

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (505) 748-1283 Fax: (505) 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
AS-DRILLED PLAT

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 30-045-35722	² Pool Code 71629	³ Pool Name Basin Fruitland Coal
⁴ Property Code 315681	⁵ Property Name AL Elliott B 8	⁶ Well Number 1H Lat 1 ST 1
⁷ OGRID No. 000778	⁸ Operator Name BP America Production Company	⁹ Elevation 5870

¹⁰ Surface Location

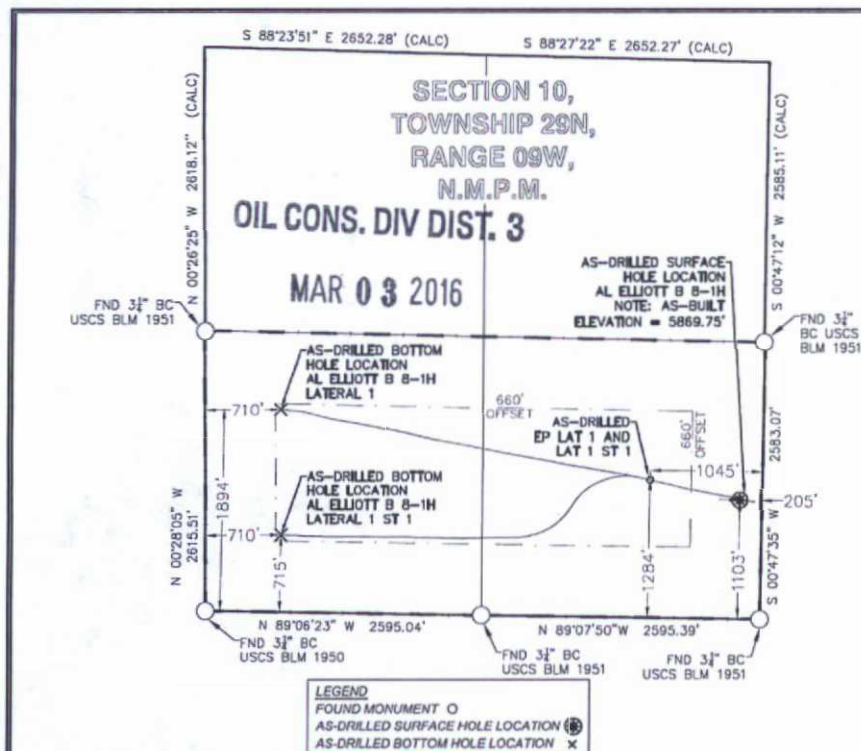
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	10	29N	09W		1103	South	205	East	San Juan

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
M	10	29N	09W		715	South	710	West	San Juan

¹² Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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.



AL ELLIOTT B 8-1H	NMW2 NAD'83	NAD'83	TIES
AS-DRILLED SURFACE HOLE LOCATION (SHL)	N (Y) = 2,086,892.74' E (X) = 2,745,179.45'	LAT. = 36.73507487°N LON. = 107.75795306°W	FSL = 1103' FEL = 205'
AS-DRILLED ENTRY POINT (EP) LAT 1 & LAT 1 ST 1	N (Y) = 2,087,085.78' E (X) = 2,744,341.51'	LAT. = 36.73506090°N LON. = 107.76081225°W	FSL = 1284' FEL = 1045'
AS-DRILLED BOTTOM HOLE LOCATION (BHL) LAT 1	N (Y) = 2,087,748.43' E (X) = 2,740,874.12'	LAT. = 36.73743647°N LON. = 107.77254426°W	FSL = 1894' FWL = 710'
AS-DRILLED BOTTOM HOLE LOCATION (BHL) LAT 1 ST 1	N (Y) = 2,088,570.18' E (X) = 2,740,883.32'	LAT. = 36.73419722°N LON. = 107.77261541°W	FSL = 715' FWL = 710'

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: 3/2/16

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.

Date of Survey: 2-15-16

Signature and Seal of Professional Surveyor



Certificate Number: 17078

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19

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L	10	29N	09W		1894	South	710	West	San Juan

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SECTION 10, TOWNSHIP 29N, RANGE 09W, N.M.P.M.
OIL CONS. DIV DIST. 3
MAR 03 2016

AS-DRILLED SURFACE HOLE LOCATION AL ELLIOTT B 8-1H
NOTE: AS-BUILT ELEVATION = 5869.75'

AS-DRILLED BOTTOM HOLE LOCATION AL ELLIOTT B 8-1H LATERAL 1

AS-DRILLED ENTRY POINT (EP) LAT 1 AND LAT 1 ST 1

AS-DRILLED BOTTOM HOLE LOCATION (BHL) LAT 1

AS-DRILLED BOTTOM HOLE LOCATION (BHL) LAT 1 ST 1

LEGEND
FOUND MONUMENT O
AS-DRILLED SURFACE HOLE LOCATION ●
AS-DRILLED BOTTOM HOLE LOCATION X

AL ELLIOTT B 8-1H	NMWS NAD'83	NAD'83	TIES
AS-DRILLED SURFACE HOLE LOCATION (SHL)	N (Y) = 2,086,892.74' E (X) = 2,745,179.45'	LAT. = 36.73507487°N LON. = 107.75795306°W	FSL = 1103' FWL = 205'
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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 released 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.

Toya Colvin 3/2/16
Signature Date

Toya Colvin
Printed Name

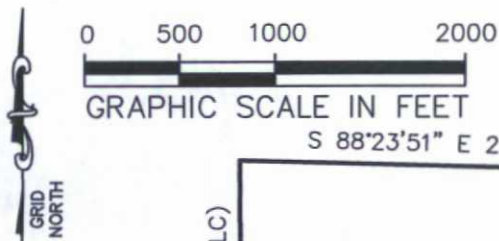
Toya.Colvin@bp.com
E-mail Address

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.

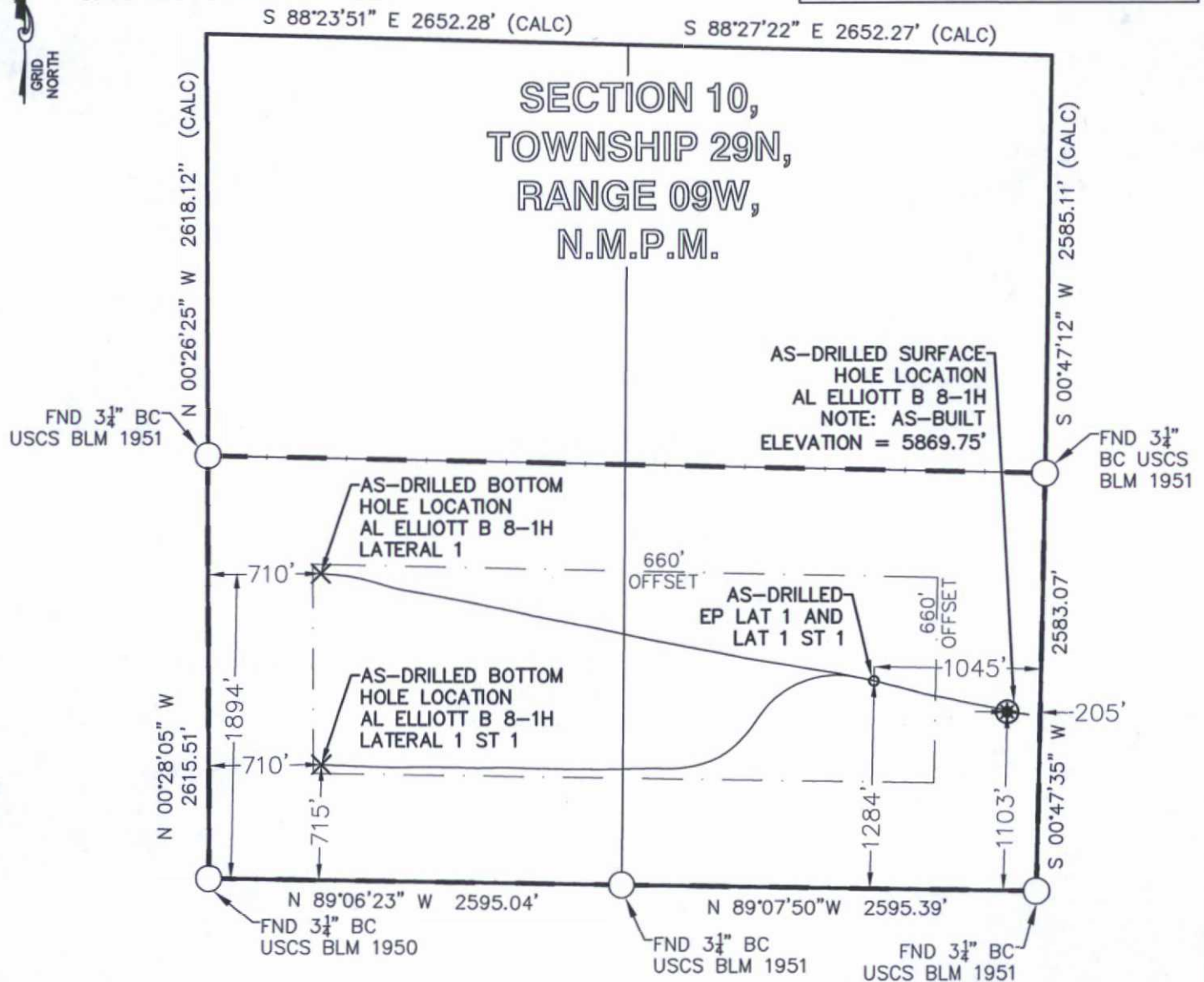
2-15-16
Date of Survey

Marshall W. Linden
Signature and Seal of Professional Surveyor

17078
Certificate Number



LEGEND
 FOUND MONUMENT ○
 AS-DRILLED SURFACE HOLE LOCATION ●
 AS-DRILLED BOTTOM HOLE LOCATION ×



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SURVEY NOTES

1. BEARING BASIS FOR THIS SURVEY IS BASED ON THE NORTH AMERICAN DATUM OF 1983, NEW MEXICO STATE PLANE COORDINATE SYSTEM, NEW MEXICO WEST, ZONE 3003.
2. ELEVATION BASIS FOR THIS SURVEY IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (GEOID12A).
3. SURVEYED IN THE FIELD ON 02/15/2016.
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 0.99963976.
6. AS-DRILLED DATA SHOWN IS BASED ON AS-DRILLED REPORT PROVIDED BY SCIENTIFIC DRILLING DATED FEBRUARY 28, 2016.

SURVEYOR'S CERTIFICATE

I, MARSHALL LINDEEN, A PROFESSIONAL LAND SURVEYOR IN THE STATE OF NEW MEXICO, DO 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.



BP AMERICA
 PRODUCTION COMPANY
 US LOWER 48 ONSHORE

AS-DRILLED PLAT

AL ELLIOTT B 8-1H
 PART OF
 SECTION 10, TOWNSHIP 29N, RANGE 09W,
 N.M.P.M.
 SAN JUAN COUNTY, NEW MEXICO

DRAWN BY	CHECKED BY	SCALE	DATE	SHEET	REVISION
CFW/RLM	MWL	1"=1000'	03/01/2016	1 OF 1	



Scientific Drilling

Directional Survey Certification

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

Operator	B.P.
Well Name & No.	AL Elliott B 8-1H Lateral 1 ST1
County & State	San Juan County, NM
SDI Job No.	330216HEF345041
Rig	Aztec 507

I, Janie Collins, having personal knowledge of all the facts, hereby certify that the attached directional survey run from a measured depth of 3,310 feet to a measured depth of 6,839 feet is true and correct as determined from all available records.


Signature

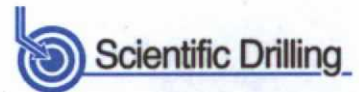
28-Feb-16
Date

Janie Collins

Colorado District Well Planner
Scientific Drilling International



Survey Report



Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.22' & RKB 11' @ 5875.22usft (Aztec 507)
Site:	AL Elliott	MD Reference:	GL 5864.22' & RKB 11' @ 5875.22usft (Aztec 507)
Well:	AL Elliott B 8-1H	North Reference:	Grid
Wellbore:	Lateral 1 ST1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1 ST1	Database:	Grand Junction District

Project	San Juan County, NM NAD83			OIL CONS. DIV DIST. 3
Map System:	US State Plane 1983	System Datum:	Mean Sea Level	MAR 03 2016
Geo Datum:	North American Datum 1983			
Map Zone:	New Mexico Western Zone			

Site	AL Elliott			
Site Position:		Northing:	2,086,968.49 usft	Latitude: 36.7352831
From:	Map	Easting:	2,745,086.37 usft	Longitude: -107.7582706
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in	Grid Convergence: 0.04 °

Well	AL Elliott B 8-1H			
Well Position	+N/-S	0.00 usft	Northing:	2,086,893.46 usft
	+E/-W	0.00 usft	Easting:	2,745,179.81 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level: 5,864.22 usft

Wellbore	Lateral 1 ST1			
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)
	IGRF2015	7/13/2015	9.46	63.36
				Field Strength (nT)
				50,243

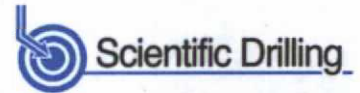
Design	Lateral 1 ST1			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 3,273.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	270.97

Survey Program	Date 2/28/2016			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
11.00	261.00	Survey #1 - Gyro Survey (Lateral 1)	NS-GYRO-MS	North sensing gyrocompassing m/s
330.00	3,273.00	Survey #2 - MWD Survey (Lateral 1)	SDI MWD	SDI MWD - Standard ver 1.0.1
3,310.00	6,839.00	Survey #1 - MWD Survey (Lateral 1 ST1)	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
11.00	0.00	0.00	11.00	0.00	0.00	0.00	0.00	0.00	0.00
31.00	0.23	70.75	31.00	0.01	0.04	-0.04	1.15	1.15	0.00
51.00	0.16	29.51	51.00	0.05	0.09	-0.09	0.76	-0.35	-206.20
71.00	0.08	51.17	71.00	0.08	0.11	-0.11	0.45	-0.40	108.30
91.00	0.10	163.53	91.00	0.08	0.13	-0.13	0.75	0.10	561.80
111.00	0.16	256.33	111.00	0.05	0.11	-0.11	0.96	0.30	464.00



Survey Report

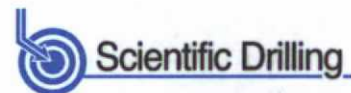


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Well:	AL Elliott B 8-1H	North Reference:	Grid
Wellbore:	Lateral 1 ST1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1 ST1	Database:	Grand Junction District

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)	
131.00	0.27	278.35	131.00	0.05	0.03	-0.03	0.68	0.55	110.10	
151.00	0.30	271.26	151.00	0.06	-0.06	0.07	0.23	0.15	-35.45	
171.00	0.24	248.61	171.00	0.05	-0.16	0.16	0.61	-0.30	-113.25	
191.00	0.38	327.21	191.00	0.09	-0.23	0.23	2.04	0.70	393.00	
211.00	0.37	324.94	211.00	0.20	-0.30	0.31	0.09	-0.05	-11.35	
231.00	0.54	350.28	231.00	0.34	-0.36	0.36	1.30	0.85	126.70	
251.00	0.48	338.19	251.00	0.51	-0.40	0.41	0.61	-0.30	-60.45	
261.00	0.61	345.02	261.00	0.60	-0.43	0.44	1.45	1.30	68.30	
330.00	0.74	20.67	329.99	1.37	-0.37	0.39	0.63	0.19	51.66	
362.00	0.82	18.35	361.99	1.78	-0.23	0.26	0.27	0.25	-7.25	
393.00	0.32	34.53	392.99	2.07	-0.11	0.14	1.68	-1.61	52.19	
425.00	0.77	38.35	424.99	2.31	0.08	-0.04	1.41	1.41	11.94	
457.00	0.37	38.98	456.98	2.56	0.28	-0.23	1.25	-1.25	1.97	
488.00	0.55	73.96	487.98	2.68	0.48	-0.44	1.05	0.58	112.84	
520.00	0.72	88.81	519.98	2.72	0.83	-0.78	0.74	0.53	46.41	
551.00	1.57	88.52	550.97	2.74	1.45	-1.40	2.74	2.74	-0.94	
582.00	2.65	104.43	581.95	2.57	2.57	-2.52	3.93	3.48	51.32	
614.00	3.34	101.23	613.91	2.20	4.20	-4.16	2.22	2.16	-10.00	
645.00	4.28	104.26	644.84	1.74	6.21	-6.18	3.10	3.03	9.77	
676.00	4.95	102.51	675.74	1.17	8.63	-8.61	2.21	2.16	-5.65	
707.00	5.47	102.90	706.61	0.55	11.38	-11.37	1.68	1.68	1.26	
738.00	6.02	101.35	737.46	-0.10	14.41	-14.41	1.84	1.77	-5.00	
769.00	6.80	102.59	768.26	-0.82	17.80	-17.81	2.56	2.52	4.00	
801.00	7.52	104.92	800.01	-1.77	21.67	-21.70	2.43	2.25	7.28	
833.00	8.06	104.15	831.72	-2.86	25.87	-25.91	1.72	1.69	-2.41	
864.00	7.92	104.25	862.42	-3.92	30.05	-30.11	0.45	-0.45	0.32	
895.00	8.68	102.20	893.09	-4.94	34.40	-34.48	2.63	2.45	-6.61	
926.00	9.56	97.83	923.70	-5.78	39.24	-39.33	3.61	2.84	-14.10	
957.00	9.99	99.55	954.25	-6.58	44.44	-44.55	1.68	1.39	5.55	
989.00	10.57	98.03	985.74	-7.45	50.08	-50.20	2.00	1.81	-4.75	
1,020.00	11.14	98.58	1,016.18	-8.29	55.86	-55.99	1.87	1.84	1.77	
1,051.00	11.79	97.04	1,046.56	-9.13	61.97	-62.11	2.32	2.10	-4.97	
1,082.00	11.76	96.20	1,076.91	-9.86	68.25	-68.41	0.56	-0.10	-2.71	
1,114.00	11.32	95.87	1,108.26	-10.53	74.62	-74.78	1.39	-1.38	-1.03	
1,146.00	10.34	94.11	1,139.69	-11.06	80.60	-80.78	3.23	-3.06	-5.50	
1,177.00	9.17	90.19	1,170.24	-11.27	85.85	-86.03	4.34	-3.77	-12.65	
1,209.00	8.41	88.49	1,201.87	-11.21	90.74	-90.92	2.51	-2.38	-5.31	
1,239.00	8.27	88.97	1,231.55	-11.12	95.09	-95.26	0.52	-0.47	1.60	
1,270.00	7.64	90.36	1,262.25	-11.09	99.38	-99.55	2.12	-2.03	4.48	
1,301.00	6.97	95.54	1,293.00	-11.28	103.31	-103.49	3.03	-2.16	16.71	
1,332.00	7.05	102.12	1,323.77	-11.86	107.04	-107.23	2.60	0.26	21.23	
1,362.00	6.81	104.74	1,353.55	-12.70	110.56	-110.76	1.32	-0.80	8.73	



Survey Report



Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.22' & RKB 11' @ 5875.22usft (Aztec 507)
Site:	AL Elliott	MD Reference:	GL 5864.22' & RKB 11' @ 5875.22usft (Aztec 507)
Well:	AL Elliott B 8-1H	North Reference:	Grid
Wellbore:	Lateral 1 ST1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1 ST1	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)
1,393.00	6.98	107.03	1,384.33	-13.72	114.14	-114.36	1.04	0.55	7.39
1,424.00	6.44	109.59	1,415.11	-14.86	117.58	-117.82	1.99	-1.74	8.26
1,454.00	5.85	107.08	1,444.94	-15.87	120.63	-120.88	2.16	-1.97	-8.37
1,485.00	5.05	107.40	1,475.80	-16.74	123.44	-123.71	2.58	-2.58	1.03
1,515.00	4.34	103.10	1,505.70	-17.39	125.81	-126.08	2.64	-2.37	-14.33
1,546.00	3.69	99.94	1,536.62	-17.83	127.93	-128.21	2.21	-2.10	-10.19
1,576.00	3.25	87.96	1,566.57	-17.97	129.73	-130.02	2.82	-1.47	-39.93
1,607.00	2.74	90.19	1,597.53	-17.94	131.35	-131.64	1.69	-1.65	7.19
1,637.00	2.14	90.27	1,627.50	-17.94	132.63	-132.91	2.00	-2.00	0.27
1,668.00	1.91	100.66	1,658.48	-18.04	133.71	-134.00	1.39	-0.74	33.52
1,699.00	1.40	88.44	1,689.47	-18.13	134.60	-134.89	1.99	-1.65	-39.42
1,729.00	1.46	102.00	1,719.46	-18.20	135.34	-135.63	1.14	0.20	45.20
1,759.00	1.44	102.23	1,749.45	-18.36	136.08	-136.37	0.07	-0.07	0.77
1,790.00	1.31	96.44	1,780.44	-18.48	136.82	-137.11	0.61	-0.42	-18.68
1,821.00	0.32	63.50	1,811.44	-18.48	137.25	-137.54	3.41	-3.19	-106.26
1,853.00	2.35	282.00	1,843.43	-18.30	136.68	-136.97	8.15	6.34	-442.19
1,884.00	4.52	284.73	1,874.37	-17.86	134.88	-135.16	7.02	7.00	8.81
1,915.00	7.05	284.02	1,905.21	-17.09	131.85	-132.12	8.16	8.16	-2.29
1,945.00	9.78	283.20	1,934.88	-16.06	127.58	-127.84	9.11	9.10	-2.73
1,976.00	12.83	280.53	1,965.28	-14.83	121.64	-121.87	9.98	9.84	-8.61
2,006.00	16.21	277.11	1,994.32	-13.70	114.20	-114.42	11.62	11.27	-11.40
2,037.00	20.10	277.18	2,023.77	-12.50	104.62	-104.82	12.55	12.55	0.23
2,068.00	23.69	278.94	2,052.53	-10.87	93.18	-93.35	11.77	11.58	5.68
2,098.00	26.85	281.10	2,079.66	-8.63	80.58	-80.71	10.97	10.53	7.20
2,129.00	29.43	282.48	2,106.99	-5.63	66.27	-66.35	8.58	8.32	4.45
2,160.00	32.89	282.68	2,133.51	-2.14	50.61	-50.64	11.17	11.16	0.65
2,191.00	35.99	282.03	2,159.08	1.61	33.49	-33.46	10.07	10.00	-2.10
2,223.00	40.10	282.26	2,184.27	5.76	14.22	-14.12	12.85	12.84	0.72
2,254.00	43.26	282.79	2,207.42	10.23	-5.91	6.08	10.26	10.19	1.71
2,285.00	46.64	282.07	2,229.36	14.94	-27.29	27.54	11.03	10.90	-2.32
2,317.00	49.39	280.91	2,250.76	19.67	-50.60	50.92	9.01	8.59	-3.63
2,349.00	50.96	280.66	2,271.26	24.27	-74.74	75.14	4.94	4.91	-0.78
2,381.00	52.94	280.78	2,290.98	28.96	-99.50	99.97	6.19	6.19	0.38
2,412.00	55.36	281.18	2,309.13	33.75	-124.16	124.72	7.88	7.81	1.29
2,443.00	58.13	281.22	2,326.13	38.78	-149.59	150.22	8.94	8.94	0.13
2,475.00	59.25	280.91	2,342.76	44.03	-176.42	177.14	3.60	3.50	-0.97
2,506.00	61.25	281.22	2,358.14	49.19	-202.83	203.64	6.51	6.45	1.00
2,537.00	64.41	281.67	2,372.29	54.67	-229.86	230.75	10.27	10.19	1.45
2,568.00	67.30	281.50	2,384.97	60.35	-257.57	258.55	9.34	9.32	-0.55
2,600.00	69.44	281.57	2,396.77	66.29	-286.71	287.79	6.69	6.69	0.22
2,631.00	71.60	281.61	2,407.11	72.17	-315.34	316.52	6.97	6.97	0.13
2,662.00	75.02	281.81	2,416.01	78.19	-344.41	345.69	11.05	11.03	0.65



Survey Report

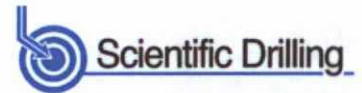


Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.22' & RKB 11' @ 5875.22usft (Aztec 507)
Site:	AL Elliott	MD Reference:	GL 5864.22' & RKB 11' @ 5875.22usft (Aztec 507)
Well:	AL Elliott B 8-1H	North Reference:	Grid
Wellbore:	Lateral 1 ST1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1 ST1	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)
2,693.00	77.47	281.54	2,423.38	84.28	-373.90	375.27	7.95	7.90	-0.87
2,724.00	78.50	280.77	2,429.83	90.15	-403.65	405.11	4.12	3.32	-2.48
2,755.00	80.62	280.23	2,435.45	95.70	-433.62	435.18	7.05	6.84	-1.74
2,786.00	83.12	280.02	2,439.83	101.10	-463.83	465.47	8.09	8.06	-0.68
2,818.00	83.27	281.90	2,443.62	107.14	-495.02	496.76	5.85	0.47	5.88
2,849.00	83.51	283.63	2,447.19	113.94	-525.05	526.91	5.60	0.77	5.58
2,880.00	85.81	285.39	2,450.08	121.68	-554.93	556.91	9.33	7.42	5.68
2,911.00	89.23	285.06	2,451.42	129.81	-584.81	586.92	11.08	11.03	-1.06
2,942.00	89.83	284.61	2,451.67	137.75	-614.78	617.02	2.42	1.94	-1.45
2,973.00	90.74	284.41	2,451.52	145.51	-644.79	647.16	3.01	2.94	-0.65
3,004.00	90.84	284.23	2,451.09	153.18	-674.82	677.32	0.66	0.32	-0.58
3,035.00	90.54	283.75	2,450.72	160.67	-704.90	707.52	1.83	-0.97	-1.55
3,066.00	90.84	283.93	2,450.34	168.09	-735.00	737.74	1.13	0.97	0.58
3,097.00	91.28	284.03	2,449.77	175.58	-765.07	767.94	1.46	1.42	0.32
3,122.00	91.73	284.22	2,449.11	181.67	-789.31	792.27	1.95	1.80	0.76
3,210.00	93.74	282.11	2,444.92	201.69	-874.89	878.18	3.31	2.28	-2.40
3,242.00	92.65	281.65	2,443.13	208.27	-906.15	909.55	3.70	-3.41	-1.44
3,273.00	92.68	281.88	2,441.69	214.58	-936.47	939.97	0.75	0.10	0.74
3,310.00	90.54	280.34	2,440.65	221.71	-972.76	976.37	7.12	-5.78	-4.16
First SDI MWD Survey									
3,342.00	90.54	277.04	2,440.35	226.54	-1,004.39	1,008.08	10.31	0.00	-10.31
3,373.00	89.30	272.94	2,440.39	229.24	-1,035.26	1,038.99	13.82	-4.00	-13.23
3,405.00	88.46	269.89	2,441.02	230.03	-1,067.24	1,070.98	9.88	-2.63	-9.53
3,436.00	88.36	265.88	2,441.88	228.89	-1,098.20	1,101.92	12.93	-0.32	-12.94
3,468.00	89.33	263.09	2,442.52	225.81	-1,130.04	1,133.70	9.23	3.03	-8.72
3,499.00	90.84	260.95	2,442.48	221.51	-1,160.74	1,164.32	8.45	4.87	-6.90
3,531.00	91.14	257.60	2,441.92	215.56	-1,192.17	1,195.65	10.51	0.94	-10.47
3,563.00	90.67	254.30	2,441.42	207.79	-1,223.21	1,226.55	10.42	-1.47	-10.31
3,594.00	90.20	251.38	2,441.18	198.64	-1,252.82	1,256.01	9.54	-1.52	-9.42
3,626.00	89.30	248.47	2,441.32	187.66	-1,282.88	1,285.87	9.52	-2.81	-9.09
3,658.00	89.19	245.46	2,441.75	175.14	-1,312.32	1,315.09	9.41	-0.34	-9.41
3,690.00	89.76	242.21	2,442.04	161.04	-1,341.03	1,343.57	10.31	1.78	-10.16
3,721.00	89.93	238.88	2,442.12	145.79	-1,368.02	1,370.29	10.76	0.55	-10.74
3,753.00	89.73	235.39	2,442.22	128.43	-1,394.90	1,396.87	10.92	-0.63	-10.91
3,785.00	89.76	232.42	2,442.36	109.58	-1,420.75	1,422.40	9.28	0.09	-9.28
3,816.00	90.91	229.88	2,442.18	90.14	-1,444.89	1,446.21	8.99	3.71	-8.19
3,848.00	92.48	227.48	2,441.23	69.02	-1,468.91	1,469.87	8.96	4.91	-7.50
3,879.00	92.45	223.49	2,439.90	47.31	-1,490.99	1,491.58	12.86	-0.10	-12.87
3,908.00	91.41	220.36	2,438.92	25.75	-1,510.35	1,510.57	11.37	-3.59	-10.79
3,939.00	90.54	216.61	2,438.39	1.49	-1,529.64	1,529.44	12.42	-2.81	-12.10
3,971.00	89.70	215.14	2,438.33	-24.44	-1,548.39	1,547.76	5.29	-2.63	-4.59
4,003.00	89.90	214.79	2,438.44	-50.66	-1,566.73	1,565.65	1.26	0.63	-1.09



Survey Report



Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.22' & RKB 11' @ 5875.22usft (Aztec 507)
Site:	AL Elliott	MD Reference:	GL 5864.22' & RKB 11' @ 5875.22usft (Aztec 507)
Well:	AL Elliott B 8-1H	North Reference:	Grid
Wellbore:	Lateral 1 ST1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1 ST1	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)
4,034.00	90.74	215.75	2,438.27	-75.97	-1,584.63	1,583.12	4.11	2.71	3.10
4,065.00	90.87	217.39	2,437.83	-100.86	-1,603.10	1,601.16	5.31	0.42	5.29
4,097.00	91.21	219.28	2,437.25	-125.96	-1,622.94	1,620.58	6.00	1.06	5.91
4,128.00	90.77	221.71	2,436.71	-149.53	-1,643.07	1,640.30	7.97	-1.42	7.84
4,160.00	90.50	224.31	2,436.36	-172.92	-1,664.89	1,661.73	8.17	-0.84	8.13
4,192.00	90.10	227.02	2,436.19	-195.28	-1,687.78	1,684.23	8.56	-1.25	8.47
4,223.00	90.84	229.62	2,435.94	-215.90	-1,710.93	1,707.03	8.72	2.39	8.39
4,255.00	89.77	232.69	2,435.77	-235.96	-1,735.85	1,731.60	10.16	-3.34	9.59
4,287.00	89.63	237.11	2,435.93	-254.36	-1,762.02	1,757.46	13.82	-0.44	13.81
4,318.00	90.81	241.22	2,435.81	-270.24	-1,788.63	1,783.80	13.79	3.81	13.26
4,350.00	91.85	245.02	2,435.07	-284.71	-1,817.16	1,812.08	12.31	3.25	11.88
4,381.00	91.44	248.09	2,434.18	-297.03	-1,845.59	1,840.29	9.99	-1.32	9.90
4,412.00	90.54	251.23	2,433.65	-307.81	-1,874.65	1,869.17	10.54	-2.90	10.13
4,444.00	90.94	253.44	2,433.23	-317.51	-1,905.13	1,899.48	7.02	1.25	6.91
4,476.00	90.81	255.89	2,432.74	-325.98	-1,935.99	1,930.19	7.67	-0.41	7.66
4,507.00	90.20	258.76	2,432.47	-332.78	-1,966.23	1,960.31	9.46	-1.97	9.26
4,539.00	90.20	261.17	2,432.36	-338.35	-1,997.74	1,991.72	7.53	0.00	7.53
4,571.00	90.27	262.97	2,432.23	-342.77	-2,029.43	2,023.33	5.63	0.22	5.63
4,602.00	89.93	265.59	2,432.17	-345.86	-2,060.27	2,054.12	8.52	-1.10	8.45
4,634.00	91.55	268.48	2,431.76	-347.51	-2,092.22	2,086.04	10.35	5.06	9.03
4,666.00	92.28	270.14	2,430.69	-347.90	-2,124.20	2,118.01	5.66	2.28	5.19
4,697.00	93.02	271.60	2,429.26	-347.43	-2,155.16	2,148.97	5.28	2.39	4.71
4,728.00	90.81	270.98	2,428.22	-346.73	-2,186.13	2,179.95	7.40	-7.13	-2.00
4,759.00	89.73	270.00	2,428.08	-346.46	-2,217.13	2,210.95	4.70	-3.48	-3.16
4,790.00	90.97	269.56	2,427.89	-346.58	-2,248.13	2,241.94	4.24	4.00	-1.42
4,821.00	91.31	269.12	2,427.27	-346.94	-2,279.12	2,272.92	1.79	1.10	-1.42
4,852.00	91.01	268.91	2,426.64	-347.47	-2,310.11	2,303.90	1.18	-0.97	-0.68
4,882.00	91.11	268.98	2,426.09	-348.02	-2,340.10	2,333.87	0.41	0.33	0.23
4,912.00	91.07	268.69	2,425.52	-348.63	-2,370.09	2,363.85	0.98	-0.13	-0.97
4,943.00	90.94	268.39	2,424.97	-349.42	-2,401.07	2,394.81	1.05	-0.42	-0.97
4,973.00	91.24	268.88	2,424.40	-350.14	-2,431.06	2,424.78	1.91	1.00	1.63
5,003.00	91.24	268.55	2,423.75	-350.81	-2,461.05	2,454.75	1.10	0.00	-1.10
5,033.00	91.48	268.78	2,423.04	-351.51	-2,491.03	2,484.72	1.11	0.80	0.77
5,064.00	90.94	269.27	2,422.39	-352.04	-2,522.02	2,515.70	2.35	-1.74	1.58
5,094.00	90.70	269.93	2,421.96	-352.25	-2,552.01	2,545.68	2.34	-0.80	2.20
5,124.00	90.17	270.63	2,421.73	-352.10	-2,582.01	2,575.68	2.93	-1.77	2.33
5,155.00	90.07	270.75	2,421.66	-351.73	-2,613.01	2,606.68	0.50	-0.32	0.39
5,185.00	90.17	270.46	2,421.60	-351.41	-2,643.01	2,636.68	1.02	0.33	-0.97
5,216.00	90.54	270.42	2,421.41	-351.17	-2,674.01	2,667.68	1.20	1.19	-0.13
5,247.00	90.57	270.68	2,421.11	-350.87	-2,705.00	2,698.68	0.84	0.10	0.84
5,277.00	90.57	270.43	2,420.81	-350.58	-2,735.00	2,728.67	0.83	0.00	-0.83
5,308.00	90.64	270.67	2,420.48	-350.29	-2,766.00	2,759.67	0.81	0.23	0.77



Survey Report



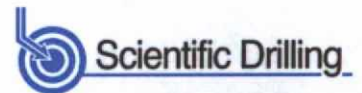
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.22' & RKB 11' @ 5875.22usft (Aztec 507)
Site:	AL Elliott	MD Reference:	GL 5864.22' & RKB 11' @ 5875.22usft (Aztec 507)
Well:	AL Elliott B 8-1H	North Reference:	Grid
Wellbore:	Lateral 1 ST1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1 ST1	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)
5,339.00	90.77	271.02	2,420.10	-349.83	-2,796.99	2,790.67	1.20	0.42	1.13
5,369.00	90.91	271.09	2,419.66	-349.28	-2,826.98	2,820.66	0.52	0.47	0.23
5,400.00	91.04	270.81	2,419.13	-348.76	-2,857.97	2,851.66	1.00	0.42	-0.90
5,430.00	91.11	270.82	2,418.57	-348.34	-2,887.97	2,881.66	0.24	0.23	0.03
5,461.00	91.01	270.49	2,418.00	-347.98	-2,918.96	2,912.65	1.11	-0.32	-1.06
5,492.00	90.97	271.01	2,417.46	-347.58	-2,949.95	2,943.64	1.68	-0.13	1.68
5,522.00	91.61	272.47	2,416.79	-346.67	-2,979.93	2,973.63	5.31	2.13	4.87
5,553.00	90.30	271.98	2,416.27	-345.46	-3,010.90	3,004.62	4.51	-4.23	-1.58
5,584.00	90.37	272.82	2,416.09	-344.16	-3,041.87	3,035.61	2.72	0.23	2.71
5,615.00	89.13	271.81	2,416.22	-342.91	-3,072.85	3,066.60	5.16	-4.00	-3.26
5,646.00	88.83	271.60	2,416.78	-341.99	-3,103.83	3,097.59	1.18	-0.97	-0.68
5,677.00	88.79	270.53	2,417.42	-341.41	-3,134.81	3,128.59	3.45	-0.13	-3.45
5,707.00	88.89	269.45	2,418.03	-341.42	-3,164.81	3,158.57	3.61	0.33	-3.60
5,738.00	89.73	269.32	2,418.40	-341.75	-3,195.80	3,189.56	2.74	2.71	-0.42
5,769.00	90.10	269.03	2,418.45	-342.20	-3,226.80	3,220.54	1.52	1.19	-0.94
5,799.00	90.30	269.03	2,418.34	-342.71	-3,256.80	3,250.53	0.67	0.67	0.00
5,829.00	90.17	268.94	2,418.22	-343.24	-3,286.79	3,280.51	0.53	-0.43	-0.30
5,859.00	90.37	269.90	2,418.08	-343.54	-3,316.79	3,310.50	3.27	0.67	3.20
5,889.00	91.82	272.01	2,417.50	-343.04	-3,346.78	3,340.49	8.53	4.83	7.03
5,919.00	92.32	272.27	2,416.42	-341.92	-3,376.74	3,370.46	1.88	1.67	0.87
5,950.00	91.92	272.20	2,415.27	-340.71	-3,407.69	3,401.43	1.31	-1.29	-0.23
5,980.00	91.88	271.66	2,414.28	-339.70	-3,437.66	3,431.41	1.80	-0.13	-1.80
6,010.00	90.94	270.81	2,413.54	-339.06	-3,467.64	3,461.40	4.22	-3.13	-2.83
6,040.00	90.20	270.31	2,413.24	-338.76	-3,497.64	3,491.40	2.98	-2.47	-1.67
6,070.00	90.23	270.35	2,413.13	-338.59	-3,527.64	3,521.40	0.17	0.10	0.13
6,100.00	90.27	270.48	2,413.00	-338.37	-3,557.64	3,551.40	0.45	0.13	0.43
6,131.00	90.30	270.59	2,412.84	-338.09	-3,588.63	3,582.40	0.37	0.10	0.35
6,161.00	90.17	270.59	2,412.72	-337.78	-3,618.63	3,612.40	0.43	-0.43	0.00
6,191.00	90.13	270.64	2,412.64	-337.45	-3,648.63	3,642.39	0.21	-0.13	0.17
6,221.00	89.90	269.65	2,412.63	-337.38	-3,678.63	3,672.39	3.39	-0.77	-3.30
6,251.00	90.81	269.13	2,412.45	-337.70	-3,708.63	3,702.38	3.49	3.03	-1.73
6,281.00	91.24	269.17	2,411.91	-338.14	-3,738.62	3,732.36	1.44	1.43	0.13
6,311.00	91.51	269.05	2,411.19	-338.61	-3,768.61	3,762.33	0.98	0.90	-0.40
6,342.00	91.68	268.99	2,410.33	-339.14	-3,799.59	3,793.30	0.58	0.55	-0.19
6,373.00	90.50	270.21	2,409.74	-339.35	-3,830.58	3,824.29	5.47	-3.81	3.94
6,403.00	90.40	271.06	2,409.50	-339.02	-3,860.58	3,854.29	2.85	-0.33	2.83
6,433.00	91.01	271.62	2,409.14	-338.32	-3,890.57	3,884.28	2.76	2.03	1.87
6,463.00	91.04	271.75	2,408.60	-337.44	-3,920.55	3,914.28	0.44	0.10	0.43
6,493.00	91.21	272.09	2,408.01	-336.43	-3,950.53	3,944.27	1.27	0.57	1.13
6,524.00	91.31	272.11	2,407.33	-335.30	-3,981.50	3,975.25	0.33	0.32	0.06
6,554.00	91.28	272.19	2,406.65	-334.17	-4,011.47	4,005.24	0.28	-0.10	0.27
6,585.00	91.44	271.96	2,405.91	-333.05	-4,042.44	4,036.22	0.90	0.52	-0.74



Survey Report



Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.22' & RKB 11' @ 5875.22usft (Aztec 507)
Site:	AL Elliott	MD Reference:	GL 5864.22' & RKB 11' @ 5875.22usft (Aztec 507)
Well:	AL Elliott B 8-1H	North Reference:	Grid
Wellbore:	Lateral 1 ST1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1 ST1	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)
6,615.00	91.51	272.18	2,405.14	-331.97	-4,072.41	4,066.21	0.77	0.23	0.73
6,645.00	91.38	272.33	2,404.39	-330.79	-4,102.38	4,096.19	0.66	-0.43	0.50
6,676.00	91.41	272.44	2,403.63	-329.50	-4,133.34	4,127.17	0.37	0.10	0.35
6,706.00	91.51	272.42	2,402.87	-328.23	-4,163.31	4,157.15	0.34	0.33	-0.07
6,737.00	91.61	272.52	2,402.02	-326.89	-4,194.27	4,188.13	0.46	0.32	0.32
6,768.00	91.65	272.45	2,401.14	-325.55	-4,225.23	4,219.11	0.26	0.13	-0.23
6,784.00	91.65	272.41	2,400.68	-324.87	-4,241.20	4,235.10	0.25	0.00	-0.25
Last SDI MWD Survey									
6,839.00	91.65	272.41	2,399.10	-322.56	-4,296.13	4,290.06	0.00	0.00	0.00
Projection to TD									

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
3,310.00	2,440.65	221.71	-972.76	First SDI MWD Survey
6,784.00	2,400.68	-324.87	-4,241.20	Last SDI MWD Survey
6,839.00	2,399.10	-322.56	-4,296.13	Projection to TD

Checked By: _____ Approved By: _____ Date: _____



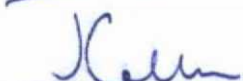
Scientific Drilling

Directional Survey Certification

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

Operator	B.P.
Well Name & No.	AL Elliott B 8-1H Lateral 1
County & State	San Juan County, NM
SDI Job No.	330216HEF345041
Rig	Aztec 507

I, Janie Collins, having personal knowledge of all the facts, hereby certify that the attached directional survey run from a measured depth of 330 feet to a measured depth of 6,705 feet is true and correct as determined from all available records.


Signature

28-Feb-16
Date

Janie Collins
Colorado District Well Planner
Scientific Drilling International



Survey Report



Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.22' & RKB 11' @ 5875.22usft (Aztec 507)
Site:	AL Elliott	MD Reference:	GL 5864.22' & RKB 11' @ 5875.22usft (Aztec 507)
Well:	AL Elliott B 8-1H	North Reference:	Grid
Wellbore:	Lateral 1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1	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	AL Elliott				
Site Position:		Northing:	2,086,968.49 usft	Latitude:	36.7352831
From:	Map	Easting:	2,745,086.37 usft	Longitude:	-107.7582706
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in	Grid Convergence:	0.04 °

Well	AL Elliott B 8-1H					
Well Position	+N/-S	0.00 usft	Northing:	2,086,893.46 usft	Latitude:	36.7350768
	+E/-W	0.00 usft	Easting:	2,745,179.81 usft	Longitude:	-107.7579519
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	5,864.22 usft

Wellbore	Lateral 1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	2/16/2016	9.20	63.35	50,096

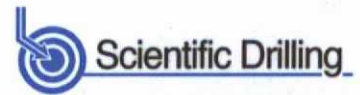
Design	Lateral 1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	281.25	

Survey Program	Date	2/28/2016			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
11.00	261.00	Survey #1 - Gyro Survey (Lateral 1)	NS-GYRO-MS	North sensing gyrocompassing m/s	
330.00	6,705.00	Survey #2 - MWD Survey (Lateral 1)	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	
11.00	0.00	0.00	11.00	0.00	0.00	0.00	0.00	0.00	0.00	
31.00	0.23	70.75	31.00	0.01	0.04	-0.03	1.15	1.15	0.00	
51.00	0.16	29.51	51.00	0.05	0.09	-0.08	0.76	-0.35	-206.20	
71.00	0.08	51.17	71.00	0.08	0.11	-0.10	0.45	-0.40	108.30	
91.00	0.10	163.53	91.00	0.08	0.13	-0.11	0.75	0.10	561.80	
111.00	0.16	256.33	111.00	0.05	0.11	-0.10	0.96	0.30	464.00	
131.00	0.27	278.35	131.00	0.05	0.03	-0.02	0.68	0.55	110.10	



Survey Report

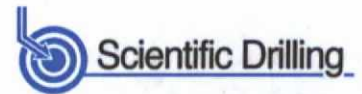


Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.22' & RKB 11' @ 5875.22usft (Aztec 507)
Site:	AL Elliott	MD Reference:	GL 5864.22' & RKB 11' @ 5875.22usft (Aztec 507)
Well:	AL Elliott B 8-1H	North Reference:	Grid
Wellbore:	Lateral 1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1	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)	
151.00	0.30	271.26	151.00	0.06	-0.06	0.08	0.23	0.15	-35.45	
171.00	0.24	248.61	171.00	0.05	-0.16	0.16	0.61	-0.30	-113.25	
191.00	0.38	327.21	191.00	0.09	-0.23	0.24	2.04	0.70	393.00	
211.00	0.37	324.94	211.00	0.20	-0.30	0.34	0.09	-0.05	-11.35	
231.00	0.54	350.28	231.00	0.34	-0.36	0.42	1.30	0.85	126.70	
251.00	0.48	338.19	251.00	0.51	-0.40	0.50	0.61	-0.30	-60.45	
261.00	0.61	345.02	261.00	0.60	-0.43	0.54	1.45	1.30	68.30	
330.00	0.74	20.67	329.99	1.37	-0.37	0.63	0.63	0.19	51.66	
First SDI MWD Survey										
362.00	0.82	18.35	361.99	1.78	-0.23	0.57	0.27	0.25	-7.25	
393.00	0.32	34.53	392.99	2.07	-0.11	0.51	1.68	-1.61	52.19	
425.00	0.77	38.35	424.99	2.31	0.08	0.38	1.41	1.41	11.94	
457.00	0.37	38.98	456.98	2.56	0.28	0.23	1.25	-1.25	1.97	
488.00	0.55	73.96	487.98	2.68	0.48	0.05	1.05	0.58	112.84	
520.00	0.72	88.81	519.98	2.72	0.83	-0.28	0.74	0.53	46.41	
551.00	1.57	88.52	550.97	2.74	1.45	-0.89	2.74	2.74	-0.94	
582.00	2.65	104.43	581.95	2.57	2.57	-2.02	3.93	3.48	51.32	
614.00	3.34	101.23	613.91	2.20	4.20	-3.69	2.22	2.16	-10.00	
645.00	4.28	104.26	644.84	1.74	6.21	-5.75	3.10	3.03	9.77	
676.00	4.95	102.51	675.74	1.17	8.63	-8.24	2.21	2.16	-5.65	
707.00	5.47	102.90	706.61	0.55	11.38	-11.05	1.68	1.68	1.26	
738.00	6.02	101.35	737.46	-0.10	14.41	-14.15	1.84	1.77	-5.00	
769.00	6.80	102.59	768.26	-0.82	17.80	-17.62	2.56	2.52	4.00	
801.00	7.52	104.92	800.01	-1.77	21.67	-21.60	2.43	2.25	7.28	
833.00	8.06	104.15	831.72	-2.86	25.87	-25.93	1.72	1.69	-2.41	
864.00	7.92	104.25	862.42	-3.92	30.05	-30.23	0.45	-0.45	0.32	
895.00	8.68	102.20	893.09	-4.94	34.40	-34.70	2.63	2.45	-6.61	
926.00	9.56	97.83	923.70	-5.78	39.24	-39.61	3.61	2.84	-14.10	
957.00	9.99	99.55	954.25	-6.58	44.44	-44.87	1.68	1.39	5.55	
989.00	10.57	98.03	985.74	-7.45	50.08	-50.57	2.00	1.81	-4.75	
1,020.00	11.14	98.58	1,016.18	-8.29	55.86	-56.41	1.87	1.84	1.77	
1,051.00	11.79	97.04	1,046.56	-9.13	61.97	-62.56	2.32	2.10	-4.97	
1,082.00	11.76	96.20	1,076.91	-9.86	68.25	-68.86	0.56	-0.10	-2.71	
1,114.00	11.32	95.87	1,108.26	-10.53	74.62	-75.24	1.39	-1.38	-1.03	
1,146.00	10.34	94.11	1,139.69	-11.06	80.60	-81.21	3.23	-3.06	-5.50	
1,177.00	9.17	90.19	1,170.24	-11.27	85.85	-86.40	4.34	-3.77	-12.65	
1,209.00	8.41	88.49	1,201.87	-11.21	90.74	-91.18	2.51	-2.38	-5.31	
1,239.00	8.27	88.97	1,231.55	-11.12	95.09	-95.43	0.52	-0.47	1.60	
1,270.00	7.64	90.36	1,262.25	-11.09	99.38	-99.63	2.12	-2.03	4.48	
1,301.00	6.97	95.54	1,293.00	-11.28	103.31	-103.53	3.03	-2.16	16.71	
1,332.00	7.05	102.12	1,323.77	-11.86	107.04	-107.30	2.60	0.26	21.23	
1,362.00	6.81	104.74	1,353.55	-12.70	110.56	-110.92	1.32	-0.80	8.73	



Survey Report

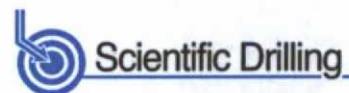


Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.22' & RKB 11' @ 5875.22usft (Aztec 507)
Site:	AL Elliott	MD Reference:	GL 5864.22' & RKB 11' @ 5875.22usft (Aztec 507)
Well:	AL Elliott B 8-1H	North Reference:	Grid
Wellbore:	Lateral 1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1	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)
1,393.00	6.98	107.03	1,384.33	-13.72	114.14	-114.63	1.04	0.55	7.39
1,424.00	6.44	109.59	1,415.11	-14.86	117.58	-118.22	1.99	-1.74	8.26
1,454.00	5.85	107.08	1,444.94	-15.87	120.63	-121.41	2.16	-1.97	-8.37
1,485.00	5.05	107.40	1,475.80	-16.74	123.44	-124.33	2.58	-2.58	1.03
1,515.00	4.34	103.10	1,505.70	-17.39	125.81	-126.78	2.64	-2.37	-14.33
1,546.00	3.69	99.94	1,536.62	-17.83	127.93	-128.95	2.21	-2.10	-10.19
1,576.00	3.25	87.96	1,566.57	-17.97	129.73	-130.74	2.82	-1.47	-39.93
1,607.00	2.74	90.19	1,597.53	-17.94	131.35	-132.33	1.69	-1.65	7.19
1,637.00	2.14	90.27	1,627.50	-17.94	132.63	-133.58	2.00	-2.00	0.27
1,668.00	1.91	100.66	1,658.48	-18.04	133.71	-134.66	1.39	-0.74	33.52
1,699.00	1.40	88.44	1,689.47	-18.13	134.60	-135.55	1.99	-1.65	-39.42
1,729.00	1.46	102.00	1,719.46	-18.20	135.34	-136.29	1.14	0.20	45.20
1,759.00	1.44	102.23	1,749.45	-18.36	136.08	-137.05	0.07	-0.07	0.77
1,790.00	1.31	96.44	1,780.44	-18.48	136.82	-137.79	0.61	-0.42	-18.68
1,821.00	0.32	63.50	1,811.44	-18.48	137.25	-138.21	3.41	-3.19	-106.26
1,853.00	2.35	282.00	1,843.43	-18.30	136.68	-137.63	8.15	6.34	-442.19
1,884.00	4.52	284.73	1,874.37	-17.86	134.88	-135.77	7.02	7.00	8.81
1,915.00	7.05	284.02	1,905.21	-17.09	131.85	-132.65	8.16	8.16	-2.29
1,945.00	9.78	283.20	1,934.88	-16.06	127.58	-128.27	9.11	9.10	-2.73
1,976.00	12.83	280.53	1,965.28	-14.83	121.64	-122.19	9.98	9.84	-8.61
2,006.00	16.21	277.11	1,994.32	-13.70	114.20	-114.68	11.62	11.27	-11.40
2,037.00	20.10	277.18	2,023.77	-12.50	104.62	-105.05	12.55	12.55	0.23
2,068.00	23.69	278.94	2,052.53	-10.87	93.18	-93.51	11.77	11.58	5.68
2,098.00	26.85	281.10	2,079.66	-8.63	80.58	-80.71	10.97	10.53	7.20
2,129.00	29.43	282.48	2,106.99	-5.63	66.27	-66.09	8.58	8.32	4.45
2,160.00	32.89	282.68	2,133.51	-2.14	50.61	-50.06	11.17	11.16	0.65
2,191.00	35.99	282.03	2,159.08	1.61	33.49	-32.53	10.07	10.00	-2.10
2,223.00	40.10	282.26	2,184.27	5.76	14.22	-12.82	12.85	12.84	0.72
2,254.00	43.26	282.79	2,207.42	10.23	-5.91	7.79	10.26	10.19	1.71
2,285.00	46.64	282.07	2,229.36	14.94	-27.29	29.68	11.03	10.90	-2.32
2,317.00	49.39	280.91	2,250.76	19.67	-50.60	53.46	9.01	8.59	-3.63
2,349.00	50.96	280.66	2,271.26	24.27	-74.74	78.04	4.94	4.91	-0.78
2,381.00	52.94	280.78	2,290.98	28.96	-99.50	103.24	6.19	6.19	0.38
2,412.00	55.36	281.18	2,309.13	33.75	-124.16	128.36	7.88	7.81	1.29
2,443.00	58.13	281.22	2,326.13	38.78	-149.59	154.28	8.94	8.94	0.13
2,475.00	59.25	280.91	2,342.76	44.03	-176.42	181.62	3.60	3.50	-0.97
2,506.00	61.25	281.22	2,358.14	49.19	-202.83	208.53	6.51	6.45	1.00
2,537.00	64.41	281.67	2,372.29	54.67	-229.86	236.11	10.27	10.19	1.45
2,568.00	67.30	281.50	2,384.97	60.35	-257.57	264.39	9.34	9.32	-0.55
2,600.00	69.44	281.57	2,396.77	66.29	-286.71	294.14	6.69	6.69	0.22
2,631.00	71.60	281.61	2,407.11	72.17	-315.34	323.36	6.97	6.97	0.13
2,662.00	75.02	281.81	2,416.01	78.19	-344.41	353.05	11.05	11.03	0.65



Survey Report



Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.22' & RKB 11' @ 5875.22usft (Aztec 507)
Site:	AL Elliott	MD Reference:	GL 5864.22' & RKB 11' @ 5875.22usft (Aztec 507)
Well:	AL Elliott B 8-1H	North Reference:	Grid
Wellbore:	Lateral 1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1	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)
2,693.00	77.47	281.54	2,423.38	84.28	-373.90	383.16	7.95	7.90	-0.87
2,724.00	78.50	280.77	2,429.83	90.15	-403.65	413.48	4.12	3.32	-2.48
2,755.00	80.62	280.23	2,435.45	95.70	-433.62	443.96	7.05	6.84	-1.74
2,786.00	83.12	280.02	2,439.83	101.10	-463.83	474.64	8.09	8.06	-0.68
2,818.00	83.27	281.90	2,443.62	107.14	-495.02	506.41	5.85	0.47	5.88
2,849.00	83.51	283.63	2,447.19	113.94	-525.05	537.19	5.60	0.77	5.58
2,880.00	85.81	285.39	2,450.08	121.68	-554.93	568.01	9.33	7.42	5.68
2,911.00	89.23	285.06	2,451.42	129.81	-584.81	598.90	11.08	11.03	-1.06
2,942.00	89.83	284.61	2,451.67	137.75	-614.78	629.84	2.42	1.94	-1.45
2,973.00	90.74	284.41	2,451.52	145.51	-644.79	660.79	3.01	2.94	-0.65
3,004.00	90.84	284.23	2,451.09	153.18	-674.82	691.74	0.66	0.32	-0.58
3,035.00	90.54	283.75	2,450.72	160.67	-704.90	722.70	1.83	-0.97	-1.55
3,066.00	90.84	283.93	2,450.34	168.09	-735.00	753.67	1.13	0.97	0.58
3,097.00	91.28	284.03	2,449.77	175.58	-765.07	784.63	1.46	1.42	0.32
3,122.00	91.73	284.22	2,449.11	181.67	-789.31	809.59	1.95	1.80	0.76
3,210.00	93.74	282.11	2,444.92	201.69	-874.89	897.43	3.31	2.28	-2.40
3,242.00	92.65	281.65	2,443.13	208.27	-906.15	929.38	3.70	-3.41	-1.44
3,273.00	92.68	281.88	2,441.69	214.58	-936.47	960.34	0.75	0.10	0.74
3,305.00	94.40	282.26	2,439.71	221.26	-967.70	992.28	5.50	5.38	1.19
3,336.00	94.94	282.05	2,437.19	227.77	-997.91	1,023.17	1.87	1.74	-0.68
3,368.00	94.00	281.36	2,434.70	234.24	-1,029.14	1,055.07	3.64	-2.94	-2.16
3,399.00	92.28	280.20	2,433.00	240.03	-1,059.55	1,086.02	6.69	-5.55	-3.74
3,431.00	89.70	279.14	2,432.45	245.40	-1,091.09	1,118.00	8.72	-8.06	-3.31
3,463.00	89.60	279.49	2,432.64	250.58	-1,122.67	1,149.98	1.14	-0.31	1.09
3,494.00	90.10	279.86	2,432.72	255.79	-1,153.22	1,180.97	2.01	1.61	1.19
3,526.00	90.44	279.54	2,432.57	261.18	-1,184.77	1,212.96	1.46	1.06	-1.00
3,557.00	89.63	279.36	2,432.55	266.27	-1,215.35	1,243.94	2.68	-2.61	-0.58
3,589.00	88.79	279.07	2,432.99	271.40	-1,246.93	1,275.92	2.78	-2.63	-0.91
3,620.00	89.26	279.23	2,433.52	276.33	-1,277.53	1,306.89	1.60	1.52	0.52
3,651.00	89.53	279.14	2,433.85	281.27	-1,308.13	1,337.87	0.92	0.87	-0.29
3,684.00	90.07	279.28	2,433.96	286.56	-1,340.71	1,370.85	1.69	1.64	0.42
3,715.00	90.60	279.50	2,433.78	291.61	-1,371.29	1,401.83	1.85	1.71	0.71
3,747.00	91.14	279.51	2,433.30	296.90	-1,402.85	1,433.81	1.69	1.69	0.03
3,779.00	89.97	279.36	2,432.99	302.14	-1,434.41	1,465.80	3.69	-3.66	-0.47
3,810.00	90.23	279.77	2,432.93	307.29	-1,464.98	1,496.78	1.57	0.84	1.32
3,842.00	88.96	278.77	2,433.16	312.45	-1,496.56	1,528.76	5.05	-3.97	-3.13
3,874.00	88.72	278.35	2,433.81	317.21	-1,528.20	1,560.72	1.51	-0.75	-1.31
3,906.00	88.99	278.17	2,434.45	321.81	-1,559.86	1,592.67	1.01	0.84	-0.56
3,938.00	89.50	279.16	2,434.87	326.63	-1,591.49	1,624.63	3.48	1.59	3.09
3,970.00	89.06	280.61	2,435.27	332.12	-1,623.01	1,656.62	4.73	-1.38	4.53
4,001.00	89.30	280.84	2,435.71	337.89	-1,653.47	1,687.62	1.07	0.77	0.74
4,032.00	89.63	280.85	2,436.00	343.72	-1,683.91	1,718.61	1.07	1.06	0.03



Survey Report

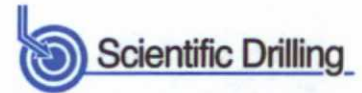


Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.22' & RKB 11' @ 5875.22usft (Aztec 507)
Site:	AL Elliott	MD Reference:	GL 5864.22' & RKB 11' @ 5875.22usft (Aztec 507)
Well:	AL Elliott B 8-1H	North Reference:	Grid
Wellbore:	Lateral 1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1	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)	
4,064.00	90.47	281.25	2,435.98	349.85	-1,715.32	1,750.61	2.91	2.63	1.25	
4,095.00	89.73	281.02	2,435.92	355.84	-1,745.73	1,781.61	2.50	-2.39	-0.74	
4,126.00	90.10	281.36	2,435.97	361.86	-1,776.15	1,812.61	1.62	1.19	1.10	
4,158.00	90.64	281.61	2,435.76	368.23	-1,807.50	1,844.61	1.86	1.69	0.78	
4,190.00	91.01	280.69	2,435.30	374.42	-1,838.90	1,876.61	3.10	1.16	-2.88	
4,221.00	90.40	279.86	2,434.92	379.95	-1,869.40	1,907.60	3.32	-1.97	-2.68	
4,253.00	90.77	279.88	2,434.59	385.43	-1,900.92	1,939.59	1.16	1.16	0.06	
4,284.00	90.60	280.47	2,434.22	390.91	-1,931.43	1,970.58	1.98	-0.55	1.90	
4,316.00	90.90	280.72	2,433.80	396.79	-1,962.88	2,002.58	1.22	0.94	0.78	
4,348.00	89.87	280.87	2,433.59	402.78	-1,994.32	2,034.57	3.25	-3.22	0.47	
4,379.00	90.03	280.99	2,433.61	408.66	-2,024.75	2,065.57	0.65	0.52	0.39	
4,410.00	89.13	280.31	2,433.84	414.39	-2,055.22	2,096.57	3.64	-2.90	-2.19	
4,442.00	89.10	280.19	2,434.34	420.08	-2,086.70	2,128.56	0.39	-0.09	-0.38	
4,474.00	89.66	280.45	2,434.68	425.82	-2,118.18	2,160.56	1.93	1.75	0.81	
4,505.00	90.23	280.73	2,434.71	431.51	-2,148.66	2,191.55	2.05	1.84	0.90	
4,537.00	91.07	280.98	2,434.35	437.54	-2,180.08	2,223.55	2.74	2.63	0.78	
4,568.00	90.17	281.14	2,434.01	443.48	-2,210.50	2,254.55	2.95	-2.90	0.52	
4,599.00	90.30	281.90	2,433.89	449.68	-2,240.88	2,285.55	2.49	0.42	2.45	
4,630.00	89.36	281.79	2,433.98	456.04	-2,271.22	2,316.55	3.05	-3.03	-0.35	
4,661.00	89.43	281.79	2,434.31	462.37	-2,301.56	2,347.54	0.23	0.23	0.00	
4,692.00	89.73	281.90	2,434.53	468.74	-2,331.90	2,378.54	1.03	0.97	0.35	
4,723.00	90.27	282.20	2,434.53	475.21	-2,362.22	2,409.54	1.99	1.74	0.97	
4,753.00	90.87	282.40	2,434.23	481.60	-2,391.53	2,439.53	2.11	2.00	0.67	
4,783.00	89.90	281.56	2,434.03	487.82	-2,420.87	2,469.53	4.28	-3.23	-2.80	
4,814.00	90.03	281.48	2,434.05	494.02	-2,451.25	2,500.53	0.49	0.42	-0.26	
4,844.00	90.57	281.58	2,433.89	500.01	-2,480.64	2,530.52	1.83	1.80	0.33	
4,874.00	91.24	281.77	2,433.42	506.08	-2,510.02	2,560.52	2.32	2.23	0.63	
4,904.00	89.93	281.20	2,433.11	512.05	-2,539.41	2,590.52	4.76	-4.37	-1.90	
4,935.00	89.97	281.18	2,433.14	518.07	-2,569.82	2,621.52	0.14	0.13	-0.06	
4,965.00	90.67	281.28	2,432.97	523.91	-2,599.25	2,651.52	2.36	2.33	0.33	
4,996.00	91.24	281.67	2,432.46	530.08	-2,629.63	2,682.51	2.23	1.84	1.26	
5,026.00	92.05	280.65	2,431.60	535.88	-2,659.05	2,712.50	4.34	2.70	-3.40	
5,056.00	90.97	280.32	2,430.81	541.34	-2,688.53	2,742.49	3.76	-3.60	-1.10	
5,087.00	91.28	280.62	2,430.20	546.97	-2,719.01	2,773.48	1.39	1.00	0.97	
5,118.00	90.00	280.56	2,429.85	552.67	-2,749.48	2,804.47	4.13	-4.13	-0.19	
5,148.00	90.20	280.56	2,429.80	558.17	-2,778.97	2,834.47	0.67	0.67	0.00	
5,179.00	91.28	280.61	2,429.40	563.86	-2,809.44	2,865.46	3.49	3.48	0.16	
5,210.00	90.00	280.69	2,429.05	569.59	-2,839.91	2,896.46	4.14	-4.13	0.26	
5,240.00	90.03	281.23	2,429.04	575.29	-2,869.36	2,926.46	1.80	0.10	1.80	
5,271.00	90.30	280.76	2,428.95	581.21	-2,899.79	2,957.46	1.75	0.87	-1.52	
5,301.00	90.84	281.09	2,428.66	586.89	-2,929.24	2,987.46	2.11	1.80	1.10	
5,332.00	90.44	281.17	2,428.31	592.88	-2,959.66	3,018.45	1.32	-1.29	0.26	



Survey Report



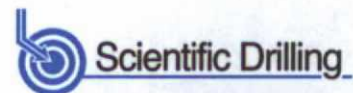
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.22' & RKB 11' @ 5875.22usft (Aztec 507)
Site:	AL Elliott	MD Reference:	GL 5864.22' & RKB 11' @ 5875.22usft (Aztec 507)
Well:	AL Elliott B 8-1H	North Reference:	Grid
Wellbore:	Lateral 1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1	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)
5,363.00	91.01	281.74	2,427.92	599.03	-2,990.04	3,049.45	2.60	1.84	1.84
5,393.00	90.00	281.94	2,427.65	605.19	-3,019.40	3,079.45	3.43	-3.37	0.67
5,424.00	90.24	282.49	2,427.59	611.75	-3,049.70	3,110.44	1.94	0.77	1.77
5,455.00	90.60	283.14	2,427.36	618.62	-3,079.92	3,141.43	2.40	1.16	2.10
5,486.00	90.87	282.45	2,426.96	625.49	-3,110.15	3,172.42	2.39	0.87	-2.23
5,517.00	90.50	281.89	2,426.59	632.02	-3,140.45	3,203.41	2.17	-1.19	-1.81
5,548.00	89.13	281.28	2,426.69	638.25	-3,170.82	3,234.41	4.84	-4.42	-1.97
5,578.00	89.26	281.13	2,427.11	644.07	-3,200.25	3,264.41	0.66	0.43	-0.50
5,609.00	89.83	281.48	2,427.36	650.15	-3,230.64	3,295.41	2.16	1.84	1.13
5,640.00	90.27	281.50	2,427.33	656.33	-3,261.02	3,326.41	1.42	1.42	0.06
5,670.00	90.64	281.37	2,427.10	662.27	-3,290.42	3,356.40	1.31	1.23	-0.43
5,700.00	90.17	281.36	2,426.88	668.19	-3,319.84	3,386.40	1.57	-1.57	-0.03
5,730.00	89.76	281.36	2,426.90	674.09	-3,349.25	3,416.40	1.37	-1.37	0.00
5,760.00	90.30	281.58	2,426.89	680.06	-3,378.65	3,446.40	1.94	1.80	0.73
5,791.00	91.04	281.34	2,426.52	686.22	-3,409.03	3,477.40	2.51	2.39	-0.77
5,821.00	89.60	280.58	2,426.36	691.92	-3,438.48	3,507.40	5.43	-4.80	-2.53
5,851.00	89.16	280.59	2,426.68	697.43	-3,467.97	3,537.39	1.47	-1.47	0.03
5,881.00	89.33	280.52	2,427.08	702.93	-3,497.46	3,567.39	0.61	0.57	-0.23
5,911.00	89.70	280.90	2,427.33	708.50	-3,526.93	3,597.39	1.77	1.23	1.27
5,941.00	89.90	280.81	2,427.43	714.15	-3,556.40	3,627.39	0.73	0.67	-0.30
5,971.00	90.50	280.37	2,427.33	719.67	-3,585.89	3,657.38	2.48	2.00	-1.47
6,002.00	91.04	279.48	2,426.91	725.01	-3,616.42	3,688.37	3.36	1.74	-2.87
6,032.00	90.00	279.23	2,426.64	729.88	-3,646.02	3,718.35	3.57	-3.47	-0.83
6,062.00	90.00	279.74	2,426.64	734.83	-3,675.61	3,748.34	1.70	0.00	1.70
6,092.00	90.34	279.72	2,426.55	739.90	-3,705.18	3,778.33	1.14	1.13	-0.07
6,122.00	90.70	279.79	2,426.28	744.98	-3,734.74	3,808.32	1.22	1.20	0.23
6,152.00	89.60	280.36	2,426.20	750.23	-3,764.28	3,838.31	4.13	-3.67	1.90
6,182.00	89.23	280.95	2,426.51	755.78	-3,793.76	3,868.31	2.32	-1.23	1.97
6,213.00	89.97	281.99	2,426.72	761.94	-3,824.14	3,899.31	4.12	2.39	3.35
6,244.00	91.11	284.76	2,426.43	769.11	-3,854.29	3,930.28	9.66	3.68	8.94
6,274.00	91.71	286.75	2,425.69	777.25	-3,883.15	3,960.18	6.93	2.00	6.63
6,304.00	90.44	286.66	2,425.13	785.87	-3,911.88	3,990.03	4.24	-4.23	-0.30
6,334.00	90.30	286.46	2,424.94	794.42	-3,940.64	4,019.91	0.81	-0.47	-0.67
6,364.00	91.14	286.06	2,424.56	802.82	-3,969.44	4,049.79	3.10	2.80	-1.33
6,395.00	91.28	285.37	2,423.90	811.22	-3,999.27	4,080.69	2.27	0.45	-2.23
6,425.00	89.83	284.18	2,423.61	818.87	-4,028.28	4,110.63	6.25	-4.83	-3.97
6,456.00	89.66	282.56	2,423.75	826.04	-4,058.43	4,141.61	5.25	-0.55	-5.23
6,486.00	89.46	280.42	2,423.98	832.01	-4,087.83	4,171.60	7.16	-0.67	-7.13
6,516.00	89.46	278.56	2,424.27	836.96	-4,117.42	4,201.59	6.20	0.00	-6.20
6,547.00	89.63	278.08	2,424.51	841.44	-4,148.09	4,232.54	1.64	0.55	-1.55
6,577.00	89.73	276.22	2,424.68	845.18	-4,177.85	4,262.46	6.21	0.33	-6.20
6,608.00	89.90	275.20	2,424.78	848.26	-4,208.70	4,293.32	3.34	0.55	-3.29



Survey Report



Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.22' & RKB 11' @ 5875.22usft (Aztec 507)
Site:	AL Elliott	MD Reference:	GL 5864.22' & RKB 11' @ 5875.22usft (Aztec 507)
Well:	AL Elliott B 8-1H	North Reference:	Grid
Wellbore:	Lateral 1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1	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)
6,639.00	90.34	275.15	2,424.71	851.06	-4,239.57	4,324.14	1.43	1.42	-0.16
6,654.00	90.33	274.86	2,424.63	852.37	-4,254.52	4,339.06	1.93	-0.07	-1.93
Last SDI MWD Survey									
6,705.00	90.33	274.86	2,424.33	856.69	-4,305.33	4,389.74	0.00	0.00	0.00
Projection to TD									

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
330.00	329.99	1.37	-0.37	First SDI MWD Survey
6,654.00	2,424.63	852.37	-4,254.52	Last SDI MWD Survey
6,705.00	2,424.33	856.69	-4,305.33	Projection to TD

Checked By: _____ Approved By: _____ Date: _____