


HARPER 01-08 2 WELLBORE DISTANCES	
SHL TO TOP	979'
TOP TO BHL PILOT	646'
TOP TO BHL LATERAL 1	2,923'
TOP TO BHL LATERAL 1 ST 1	3,015'
TOP TO BHL LATERAL 2	2,842'
TOP TO BHL LATERAL 2 ST 1	3,129'

HARPER 01-08 2	CSZ NAD'83	NAD'83	TIES	SEC / TWP / RNG	ELEVATION
PROPOSED SURFACE HOLE LOCATION (SHL)	N (Y) = 1,196,059.56' E (X) = 2,404,386.66'	LAT. = 37.18720868°N LON. = 107.54471397°W	FSL = 1274' FWL = 1631'	SEC 18U, TWP 34N, RNG 06W	EXISTING GROUND 6918.69'
PROPOSED TOP OF PRODUCTION (TOP) PILOT, LAT 1, LAT 1 ST 1, LAT 2, AND LAT 2 ST 1	N (Y) = 1,196,346.15' E (X) = 2,404,363.14'	LAT. = 37.18799417°N LON. = 107.54481622°W	FSL = 1559' FWL = 1601'	SEC 18U, TWP 34N, RNG 06W	PROPOSED GRADE 6918.65'
PROPOSED BOTTOM HOLE LOCATION (BHL) PILOT	N (Y) = 1,196,346.15' E (X) = 2,405,009.20'	LAT. = 37.18803299°N LON. = 107.54259901°W	FSL = 1600' FWL = 2247'	SEC 18U, TWP 34N, RNG 06W	
PROPOSED BOTTOM HOLE LOCATION (BHL) LAT 1	N (Y) = 1,196,638.09' E (X) = 2,407,214.83'	LAT. = 37.18896678°N LON. = 107.53505133°W	FSL = 1964' FEL = 710'	SEC 18U, TWP 34N, RNG 06W	
PROPOSED BOTTOM HOLE LOCATION (BHL) LAT 1 ST 1	N (Y) = 1,195,698.56' E (X) = 2,407,186.88'	LAT. = 37.18638540°N LON. = 107.53507699°W	FSL = 1024' FEL = 710'	SEC 18U, TWP 34N, RNG 06W	
PROPOSED BOTTOM HOLE LOCATION (BHL) LAT 2	N (Y) = 1,196,324.91' E (X) = 2,407,205.51'	LAT. = 37.18810631°N LON. = 107.53505989°W	FSL = 1651' FEL = 710'	SEC 18U, TWP 34N, RNG 06W	
PROPOSED BOTTOM HOLE LOCATION (BHL) LAT 2 ST 1	N (Y) = 1,195,385.38' E (X) = 2,407,177.56'	LAT. = 37.18552493°N LON. = 107.53508556°W	FSL = 711' FEL = 710'	SEC 18U, TWP 34N, RNG 06W	

HARPER 01-08 1	CSZ NAD'83	NAD'83	TIES	SEC / TWP / RNG	ELEVATION
EXISTING SURFACE HOLE LOCATION (SHL)	N (Y) = 1,196,015.92' E (X) = 2,404,382.32'	LAT. = 37.18708860°N LON. = 107.54472558°W	FSL = 1230' FWL = 1627'	SEC 18U, TWP 34N, RNG 06W	EXISTING GROUND 6918.65'
EXISTING TOP OF PRODUCTION (TOP)	N (Y) = 1,196,015.92' E (X) = 2,404,382.32'	LAT. = 37.18708860°N LON. = 107.54472558°W	FSL = 1230' FWL = 1627'	SEC 18U, TWP 34N, RNG 06W	PROPOSED GRADE 6918.65'
EXISTING BOTTOM HOLE LOCATION (BHL)	N (Y) = 1,196,015.92' E (X) = 2,404,382.32'	LAT. = 37.18708860°N LON. = 107.54472558°W	FSL = 1230' FWL = 1627'	SEC 18U, TWP 34N, RNG 06W	

SURVEY NOTES

1. BEARING BASIS FOR THIS SURVEY IS BASED ON THE NORTH AMERICAN DATUM OF 1983, COLORADO STATE PLANE COORDINATE SYSTEM, COLORADO SOUTH, ZONE 0503.
2. ELEVATION BASIS FOR THIS SURVEY IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (GEOID12A).
3. SURVEYED IN THE FIELD ON 09/26/2017.
4. BEARINGS AND DISTANCE SHOWN ARE MEASURED IN THE FIELD UNLESS OTHERWISE NOTED.
5. ALL MEASURED DISTANCES SHOWN ARE GRID USING A COMBINED SCALE FACTOR 0.99968170.
6. GPS INSTRUMENT OPERATOR: BRIAN BONIFACE
7. GPS PDOP VALUE: 2.1

	BP AMERICA PRODUCTION COMPANY US LOWER 48 ONSHORE
	MULTI-WELL PLAN
	HARPER 01-18 2 PART OF SECTION 18U, TOWNSHIP 34N, RANGE 06W, N.M.P.M. LA PLATA COUNTY, COLORADO

DRAWN BY CFW/RLM	CHECKED BY RLM	SCALE N/A	DATE 02/15/2018	SHEET 2 OF 2	REVISION
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