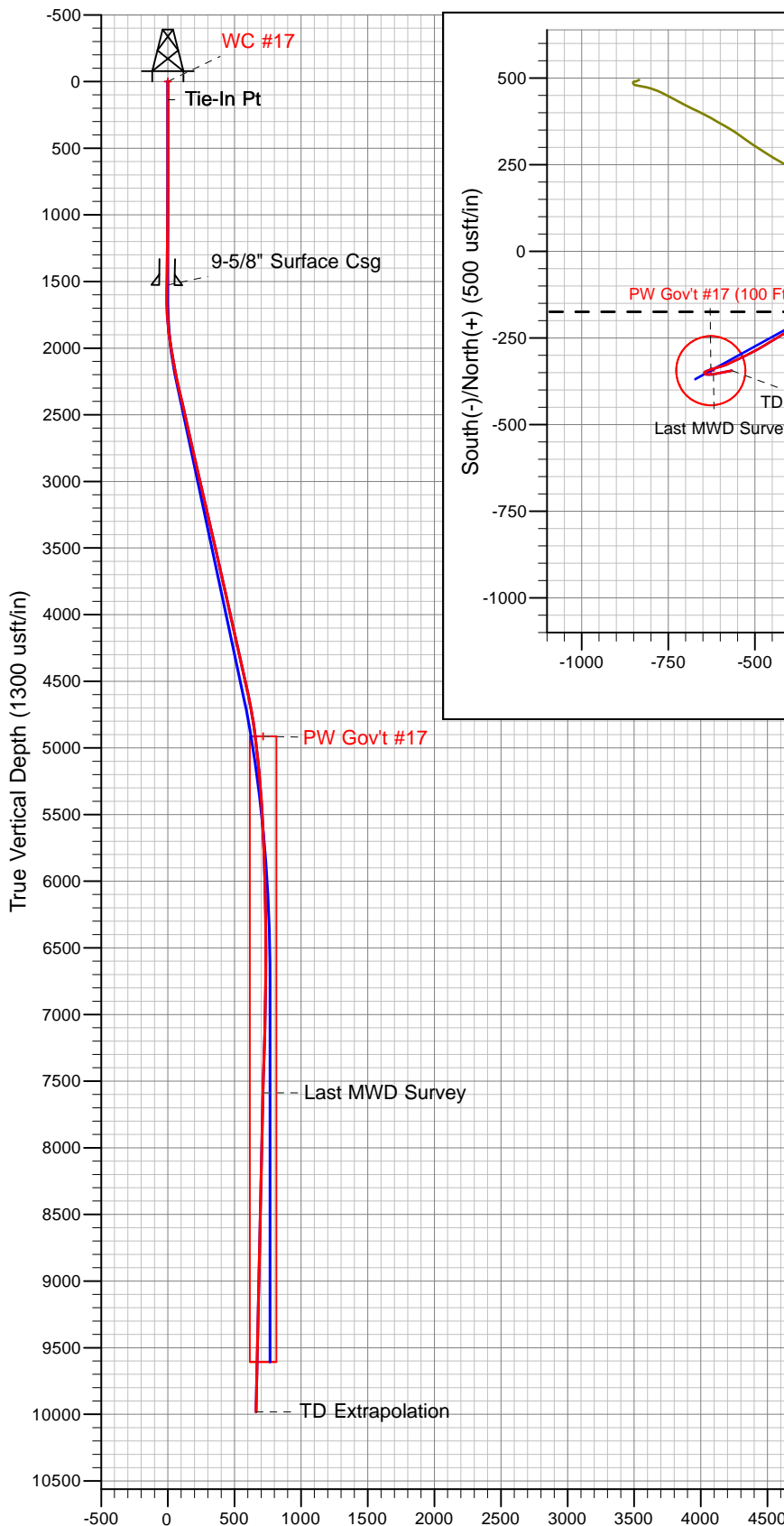
API #: 05-081-07630

Survey: Final Surveys to TD (10,057' MD)





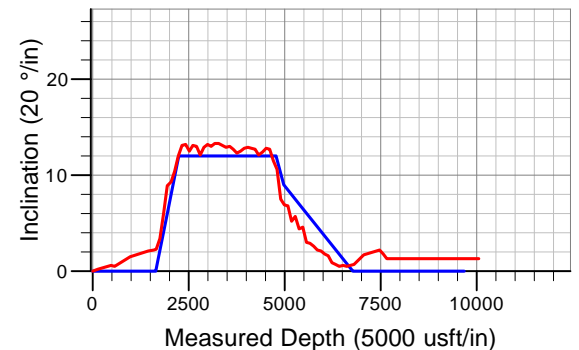
Wexpro Company
Project: Moffat County, Colorado
Site: Sec 15, T11N, R97W, 6 PM
Well: Powder Wash Government #17
Wellbore: API #: 05-081-07630
Design: Final Surveys (10556-159)



Ref Information: Well Center

Geodetic System: US State Plane 1983
 Ellipsoid: GRS 1980
 Zone: Colorado Northern Zone
 Northing: 1596041.00
 Easting: 2220952.39
 Latitude: 40° 56' 7.771 N
 Longitude: 108° 19' 11.791 W

Ground Elevation: 7037.0
 KB Elevation: Actual KB @ 7065.0usft (SST-88)



ANNOTATIONS

TVD	MD	Inc	Azi	V Sect	Annotation
136.0	136.0	0.20	342.50	0.0	Tie-In Pt
1527.6	1528.0	2.15	355.15	-6.2	Surface Csg
7588.4	7663.0	1.30	78.80	713.5	Last MWD Survey
9981.7	10057.0	1.30	78.80	661.7	TD Extrapolation

Vertical Section at 241.23° (1300 usft/in)

Company:	Wexpro Company	Local Co-ordinate Reference:	Well Powder Wash Government #17
Project:	Moffat County, Colorado	Ground Level Elevation:	7,037.00usft
Site:	Sec 15, T11N, R97W, 6 PM	Wellhead Elevation:	Actual KB @ 7065.0usft (SST-88)
Well:	Powder Wash Government #17	North Reference:	True
Wellbore:	API #: 05-081-07630	Survey Calculation Method:	Minimum Curvature
Design:	Final Surveys (10556-159)	Database:	EDM 5000.1 Single User Db

Project	Moffat County, Colorado		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site		Sec 15, T11N, R97W, 6 PM			
Site Position:		Northing:	1,596,083.30 usft	Latitude:	40° 56' 8.182 N
From:	Map	Easting:	2,220,929.13usft	Longitude:	108° 19' 12.112 W
Position Uncertainty:	0.0usft	Slot Radius:	13-3/16"	Grid Convergence:	-1.82°

Well	Powder Wash Government #17					
Well Position	+N/-S	-41.5 usft	Northing:	1,596,041.00 usft	Latitude:	40° 56' 7.771 N
	+E/-W	24.6 usft	Easting:	2,220,952.39 usft	Longitude:	108° 19' 11.791 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	7,065.0 usft	Ground Level:	7,037.0usft

Wellbore	API #: 05-081-07630				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	28-Oct-2010	10.77	66.87	53,036

Design:	Final Surveys (10556-159)			Survey Error Model:	Standard ISCWSA MWD Tool
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	241.23	

Company:	Wexpro Company	Local Co-ordinate Reference:	Well Powder Wash Government #17
Project:	Moffat County, Colorado	Ground Level Elevation:	7,037.00usft
Site:	Sec 15, T11N, R97W, 6 PM	Wellhead Elevation:	Actual KB @ 7065.0usft (SST-88)
Well:	Powder Wash Government #17	North Reference:	True
Wellbore:	API #: 05-081-07630	Survey Calculation Method:	Minimum Curvature
Design:	Final Surveys (10556-159)	Database:	EDM 5000.1 Single User Db

Survey										
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N-S (usft)	+E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	7,065.00	0.0	0.0	0.0	0.00	0.00	0.00
Tie-In Pt										
136.0	0.20	342.50	136.0	6,929.00	0.2	-0.1	0.0	0.15	0.15	0.00
481.0	0.60	338.80	481.0	6,584.01	2.5	-0.9	-0.4	0.12	0.12	-1.07
572.0	0.50	334.50	572.0	6,493.02	3.3	-1.2	-0.5	0.12	-0.11	-4.73
978.0	1.50	340.70	977.9	6,087.08	9.9	-3.8	-1.5	0.25	0.25	1.53
1,450.0	2.10	349.60	1,449.7	5,615.32	24.2	-7.4	-5.2	0.14	0.13	1.89
Surface Csg										
1,528.0	2.15	355.15	1,527.6	5,537.37	27.1	-7.8	-6.2	0.27	0.06	7.12
1,595.0	2.20	359.70	1,594.6	5,470.42	29.6	-7.9	-7.4	0.27	0.08	6.79
1,658.0	2.30	316.00	1,657.5	5,407.47	31.8	-8.7	-7.6	2.66	0.16	-69.37
1,754.0	3.40	260.10	1,753.4	5,311.57	32.6	-12.9	-4.4	2.96	1.15	-58.23
1,850.0	6.00	235.40	1,849.1	5,215.89	29.3	-19.8	3.3	3.37	2.71	-25.73
1,945.0	8.90	236.30	1,943.3	5,121.70	22.4	-30.0	15.5	3.06	3.05	0.95
2,041.0	9.30	236.90	2,038.1	5,026.91	14.1	-42.7	30.7	0.43	0.42	0.63
2,136.0	10.40	237.70	2,131.7	4,933.32	5.3	-56.4	46.9	1.17	1.16	0.84
2,231.0	12.00	238.10	2,224.9	4,840.13	-4.5	-72.0	65.3	1.69	1.68	0.42
2,327.0	13.10	235.60	2,318.6	4,746.42	-15.9	-89.5	86.1	1.28	1.15	-2.60
2,422.0	13.20	234.40	2,411.1	4,653.91	-28.3	-107.2	107.6	0.31	0.11	-1.26
2,518.0	12.50	232.30	2,504.7	4,560.32	-41.1	-124.3	128.7	0.88	-0.73	-2.19
2,612.0	13.10	235.10	2,596.3	4,468.66	-53.4	-141.1	149.4	0.92	0.64	2.98
2,708.0	13.00	236.30	2,689.9	4,375.13	-65.6	-159.0	170.9	0.30	-0.10	1.25
2,804.0	12.10	236.00	2,783.6	4,281.43	-77.2	-176.3	191.7	0.94	-0.94	-0.31
2,899.0	12.90	233.50	2,876.3	4,188.68	-89.1	-193.1	212.1	1.02	0.84	-2.63
2,994.0	13.20	234.40	2,968.9	4,096.14	-101.7	-210.4	233.4	0.38	0.32	0.95
3,090.0	13.00	232.30	3,062.4	4,002.63	-114.7	-227.9	255.0	0.54	-0.21	-2.19
3,185.0	13.30	233.50	3,154.9	3,910.13	-127.7	-245.1	276.4	0.43	0.32	1.26
3,281.0	13.30	237.20	3,248.3	3,816.70	-140.3	-263.3	298.3	0.89	0.00	3.85
3,376.0	13.10	236.70	3,340.8	3,724.21	-152.1	-281.5	319.9	0.24	-0.21	-0.53
3,471.0	12.90	236.70	3,433.4	3,631.64	-163.8	-299.3	341.3	0.21	-0.21	0.00
3,567.0	13.00	236.70	3,526.9	3,538.09	-175.7	-317.3	362.7	0.10	0.10	0.00
3,662.0	12.70	237.40	3,619.5	3,445.47	-187.2	-335.1	383.8	0.36	-0.32	0.74
3,757.0	12.30	236.20	3,712.3	3,352.72	-198.4	-352.3	404.3	0.50	-0.42	-1.26
3,853.0	12.50	238.60	3,806.0	3,258.96	-209.5	-369.6	424.8	0.58	0.21	2.50
3,946.0	12.80	239.10	3,896.8	3,168.22	-220.0	-387.1	445.2	0.34	0.32	0.54
4,041.0	12.90	239.00	3,989.4	3,075.60	-230.9	-405.2	466.3	0.11	0.11	-0.11
4,136.0	12.80	239.00	4,082.0	2,982.97	-241.8	-423.3	487.4	0.11	-0.11	0.00
4,232.0	12.70	238.60	4,175.7	2,889.34	-252.8	-441.4	508.6	0.14	-0.10	-0.42
4,325.0	12.10	239.50	4,266.5	2,798.51	-263.0	-458.5	528.5	0.68	-0.65	0.97
4,423.0	12.40	239.00	4,362.3	2,702.74	-273.7	-476.4	549.3	0.32	0.31	-0.51
4,518.0	12.80	241.20	4,455.0	2,610.03	-284.0	-494.4	570.0	0.66	0.42	2.32
4,613.0	12.70	243.40	4,547.6	2,517.37	-293.7	-512.9	591.0	0.52	-0.11	2.32
4,708.0	11.50	243.70	4,640.5	2,424.49	-302.6	-530.8	610.9	1.26	-1.26	0.32
4,804.0	10.60	245.50	4,734.7	2,330.27	-310.5	-547.4	629.2	1.00	-0.94	1.88
4,899.0	7.50	245.10	4,828.5	2,236.46	-316.7	-560.9	644.1	3.26	-3.26	-0.42
4,995.0	6.90	244.60	4,923.8	2,141.22	-321.9	-571.8	656.2	0.63	-0.63	-0.52
5,090.0	6.80	243.70	5,018.1	2,046.90	-326.8	-582.0	667.5	0.15	-0.11	-0.95
5,185.0	5.20	254.10	5,112.6	1,952.42	-330.5	-591.2	677.3	2.03	-1.68	10.95
5,280.0	5.70	255.50	5,207.2	1,857.85	-332.8	-599.9	686.1	0.54	0.53	1.47
5,376.0	4.40	253.90	5,302.8	1,762.22	-335.0	-608.1	694.3	1.36	-1.35	-1.67
5,471.0	4.60	253.90	5,397.5	1,667.52	-337.1	-615.2	701.5	0.21	0.21	0.00
5,567.0	3.00	254.10	5,493.3	1,571.73	-338.9	-621.4	707.7	1.67	-1.67	0.21

Company:	Wexpro Company	Local Co-ordinate Reference:	Well Powder Wash Government #17
Project:	Moffat County, Colorado	Ground Level Elevation:	7,037.00usft
Site:	Sec 15, T11N, R97W, 6 PM	Wellhead Elevation:	Actual KB @ 7065.0usft (SST-88)
Well:	Powder Wash Government #17	North Reference:	True
Wellbore:	API #: 05-081-07630	Survey Calculation Method:	Minimum Curvature
Design:	Final Surveys (10556-159)	Database:	EDM 5000.1 Single User Db

Survey										
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,662.0	2.90	254.40	5,588.1	1,476.86	-340.2	-626.1	712.5	0.11	-0.11	0.32
5,758.0	2.60	249.30	5,684.0	1,380.97	-341.6	-630.4	717.0	0.40	-0.31	-5.31
5,853.0	2.20	246.90	5,778.9	1,286.05	-343.1	-634.1	721.0	0.43	-0.42	-2.53
5,949.0	2.10	246.00	5,874.9	1,190.12	-344.5	-637.4	724.6	0.11	-0.10	-0.94
6,044.0	1.80	247.10	5,969.8	1,095.18	-345.8	-640.4	727.8	0.32	-0.32	1.16
6,139.0	1.60	244.10	6,064.8	1,000.22	-347.0	-643.0	730.6	0.23	-0.21	-3.16
6,235.0	0.90	215.20	6,160.8	904.24	-348.2	-644.6	732.6	0.96	-0.73	-30.10
6,330.0	0.70	191.20	6,255.7	809.25	-349.4	-645.1	733.7	0.41	-0.21	-25.26
6,425.0	0.50	178.70	6,350.7	714.26	-350.3	-645.2	734.2	0.25	-0.21	-13.16
6,521.0	0.60	174.50	6,446.7	618.26	-351.3	-645.2	734.6	0.11	0.10	-4.38
6,616.0	0.50	157.10	6,541.7	523.27	-352.1	-645.0	734.8	0.20	-0.11	-18.32
6,712.0	0.60	146.70	6,637.7	427.27	-353.0	-644.5	734.9	0.15	0.10	-10.83
6,807.0	0.70	141.60	6,732.7	332.28	-353.8	-643.9	734.7	0.12	0.11	-5.37
7,061.0	1.70	92.20	6,986.7	78.33	-355.2	-639.2	731.2	0.53	0.39	-19.45
7,473.0	2.20	87.80	7,398.4	-333.43	-355.1	-625.2	718.9	0.13	0.12	-1.07
7,568.0	1.80	82.30	7,493.4	-428.37	-354.8	-621.9	715.9	0.47	-0.42	-5.79
Last MWD Survey										
7,663.0	1.30	78.80	7,588.4	-523.36	-354.4	-619.3	713.5	0.54	-0.53	-3.68
TD Extrapolation										
10,057.0	1.30	78.80	9,981.7	-2,916.75	-343.9	-566.1	661.7	0.00	0.00	0.00

Casing Points					
MD (usft)	TVD (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,528.0	1,527.6	9-5/8" Surface Csg	9-5/8	12-1/4	

Survey Annotations					
MD (usft)	TVD (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
136.0	136.0	0.2	-0.1	Tie-In Pt	
1,528.0	1,527.6	27.1	-7.8	Surface Csg	
7,663.0	7,588.4	-354.4	-619.3	Last MWD Survey	
10,057.0	9,981.7	-343.9	-566.1	TD Extrapolation	



Enseco Closure Report

27 June, 2012

Wexpro Company

Moffat County, Colorado

Sec 15, T11N, R97W, 6 PM

Powder Wash Government #17

API #: 05-081-07630

Survey: Final Surveys to TD (10,057' MD)



Company:	Wexpro Company	Local Co-ordinate Ref:	Well: Powder Wash Government #17
Project:	Moffat County, Colorado	Ground Level:	7,037.0 usft
Site:	Sec 15, T11N, R97W, 6 PM	Wellhead Elevation:	Actual KB @ 7065.0usft (SST-88)
Well:	Powder Wash Government #17	North Reference:	True
Wellbore:	API #: 05-081-07630	Survey Calculation Method:	Minimum Curvature
Design:	Final Surveys (10556-159)	Database:	EDM 5000.1 Single User Db

Project	Moffat County, Colorado		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site	Sec 15, T11N, R97W, 6 PM		
Site Position:		Northing:	1,596,083.30 usft
From:	Map	Easting:	2,220,929.13usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"
		Latitude:	40° 56' 8.182 N
		Longitude:	108° 19' 12.112 W
		Grid Convergence:	-1.82°

Well	Powder Wash Government #17		
Well Position	+N/-S	-41.5 usft	Northing: 1,596,041.00 usft
	+E/-W	24.6 usft	Easting: 2,220,952.39 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	7,065.0 usft
		Latitude:	40° 56' 7.771 N
		Longitude:	108° 19' 11.791 W
		Ground Level:	7,037.0 usft

Wellbore	API #: 05-081-07630				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	28-Oct-2010	10.77	66.87	53,036

Design	Final Surveys (10556-159)			Survey Error Model:	Standard ISCWSA MWD Tool
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	241.23	

Company:	Wexpro Company	Local Co-ordinate Ref:	Well: Powder Wash Government #17
Project:	Moffat County, Colorado	Ground Level:	7,037.0 usft
Site:	Sec 15, T11N, R97W, 6 PM	Wellhead Elevation:	Actual KB @ 7065.0usft (SST-88)
Well:	Powder Wash Government #17	North Reference:	True
Wellbore:	API #: 05-081-07630	Survey Calculation Method:	Minimum Curvature
Design:	Final Surveys (10556-159)	Database:	EDM 5000.1 Single User Db

Survey										
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Vertical Section (usft)	Closure Distance (usft)	Closure Azimuth (°)
0.0	0.00	0.00	0.0	7,065.00	0.0	0.0	0.00	0.00	0.0	0.00
Tie-In Pt										
136.0	0.20	342.50	136.0	6,929.00	0.2	-0.1	0.15	-0.05	0.2	342.50
481.0	0.60	338.80	481.0	6,584.01	2.5	-0.9	0.12	-0.40	2.6	339.97
572.0	0.50	334.50	572.0	6,493.02	3.3	-1.2	0.12	-0.49	3.5	339.20
978.0	1.50	340.70	977.9	6,087.08	9.9	-3.8	0.25	-1.46	10.6	339.17
1,450.0	2.10	349.60	1,449.7	5,615.32	24.2	-7.4	0.14	-5.20	25.3	343.09
Surface Csg										
1,528.0	2.15	355.15	1,527.6	5,537.37	27.1	-7.8	0.27	-6.25	28.2	344.04
1,595.0	2.20	359.70	1,594.6	5,470.42	29.6	-7.9	0.27	-7.37	30.7	345.14
1,658.0	2.30	316.00	1,657.5	5,407.47	31.8	-8.7	2.66	-7.61	32.9	344.59
1,754.0	3.40	260.10	1,753.4	5,311.57	32.6	-12.9	2.96	-4.41	35.1	338.45
1,850.0	6.00	235.40	1,849.1	5,215.89	29.3	-19.8	3.37	3.28	35.4	325.92
1,945.0	8.90	236.30	1,943.3	5,121.70	22.4	-30.0	3.06	15.54	37.5	306.73
2,041.0	9.30	236.90	2,038.1	5,026.91	14.1	-42.7	0.43	30.67	45.0	288.22
2,136.0	10.40	237.70	2,131.7	4,933.32	5.3	-56.4	1.17	46.89	56.6	275.35
2,231.0	12.00	238.10	2,224.9	4,840.13	-4.5	-72.0	1.69	65.31	72.2	266.41
2,327.0	13.10	235.60	2,318.6	4,746.42	-15.9	-89.5	1.28	86.10	90.9	259.90
2,422.0	13.20	234.40	2,411.1	4,653.91	-28.3	-107.2	0.31	107.58	110.9	255.19
2,518.0	12.50	232.30	2,504.7	4,560.32	-41.1	-124.3	0.88	128.73	130.9	251.72
2,612.0	13.10	235.10	2,596.3	4,468.66	-53.4	-141.1	0.92	149.37	150.9	249.27
2,708.0	13.00	236.30	2,689.9	4,375.13	-65.6	-159.0	0.30	170.95	172.0	247.58
2,804.0	12.10	236.00	2,783.6	4,281.43	-77.2	-176.3	0.94	191.72	192.5	246.35
2,899.0	12.90	233.50	2,876.3	4,188.68	-89.1	-193.1	1.02	212.15	212.7	245.23
2,994.0	13.20	234.40	2,968.9	4,096.14	-101.7	-210.4	0.38	233.42	233.7	244.20
3,090.0	13.00	232.30	3,062.4	4,002.63	-114.7	-227.9	0.54	254.97	255.1	243.28
3,185.0	13.30	233.50	3,154.9	3,910.13	-127.7	-245.1	0.43	276.36	276.4	242.48
3,281.0	13.30	237.20	3,248.3	3,816.70	-140.3	-263.3	0.89	298.31	298.3	241.95
3,376.0	13.10	236.70	3,340.8	3,724.21	-152.1	-281.5	0.24	319.95	320.0	241.61
3,471.0	12.90	236.70	3,433.4	3,631.64	-163.8	-299.3	0.21	341.25	341.3	241.31
3,567.0	13.00	236.70	3,526.9	3,538.09	-175.7	-317.3	0.10	362.70	362.7	241.03
3,662.0	12.70	237.40	3,619.5	3,445.47	-187.2	-335.1	0.36	383.77	383.8	240.81
3,757.0	12.30	236.20	3,712.3	3,352.72	-198.4	-352.3	0.50	404.27	404.3	240.61
3,853.0	12.50	238.60	3,806.0	3,258.96	-209.5	-369.6	0.58	424.83	424.9	240.45
3,946.0	12.80	239.10	3,896.8	3,168.22	-220.0	-387.1	0.34	445.18	445.2	240.38
4,041.0	12.90	239.00	3,989.4	3,075.60	-230.9	-405.2	0.11	466.29	466.4	240.32
4,136.0	12.80	239.00	4,082.0	2,982.97	-241.8	-423.3	0.11	487.40	487.5	240.26
4,232.0	12.70	238.60	4,175.7	2,889.34	-252.8	-441.4	0.14	508.57	508.7	240.20
4,325.0	12.10	239.50	4,266.5	2,798.51	-263.0	-458.5	0.68	528.53	528.6	240.16
4,423.0	12.40	239.00	4,362.3	2,702.74	-273.7	-476.4	0.32	549.31	549.4	240.12
4,518.0	12.80	241.20	4,455.0	2,610.03	-284.0	-494.4	0.66	570.02	570.1	240.12
4,613.0	12.70	243.40	4,547.6	2,517.37	-293.7	-512.9	0.52	590.98	591.1	240.20
4,708.0	11.50	243.70	4,640.5	2,424.49	-302.6	-530.8	1.26	610.88	611.0	240.31
4,804.0	10.60	245.50	4,734.7	2,330.27	-310.5	-547.4	1.00	629.25	629.3	240.43
4,899.0	7.50	245.10	4,828.5	2,236.46	-316.7	-560.9	3.26	644.15	644.2	240.55
4,995.0	6.90	244.60	4,923.8	2,141.22	-321.9	-571.8	0.63	656.16	656.2	240.63
5,090.0	6.80	243.70	5,018.1	2,046.90	-326.8	-582.0	0.15	667.47	667.5	240.69
5,185.0	5.20	254.10	5,112.6	1,952.42	-330.5	-591.2	2.03	677.29	677.3	240.80
5,280.0	5.70	255.50	5,207.2	1,857.85	-332.8	-599.9	0.54	686.06	686.1	240.98
5,376.0	4.40	253.90	5,302.8	1,762.22	-335.0	-608.1	1.36	694.27	694.3	241.15
5,471.0	4.60	253.90	5,397.5	1,667.52	-337.1	-615.2	0.21	701.54	701.5	241.28
5,567.0	3.00	254.10	5,493.3	1,571.73	-338.9	-621.4	1.67	707.75	707.8	241.39

Company:	Wexpro Company	Local Co-ordinate Ref:	Well: Powder Wash Government #17
Project:	Moffat County, Colorado	Ground Level:	7,037.0 usft
Site:	Sec 15, T11N, R97W, 6 PM	Wellhead Elevation:	Actual KB @ 7065.0usft (SST-88)
Well:	Powder Wash Government #17	North Reference:	True
Wellbore:	API #: 05-081-07630	Survey Calculation Method:	Minimum Curvature
Design:	Final Surveys (10556-159)	Database:	EDM 5000.1 Single User Db

Survey										
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Vertical Section (usft)	Closure Distance (usft)	Closure Azimuth (°)
5,662.0	2.90	254.40	5,588.1	1,476.86	-340.2	-626.1	0.11	712.51	712.5	241.48
5,758.0	2.60	249.30	5,684.0	1,380.97	-341.6	-630.4	0.40	717.03	717.0	241.55
5,853.0	2.20	246.90	5,778.9	1,286.05	-343.1	-634.1	0.43	720.98	721.0	241.58
5,949.0	2.10	246.00	5,874.9	1,190.12	-344.5	-637.4	0.11	724.57	724.6	241.61
6,044.0	1.80	247.10	5,969.8	1,095.18	-345.8	-640.4	0.32	727.79	727.8	241.63
6,139.0	1.60	244.10	6,064.8	1,000.22	-347.0	-643.0	0.23	730.59	730.6	241.65
6,235.0	0.90	215.20	6,160.8	904.24	-348.2	-644.6	0.96	732.61	732.6	241.62
6,330.0	0.70	191.20	6,255.7	809.25	-349.4	-645.1	0.41	733.65	733.7	241.56
6,425.0	0.50	178.70	6,350.7	714.26	-350.3	-645.2	0.25	734.22	734.2	241.50
6,521.0	0.60	174.50	6,446.7	618.26	-351.3	-645.2	0.11	734.61	734.6	241.43
6,616.0	0.50	157.10	6,541.7	523.27	-352.1	-645.0	0.20	734.85	734.9	241.37
6,712.0	0.60	146.70	6,637.7	427.27	-353.0	-644.5	0.15	734.85	734.9	241.29
6,807.0	0.70	141.60	6,732.7	332.28	-353.8	-643.9	0.12	734.72	734.7	241.21
7,061.0	1.70	92.20	6,986.7	78.33	-355.2	-639.2	0.53	731.22	731.2	240.94
7,473.0	2.20	87.80	7,398.4	-333.43	-355.1	-625.2	0.13	718.91	719.0	240.40
7,568.0	1.80	82.30	7,493.4	-428.37	-354.8	-621.9	0.47	715.89	716.0	240.29
Last MWD Survey										
7,663.0	1.30	78.80	7,588.4	-523.36	-354.4	-619.3	0.54	713.47	713.6	240.22
TD Extrapolation										
10,057.0	1.30	78.80	9,981.7	-2,916.75	-343.9	-566.1	0.00	661.69	662.3	238.72

Casing Points					
MD (usft)	TVD (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,528.0	1,527.6	9-5/8" Surface Csg	9-5/8	12-1/4	

Survey Annotations					
MD (usft)	TVD (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
136.0	136.0	0.2	-0.1	Tie-In Pt	
1,528.0	1,527.6	27.1	-7.8	Surface Csg	
7,663.0	7,588.4	-354.4	-619.3	Last MWD Survey	
10,057.0	9,981.7	-343.9	-566.1	TD Extrapolation	