

District I
1625 N. French Dr., Hobbs, NM 88240
Phone (575) 393-6161 Fax (575) 393-0720
District II
911 S. First St., Artesia, NM 88210
Phone (575) 748-1283 Fax (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone (505) 334-6178 Fax (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone (505) 476-3460 Fax (505) 476-3462

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 August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-35775	² Pool Code 97232	³ Pool Name Mancos Gas
⁴ Property Code 317302	⁵ Property Name Northeast Blanco Unit 602 Com	
⁷ OGRID No. 000778	⁸ Operator Name BP America Production Company	⁶ Well Number 1H ⁹ Elevation 6522

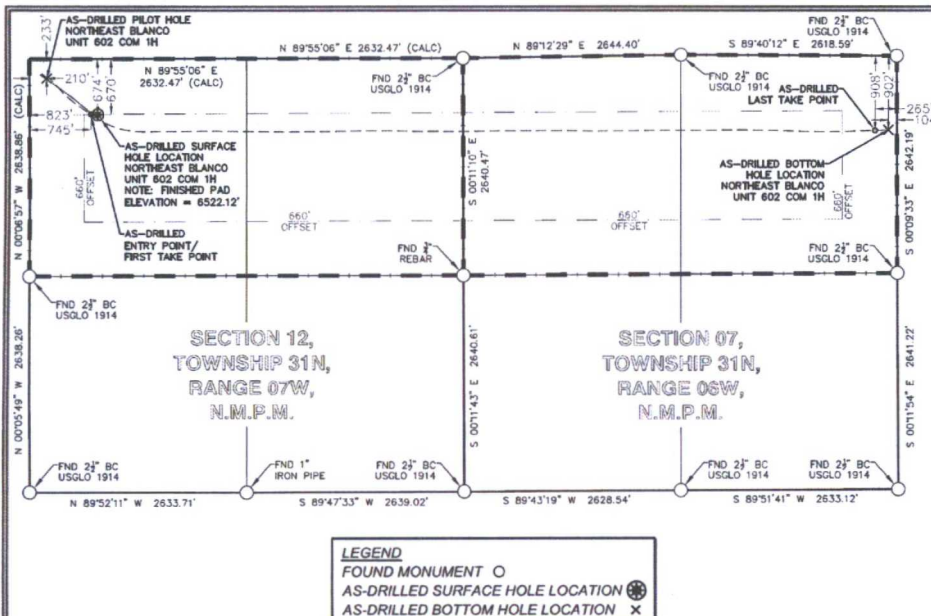
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	12	31N	07W		674	North	823	West	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
A	07	31N	06W		902	North	104	East	San Juan

¹² Dedicated Acres 640.02 N/2—SEC. 12 N/2—SEC. 07	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.			



¹⁷ OPERATOR CERTIFICATION

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 undivided 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.

Signature: *Toya Colvin* Date: 5/23/17

Printed Name

Toya Colvin

E-mail Address

toya.colvin@bp.com

¹⁸ SURVEYOR CERTIFICATION

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.

5-4-17
Date of Survey

Signature and Seal of Professional Surveyor



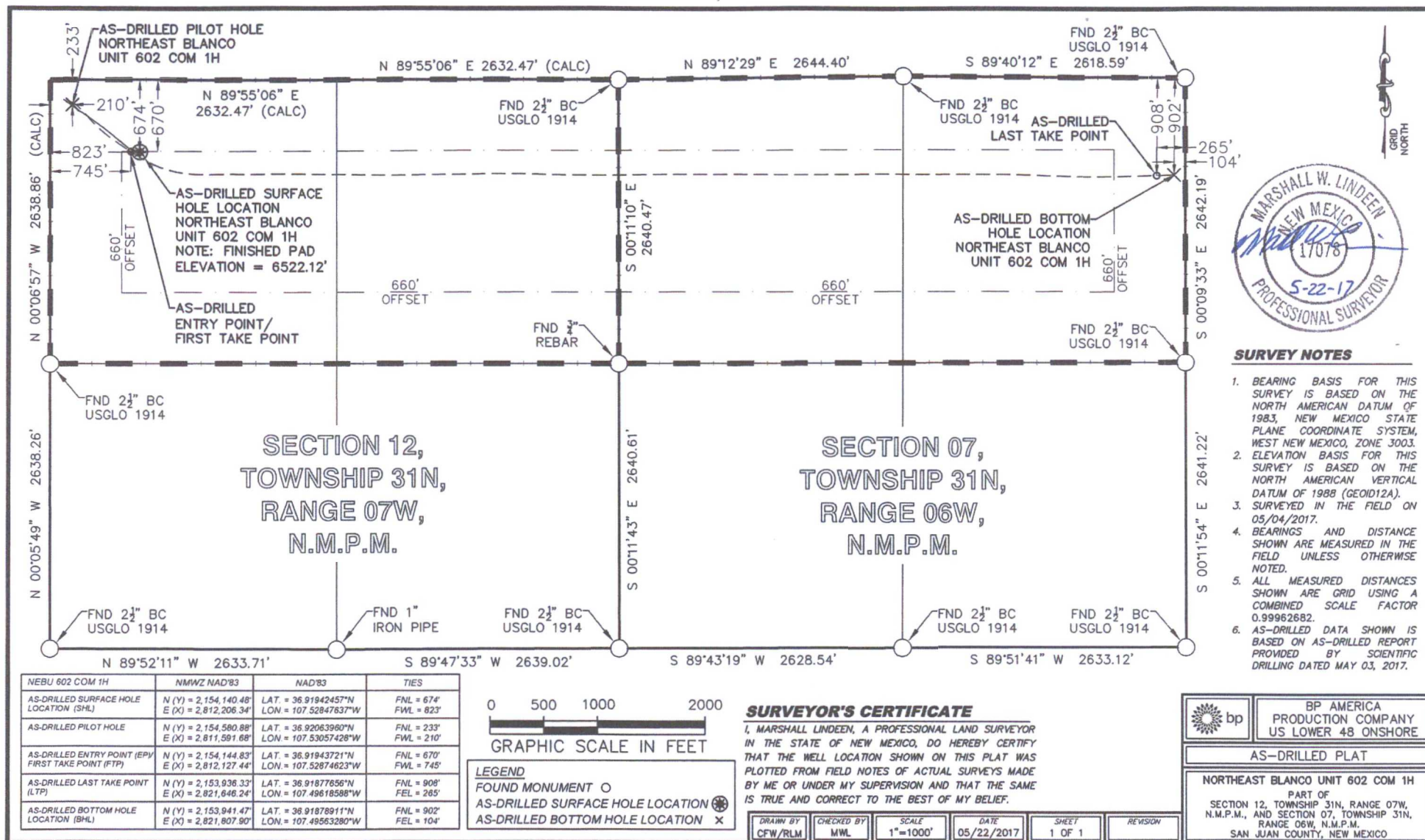
17078
Certificate Number

NEBU 602 COM 1H	NMWZ NAD'83	NAD'83	TIES
AS-DRILLED SURFACE HOLE LOCATION (SHL)	N (Y) = 2,154,140.48' E (X) = 2,812,206.34'	LAT. = 36.91942457°N LON. = 107.52847637°W	FNL = 674' FWL = 823'
AS-DRILLED PILOT HOLE	N (Y) = 2,154,580.88' E (X) = 2,811,591.68'	LAT. = 36.92063960°N LON. = 107.53057428°W	FNL = 233' FWL = 210'
AS-DRILLED ENTRY POINT (EP)/ FIRST TAKE POINT (FTP)	N (Y) = 2,154,144.83' E (X) = 2,812,127.44'	LAT. = 36.91943721°N LON. = 107.52874623°W	FNL = 670' FWL = 745'
AS-DRILLED LAST TAKE POINT (LTP)	N (Y) = 2,153,936.33' E (X) = 2,821,646.24'	LAT. = 36.91877656°N LON. = 107.49618588°W	FNL = 908' FEL = 265'
AS-DRILLED BOTTOM HOLE LOCATION (BHL)	N (Y) = 2,153,941.47' E (X) = 2,821,807.90'	LAT. = 36.91878911°N LON. = 107.49563280°W	FNL = 902' FEL = 104'

AV

Confidential

15



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Scientific Drilling

Directional Survey Certification

2948 I-70 Business Loop
Grand Junction, CO 81504
(970)-245-9447 Fax (970)-245-9454

Confidential

Operator	B.P.
Well Name & No.	NEBU 602 1H Pilot
County & State	San Juan County, NM
SDI Job No.	420217HEF419655
Rig	Aztec 1000

I, Janie Collins, having personal knowledge of all the facts, hereby certify that the attached directional survey run from a measured depth of 416 feet to a measured depth of 8,281 feet is true and correct as determined from all available records.


Signature

3-May-17
Date

Janie Collins
Colorado District Well Planner
Scientific Drilling International



Survey Report

Confidential



Company:	B.P.	Local Co-ordinate Reference:	Well NEBU 602 #1H - Slot 602 #1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 6521' & RKB 25' @ 6546.00usft (Aztec 1000)
Site:	NEBU 602 Pad	MD Reference:	GL 6521' & RKB 25' @ 6546.00usft (Aztec 1000)
Well:	NEBU 602 #1H	North Reference:	Grid
Wellbore:	Pilot	Survey Calculation Method:	Minimum Curvature
Design:	Pilot	Database:	Grand Junction District

Project	San Juan County, NM NAD83		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Western Zone		

Site		NEBU 602 Pad			
Site Position:		Northing:	2,154,140.58 usft	Latitude:	36.9194248
From:	Map	Easting:	2,812,207.47 usft	Longitude:	-107.5284725
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in	Grid Convergence:	0.18 °

Well	NEBU 602 #1H - Slot 602 #1H					
Well Position	+N/-S	0.00 usft	Northing:	2,154,140.58 usft	Latitude:	36.9194248
	+E/-W	0.00 usft	Easting:	2,812,207.47 usft	Longitude:	-107.5284725
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	6,521.00 usft

Wellbore	Pilot				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	2/20/2017	9.10	63.55	50,088

Design	Pilot				
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	291.48	

Survey Program	Date 5/3/2017			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
25.00	314.00	Survey #1 - Gyro Survey (Pilot)	NS-GYRO-MS	North sensing gyrocompassing m/s
416.00	8,281.00	Survey #2 - MWD Surveys (Pilot)	SDI MWD	SDI MWD - Standard ver 1.0.1

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
25.00	0.00	0.01	25.00	0.00	0.00	0.00	0.00	0.00	0.00	
55.00	0.79	145.29	55.00	-0.17	0.12	-0.17	2.63	2.63	0.00	
85.00	0.67	134.29	85.00	-0.46	0.36	-0.51	0.61	-0.40	-36.67	
115.00	0.70	137.27	114.99	-0.72	0.61	-0.83	0.16	0.10	9.93	
145.00	0.75	129.96	144.99	-0.98	0.89	-1.18	0.35	0.17	-24.37	
175.00	0.95	111.66	174.99	-1.20	1.27	-1.62	1.12	0.67	-61.00	
205.00	1.23	112.77	204.98	-1.41	1.80	-2.19	0.94	0.93	3.70	
235.00	0.99	118.36	234.98	-1.66	2.32	-2.77	0.88	-0.80	18.63	
265.00	0.98	122.74	264.97	-1.92	2.76	-3.28	0.25	-0.03	14.60	



Survey Report

Confidential



Company:	B.P.	Local Co-ordinate Reference:	Well NEBU 602 #1H - Slot 602 #1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 6521' & RKB 25' @ 6546.00usft (Aztec 1000)
Site:	NEBU 602 Pad	MD Reference:	GL 6521' & RKB 25' @ 6546.00usft (Aztec 1000)
Well:	NEBU 602 #1H	North Reference:	Grid
Wellbore:	Pilot	Survey Calculation Method:	Minimum Curvature
Design:	Pilot	Database:	Grand Junction District

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
295.00	1.06	128.44	294.97	-2.24	3.20	-3.79	0.43	0.27	19.00
314.00	1.09	127.64	313.97	-2.45	3.48	-4.14	0.18	0.16	-4.21
416.00	1.26	146.29	415.94	-3.98	4.87	-5.99	0.41	0.17	18.29
508.00	1.81	160.60	507.91	-6.19	5.91	-7.77	0.72	0.60	15.55
602.00	2.31	153.21	601.85	-9.28	7.26	-10.16	0.60	0.53	-7.86
692.00	1.64	174.15	691.80	-12.18	8.21	-12.10	1.08	-0.74	23.27
795.00	0.86	212.57	794.77	-14.30	7.94	-12.63	1.07	-0.76	37.30
879.00	0.62	263.06	878.77	-14.89	7.15	-12.11	0.79	-0.29	60.11
971.00	0.84	258.08	970.76	-15.09	6.00	-11.11	0.25	0.24	-5.41
1,063.00	1.18	297.76	1,062.75	-14.79	4.50	-9.60	0.82	0.37	43.13
1,154.00	1.32	318.62	1,153.73	-13.56	2.98	-7.74	0.52	0.15	22.92
1,246.00	0.80	320.84	1,245.71	-12.27	1.87	-6.24	0.57	-0.57	2.41
1,338.00	0.54	334.45	1,337.70	-11.38	1.28	-5.36	0.33	-0.28	14.79
1,430.00	0.50	304.38	1,429.70	-10.76	0.76	-4.65	0.30	-0.04	-32.68
1,522.00	1.11	300.17	1,521.69	-10.09	-0.34	-3.38	0.67	0.66	-4.58
1,614.00	1.07	296.77	1,613.67	-9.25	-1.88	-1.64	0.08	-0.04	-3.70
1,706.00	1.64	302.33	1,705.65	-8.16	-3.76	0.51	0.64	0.62	6.04
1,798.00	1.38	352.28	1,797.62	-6.36	-5.02	2.34	1.41	-0.28	54.29
1,889.00	1.50	44.88	1,888.59	-4.43	-4.33	2.40	1.41	0.13	57.80
1,981.00	2.10	127.25	1,980.56	-4.60	-2.13	0.30	2.62	0.65	89.53
2,077.00	2.06	164.79	2,076.50	-7.33	-0.28	-2.42	1.39	-0.04	39.10
2,173.00	1.57	257.37	2,172.47	-9.28	-1.11	-2.36	2.76	-0.51	96.44
2,267.00	1.80	287.77	2,266.43	-9.11	-3.77	0.18	0.97	0.24	32.34
2,362.00	2.07	295.63	2,361.38	-7.91	-6.74	3.38	0.40	0.28	8.27
2,428.00	2.71	307.97	2,427.32	-6.44	-9.05	6.06	1.24	0.97	18.70
2,520.00	2.93	311.78	2,519.21	-3.53	-12.51	10.35	0.31	0.24	4.14
2,611.00	3.64	308.75	2,610.06	-0.18	-16.50	15.29	0.80	0.78	-3.33
2,703.00	2.93	308.66	2,701.91	3.12	-20.62	20.33	0.77	-0.77	-0.10
2,795.00	2.84	308.09	2,793.79	6.00	-24.25	24.76	0.10	-0.10	-0.62
2,887.00	2.62	306.00	2,885.69	8.64	-27.74	28.98	0.26	-0.24	-2.27
2,979.00	2.89	304.48	2,977.58	11.19	-31.35	33.27	0.30	0.29	-1.65
3,071.00	3.42	303.05	3,069.44	14.00	-35.56	38.22	0.58	0.58	-1.55
3,163.00	3.52	296.23	3,161.27	16.74	-40.40	43.72	0.46	0.11	-7.41
3,255.00	3.02	282.24	3,253.12	18.50	-45.30	48.93	1.02	-0.54	-15.21
3,347.00	3.44	278.06	3,344.98	19.40	-50.40	54.01	0.52	0.46	-4.54
3,438.00	3.89	275.02	3,435.79	20.06	-56.18	59.62	0.54	0.49	-3.34
3,552.00	4.19	282.30	3,549.51	21.28	-64.10	67.44	0.52	0.26	6.39
3,644.00	4.43	293.74	3,641.25	23.43	-70.64	74.31	0.97	0.26	12.43
3,736.00	4.92	295.53	3,732.94	26.56	-77.45	81.80	0.56	0.53	1.95
3,828.00	5.34	294.09	3,824.57	30.01	-84.92	90.01	0.48	0.46	-1.57
3,916.00	5.37	292.88	3,912.19	33.28	-92.45	98.22	0.13	0.03	-1.38
4,011.00	5.23	305.59	4,006.79	37.53	-100.07	106.86	1.24	-0.15	13.38
4,106.00	7.68	309.96	4,101.18	44.13	-108.46	117.08	2.63	2.58	4.60



Survey Report

Confidential

Scientific Drilling

Company:	B.P.	Local Co-ordinate Reference:	Well NEBU 602 #1H - Slot 602 #1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 6521' & RKB 25' @ 6546.00usft (Aztec 1000)
Site:	NEBU 602 Pad	MD Reference:	GL 6521' & RKB 25' @ 6546.00usft (Aztec 1000)
Well:	NEBU 602 #1H	North Reference:	Grid
Wellbore:	Pilot	Survey Calculation Method:	Minimum Curvature
Design:	Pilot	Database:	Grand Junction District

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,201.00	9.94	311.94	4,195.05	53.69	-119.42	130.79	2.40	2.38	2.08
4,295.00	11.52	311.52	4,287.40	65.33	-132.48	147.21	1.68	1.68	-0.45
4,390.00	13.93	309.85	4,380.06	78.95	-148.37	166.97	2.57	2.54	-1.76
4,485.00	15.64	307.76	4,471.92	94.12	-167.27	190.12	1.89	1.80	-2.20
4,580.00	17.28	308.86	4,563.02	110.81	-188.39	215.88	1.76	1.73	1.16
4,675.00	19.01	311.21	4,653.29	129.86	-211.01	243.91	1.98	1.82	2.47
4,770.00	20.90	309.98	4,742.59	150.94	-235.64	274.55	2.04	1.99	-1.29
4,865.00	21.35	311.83	4,831.20	173.37	-261.51	306.83	0.85	0.47	1.95
4,960.00	24.47	308.14	4,918.70	197.06	-289.88	341.91	3.61	3.28	-3.88
5,055.00	24.97	306.87	5,005.00	221.24	-321.40	380.09	0.77	0.53	-1.34
5,150.00	22.54	305.07	5,091.94	243.74	-352.34	417.13	2.67	-2.56	-1.89
5,245.00	23.39	305.08	5,179.41	265.04	-382.68	453.16	0.89	0.89	0.01
5,340.00	23.25	306.46	5,266.65	287.02	-413.19	489.60	0.59	-0.15	1.45
5,435.00	22.92	306.10	5,354.05	309.06	-443.22	525.61	0.38	-0.35	-0.38
5,530.00	24.45	305.72	5,441.04	331.44	-474.13	562.57	1.62	1.61	-0.40
5,625.00	25.27	305.45	5,527.24	354.68	-506.61	601.30	0.87	0.86	-0.28
5,720.00	24.24	305.40	5,613.51	377.73	-539.02	639.91	1.08	-1.08	-0.05
5,815.00	20.49	305.67	5,701.35	398.73	-568.44	674.97	3.95	-3.95	0.28
5,910.00	18.44	304.12	5,790.91	416.86	-594.39	705.76	2.23	-2.16	-1.63
6,005.00	17.08	303.69	5,881.38	433.03	-618.44	734.06	1.44	-1.43	-0.45
6,100.00	15.42	303.57	5,972.58	447.75	-640.57	760.04	1.75	-1.75	-0.13
6,195.00	12.64	306.23	6,064.74	460.88	-659.48	782.45	3.00	-2.93	2.80
6,290.00	9.35	309.26	6,157.99	471.91	-673.84	799.85	3.52	-3.46	3.19
6,385.00	6.17	308.08	6,252.10	479.94	-683.84	812.10	3.35	-3.35	-1.24
6,454.00	4.56	304.10	6,320.80	483.77	-689.03	818.33	2.39	-2.33	-5.77
6,592.00	3.05	303.40	6,458.49	488.87	-696.64	827.27	1.09	-1.09	-0.51
6,687.00	0.42	326.46	6,553.44	490.55	-698.94	830.03	2.81	-2.77	24.27
6,782.00	2.36	118.60	6,648.42	489.90	-697.42	828.38	2.88	2.04	160.15
6,877.00	4.24	122.53	6,743.25	487.08	-692.74	822.99	1.99	1.98	4.14
6,940.00	4.70	122.28	6,806.06	484.45	-688.59	818.17	0.73	0.73	-0.40
7,067.00	4.04	123.79	6,932.69	479.18	-680.48	808.69	0.53	-0.52	1.19
7,162.00	3.87	124.72	7,027.47	475.49	-675.06	802.30	0.19	-0.18	0.98
7,257.00	3.69	125.84	7,122.26	471.88	-669.95	796.21	0.20	-0.19	1.18
7,352.00	3.50	125.97	7,217.07	468.38	-665.12	790.44	0.20	-0.20	0.14
7,447.00	3.37	125.80	7,311.90	465.05	-660.51	784.93	0.14	-0.14	-0.18
7,542.00	3.28	126.56	7,406.74	461.79	-656.06	779.60	0.11	-0.09	0.80
7,637.00	2.55	126.31	7,501.62	458.92	-652.18	774.93	0.77	-0.77	-0.26
7,732.00	3.63	121.11	7,596.48	456.12	-647.90	769.93	1.17	1.14	-5.47
7,827.00	5.73	121.17	7,691.16	452.11	-641.26	762.29	2.21	2.21	0.06
7,932.00	4.78	115.47	7,795.72	447.51	-632.83	752.75	1.03	-0.90	-5.43
8,027.00	3.66	113.31	7,890.46	444.61	-626.47	745.77	1.19	-1.18	-2.27
8,101.00	2.81	109.20	7,964.34	443.08	-622.59	741.60	1.19	-1.15	-5.55
8,215.00	2.69	106.94	8,078.21	441.38	-617.39	736.14	0.14	-0.11	-1.98



Survey Report

Confidential

Company:	B.P.	Local Co-ordinate Reference:	Well NEBU 602 #1H - Slot 602 #1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 6521' & RKB 25' @ 6546.00usft (Aztec 1000)
Site:	NEBU 602 Pad	MD Reference:	GL 6521' & RKB 25' @ 6546.00usft (Aztec 1000)
Well:	NEBU 602 #1H	North Reference:	Grid
Wellbore:	Pilot	Survey Calculation Method:	Minimum Curvature
Design:	Pilot	Database:	Grand Junction District

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,281.00	2.35	113.08	8,144.14	440.40	-614.66	733.25	0.66	-0.52	9.30

Checked By: _____	Approved By: _____	Date: _____
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Scientific Drilling

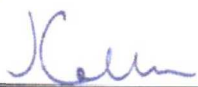
Directional Survey Certification

2948 I-70 Business Loop
Grand Junction, CO 81504
(970)-245-9447 Fax (970)-245-9454

Confidential

Operator	B.P.
Well Name & No.	NEBU 602 1H Lateral
County & State	San Juan County, NM
SDI Job No.	OP.0000363
Rig	Aztec 1000

I, Janie Collins, having personal knowledge of all the facts, hereby certify that the attached directional survey run from a measured depth of 6,594 feet to a measured depth of 17,490 feet is true and correct as determined from all available records.


Signature

3-May-17
Date

Janie Collins

Colorado District Well Planner
Scientific Drilling International



Survey Report

Confidential



Company:	B.P.	Local Co-ordinate Reference:	Well NEBU 602 #1H - Slot 602 #1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 6521' & RKB 25' @ 6546.00usft (Aztec 1000)
Site:	NEBU 602 Pad	MD Reference:	GL 6521' & RKB 25' @ 6546.00usft (Aztec 1000)
Well:	NEBU 602 #1H	North Reference:	Grid
Wellbore:	Lateral	Survey Calculation Method:	Minimum Curvature
Design:	Lateral	Database:	Grand Junction District

Project	San Juan County, NM NAD83		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Western Zone		

Site	NEBU 602 Pad		
Site Position:		Northing:	2,154,140.58 usft
From:	Map	Easting:	2,812,207.47 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in
		Latitude:	36.9194248
		Longitude:	-107.5284725
		Grid Convergence:	0.18 °

Well	NEBU 602 #1H - Slot 602 #1H		
Well Position	+N/-S	0.00 usft	Northing:
	+E/-W	0.00 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	36.9194248
		Longitude:	-107.5284725
		Ground Level:	6,521.00 usft

Wellbore	Lateral		
Magnetics	Model Name	Sample Date	Declination (°)
	HDGM	5/11/2016	9.18
	HDGM	3/31/2017	9.10
		Dip Angle (°)	63.57
		Field Strength (nT)	50,176
			50,075

Design	Lateral		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.00	0.00	0.00
		Direction (°)	91.19

Survey Program	Date 4/21/2017		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
0.00	289.00	Survey #1 - Gyro Survey (Pilot)	NS-GYRO-MS
391.00	3,046.00	Survey #2 - MWD Surveys (Pilot)	SDI MWD
3,138.00	6,454.00	RH MWD TEMP (Pilot)	MWD
6,454.00	17,490.00	Survey #1 - MWD Survey (Lateral)	SDI MWD
			Description
			North sensing gyrocompassing m/s
			SDI MWD - Standard ver 1.0.1
			SDI
			SDI MWD - Standard ver 1.0.1

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
25.00	0.00	0.01	25.00	0.00	0.00	0.00	0.00	0.00	0.00	
55.00	0.79	145.29	55.00	-0.17	0.12	0.12	2.63	2.63	0.00	
85.00	0.67	134.29	85.00	-0.46	0.36	0.37	0.61	-0.40	-36.67	
115.00	0.70	137.27	114.99	-0.72	0.61	0.63	0.16	0.10	9.93	
145.00	0.75	129.96	144.99	-0.98	0.89	0.91	0.35	0.17	-24.37	
175.00	0.95	111.66	174.99	-1.20	1.27	1.29	1.12	0.67	-61.00	



Survey Report

Confidential



Company:	B.P.	Local Co-ordinate Reference:	Well NEBU 602 #1H - Slot 602 #1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 6521' & RKB 25' @ 6546.00usft (Aztec 1000)
Site:	NEBU 602 Pad	MD Reference:	GL 6521' & RKB 25' @ 6546.00usft (Aztec 1000)
Well:	NEBU 602 #1H	North Reference:	Grid
Wellbore:	Lateral	Survey Calculation Method:	Minimum Curvature
Design:	Lateral	Database:	Grand Junction District

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
205.00	1.23	112.77	204.98	-1.41	1.80	1.82	0.94	0.93	3.70
235.00	0.99	118.36	234.98	-1.66	2.32	2.35	0.88	-0.80	18.63
265.00	0.98	122.74	264.97	-1.92	2.76	2.80	0.25	-0.03	14.60
416.00	1.26	146.29	415.95	-4.00	4.77	4.85	0.35	0.19	15.60
508.00	1.81	160.60	507.91	-6.22	5.82	5.94	0.72	0.60	15.55
602.00	2.31	153.21	601.85	-9.31	7.16	7.35	0.60	0.53	-7.86
692.00	1.64	174.15	691.80	-12.21	8.11	8.36	1.08	-0.74	23.27
795.00	0.86	212.57	794.77	-14.32	7.85	8.14	1.07	-0.76	37.30
879.00	0.62	263.06	878.77	-14.91	7.06	7.36	0.79	-0.29	60.11
971.00	0.84	258.08	970.76	-15.11	5.90	6.21	0.25	0.24	-5.41
1,063.00	1.18	297.76	1,062.75	-14.81	4.40	4.71	0.82	0.37	43.13
1,154.00	1.32	318.62	1,153.73	-13.59	2.88	3.16	0.52	0.15	22.92
1,246.00	0.80	320.84	1,245.71	-12.29	1.78	2.03	0.57	-0.57	2.41
1,338.00	0.54	334.45	1,337.70	-11.40	1.18	1.42	0.33	-0.28	14.79
1,430.00	0.50	304.38	1,429.70	-10.79	0.66	0.89	0.30	-0.04	-32.68
1,522.00	1.11	300.17	1,521.69	-10.11	-0.44	-0.23	0.67	0.66	-4.58
1,614.00	1.07	296.77	1,613.67	-9.28	-1.97	-1.78	0.08	-0.04	-3.70
1,706.00	1.64	302.33	1,705.65	-8.19	-3.85	-3.68	0.64	0.62	6.04
1,798.00	1.38	352.28	1,797.62	-6.38	-5.12	-4.98	1.41	-0.28	54.29
1,889.00	1.50	44.88	1,888.59	-4.45	-4.42	-4.33	1.41	0.13	57.80
1,981.00	2.10	127.25	1,980.56	-4.62	-2.23	-2.13	2.62	0.65	89.53
2,077.00	2.06	164.79	2,076.50	-7.35	-0.38	-0.23	1.39	-0.04	39.10
2,173.00	1.57	257.37	2,172.47	-9.30	-1.21	-1.02	2.76	-0.51	96.44
2,267.00	1.80	287.77	2,266.43	-9.13	-3.87	-3.68	0.97	0.24	32.34
2,362.00	2.07	295.63	2,361.38	-7.94	-6.84	-6.67	0.40	0.28	8.27
2,428.00	2.71	307.97	2,427.32	-6.46	-9.14	-9.01	1.24	0.97	18.70
2,520.00	2.93	311.78	2,519.21	-3.56	-12.61	-12.53	0.31	0.24	4.14
2,611.00	3.64	308.75	2,610.06	-0.20	-16.60	-16.59	0.80	0.78	-3.33
2,703.00	2.93	308.66	2,701.91	3.10	-20.71	-20.77	0.77	-0.77	-0.10
2,795.00	2.84	308.09	2,793.79	5.97	-24.34	-24.46	0.10	-0.10	-0.62
2,887.00	2.62	306.00	2,885.69	8.62	-27.84	-28.01	0.26	-0.24	-2.27
2,979.00	2.89	304.48	2,977.58	11.16	-31.45	-31.67	0.30	0.29	-1.65
3,163.00	3.52	296.23	3,161.29	16.29	-40.34	-40.67	0.42	0.34	-4.48
3,255.00	3.02	282.24	3,253.14	18.05	-45.24	-45.61	1.02	-0.54	-15.21
3,347.00	3.44	278.06	3,345.00	18.95	-50.34	-50.73	0.52	0.46	-4.54
3,438.00	3.89	275.02	3,435.81	19.60	-56.12	-56.52	0.54	0.49	-3.34
3,552.00	4.19	282.30	3,549.53	20.83	-64.04	-64.46	0.52	0.26	6.39
3,644.00	4.43	293.74	3,641.27	22.97	-70.58	-71.04	0.97	0.26	12.43
3,736.00	4.92	295.53	3,732.96	26.11	-77.39	-77.92	0.56	0.53	1.95
3,828.00	5.34	294.09	3,824.60	29.55	-84.86	-85.45	0.48	0.46	-1.57
3,916.00	5.37	292.88	3,912.21	32.83	-92.39	-93.05	0.13	0.03	-1.38
4,011.00	5.23	305.59	4,006.81	37.07	-100.01	-100.76	1.24	-0.15	13.38
4,106.00	7.68	309.96	4,101.20	43.67	-108.40	-109.28	2.63	2.58	4.60



Survey Report

Confidential



Company:	B.P.	Local Co-ordinate Reference:	Well NEBU 602 #1H - Slot 602 #1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 6521' & RKB 25' @ 6546.00usft (Aztec 1000)
Site:	NEBU 602 Pad	MD Reference:	GL 6521' & RKB 25' @ 6546.00usft (Aztec 1000)
Well:	NEBU 602 #1H	North Reference:	Grid
Wellbore:	Lateral	Survey Calculation Method:	Minimum Curvature
Design:	Lateral	Database:	Grand Junction District

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,201.00	9.94	311.94	4,195.07	53.23	-119.36	-120.44	2.40	2.38	2.08
4,295.00	11.52	311.52	4,287.43	64.88	-132.43	-133.74	1.68	1.68	-0.45
4,390.00	13.93	309.85	4,380.09	78.49	-148.31	-149.91	2.57	2.54	-1.76
4,485.00	15.64	307.76	4,471.94	93.66	-167.22	-169.12	1.89	1.80	-2.20
4,580.00	17.28	308.86	4,563.04	110.36	-188.33	-190.57	1.76	1.73	1.16
4,675.00	19.01	311.21	4,653.32	129.41	-210.96	-213.59	1.98	1.82	2.47
4,770.00	20.90	309.98	4,742.61	150.49	-235.58	-238.65	2.04	1.99	-1.29
4,865.00	21.35	311.83	4,831.22	172.91	-261.45	-264.98	0.85	0.47	1.95
4,960.00	24.47	308.14	4,918.72	196.60	-289.82	-293.83	3.61	3.28	-3.88
5,055.00	24.97	306.87	5,005.02	220.78	-321.34	-325.84	0.77	0.53	-1.34
5,150.00	22.54	305.07	5,091.97	243.28	-352.29	-357.25	2.67	-2.56	-1.89
5,245.00	23.39	305.08	5,179.43	264.58	-382.62	-388.02	0.89	0.89	0.01
5,340.00	23.25	306.46	5,266.67	286.56	-413.13	-418.98	0.59	-0.15	1.45
5,435.00	22.92	306.10	5,354.07	308.60	-443.16	-449.46	0.38	-0.35	-0.38
5,530.00	24.45	305.72	5,441.06	330.98	-474.07	-480.83	1.62	1.61	-0.40
5,625.00	25.27	305.45	5,527.26	354.22	-506.55	-513.78	0.87	0.86	-0.28
5,720.00	24.24	305.40	5,613.53	377.28	-538.97	-546.67	1.08	-1.08	-0.05
5,815.00	20.49	305.67	5,701.37	398.28	-568.38	-576.51	3.95	-3.95	0.28
5,910.00	18.44	304.12	5,790.93	416.40	-594.33	-602.83	2.23	-2.16	-1.63
6,005.00	17.08	303.69	5,881.40	432.57	-618.38	-627.21	1.44	-1.43	-0.45
6,100.00	15.42	303.57	5,972.60	447.29	-640.51	-649.64	1.75	-1.75	-0.13
6,195.00	12.64	306.23	6,064.76	460.42	-659.42	-668.82	3.00	-2.93	2.80
6,290.00	9.35	309.26	6,158.01	471.45	-673.79	-683.41	3.52	-3.46	3.19
6,385.00	6.17	308.08	6,252.12	479.49	-683.78	-693.57	3.35	-3.35	-1.24
6,454.00	4.56	304.10	6,320.82	483.31	-688.97	-698.84	2.39	-2.33	-5.77
6,594.00	1.94	315.08	6,460.58	488.11	-695.26	-705.22	1.92	-1.87	7.84
6,626.00	3.31	90.12	6,492.57	488.49	-694.71	-704.69	15.25	4.28	422.00
6,658.00	8.42	93.44	6,524.39	488.35	-691.45	-701.42	16.00	15.97	10.38
6,689.00	12.28	95.27	6,554.88	487.91	-685.90	-695.86	12.50	12.45	5.90
6,721.00	16.50	104.79	6,585.87	486.44	-678.11	-688.05	15.08	13.19	29.75
6,753.00	18.44	110.99	6,616.40	483.47	-668.99	-678.87	8.39	6.06	19.38
6,784.00	19.23	115.66	6,645.74	479.50	-659.81	-669.61	5.49	2.55	15.06
6,816.00	23.16	112.87	6,675.57	474.77	-649.26	-658.96	12.68	12.28	-8.72
6,848.00	25.30	114.66	6,704.75	469.47	-637.25	-646.84	7.07	6.69	5.59
6,879.00	27.99	113.39	6,732.46	463.82	-624.55	-634.02	8.87	8.68	-4.10
6,911.00	30.03	115.28	6,760.44	457.42	-610.41	-619.76	6.99	6.38	5.91
6,943.00	31.95	119.02	6,787.87	449.89	-595.77	-604.96	8.50	6.00	11.69
6,974.00	33.29	125.86	6,813.99	440.92	-581.69	-590.70	12.65	4.32	22.06
7,006.00	35.26	131.36	6,840.44	429.67	-567.64	-576.42	11.47	6.16	17.19
7,038.00	36.67	132.63	6,866.34	417.09	-553.67	-562.20	4.98	4.41	3.97
7,069.00	37.79	134.40	6,891.02	404.18	-540.08	-548.34	5.00	3.61	5.71
7,101.00	39.21	136.78	6,916.07	389.95	-526.14	-534.11	6.41	4.44	7.44
7,133.00	40.02	138.41	6,940.72	374.88	-512.39	-520.04	4.12	2.53	5.09
7,165.00	43.06	139.20	6,964.67	358.91	-498.42	-505.75	9.64	9.50	2.47



Survey Report

Confidential



Scientific Drilling

Company:	B.P.	Local Co-ordinate Reference:	Well NEBU 602 #1H - Slot 602 #1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 6521' & RKB 25' @ 6546.00usft (Aztec 1000)
Site:	NEBU 602 Pad	MD Reference:	GL 6521' & RKB 25' @ 6546.00usft (Aztec 1000)
Well:	NEBU 602 #1H	North Reference:	Grid
Wellbore:	Lateral	Survey Calculation Method:	Minimum Curvature
Design:	Lateral	Database:	Grand Junction District

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,197.00	47.01	140.72	6,987.28	341.57	-483.86	-490.84	12.79	12.34	4.75
7,228.00	52.76	140.40	7,007.24	323.28	-468.81	-475.40	18.57	18.55	-1.03
7,260.00	58.32	139.51	7,025.34	303.09	-451.83	-458.01	17.53	17.38	-2.78
7,292.00	60.33	137.49	7,041.67	282.48	-433.59	-439.35	8.30	6.28	-6.31
7,323.00	64.22	134.90	7,056.09	262.69	-414.60	-419.95	14.56	12.55	-8.35
7,355.00	67.22	133.28	7,069.25	242.40	-393.65	-398.58	10.45	9.38	-5.06
7,387.00	70.36	132.04	7,080.82	222.19	-371.71	-376.23	10.46	9.81	-3.88
7,419.00	72.33	130.86	7,091.06	202.13	-348.98	-353.10	7.08	6.16	-3.69
7,450.00	73.39	129.24	7,100.20	183.07	-326.31	-330.03	6.05	3.42	-5.23
7,482.00	73.48	129.00	7,109.32	163.71	-302.51	-305.84	0.77	0.28	-0.75
7,513.00	73.84	127.57	7,118.04	145.28	-279.16	-282.11	4.58	1.16	-4.61
7,545.00	76.38	126.20	7,126.26	126.73	-254.43	-257.00	8.95	7.94	-4.28
7,576.00	81.40	125.93	7,132.23	108.82	-229.85	-232.05	16.22	16.19	-0.87
7,608.00	86.91	125.43	7,135.49	90.27	-204.00	-205.82	17.29	17.22	-1.56
7,637.00	88.49	125.22	7,136.66	73.51	-180.36	-181.84	5.50	5.45	-0.72
7,669.00	93.87	124.85	7,136.00	55.15	-154.17	-155.28	16.85	16.81	-1.16
7,764.00	93.42	123.18	7,129.96	2.12	-75.59	-75.62	1.82	-0.47	-1.76
7,827.00	93.39	122.80	7,126.22	-32.13	-22.84	-22.17	0.60	-0.05	-0.60
7,859.00	93.22	122.06	7,124.37	-49.26	4.13	5.15	2.37	-0.53	-2.31
7,890.00	93.02	120.40	7,122.68	-65.31	30.59	31.94	5.39	-0.65	-5.35
7,922.00	92.65	119.31	7,121.10	-81.22	58.31	59.98	3.59	-1.16	-3.41
7,954.00	93.05	118.43	7,119.51	-96.65	86.30	88.28	3.02	1.25	-2.75
7,985.00	93.36	116.41	7,117.78	-110.90	113.77	116.05	6.58	1.00	-6.52
8,017.00	93.59	113.84	7,115.84	-124.46	142.69	145.24	8.05	0.72	-8.03
8,048.00	92.92	111.66	7,114.08	-136.43	171.23	174.02	7.35	-2.16	-7.03
8,080.00	92.72	109.98	7,112.50	-147.79	201.10	204.12	5.28	-0.63	-5.25
8,112.00	91.98	108.38	7,111.19	-158.29	231.30	234.53	5.51	-2.31	-5.00
8,143.00	91.88	106.27	7,110.14	-167.52	260.87	264.29	6.81	-0.32	-6.81
8,175.00	91.84	104.50	7,109.11	-176.00	291.71	295.30	5.53	-0.13	-5.53
8,207.00	93.25	101.78	7,107.68	-183.27	322.84	326.57	9.57	4.41	-8.50
8,238.00	93.22	100.57	7,105.94	-189.27	353.20	357.05	3.90	-0.10	-3.90
8,270.00	93.46	97.75	7,104.07	-194.35	384.74	388.68	8.83	0.75	-8.81
8,302.00	93.60	97.32	7,102.10	-198.54	416.40	420.42	1.41	0.44	-1.34
8,333.00	93.09	95.34	7,100.29	-201.95	447.16	451.25	6.59	-1.65	-6.39
8,365.00	93.22	93.91	7,098.53	-204.53	479.00	483.14	4.48	0.41	-4.47
8,397.00	93.22	92.09	7,096.73	-206.20	510.91	515.07	5.68	0.00	-5.69
8,428.00	92.82	90.71	7,095.10	-206.96	541.85	546.03	4.63	-1.29	-4.45
8,460.00	92.45	89.75	7,093.63	-207.09	573.82	577.99	3.21	-1.16	-3.00
8,491.00	92.55	89.42	7,092.28	-206.86	604.79	608.95	1.11	0.32	-1.06
8,523.00	92.99	89.05	7,090.73	-206.43	636.75	640.89	1.80	1.38	-1.16
8,618.00	91.75	88.85	7,086.80	-204.70	731.65	735.73	1.32	-1.31	-0.21
8,713.00	90.97	90.42	7,084.55	-204.09	826.62	830.67	1.84	-0.82	1.65
8,808.00	91.58	90.23	7,082.43	-204.63	921.59	925.63	0.67	0.64	-0.20



Survey Report

Confidential



Company:	B.P.	Local Co-ordinate Reference:	Well NEBU 602 #1H - Slot 602 #1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 6521' & RKB 25' @ 6546.00usft (Aztec 1000)
Site:	NEBU 602 Pad	MD Reference:	GL 6521' & RKB 25' @ 6546.00usft (Aztec 1000)
Well:	NEBU 602 #1H	North Reference:	Grid
Wellbore:	Lateral	Survey Calculation Method:	Minimum Curvature
Design:	Lateral	Database:	Grand Junction District

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,903.00	90.44	89.63	7,080.76	-204.51	1,016.58	1,020.60	1.36	-1.20	-0.63
8,998.00	90.80	89.17	7,079.73	-203.52	1,111.56	1,115.54	0.61	0.38	-0.48
9,093.00	89.73	89.25	7,079.29	-202.21	1,206.55	1,210.48	1.13	-1.13	0.08
9,188.00	89.87	90.28	7,079.62	-201.82	1,301.55	1,305.45	1.09	0.15	1.08
9,283.00	90.67	89.59	7,079.17	-201.71	1,396.55	1,400.43	1.11	0.84	-0.73
9,378.00	89.93	91.05	7,078.68	-202.24	1,491.54	1,495.41	1.72	-0.78	1.54
9,473.00	90.84	90.86	7,078.04	-203.83	1,586.53	1,590.41	0.98	0.96	-0.20
9,568.00	89.60	90.84	7,077.67	-205.23	1,681.51	1,685.40	1.31	-1.31	-0.02
9,663.00	90.07	90.77	7,077.95	-206.57	1,776.50	1,780.40	0.50	0.49	-0.07
9,758.00	90.94	90.32	7,077.11	-207.47	1,871.49	1,875.39	1.03	0.92	-0.47
9,852.00	88.56	90.82	7,077.52	-208.41	1,965.48	1,969.38	2.59	-2.53	0.53
9,947.00	89.36	91.12	7,079.24	-210.02	2,060.45	2,064.36	0.90	0.84	0.32
10,042.00	90.00	90.84	7,079.78	-211.64	2,155.43	2,159.36	0.74	0.67	-0.29
10,137.00	90.97	90.60	7,078.97	-212.83	2,250.42	2,254.35	1.05	1.02	-0.25
10,232.00	88.86	89.31	7,079.11	-212.76	2,345.41	2,349.32	2.60	-2.22	-1.36
10,327.00	89.19	89.08	7,080.73	-211.43	2,440.39	2,444.25	0.42	0.35	-0.24
10,422.00	90.17	89.47	7,081.26	-210.22	2,535.38	2,539.19	1.11	1.03	0.41
10,517.00	91.14	89.33	7,080.17	-209.23	2,630.37	2,634.14	1.03	1.02	-0.15
10,612.00	90.57	89.30	7,078.76	-208.09	2,725.35	2,729.08	0.60	-0.60	-0.03
10,707.00	90.10	89.63	7,078.20	-207.21	2,820.34	2,824.03	0.60	-0.49	0.35
10,802.00	90.77	89.14	7,077.48	-206.19	2,915.34	2,918.98	0.87	0.71	-0.52
10,897.00	89.50	89.38	7,077.25	-204.96	3,010.33	3,013.93	1.36	-1.34	0.25
10,992.00	90.10	88.61	7,077.59	-203.29	3,105.31	3,108.86	1.03	0.63	-0.81
11,087.00	88.69	89.38	7,078.59	-201.63	3,200.29	3,203.78	1.69	-1.48	0.81
11,182.00	89.03	89.26	7,080.48	-200.50	3,295.26	3,298.71	0.38	0.36	-0.13
11,277.00	90.34	89.81	7,081.00	-199.73	3,390.25	3,393.66	1.50	1.38	0.58
11,372.00	90.10	89.98	7,080.64	-199.55	3,485.25	3,488.64	0.31	-0.25	0.18
11,467.00	88.39	91.20	7,081.89	-200.53	3,580.23	3,583.62	2.21	-1.80	1.28
11,562.00	88.72	91.39	7,084.28	-202.68	3,675.18	3,678.59	0.40	0.35	0.20
11,657.00	89.63	91.48	7,085.65	-205.06	3,770.14	3,773.58	0.96	0.96	0.09
11,752.00	90.03	91.65	7,085.93	-207.65	3,865.10	3,868.58	0.46	0.42	0.18
11,847.00	91.01	89.76	7,085.07	-208.82	3,960.09	3,963.56	2.24	1.03	-1.99
11,942.00	90.20	90.34	7,084.07	-208.90	4,055.08	4,058.54	1.05	-0.85	0.61
12,016.00	90.77	90.06	7,083.44	-209.16	4,129.08	4,132.52	0.86	0.77	-0.38
12,111.00	91.61	90.40	7,081.47	-209.54	4,224.05	4,227.49	0.95	0.88	0.36
12,206.00	89.36	89.93	7,080.67	-209.82	4,319.04	4,322.46	2.42	-2.37	-0.49
12,301.00	89.23	89.46	7,081.83	-209.31	4,414.03	4,417.42	0.51	-0.14	-0.49
12,396.00	89.53	89.36	7,082.86	-208.33	4,509.02	4,512.37	0.33	0.32	-0.11
12,491.00	90.03	88.79	7,083.23	-206.80	4,604.01	4,607.31	0.80	0.53	-0.60
12,586.00	90.67	88.88	7,082.65	-204.87	4,698.99	4,702.22	0.68	0.67	0.09
12,681.00	91.14	88.81	7,081.15	-202.95	4,793.96	4,797.13	0.50	0.49	-0.07
12,776.00	90.17	89.89	7,080.06	-201.88	4,888.94	4,892.08	1.53	-1.02	1.14
12,871.00	90.47	89.72	7,079.53	-201.55	4,983.94	4,987.05	0.36	0.32	-0.18



Survey Report

Confidential



Company:	B.P.	Local Co-ordinate Reference:	Well NEBU 602 #1H - Slot 602 #1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 6521' & RKB 25' @ 6546.00usft (Aztec 1000)
Site:	NEBU 602 Pad	MD Reference:	GL 6521' & RKB 25' @ 6546.00usft (Aztec 1000)
Well:	NEBU 602 #1H	North Reference:	Grid
Wellbore:	Lateral	Survey Calculation Method:	Minimum Curvature
Design:	Lateral	Database:	Grand Junction District

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,966.00	89.53	90.12	7,079.53	-201.42	5,078.94	5,082.02	1.08	-0.99	0.42
13,061.00	89.73	90.03	7,080.14	-201.54	5,173.94	5,177.00	0.23	0.21	-0.09
13,156.00	90.17	89.95	7,080.23	-201.53	5,268.94	5,271.98	0.47	0.46	-0.08
13,251.00	90.67	89.65	7,079.53	-201.20	5,363.93	5,366.95	0.61	0.53	-0.32
13,346.00	90.80	89.52	7,078.31	-200.51	5,458.92	5,461.91	0.19	0.14	-0.14
13,441.00	89.19	90.52	7,078.32	-200.54	5,553.92	5,556.88	2.00	-1.69	1.05
13,536.00	89.70	90.24	7,079.24	-201.17	5,648.91	5,651.87	0.61	0.54	-0.29
13,630.00	88.25	90.60	7,080.92	-201.86	5,742.89	5,745.84	1.59	-1.54	0.38
13,725.00	89.06	90.42	7,083.15	-202.71	5,837.86	5,840.81	0.87	0.85	-0.19
13,820.00	89.73	90.26	7,084.15	-203.27	5,932.85	5,935.79	0.73	0.71	-0.17
13,915.00	90.30	90.40	7,084.13	-203.82	6,027.85	6,030.78	0.62	0.60	0.15
14,010.00	91.11	89.96	7,082.96	-204.11	6,122.84	6,125.76	0.97	0.85	-0.46
14,043.00	91.54	89.24	7,082.20	-203.88	6,155.83	6,158.73	2.54	1.30	-2.18
14,138.00	89.53	89.99	7,081.31	-203.25	6,250.82	6,253.69	2.26	-2.12	0.79
14,233.00	89.87	89.66	7,081.81	-202.96	6,345.82	6,348.66	0.50	0.36	-0.35
14,328.00	90.00	89.69	7,081.92	-202.42	6,440.82	6,443.63	0.14	0.14	0.03
14,423.00	90.13	89.93	7,081.81	-202.10	6,535.82	6,538.60	0.29	0.14	0.25
14,518.00	90.30	89.78	7,081.45	-201.86	6,630.81	6,633.57	0.24	0.18	-0.16
14,613.00	90.67	89.06	7,080.65	-200.90	6,725.81	6,728.52	0.85	0.39	-0.76
14,708.00	90.64	89.13	7,079.56	-199.40	6,820.79	6,823.45	0.08	-0.03	0.07
14,803.00	89.36	90.03	7,079.56	-198.70	6,915.78	6,918.41	1.65	-1.35	0.95
14,898.00	88.36	90.51	7,081.45	-199.15	7,010.76	7,013.38	1.17	-1.05	0.51
14,993.00	88.76	90.19	7,083.84	-199.73	7,105.73	7,108.34	0.54	0.42	-0.34
15,088.00	90.03	90.22	7,084.84	-200.07	7,200.72	7,203.32	1.34	1.34	0.03
15,183.00	89.97	90.16	7,084.84	-200.39	7,295.72	7,298.31	0.09	-0.06	-0.06
15,278.00	90.44	89.33	7,084.50	-199.96	7,390.72	7,393.27	1.00	0.49	-0.87
15,373.00	90.60	89.20	7,083.64	-198.74	7,485.71	7,488.22	0.22	0.17	-0.14
15,468.00	89.69	90.21	7,083.40	-198.26	7,580.70	7,583.18	1.43	-0.96	1.06
15,568.00	90.57	89.86	7,082.97	-198.37	7,770.70	7,773.14	0.50	0.46	-0.18
15,753.00	89.69	90.04	7,082.75	-198.29	7,865.70	7,868.12	0.95	-0.93	0.19
15,848.00	90.31	90.21	7,082.75	-198.50	7,960.70	7,963.10	0.68	0.65	0.18
15,943.00	90.48	90.57	7,082.10	-199.14	8,055.69	8,058.09	0.42	0.18	0.38
16,038.00	90.84	90.30	7,081.00	-199.86	8,150.68	8,153.07	0.47	0.38	-0.28
16,133.00	90.37	91.48	7,080.00	-201.34	8,245.66	8,248.07	1.34	-0.49	1.24
16,228.00	89.66	93.27	7,079.98	-205.28	8,340.58	8,343.04	2.03	-0.75	1.88
16,323.00	89.60	91.77	7,080.59	-209.45	8,435.48	8,438.01	1.58	-0.06	-1.58
16,418.00	90.13	91.68	7,080.81	-212.31	8,530.44	8,533.01	0.57	0.56	-0.09
16,513.00	90.64	91.73	7,080.17	-215.14	8,625.39	8,628.00	0.54	0.54	0.05
16,608.00	90.44	90.96	7,079.28	-217.37	8,720.36	8,722.99	0.84	-0.21	-0.81
16,703.00	88.36	90.12	7,080.27	-218.26	8,815.35	8,817.98	2.36	-2.19	-0.88
16,798.00	88.83	89.31	7,082.60	-217.79	8,910.32	8,912.92	0.99	0.49	-0.85
16,893.00	88.76	89.46	7,084.60	-216.77	9,005.29	9,007.85	0.17	-0.07	0.16
16,988.00	89.33	88.11	7,086.18	-214.76	9,100.25	9,102.75	1.54	0.60	-1.42
17,083.00	91.41	88.15	7,085.57	-211.66	9,195.20	9,197.61	2.19	2.19	0.04



Survey Report

Confidential



Scientific Drilling

Company:	B.P.	Local Co-ordinate Reference:	Well NEBU 602 #1H - Slot 602 #1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 6521' & RKB 25' @ 6546.00usft (Aztec 1000)
Site:	NEBU 602 Pad	MD Reference:	GL 6521' & RKB 25' @ 6546.00usft (Aztec 1000)
Well:	NEBU 602 #1H	North Reference:	Grid
Wellbore:	Lateral	Survey Calculation Method:	Minimum Curvature
Design:	Lateral	Database:	Grand Junction District

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
17,178.00	91.89	88.19	7,082.84	-208.63	9,290.11	9,292.44	0.51	0.51	0.04
17,273.00	92.51	88.37	7,079.19	-205.78	9,384.99	9,387.24	0.68	0.65	0.19
17,368.00	93.09	88.23	7,074.55	-202.96	9,479.84	9,482.01	0.63	0.61	-0.15
17,431.00	93.47	88.11	7,070.94	-200.95	9,542.70	9,544.82	0.63	0.60	-0.19
17,490.00	93.47	88.11	7,067.37	-199.01	9,601.56	9,603.62	0.00	0.00	0.00

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
NEBU 602 #1H BHL RE'	90.00	90.00	7,108.00	-151.70	9,653.65	2,153,988.88	2,821,861.12	36.9189188	-107.4954502
- actual wellpath misses target center by 81.25usft at 17490.00usft MD (7067.37 TVD, -199.01 N, 9601.56 E)									
- Point									

Checked By: _____ Approved By: _____ Date: _____