

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

David Martin
Cabinet Secretary

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

David R. Catanach Division Director
Oil Conservation Division



New Mexico Oil Conservation Division approval and conditions listed below are made in accordance with OCD Rule 19.15.7.11 and are in addition to the actions approved by BLM on the following 3160-3 APD form.

Operator Signature Date: 10-7-15

Well information;

Operator BP, Well Name and Number AL Elliott BB # 1H

API# 30-045-35722, Section 10, Township 29 N/S, Range 9 E/W

Conditions of Approval:

(See the below checked and handwritten conditions)

- ☒ Notify Aztec OCD 24hrs prior to casing & cement.
- ☒ Hold C-104 for directional survey & "As Drilled" Plat
- ☒ Hold C-104 for NSL, NSP, DHC
- ☐ Spacing rule violation. Operator must follow up with change of status notification on other well to be shut in or abandoned
- ☐ Regarding the use of a pit, closed loop system or below grade tank, the operator must comply with the following as applicable:
 - A pit requires a complete C-144 be submitted and approved prior to the construction or use of the pit, pursuant to 19.15.17.8.A
 - A closed loop system requires notification prior to use, pursuant to 19.15.17.9.A
 - A below grade tank requires a registration be filed prior to the construction or use of the below grade tank, pursuant to 19.15.17.8.C
- ☐ Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string
- ☒ Regarding Hydraulic Fracturing, review EPA Underground Injection Control Guidance 84
- ☒ Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.
- ☒ Well-bore communication is regulated under 19.15.29 NMAC. This requires well-bore Communication to be reported in accordance with 19.15.29.8.

Charles H. ...
NMOCD Approved by Signature

11-30-2015
Date

HBP - actual
lessee - Elliott & Amis
onsite - 7/2015

Form 3160-3
(August 2007)

NOS: 6/29/15
APD: 5
MP: BLM
BOND: WY2924
CA/PA: 8

OIL CONS. DIV DIST. 3

NOV 23 2015

FORM APPROVED
OMB No. 1004-0136
Expires July 31, 2010

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL ☐ REENTER

CONFIDENTIAL

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

2. Name of Operator **BP AMERICA PRODUCTION COMPANY** Contact: **TOYA COLVIN**
Toya.Colvin@bp.com

3a. Address
737 NORTH ELDRIDGE PARKWAY 12.181A
HOUSTON, TX 77079

3b. Phone No. (include area code)
Ph: 281-366-7148

5. Lease Serial No.
NMSF078132

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.
A L ELLIOTT B 8 1H

9. API Well No.

10. Field and Pool, or Exploratory
BASIN FRUITLAND COAL

30-045-35722

11. Sec., T., R., M., or Blk. and Survey or Area
Sec 10 T29N R09W Mer

4. Location of Well (Report location clearly and in accordance with any State requirements.)*

At surface SESE 1104FSL 204FEL 36.735076 N Lat, 107.757951 W Lon

At proposed prod. zone NWSW 1901FSL 710FWL 36.737455 N Lat, 107.772645 W Lon

14. Distance in miles and direction from nearest town or post office*
WELL IS 13.1 MILES NORTHEAST OF BLOOMFIELD, NM.

12. County or Parish
SAN JUAN

13. State
NM

15. Distance from proposed location to nearest property or
lease line, ft. (Also to nearest drig. unit line, if any)
WELL IS 710 FEET FROM THE NEAREST UNIT/LEASE LINE.

16. No. of Acres in Lease

2372.88

17. Spacing Unit dedicated to this well
320.00

18. Distance from proposed location to nearest well, drilling,
completed, applied for, on this lease, ft.
WELL IS 293FT FROM THE NEAREST WELL AL-EZ000TMEC)

19. Proposed Depth
2415 TVD

20. BLM/BIA Bond No. on file
WY2924

21. Elevations (Show whether DF, KB, RT, GL, etc.)
5869 GL

22. Approximate date work will start
12/01/2015

23. Estimated duration
15 DAYS

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the
SUPO shall be filed with the appropriate Forest Service Office).

4. Bond to cover the operations unless covered by an existing bond on file (see
Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the
authorized officer.

25. Signature
(Electronic Submission)

Name (Printed/Typed)
TOYA COLVIN Ph: 281-366-7148

Date
10/07/2015

Title
REGULATORY ANALYST

Approved by (Signature)

Name (Printed/Typed)

OCT 13 2015

Date
11/18/15

Title

Office

AFMSS

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

BLM'S APPROVAL OR ACCEPTANCE OF THIS

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212 make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

AUTHORIZATION REQUIRED FOR OPERATIONS

Additional Operator Remarks (see next page)

DRILLING OPERATIONS
AUTHORIZED ARE SUBJECT TO
COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS"

Electronic Submission #318940 verified by the BLM Well Information System
For BP AMERICA PRODUCTION COMPANY, sent to the Farmington

This action is subject to technical
and procedural review pursuant to
43 CFR 3165.3 and appeal
pursuant to 43 CFR 3165.4

** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED **

NMOCD

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 (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 30-045-35722	² Pool Code 71629	³ Pool Name Basin Fruitland Coal
⁴ Property Code 3152081	⁵ Property Name AL Elliott B 8	⁶ Well Number 1H Lat 1 ✓
⁷ OGRID No. 000778	⁸ Operator Name BP America Production Company	⁹ Elevation 5869

¹⁰ Surface Location

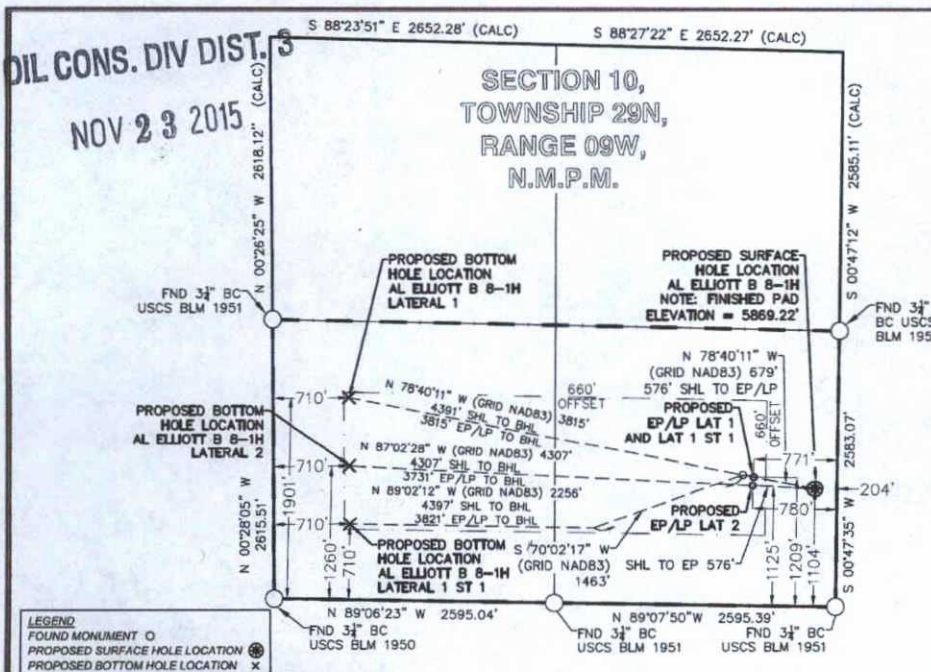
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	10	29N	09W		1104	South	204	East	San Juan

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
L	10	29N	09W		1901	South	710	West	San Juan

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

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



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.

Toya Colvin 10/06/15
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.

8-27-15
Date of Survey

Signature and Seal of Professional Surveyor

17078
Certificate Number

MARSHALL W. LINDEEN
NEW MEXICO
17078
10-1-15
PROFESSIONAL SURVEYOR

AL ELLIOTT B 8-1H	NMWS NAD'83	NAD'83	TIES
PROPOSED SURFACE HOLE LOCATION (SHL)	N (Y) = 2,086,893.46' E (X) = 2,745,179.81'	LAT. = 36.73507684°N LON. = 107.75795183°W	FSL = 1104' FEL = 204'
PROPOSED ENTRY POINT (EP)/ LANDING POINT (LP) LAT 1 & LAT 1 ST 1	N (Y) = 2,087,006.70' E (X) = 2,744,614.63'	LAT. = 36.73538910°N LON. = 107.75988036°W	FSL = 1209' FEL = 771'
PROPOSED BOTTOM HOLE LOCATION (BHL) LAT 1	N (Y) = 2,087,756.29' E (X) = 2,740,873.64'	LAT. = 36.73745531°N LON. = 107.77264588°W	FSL = 1901' FWL = 710'
PROPOSED BOTTOM HOLE LOCATION (BHL) LAT 1 ST 1	N (Y) = 2,086,565.48' E (X) = 2,740,883.37'	LAT. = 36.73418432°N LON. = 107.77261525°W	FSL = 710' FWL = 710'
PROPOSED ENTRY POINT (EP)/ LANDING POINT (LP) LAT 2	N (Y) = 2,086,923.18' E (X) = 2,744,604.70'	LAT. = 36.73515971°N LON. = 107.75991447°W	FSL = 1125' FEL = 780'
PROPOSED BOTTOM HOLE LOCATION (BHL) LAT 2	N (Y) = 2,087,115.77' E (X) = 2,740,878.87'	LAT. = 36.73569589°N LON. = 107.77262941°W	FSL = 1260' FWL = 710'

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1220 South St. Francis Dr.
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Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

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¹ API Number 30,045-35722	² Pool Code 71629	³ Pool Name Basin Fruitland Coal
⁴ Property Code 315081	⁵ Property Name AL Elliott B 8	⁶ Well Number 1H Lat 2
⁷ OGRID No. 000778	⁸ Operator Name BP America Production Company	⁹ Elevation 5869

¹⁰ Surface Location

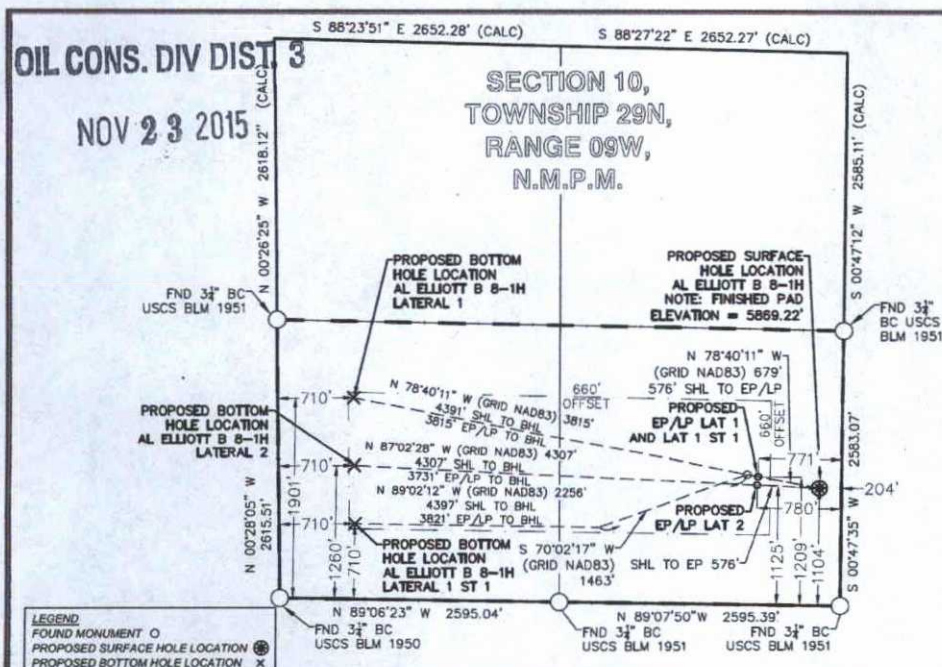
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



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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 or 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.

Tova Colvin 10/06/15
Signature Date

Tova Colvin
Printed Name

Tova.Colvin@bp.com
E-mail Address

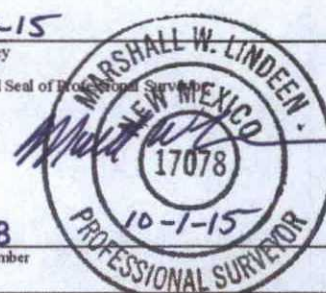
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8-27-15
Date of Survey

Signature and Seal of Professional Surveyor

17078
Certificate Number



AL ELLIOTT B 8-1H	NWAZ NAD'83	NAD'83	TIES
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10. Construction of the well pad will take approximately two weeks.

G. Methods for Handling Waste

- ✓ 1. Cuttings - Drilling operations will utilize a closed-loop system with water based mud. All cuttings will be placed in roll-off bins and hauled to a commercial disposal facility or land farm. BP America will follow Onshore Oil and Gas Order No. 1 regarding the placement, operation and removal of the closed-loop systems. No blow pit will be used. Closed-loop tanks will be adequately sized for containment of all fluids.
- 2. Drilling Fluids
 - a. Drilling fluids will be stored onsite in above-ground storage tanks (ASTs). Upon termination of drilling operations, the drilling fluids will be recycled and transferred to other permitted locations or returned to the vendor for re-use, as practical. Residual fluids will be vacuumed from the storage tanks and disposed of at an appropriate waste disposal facility.
 - b. Drilling fluid storage tanks will be adequately sized to ensure confinement of all fluids and will provide sufficient freeboard to prevent uncontrolled releases.
 - c. The ASTs will be located on the well pad. A berm will be constructed along the perimeter of the well pad, providing secondary containment.
- 3. Flowback Water
 - a. The water-based solution that flows back to the surface during and after completion operations will be placed in storage tanks on location.
 - b. Flowback water will be confined to ASTs for a period not to exceed 90 days after initial production and will be disposed of in an approved disposal facility, or recycled.
 - c. The ASTs will be located on the well pad. A berm will be constructed along the perimeter of the well pad, providing secondary containment.
- 4. Spills – any spills of non-freshwater fluids will be immediately cleaned up and removed to an approved disposal site. Spills less than 10 barrels do not require reporting. Spills and releases in excess of 10 barrels will be reported according to NMOCD and BLM requirements.
- 5. Sewage – self-contained, chemical toilets will be provided for human waste disposal. The toilet holding tanks will be pumped by a 3rd party vendor, as needed, and the contents thereof disposed of in an approved sewage disposal facility. The toilets will be onsite during all operations.

Garbage and other waste material – garbage, trash, and other waste materials will be collected in a portable, self-contained and fully-enclosed trash container during drilling and completion operations. The accumulated trash will be removed, as needed, and will be disposed of at an approved landfill. No trash will be buried or burned on location. Immediately after removal of the drilling rig, all debris and other waste materials not contained in the trash container will be cleaned up and removed from the well location.

6. Hazardous waste-

- a. No chemicals subject to reporting under the Superfund Amendments and Reauthorization Act (SARA) Title III in an amount equal to or greater than 10,000 pounds will be used, produced,



**Application for Permit to Drill
Drilling Plan
09/24/2015**

BP AMERICA PRODUCTION COMPANY

AL ELLIOTT B8-1H

Surface Location: 1178' FSL & 299' FEL

Section 10, T29N, R9W

Proposed GL Elev = 5864.23'

Lat. = 36.73528314° N

Long. = 107.75827052° W

NAD 83

San Juan County, New Mexico

Proposed Top of Production Location: 1187' FSL – 799' FEL

Proposed Bottom Hole Location (LAT 1): 1260' FSL – 710' FWL

Proposed Bottom Hole Location (LAT 1 ST 1): 1901' FSL – 710' FWL

Proposed Bottom Hole Location (LAT 2): 710' FSL – 710' FWL

Section 10, T29N, R9W

San Juan County, Colorado

Drilling program written in compliance with onshore Oil and Gas Order No. 1
(III.D.3, effective May 2007) and Onshore Order No. 2 Dated November 18, 1988

A. Names and estimated tops of all geologic groups, formations, members or zones.

Depths referenced to GL of 5,864.23' & RKB 11' @ 5,875.23'			
Marker	Sub Sea	TVD	MD
Nacimiento	5,864	11	11
Ojo Alamo	4,568	1,307	1,307
Kirtland Sh	4,407	1,468	1,468
Farmington Ss	4,138	1,737	1,737
Lwr. Kirtland Sh	3,917	1,958	1,958
Fruitland Coal	3,724	2,151	2,164
Fruitland Sand	3,668	2,207	2,230
Ignacio Seam	3,617	2,258	2,298
Cottonwood Seam	3,548	2,327	2,401
Cahn Seam	3,446	2,429	2,643
TOTAL DEPTH (LAT 1):	3,465	2,415	6,583
TOTAL DEPTH (LAT 1 ST 1):	3,464	2,405	6,645
TOTAL DEPTH (LAT 2):	3,545	2,330	6,409

B. Estimated depth and thickness of formations, members or zones potentially containing useable water, oil, gas or prospectively valuable deposits of other minerals that the operator expects to encounter, and the operator's plans for protecting such resources.

Depths referenced to GL of 5,864.23' & RKB 11' @ 5,875.23'					
Marker	Sub Sea	TVD	Thickness	MD	
Nacimiento	5,993	11	1,468	11	Usable Water
Ojo Alamo	4,525	1,307	158	1,479	Water
Kirtland Sh	4,407	1,468	273	1,637	Water
Farmington Ss	4,138	1,737	216	1,910	Gas & Water
Lwr. Kirtland Sh	3,917	1,958	193	2,127	Gas & Water
Fruitland Coal	3,724	2,151	278	2,335	Gas, Water
Fruitland Sand	3,668	2,207	18	2,422	Gas
Ignacio Seam	3,617	2,258	20	2,470	Gas
Cottonwood Seam	3,548	2,327	40	2,564	Gas
Cahn Seam	3,446	2,429	19	2,809	Gas
TOTAL DEPTH (LAT 1):	3,467	2,415 (Cahn)		6,583	
TOTAL DEPTH (LAT 1 ST 1):	3,464	2,405 (Cahn)		6,645	
TOTAL DEPTH (LAT 2):	3,545	2,330 (Cottonwood)		6,409	

Conductor: No conductor casing is necessary

Surface Casing: Protection shall be accomplished by setting surface casing 50' below known fresh water sources and cemented to surface with 9 5/8" surface casing.

Possible Aquifers: Nacimiento, 250'

Oil Shale: None Expected.

Oil & Gas: Primary objective is the Cottonwood Coal at 2,327' TVD and Cahn Coal at 2429' TVD.

Protection of oil, gas, water, or other mineral bearing formations: Protection shall be accomplished by setting surface casing below base of possible aquifer and cementing surface casing to surface.

Intermediate casing will be set at 2768'MD/2438'TVD and cemented to surface.

C. The operator's minimum specifications for blowout prevention equipment and diverter systems to be used, including size, pressure rating, configuration and the testing procedure and frequency. Blowout prevention equipment must meet the minimum standards outlined in Order 2.

BOP equipment and accessories will meet or exceed BLM requirements outlined in 43 CFR Part 3160.

The working pressure of all BOPE shall exceed the anticipated surface pressure to which it may be subjected, assuming a partially evacuated hole with a pressure gradient of 0.22 psi/ft.

Expected Maximum Bottom Hole pressure = 1068 psi, which is less than 2,000 psi working pressure. Therefore, a 2000 psi BOPE system is required that consists of the following:

- Annular preventer, or double ram, or two rams with one being blind and one being a pipe ram.
- Kill line (2" minimum)

- 1 Kill line valve (2" minimum)
- 1 choke line valve
- 2 chokes (refer to diagram in Attachment 1)
- Upper Kelly cock valve with handle available
- Safety valve and subs to fit all drill strings in use
- Pressure gauge on choke manifold
- 2" minimum choke manifold
- Fill-up line above the uppermost preventer

See attached diagram for the proposed BOP system. The wellhead BOP equipment will be nipped-up on the 9-5/8" x 11" 2,000 psi flanged casing head. The BOP will be hydraulically operated.

All ram preventers and related equipment will be tested to 2,000 psi for 10 minutes. Annular preventers will be tested to 50% of rated working pressure for 10 minutes. Surface casing will be tested to 1500 psi. All preventers and surface casing will be tested before drilling out of surface casing. BOP equipment will be tested when initially installed, whenever any seal subject to test pressure is broken, following related repairs and at least once every 30 days. Annular preventers will be functionally operated at least once per week. Rams preventers will be activated each trip, not to exceed once per day.

D. The operator's proposed casing program, including size, grade, weight, type of thread and coupling, the setting depth of each string, and it's condition. The operator must include the minimum design criteria, including casing loading assumptions and corresponding safety factors for burst, collapse, and tensions (body yield and joint strength). The operator must also include the lengths and setting depth of each casing when a tapered casing string is proposed. The hole size for each wellbore section of hole drilled must be included. Special casing designs such as the use of coil tubing or expandable casing may necessitate additional information.

Name	Casing & Hole Size	Grade	Weight	Coupling	Setting Depth (MD)	Condition
Surface	9-5/8" (12-1/4")	J-55	36 ppf	LT&C	0' - 300'	New casing. Cement to surface.
Intermediate	7" (8-3/4")	J-55	23 ppf	LT&C	0' - 2768'	New casing. Cement to surface in 1 stage.
(Liner) LAT 1	4-1/2" (6-1/8")	J-55	10.5 ppf	ST&C	2971' - 6583'	Used casing. Pre-perforated uncemented.
(Liner) LAT 1 ST 1	4-1/2" (6-1/8")	J-55	10.5 ppf	ST&C	2668' - 6645'	Used casing. Pre-perforated uncemented.
LAT 2	4-1/2" (6-1/8")	J-55	11.6 ppf	LT&C	1796' - 6409'	New Casing. Open hole packer and frac sleeves. Top of liner will be set 20' outside the 7" casing window in openhole. Hydraulic fracture stimulated through a tieback string.

Casing strings will be tested to .22 psi per foot of the casing string length or 1500 psi, whichever is greater, but not to exceed 70% of the minimum internal yield.

Minimum casing design factors used:

Collapse -	1.0
Burst -	1.1
Tension -	1.4

Surface casing shall have a minimum of 1 centralizer per joint on the bottom three (3) joints, starting with the shoe joint.

Surface casing maybe preset with a preset rig.

The 7" production casing will be centralized using 1 centralizer the first 6 jts and spaced appropriately through the curve section of the well-bore and then spaced +/- 1 centralizer / 4 jts through the remainder of the cement column, using approximately 30 centralizers.

The pre-perforated production liners run in LAT 1 and LAT 1 ST 1 laterals will be dropped off in open hole and are un-cemented. The pre-perforated production liners are used to guard against formation sloughing and collapse and are not intended to contain pressure. The production liner in LAT 2 will be set 20' outside the 7" window and is un-cemented. It will be installed with open hole packers and frac sleeves and hydraulic fracture stimulated through a tieback string.

Surface Casing Design - Evacuation/Casing Test (collapse & burst), 100k overpull (tension)

					Collapse	Burst	Tension		
Min Safety Factors					1.000	1.100	1.400		
	Size	Weight	Grade	Conn	Collapse	Burst	Tension (Pipe Body)	Tension (Connection)	Notes
Surface	9.625	36	J55	LTC	2,020	3,520	564,000	453,000	0' - 612'
					80% of Burst =		2,816		
36 ppf J55 LTC									
	Casing Depth	MW in	MW out	Pres in	Pres out	SF			
Collapse	300	0	15.80	0	246	8.20	Full evacuation with 15.8ppg cement in the annulus		
Burst	300	9.0	0	1500	0	2.35	1500psi casing test		
		Mud Wt	Air Wt	Bouy Wt	BW +100k				
Tension (Pipe Body)	300	9.0	10,800	9,316	109,316	5.16	100k over pull		
Tension (Connection)	300	9.0	10,800	9,316	109,316	4.14			
BF= 1- (MW)/65.5 = 0.8626									

Intermediate Casing Design - Evacuation/Casing Test (collapse & burst), 100k overpull (tension)

					Collapse	Burst	Tension		
Min Safety Factors					1.000	1.100	1.400		
	Size	Weight	Grade	Conn	Collapse	Burst	Tension (Pipe Body)	Tension (Connection)	Notes
Surface	7	23	J55	LTC	3,270	4,360	366,000	313,000	0' - 2768'
					80% of Burst =		3,488		
36 ppf J55 LTC									
	Casing TVD	MW in	MW out	Pres in	Pres out	SF			
Collapse	2348	0	15.80	0	1929	1.70	Full evacuation with 15.8ppg cement in the annulus		
Burst	2348	9.0	0	1099	0	3.97	Evacuated annulus		
		Mud Wt	Air Wt	Bouy Wt	BW +100k				
Tension (Pipe Body)	2348	9.0	54,004	46,584	146,584	2.50	100k over pull		
Tension (Connection)	2348	9.0	54,004	46,584	146,584	2.14			
BF= 1- (MW)/65.5 = 0.8626									

Liner Casing Design - Evacuation/Casing Test (collapse & burst), 100k overpull (tension)

					Collapse	Burst	Tension		
Min Safety Factors					1.000	1.100	1.400		
	Size	Weight	Grade	Conn	Collapse	Burst	Tension (Pipe Body)	Tension (Connection)	Notes
Production	4.5	11.6	L80/N80	LTC	6,350	7,780	267,000	223,000	1796' - 6,409'
					80% of Burst =		6,224		
24 ppf J55 LTC									
	Casing Depth	MW in	MW out	Pres in	Pres out	SF			
Collapse	2500	0	9.00	0	1170	5.43	Full evacuation with 15.8ppg cement in the annulus		
Burst	2500	9.0	0	3800	0	2.05	3800psi casing test		
		Mud Wt	Air Wt	Bouy Wt	BW +100k				
Tension (Pipe Body)	2500	9.0	29,000	25,015	125,015	2.14	100k over pull		
Tension (Connection)	2500	9.0	29,000	25,015	125,015	1.78			
BF= 1- (MW)/65.5 =		0.8626							

- E. The estimated amount and type(s) of cement expected to be used in the setting of each casing string. If stage cementing will be used, provide the setting depth of the stage tool(s) and the amount and type of cement including additives, to be used for each stage. Provide the yield of each cement slurry and the expected top of cement, with excess, for each cemented string or stage.**

The proposed cementing program has been designed to protect and/or isolate all usable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals. All indications of useable water shall be reported.

The surface casing shall be cemented back to surface. In the event cement does not circulate to surface, remedial cementing shall be done to cement the casing back to surface. If returns are lost and/or cement is not brought to surface, a cement bond log (CBL) will be required to determine the quality of the job prior to drilling ahead (see OO2).

Top plugs shall be used to reduce contamination of cement by displacement fluid. A fluid spacer will be pumped to help isolate the cement from contamination by the mud fluid being displaced ahead of the cement slurry.

The 7" production casing will be cemented to surface. Tail cement for the production cement job is designed to cover from the casing shoe to the curve KOP, lead cement is designed to circulate to surface. Planned excess is 50% in the open hole.

Surface Casing Single Stage Job – (0-300'MD):

Excess – 100% over gauge hole – 12-1/4" hole and 9-5/8" casing (0.3132ft3/ft)

Top of Lead Cement - Surface

Lead Slurry - (0' – 168'): 43 sx – 12.3 ppg, conventional cement containing:

HALCEM™ SYSTEM – Cement – 94 lbs/sx

Yield – 2.45 ft3/sx

Water requirement – 13.77 gal/sx.

Top of Tail Cement - 168'

Tail Slurry - (168' – 300' MD): 45 sx - 13.5 ppg, conventional cement containing:

HALCEM™ CEMENT – Cement – 94 lbs/sx

Yield – 1.842 ft3/sx

Water requirement – 9.31 gal/sx.

Total sacks of cement pumped on surface job = 88 sx

Production Casing Single Stage Job – (0-2768'MD/ 2440'TVD):

Excess – 50% over gauge hole – 8-3/4" hole and 7" casing (0.1503 ft3/ft)

Excess - 0% inside surface casing – 8.921" surf csg ID and 7" casing (0.1668 ft3/ft)

Top of Lead Cement - Surface

Lead Slurry - (0' – 1700' MD): 149 sx - 12.3 ppg, conventional cement containing:

VARICEM™ CEMENT – Cement – 94 lbs/sx

Yield – 2.454 ft3/sx

Water requirement – 13.78 gal/sx.

Top of Tail Cement - 1700' MD

Tail Slurry - (1700' – 2772'): 140 sx - 13.5 ppg, conventional cement containing:

VARICEM™ CEMENT – Cement – 94 lbs/sx

Yield – 1.849 ft3/sx

Water requirement – 9.33 gal/sx.

Total sacks of cement pumped on intermediate job = 289 sx

Actual volumes will be calculated and determined by conditions onsite. All cement slurries will meet or exceed minimum BLM requirements. Slurries used will be the slurries listed above or equivalent slurries depending on service provider selected. Cement yields may change depending on selected slurries.

All waiting on cement times shall be a minimum of 8 hours or adequate to achieve a minimum of 500 psi compressive strength at the casing shoe prior to drilling out.

- F. Type and characteristics of the proposed circulating medium or mediums proposed for the drilling of each well bore section, the quantities and types of mud and weighting material to be maintained, and the monitoring equipment to be used on the circulating system. The operator must submit the detailed information when air or gas drill is proposed.**

Interval (MD)	Hole Section	Hole Size	Type	MW (ppg)	VIS (s/qt)	FL (mL/30 min)	PV (cP)	YP (lbs/100ft ²)	Max Salinity (mg/L)	pH
0'-300'	Surface	12-1/4"	FW/Gel	8.4-8.8	~100	NC	16-22	18-24	2500	8-8.5
300'-2768'	Production	8-3/4"	LSND	8.8-9.5	35-44	<6	8-15	6-12	5000	8-8.5
2768'-6583'	LAT 1	6-1/8"	Brine	8.4-8.8	35-45	<10	6-15	4-12	50000	8-8.5
2668' - 6645'	LAT 1 ST1	6-1/8"	Brine	8.4-8.8	35-45	<10	6-15	4-12	50000	8-8.5
1776' - 6409'	LAT 2	6-1/8"	Brine	8.4-8.8	35-45	<10	6-15	4-12	50000	8-8.5

Sufficient weighting material will be on hand to weight mud up 1 PPG, if required.

The formula for weight up with barite is listed below:

Sacks of Barite per 100 bbl of mud = $1470 \times (W2 - W1) \div (35 - W2)$

Where; W1 = current mud weight, W2 = new mud weight

Sacks = $1470 \times (10.5 - 9.5) \div (35 - 10.5) = 60 \text{ sx} \times 5 \text{ (500bbls minimum)} = 300\text{sx}$

Mud Product	Estimated Quantity on Location
Baroid 41	300 sx
Aquagel Gold Seal	250 sx
Lime	4 sx
Caustic Soda	8 sx
EZ-Mud	20 buckets
Barazan D Plus	20 sx
Pac R	20 sx
Filter-Chek	30 sx
LCM	120 sx

Pit Volume Totalizer (PVT) equipment (or equivalent) will be on each pit to monitor pit levels. A trip tank equipped with a PVT sensor will be used to monitor trip volumes. Possible lost circulation in the Fruitland Coal and Pictured Cliffs Sand. Lost circulation has been successfully mitigated with lost circulation materials.

There will not be a reserve pit for this well. A closed-loop system will be used to recover drilling fluid and dry cuttings in both phases of the well and on all hole intervals. Above-ground tanks will be utilized to hold cuttings and fluids for rig operations. A frac tank will be on location to store fresh water.

G. The testing, logging, and coring procedures proposed, including drill stem testing procedures, equipment, and safety measures.

Testing: None planned

Open Hole Logging: LWD open hole logs will be utilized to geosteer the laterals within the Cottonwood (2327' TVD) and Cahn (2429' TVD) coal seams.

Mud Logging: None planned

Coring: None planned

Cased Hole Logging: If cement is not brought to surface on the surface casing string, then a cement bond log (CBL) will be run to determine the quality of the job prior to drilling ahead. A Cement Bond Log (CBL) will be run after the drilling of the well has been completed and as the start of the completion process. The CBL will confirm the quality of the cement bond and the actual TOC.

H. The expected bottom-hole pressure and any anticipated abnormal pressures, temperatures, or potential hazards that the operator expects to encounter, such as lost circulation and hydrogen sulfide. A description or the operator's plans for mitigating such hazards must be included.

Normal to subnormal pressure gradient to TD.

Maximum expected BHP @ Cottonwood Coal target at 2327' TVD (0.44 psi/ft): 1023 psi

Maximum expected BHP @ Cahn Coal target at 2429' TVD (0.44 psi/ft): 1068 psi

Maximum expected BHP @ TD at 6583'MD/2415'TVD: 1062 psi

Maximum expected BHT @ 2440' TVD: ~100° F

The maximum anticipated bottom hole pressure will be controlled with mud weight and BOP equipment.

No hydrogen sulfide gas is anticipated, however, if H₂S is encountered, the guidelines in Onshore Order No. 6 will be followed.

I. Any other facets of the proposed operation that the operator would like the BLM to considered in reviewing the application. Examples include, but are not limited to: For directional wells, proposed directional designs, plan view, and vertical section in true vertical and measured depths: Horizontal drilling; and Coil tubing Operations.

Project Overview:

The Al Elliot A8 1H is a 3 leg multi-lateral well targeting the Cahn and Cottonwood Coals. It will be drilled to TD and a 4-1/2" pre-perforated liner will be run. The well bore will be sidetracked below the 7" casing to place 2 laterals in the Cahn Coal. The well bore will then be sidetracked out of the 7" casing and a lateral drilled in the Cottonwood Coal.

Timing:

The operation is expected to start December 2015. Drilling operations will last approximately 15 days. It is anticipated that completion operations will begin within 60 days after the well has been drilled depending on schedules with various service companies and the completion rig will be on location approximately two to three weeks.

Directional Plans:

Horizontal directional well, Three directional wells are attached for LAT 1, LAT 1 ST 1, AND LAT 2.

Completion:

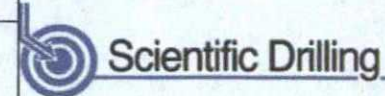
The well will be completed in the Cahn coal seam, identified by LWD open hole logs, estimated from 2405'-2415' TVD. BP plans on completing the two Cahn coal seam laterals utilizing a pre-perforated liner in the production zone. The well will also be completed in the Cottonwood coal seam, identified by LWD open hole logs, estimated from 2330'-2349' TVD. BP plans on completing the Cottonwood coal seam single lateral utilizing an open hole packer and frac sleeves and hydraulic fracture stimulated through a tieback string. The tie-back string will be pulled post completion operations.



Company: B.P.
Project: San Juan County, NM NAD83
Site: AL Elliott
Well: AL Elliott B 8-1H
Wellbore: Lateral 1
Design: Plan 2

PROJECT DETAILS: San Juan County, NM NAD83

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Western Zone
System Datum: Mean Sea Level
Local North: Grid



Acimuths to Grid North
True North: -0.04°
Magnetic North: 9.41°

Magnetic Field
Strength: 50243.5nT
Dip Angle: 63.36°
Date: 7/13/2015
Model: IGRF2015

WELL DETAILS: AL Elliott B 8-1H

GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
+N/-S +E/-W Northing Easting Latitude Longitude
0.00 0.00 2086893.462745179.81 36.7350768 -107.7579518

Plan: Plan 2 (AL Elliott B 8-1H/Lateral 1)

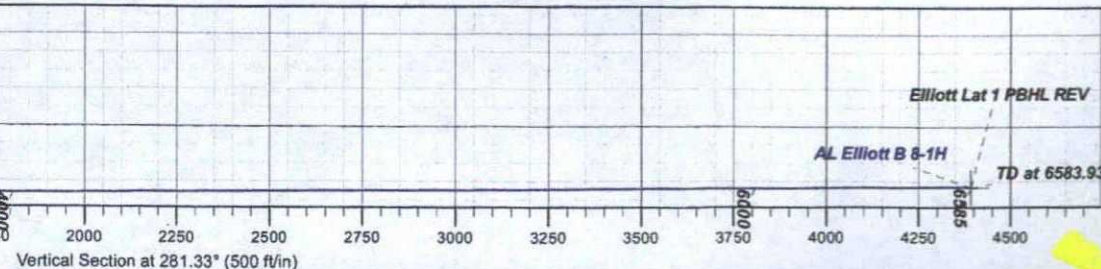
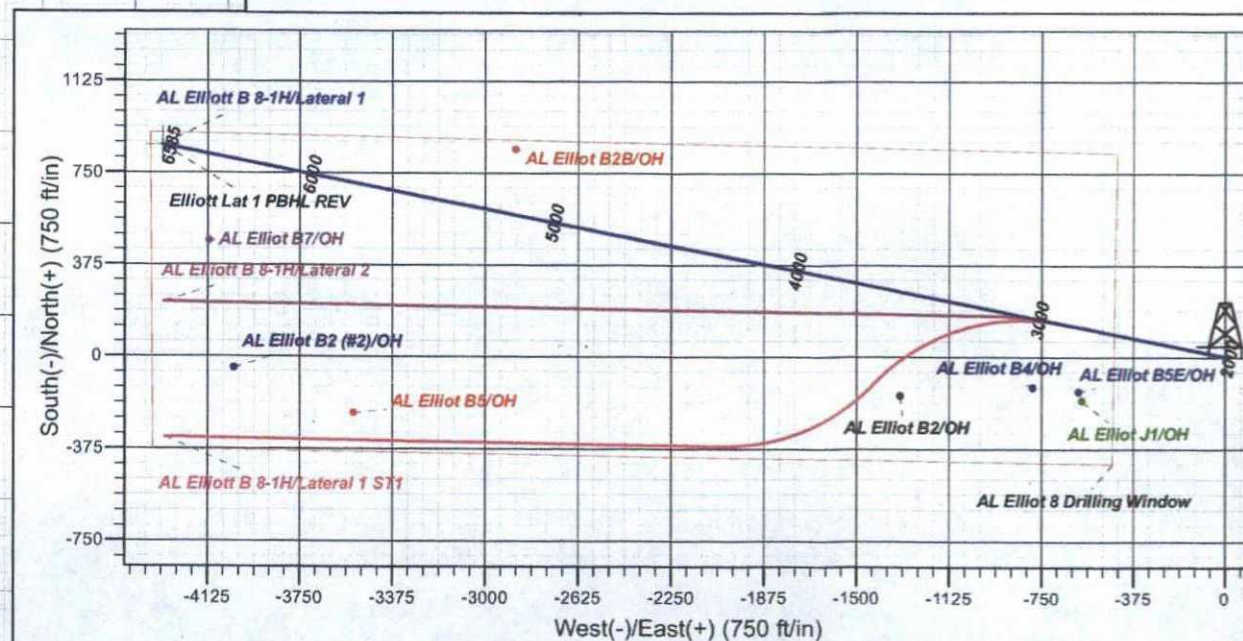
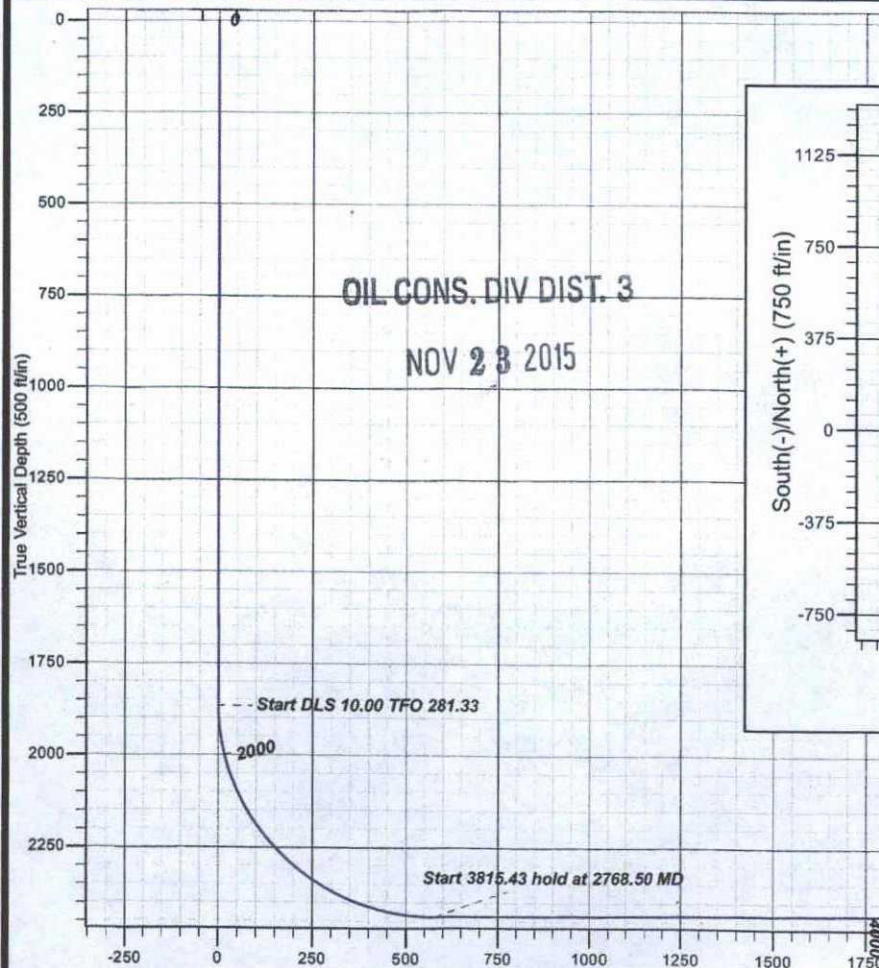
Created By: Janie Collins Date: 11:07, September 25 2015

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Elliott Lat 1 PBHL REV	2415.00	862.83	-4306.18	2087756.29	2740873.64	36.7374553	-107.7726459

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Deg	TFace	VSec	Target	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
1865.05	0.00	0.00	1865.05	0.00	0.00	0.00	0.00	0.00		
2768.50	90.35	281.33	2438.00	113.24	-565.18	10.00	281.33	576.41		
6583.93	90.35	281.33	2415.00	862.83	-4306.18	0.00	0.00	4391.77	Elliott Lat 1 PBHL REV	





B.P.

San Juan County, NM NAD83

AL Elliott

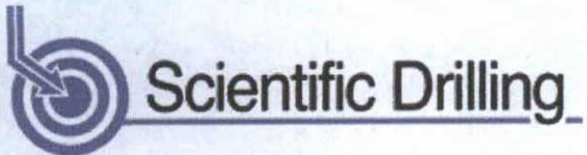
AL Elliott B 8-1H

Lateral 1

Plan: Plan 2

Standard Planning Report

25 September, 2015



www.scientificdrilling.com



Database:	Grand Junction District	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Company:	B.P.	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Project:	San Juan County, NM NAD83	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site:	AL Elliott	North Reference:	Grid
Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral 1		
Design:	Plan 2		

OIL CONS. DIV DIST. 3

NOV 23 2015

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 ft	Slot Radius:	13.200 in	Grid Convergence:	0.04

Well	AL Elliott B 8-1H					
Well Position	+N/-S	-75.03 ft	Northing:	2,086,893.46 usft	Latitude:	36.7350768
	+E/-W	93.44 ft	Easting:	2,745,179.81 usft	Longitude:	-107.7579519
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	5,864.23 ft

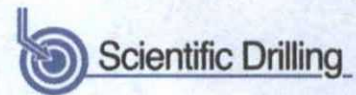
Wellbore	Lateral 1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	7/13/2015	9.46	63.36	50,243

Design	Plan 2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	281.33

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,865.05	0.00	0.00	1,865.05	0.00	0.00	0.00	0.00	0.00	0.00	
2,768.50	90.35	281.33	2,438.00	113.24	-565.18	10.00	10.00	-8.71	281.33	
6,583.93	90.35	281.33	2,415.00	862.83	-4,306.18	0.00	0.00	0.00	0.00	Elliott Lat 1 PBHL RE'



Planning Report

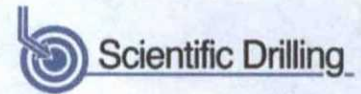


Database:	Grand Junction District	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Company:	B.P.	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Project:	San Juan County, NM NAD83	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site:	AL Elliott	North Reference:	Grid
Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral 1		
Design:	Plan 2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,865.05	0.00	0.00	1,865.05	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	3.50	281.33	1,899.98	0.21	-1.05	1.07	10.00	10.00	0.00
2,000.00	13.50	281.33	1,998.76	3.11	-15.51	15.82	10.00	10.00	0.00
2,100.00	23.50	281.33	2,093.47	9.33	-46.58	47.50	10.00	10.00	0.00
2,200.00	33.50	281.33	2,181.25	18.69	-93.30	95.15	10.00	10.00	0.00
2,300.00	43.50	281.33	2,259.42	30.91	-154.25	157.32	10.00	10.00	0.00
2,400.00	53.50	281.33	2,325.60	45.60	-227.59	232.11	10.00	10.00	0.00
2,500.01	63.50	281.33	2,377.79	62.33	-311.08	317.27	10.00	10.00	0.00
2,600.01	73.50	281.33	2,414.40	80.59	-402.19	410.19	10.00	10.00	0.00
2,700.01	83.50	281.33	2,434.32	99.81	-498.15	508.05	10.00	10.00	0.00
2,768.50	90.35	281.33	2,438.00	113.24	-565.18	576.41	10.00	10.00	0.00
2,800.01	90.35	281.33	2,437.81	119.43	-596.07	607.91	0.00	0.00	0.00
2,900.01	90.35	281.33	2,437.20	139.08	-694.11	707.91	0.00	0.00	0.00
3,000.01	90.35	281.33	2,436.60	158.73	-792.16	807.91	0.00	0.00	0.00
3,100.01	90.35	281.33	2,436.00	178.37	-890.21	907.91	0.00	0.00	0.00
3,200.01	90.35	281.33	2,435.40	198.02	-988.26	1,007.91	0.00	0.00	0.00
3,300.01	90.35	281.33	2,434.79	217.67	-1,086.31	1,107.90	0.00	0.00	0.00
3,400.01	90.35	281.33	2,434.19	237.31	-1,184.36	1,207.90	0.00	0.00	0.00
3,500.01	90.35	281.33	2,433.59	256.96	-1,282.41	1,307.90	0.00	0.00	0.00
3,600.01	90.35	281.33	2,432.99	276.60	-1,380.46	1,407.90	0.00	0.00	0.00
3,700.01	90.35	281.33	2,432.38	296.25	-1,478.51	1,507.90	0.00	0.00	0.00
3,800.01	90.35	281.33	2,431.78	315.90	-1,576.56	1,607.90	0.00	0.00	0.00
3,900.01	90.35	281.33	2,431.18	335.54	-1,674.61	1,707.90	0.00	0.00	0.00
4,000.01	90.35	281.33	2,430.57	355.19	-1,772.66	1,807.89	0.00	0.00	0.00
4,100.01	90.35	281.33	2,429.97	374.84	-1,870.71	1,907.89	0.00	0.00	0.00
4,200.01	90.35	281.33	2,429.37	394.48	-1,968.76	2,007.89	0.00	0.00	0.00
4,300.01	90.35	281.33	2,428.77	414.13	-2,066.81	2,107.89	0.00	0.00	0.00
4,400.01	90.35	281.33	2,428.16	433.77	-2,164.86	2,207.89	0.00	0.00	0.00
4,500.01	90.35	281.33	2,427.56	453.42	-2,262.91	2,307.89	0.00	0.00	0.00
4,600.01	90.35	281.33	2,426.96	473.07	-2,360.96	2,407.88	0.00	0.00	0.00
4,700.01	90.35	281.33	2,426.36	492.71	-2,459.01	2,507.88	0.00	0.00	0.00
4,800.01	90.35	281.33	2,425.75	512.36	-2,557.05	2,607.88	0.00	0.00	0.00
4,900.01	90.35	281.33	2,425.15	532.00	-2,655.10	2,707.88	0.00	0.00	0.00



Planning Report



Database:	Grand Junction District	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Company:	B.P.	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Project:	San Juan County, NM NAD83	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site:	AL Elliott	North Reference:	Grid
Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral 1		
Design:	Plan 2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,000.01	90.35	281.33	2,424.55	551.65	-2,753.15	2,807.88	0.00	0.00	0.00
5,100.01	90.35	281.33	2,423.94	571.30	-2,851.20	2,907.88	0.00	0.00	0.00
5,200.01	90.35	281.33	2,423.34	590.94	-2,949.25	3,007.87	0.00	0.00	0.00
5,300.01	90.35	281.33	2,422.74	610.59	-3,047.30	3,107.87	0.00	0.00	0.00
5,400.01	90.35	281.33	2,422.14	630.24	-3,145.35	3,207.87	0.00	0.00	0.00
5,500.01	90.35	281.33	2,421.53	649.88	-3,243.40	3,307.87	0.00	0.00	0.00
5,600.01	90.35	281.33	2,420.93	669.53	-3,341.45	3,407.87	0.00	0.00	0.00
5,700.01	90.35	281.33	2,420.33	689.17	-3,439.50	3,507.87	0.00	0.00	0.00
5,800.01	90.35	281.33	2,419.73	708.82	-3,537.55	3,607.86	0.00	0.00	0.00
5,900.01	90.35	281.33	2,419.12	728.47	-3,635.60	3,707.86	0.00	0.00	0.00
6,000.01	90.35	281.33	2,418.52	748.11	-3,733.65	3,807.86	0.00	0.00	0.00
6,100.01	90.35	281.33	2,417.92	767.76	-3,831.70	3,907.86	0.00	0.00	0.00
6,200.01	90.35	281.33	2,417.31	787.41	-3,929.75	4,007.86	0.00	0.00	0.00
6,300.01	90.35	281.33	2,416.71	807.05	-4,027.80	4,107.86	0.00	0.00	0.00
6,400.01	90.35	281.33	2,416.11	826.70	-4,125.85	4,207.85	0.00	0.00	0.00
6,500.01	90.35	281.33	2,415.51	846.34	-4,223.90	4,307.85	0.00	0.00	0.00
6,583.93	90.35	281.33	2,415.00	862.83	-4,306.18	4,391.77	0.00	0.00	0.00
Elliott Lat 1 PBHL REV									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Elliott Lat 1 PBHL REV	0.00	0.00	2,415.00	862.83	-4,306.18	2,087,756.29	2,740,873.64	36.7374553	-107.7726459
- plan hits target center									
- Point									



B.P.

San Juan County, NM NAD83

AL Elliott

AL Elliott B 8-1H

Lateral 1

Plan 2

Anticollision Report

25 September, 2015

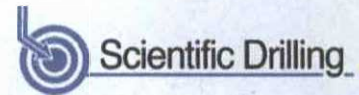


Scientific Drilling

www.scientificdrilling.com



Anticollision Report



Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Reference	Plan 2		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.00ft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 30,000.06 ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	9/23/2015	
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	6,583.93	Plan 2 (Lateral 1)	Gyro	

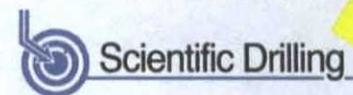
Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
AL Elliott						
AL Elliot B2 - OH - OH	3,459.63	2,412.04	415.63	354.65	6.816	CC, ES, SF
AL Elliot B2 (#2) - OH - OH	6,123.41	2,374.39	834.83	741.85	8.979	CC, ES, SF
AL Elliot B2B - OH - OH	5,180.45	2,438.26	262.32	190.62	3.658	CC, ES, SF
AL Elliot B4 - OH - OH	2,938.58	2,428.10	277.10	182.24	2.921	CC, ES, SF
AL Elliot B5 - OH - OH	5,611.17	2,366.25	920.00	852.77	13.685	CC, ES, SF
AL Elliot B5E - OH - OH	2,752.55	2,438.36	258.86	185.92	3.549	CC, ES, SF
AL Elliot B7 - OH - OH	6,324.71	2,372.37	345.85	276.95	5.019	CC, ES, SF
AL Elliot J1 - OH - OH	2,732.80	2,425.75	290.50	219.60	4.097	CC, ES, SF
AL Elliott B 8-1H - Lateral 1 ST1 - Plan #2						Out of range
AL Elliott B 8-1H - Lateral 1 ST1 - Plan #2	2,871.00	2,871.00	0.00	0.00	10,000.000	CC, ES
AL Elliott B 8-1H - Lateral 2 - Plan #2						Out of range
AL Elliott B 8-1H - Lateral 2 - Plan #2	2,920.00	2,920.00	0.00	0.00	10,000.000	CC, ES

Offset Design		AL Elliott - AL Elliot B2 - OH - OH										Offset Site Error:		0.00 ft	
Survey Program:		808-INCLINOMETER										Offset Well Error:		0.00 ft	
Reference		Offset		Semi Major Axis			Distance								
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)				
0.00	0.00	0.00	21.87	0.00	0.00	-96.82	-158.50	-1,324.48	1,334.11						
100.00	100.00	78.13	100.00	0.00	1.19	-96.82	-158.50	-1,324.48	1,333.93	1,332.75	1.19	1,124.035			
200.00	200.00	178.13	200.00	0.00	2.70	-96.82	-158.50	-1,324.48	1,333.93	1,331.23	2.71	493.109			
300.00	300.00	278.13	300.00	0.00	4.22	-96.82	-158.50	-1,324.48	1,333.93	1,329.71	4.22	315.831			
400.00	400.00	378.13	400.00	0.00	5.74	-96.82	-158.50	-1,324.48	1,333.93	1,328.19	5.74	232.313			
500.00	500.00	478.13	500.00	0.00	7.26	-96.82	-158.50	-1,324.48	1,333.93	1,326.67	7.26	183.728			
600.00	600.00	578.13	600.00	0.00	8.78	-96.82	-158.50	-1,324.48	1,333.93	1,325.15	8.78	151.949			
700.00	700.00	678.13	700.00	0.00	10.30	-96.82	-158.50	-1,324.48	1,333.93	1,323.64	10.30	129.543			
800.00	800.00	778.13	800.00	0.00	11.82	-96.82	-158.50	-1,324.48	1,333.93	1,322.12	11.82	112.896			
900.00	900.00	878.13	900.00	0.00	14.40	-96.82	-158.50	-1,324.48	1,333.93	1,319.53	14.40	92.642			
1,000.00	1,000.00	978.13	1,000.00	0.00	17.44	-96.82	-158.50	-1,324.48	1,333.93	1,316.50	17.44	76.507			
1,100.00	1,100.00	1,078.13	1,100.00	0.00	20.47	-96.82	-158.50	-1,324.48	1,333.93	1,313.46	20.47	65.158			
1,200.00	1,200.00	1,178.13	1,200.00	0.00	23.51	-96.82	-158.50	-1,324.48	1,333.93	1,310.42	23.51	56.742			
1,300.00	1,300.00	1,278.13	1,300.00	0.00	26.55	-96.82	-158.50	-1,324.48	1,333.93	1,307.39	26.55	50.250			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



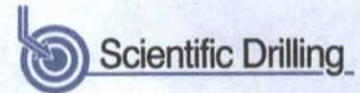
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott B2 - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 808-INCLINOMETER												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Distance		Minimum		Separation		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
1,400.00	1,400.00	1,378.13	1,400.00	0.00	29.58	-96.82	-158.50	-1,324.48	1,333.93	1,304.35	29.58	45.092	
1,500.00	1,500.00	1,478.13	1,500.00	0.00	32.62	-96.82	-158.50	-1,324.48	1,333.93	1,301.31	32.62	40.894	
1,600.00	1,600.00	1,578.13	1,600.00	0.00	35.66	-96.82	-158.50	-1,324.48	1,333.93	1,298.28	35.66	37.411	
1,700.00	1,700.00	1,678.13	1,700.00	0.00	38.69	-96.82	-158.50	-1,324.48	1,333.93	1,295.24	38.69	34.475	
1,800.00	1,800.00	1,778.13	1,800.00	0.00	41.73	-96.82	-158.50	-1,324.48	1,333.93	1,292.20	41.73	31.966	
1,900.00	1,899.98	1,878.11	1,899.98	0.00	44.77	-18.20	-158.50	-1,324.48	1,332.02	1,288.23	44.69	29.825	
2,000.00	1,998.76	1,976.89	1,998.76	0.00	47.76	-18.85	-158.50	-1,324.48	1,318.91	1,272.31	46.60	28.303	
2,100.00	2,093.47	2,071.60	2,093.47	0.00	50.64	-20.38	-158.50	-1,324.48	1,288.88	1,241.87	47.01	27.418	
2,200.00	2,181.24	2,159.45	2,181.24	0.00	53.31	-23.03	-158.50	-1,324.48	1,243.87	1,197.89	45.99	27.047	
2,300.00	2,259.41	2,237.62	2,259.41	0.00	55.68	-27.30	-158.50	-1,324.48	1,185.46	1,141.31	44.15	26.850	
2,400.00	2,325.60	2,303.80	2,325.60	0.00	57.69	-34.01	-158.50	-1,324.48	1,115.72	1,072.59	43.14	25.865	
2,500.00	2,377.79	2,355.99	2,377.79	0.00	59.28	-44.42	-158.50	-1,324.48	1,037.19	991.50	45.69	22.701	
2,600.00	2,414.40	2,392.60	2,414.40	0.00	60.39	-58.63	-158.50	-1,324.48	952.78	899.91	52.87	18.022	
2,700.00	2,434.32	2,412.52	2,434.32	0.00	60.99	-78.30	-158.50	-1,324.48	865.77	806.02	59.75	14.490	
2,800.00	2,437.81	2,416.01	2,437.81	0.00	61.10	-90.55	-158.50	-1,324.48	779.65	718.55	61.10	12.761	
2,900.00	2,437.20	2,415.41	2,437.20	0.00	61.08	-90.46	-158.50	-1,324.48	697.08	636.00	61.08	11.413	
3,000.00	2,436.60	2,414.81	2,436.60	0.00	61.06	-90.38	-158.50	-1,324.48	619.68	558.62	61.06	10.148	
3,100.00	2,436.00	2,414.20	2,436.00	0.00	61.04	-90.30	-158.50	-1,324.48	549.62	488.57	61.04	9.004	
3,200.00	2,435.40	2,413.60	2,435.40	0.00	61.03	-90.22	-158.50	-1,324.48	490.05	429.03	61.03	8.030	
3,300.00	2,434.79	2,413.00	2,434.79	0.00	61.01	-90.13	-158.50	-1,324.48	445.23	384.22	61.01	7.298	
3,400.00	2,434.19	2,412.39	2,434.19	0.00	60.99	-90.05	-158.50	-1,324.48	419.88	358.89	60.99	6.884	
3,459.63	2,433.83	2,412.04	2,433.83	0.00	60.98	-90.00	-158.50	-1,324.48	415.63	354.85	60.98	6.816 CC, ES, SF	
3,500.00	2,433.59	2,411.79	2,433.59	0.00	60.97	-89.97	-158.50	-1,324.48	417.58	356.81	60.97	6.849	
3,600.00	2,432.99	2,411.19	2,432.99	0.00	60.95	-89.88	-158.50	-1,324.48	438.69	377.73	60.95	7.197	
3,700.00	2,432.38	2,410.59	2,432.38	0.00	60.93	-89.80	-158.50	-1,324.48	480.12	419.19	60.93	7.879	
3,800.00	2,431.78	2,409.98	2,431.78	0.00	60.92	-89.72	-158.50	-1,324.48	537.21	476.29	60.92	8.819	
3,900.00	2,431.18	2,409.38	2,431.18	0.00	60.90	-89.63	-158.50	-1,324.48	605.52	544.63	60.90	9.943	
4,000.00	2,430.57	2,408.78	2,430.57	0.00	60.88	-89.55	-158.50	-1,324.48	681.71	620.83	60.88	11.198	
4,100.00	2,429.97	2,408.18	2,429.97	0.00	60.86	-89.47	-158.50	-1,324.48	763.41	702.55	60.86	12.544	
4,200.00	2,429.37	2,407.57	2,429.37	0.00	60.84	-89.38	-158.50	-1,324.48	849.04	788.20	60.84	13.955	
4,300.00	2,428.77	2,406.97	2,428.77	0.00	60.83	-89.30	-158.50	-1,324.48	937.51	876.69	60.82	15.414	
4,400.00	2,428.16	2,406.37	2,428.16	0.00	60.81	-89.22	-158.50	-1,324.48	1,028.11	967.30	60.80	16.909	
4,500.00	2,427.56	2,405.76	2,427.56	0.00	60.79	-89.14	-158.50	-1,324.48	1,120.30	1,059.52	60.78	18.431	
4,600.00	2,426.96	2,405.16	2,426.96	0.00	60.77	-89.05	-158.50	-1,324.48	1,213.73	1,152.96	60.76	19.975	
4,700.00	2,426.36	2,404.56	2,426.36	0.00	60.75	-88.97	-158.50	-1,324.48	1,308.13	1,247.38	60.74	21.536	
4,800.00	2,425.75	2,403.96	2,425.75	0.00	60.73	-88.89	-158.50	-1,324.48	1,403.30	1,342.58	60.72	23.110	
4,900.00	2,425.15	2,403.35	2,425.15	0.00	60.72	-88.80	-158.50	-1,324.48	1,499.11	1,438.41	60.70	24.696	
5,000.00	2,424.55	2,402.75	2,424.55	0.00	60.70	-88.72	-158.50	-1,324.48	1,595.43	1,534.74	60.68	26.292	
5,100.00	2,423.94	2,402.15	2,423.94	0.00	60.68	-88.64	-158.50	-1,324.48	1,692.17	1,631.51	60.66	27.895	
5,200.00	2,423.34	2,401.55	2,423.34	0.00	60.66	-88.55	-158.50	-1,324.48	1,789.28	1,728.63	60.64	29.506	
5,300.00	2,422.74	2,400.94	2,422.74	0.00	60.64	-88.47	-158.50	-1,324.48	1,886.68	1,826.06	60.62	31.123	
5,400.00	2,422.14	2,400.34	2,422.14	0.00	60.62	-88.39	-158.50	-1,324.48	1,984.35	1,923.75	60.60	32.745	
5,500.00	2,421.53	2,399.74	2,421.53	0.00	60.61	-88.31	-158.50	-1,324.48	2,082.23	2,021.65	60.58	34.372	
5,600.00	2,420.93	2,399.13	2,420.93	0.00	60.59	-88.22	-158.50	-1,324.48	2,180.31	2,119.75	60.56	36.003	
5,700.00	2,420.33	2,398.53	2,420.33	0.00	60.57	-88.14	-158.50	-1,324.48	2,278.55	2,218.02	60.54	37.639	
5,800.00	2,419.73	2,397.93	2,419.73	0.00	60.55	-88.06	-158.50	-1,324.48	2,376.94	2,316.43	60.52	39.278	
5,900.00	2,419.12	2,397.33	2,419.12	0.00	60.53	-87.97	-158.50	-1,324.48	2,475.46	2,414.97	60.49	40.920	
6,000.00	2,418.52	2,396.72	2,418.52	0.00	60.51	-87.89	-158.50	-1,324.48	2,574.10	2,513.62	60.47	42.566	
6,100.00	2,417.92	2,396.12	2,417.92	0.00	60.50	-87.81	-158.50	-1,324.48	2,672.83	2,612.38	60.45	44.214	
6,200.00	2,417.31	2,395.52	2,417.31	0.00	60.48	-87.72	-158.50	-1,324.48	2,771.66	2,711.23	60.43	45.865	
6,300.00	2,416.71	2,394.91	2,416.71	0.00	60.46	-87.64	-158.50	-1,324.48	2,870.56	2,810.15	60.41	47.519	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report

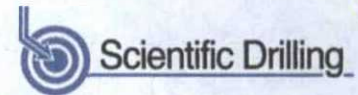


Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliot B2 - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 808-INCLINOMETER												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
6,400.00	2,416.11	2,394.31	2,416.11	0.00	60.44	-87.56	-158.50	-1,324.48	2,969.54	2,909.16	60.39	49.176	
6,500.00	2,415.51	2,393.71	2,415.51	0.00	60.42	-87.48	-158.50	-1,324.48	3,068.59	3,008.22	60.36	50.834	
6,584.69	2,415.00	2,393.20	2,415.00	0.00	60.41	-87.41	-158.50	-1,324.48	3,152.51	3,092.17	60.35	52.241	



Anticollision Report



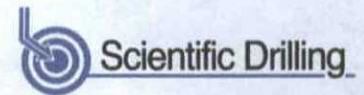
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott B2 (#2) - OH - OH													Offset Site Error:
Survey Program: 100-UNKNOWN													Offset Well Error:
Reference	Offset	Semi Major Axis		Distance		Warning							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	43.39	0.00	0.00	-90.66	-46.20	-4,018.66	4,019.16				
100.00	100.00	56.61	100.00	0.00	1.13	-90.66	-46.20	-4,018.66	4,018.92	4,017.79	1.13	3,548.760	
200.00	200.00	156.61	200.00	0.00	4.26	-90.66	-46.20	-4,018.66	4,018.92	4,014.66	4.26	942.392	
300.00	300.00	256.61	300.00	0.00	8.26	-90.66	-46.20	-4,018.66	4,018.92	4,010.66	8.26	486.282	
400.00	400.00	356.61	400.00	0.00	12.26	-90.66	-46.20	-4,018.66	4,018.92	4,006.66	12.26	327.685	
500.00	500.00	456.61	500.00	0.00	16.26	-90.66	-46.20	-4,018.66	4,018.92	4,002.66	16.26	247.096	
600.00	600.00	556.61	600.00	0.00	20.26	-90.66	-46.20	-4,018.66	4,018.92	3,998.66	20.26	198.322	
700.00	700.00	656.61	700.00	0.00	24.26	-90.66	-46.20	-4,018.66	4,018.92	3,994.66	24.26	165.629	
800.00	800.00	756.61	800.00	0.00	28.26	-90.66	-46.20	-4,018.66	4,018.92	3,990.66	28.26	142.188	
900.00	900.00	856.61	900.00	0.00	32.26	-90.66	-46.20	-4,018.66	4,018.92	3,986.66	32.26	124.561	
1,000.00	1,000.00	956.61	1,000.00	0.00	36.26	-90.66	-46.20	-4,018.66	4,018.92	3,982.66	36.26	110.822	
1,100.00	1,100.00	1,056.61	1,100.00	0.00	40.26	-90.66	-46.20	-4,018.66	4,018.92	3,978.66	40.26	99.813	
1,200.00	1,200.00	1,156.61	1,200.00	0.00	44.26	-90.66	-46.20	-4,018.66	4,018.92	3,974.66	44.26	90.793	
1,300.00	1,300.00	1,256.61	1,300.00	0.00	48.26	-90.66	-46.20	-4,018.66	4,018.92	3,970.66	48.26	83.269	
1,400.00	1,400.00	1,356.61	1,400.00	0.00	52.26	-90.66	-46.20	-4,018.66	4,018.92	3,966.66	52.26	76.896	
1,500.00	1,500.00	1,456.61	1,500.00	0.00	56.26	-90.66	-46.20	-4,018.66	4,018.92	3,962.66	56.26	71.429	
1,600.00	1,600.00	1,556.61	1,600.00	0.00	60.26	-90.66	-46.20	-4,018.66	4,018.92	3,958.66	60.26	66.688	
1,700.00	1,700.00	1,656.61	1,700.00	0.00	64.26	-90.66	-46.20	-4,018.66	4,018.92	3,954.66	64.26	62.537	
1,800.00	1,800.00	1,756.61	1,800.00	0.00	68.26	-90.66	-46.20	-4,018.66	4,018.92	3,950.66	68.26	58.873	
1,900.00	1,899.98	1,856.59	1,899.98	0.00	72.26	-12.01	-46.20	-4,018.66	4,017.88	3,945.75	72.14	55.699	
2,000.00	1,998.76	1,955.37	1,998.76	0.00	76.21	-12.37	-46.20	-4,018.66	4,003.45	3,929.24	74.21	53.949	
2,100.00	2,093.47	2,050.08	2,093.47	0.00	80.00	-13.19	-46.20	-4,018.66	3,972.47	3,888.74	73.73	53.878	
2,200.00	2,181.24	2,137.85	2,181.24	0.00	83.51	-14.63	-46.20	-4,018.66	3,925.90	3,855.29	70.61	55.599	
2,300.00	2,259.41	2,216.02	2,259.41	0.00	86.64	-16.96	-46.20	-4,018.66	3,865.18	3,799.96	65.21	59.268	
2,400.00	2,325.60	2,282.21	2,325.60	0.00	89.29	-20.77	-46.20	-4,018.66	3,792.18	3,733.28	58.90	64.381	
2,500.00	2,377.79	2,334.40	2,377.79	0.00	91.38	-27.37	-46.20	-4,018.66	3,709.17	3,653.71	55.46	66.879	
2,600.00	2,414.40	2,371.01	2,414.40	0.00	92.84	-39.85	-46.20	-4,018.66	3,618.69	3,555.85	62.84	57.587	
2,700.00	2,434.32	2,390.93	2,434.32	0.00	93.64	-65.08	-46.20	-4,018.66	3,523.54	3,438.50	85.04	41.434	
2,800.00	2,437.81	2,394.42	2,437.81	0.00	93.78	-91.37	-46.20	-4,018.66	3,426.60	3,332.85	93.75	36.550	
2,900.00	2,437.20	2,393.81	2,437.20	0.00	93.75	-91.33	-46.20	-4,018.66	3,329.71	3,235.98	93.73	35.525	
3,000.00	2,436.60	2,393.21	2,436.60	0.00	93.73	-91.29	-46.20	-4,018.66	3,233.00	3,139.30	93.70	34.502	
3,100.00	2,436.00	2,392.61	2,436.00	0.00	93.70	-91.25	-46.20	-4,018.66	3,136.50	3,042.82	93.68	33.480	
3,200.00	2,435.40	2,392.01	2,435.40	0.00	93.68	-91.21	-46.20	-4,018.66	3,040.23	2,946.57	93.66	32.460	
3,300.00	2,434.79	2,391.40	2,434.79	0.00	93.66	-91.17	-46.20	-4,018.66	2,944.20	2,850.56	93.64	31.443	
3,400.00	2,434.19	2,390.80	2,434.19	0.00	93.63	-91.13	-46.20	-4,018.66	2,848.45	2,754.83	93.61	30.428	
3,500.00	2,433.59	2,390.20	2,433.59	0.00	93.61	-91.09	-46.20	-4,018.66	2,753.00	2,659.40	93.59	29.415	
3,600.00	2,432.99	2,389.60	2,432.99	0.00	93.58	-91.04	-46.20	-4,018.66	2,657.88	2,564.31	93.57	28.406	
3,700.00	2,432.38	2,388.99	2,432.38	0.00	93.56	-91.00	-46.20	-4,018.66	2,563.13	2,469.59	93.55	27.400	
3,800.00	2,431.78	2,388.39	2,431.78	0.00	93.54	-90.96	-46.20	-4,018.66	2,468.80	2,375.28	93.52	26.398	
3,900.00	2,431.18	2,387.79	2,431.18	0.00	93.51	-90.92	-46.20	-4,018.66	2,374.94	2,281.44	93.50	25.400	
4,000.00	2,430.57	2,387.18	2,430.57	0.00	93.49	-90.88	-46.20	-4,018.66	2,281.59	2,188.11	93.48	24.408	
4,100.00	2,429.97	2,386.58	2,429.97	0.00	93.46	-90.84	-46.20	-4,018.66	2,188.83	2,095.38	93.45	23.422	
4,200.00	2,429.37	2,385.98	2,429.37	0.00	93.44	-90.80	-46.20	-4,018.66	2,096.74	2,003.31	93.43	22.442	
4,300.00	2,428.77	2,385.38	2,428.77	0.00	93.42	-90.75	-46.20	-4,018.66	2,005.41	1,912.00	93.41	21.470	
4,400.00	2,428.16	2,384.77	2,428.16	0.00	93.39	-90.71	-46.20	-4,018.66	1,914.94	1,821.55	93.38	20.506	
4,500.00	2,427.56	2,384.17	2,427.56	0.00	93.37	-90.67	-46.20	-4,018.66	1,825.46	1,732.10	93.36	19.553	
4,600.00	2,426.96	2,383.57	2,426.96	0.00	93.34	-90.63	-46.20	-4,018.66	1,737.14	1,643.80	93.34	18.611	
4,700.00	2,426.36	2,382.97	2,426.36	0.00	93.32	-90.59	-46.20	-4,018.66	1,650.14	1,556.83	93.31	17.684	
4,800.00	2,425.75	2,382.36	2,425.75	0.00	93.29	-90.55	-46.20	-4,018.66	1,564.70	1,471.41	93.29	16.772	
4,900.00	2,425.15	2,381.76	2,425.15	0.00	93.27	-90.51	-46.20	-4,018.66	1,481.09	1,387.82	93.27	15.880	
5,000.00	2,424.55	2,381.16	2,424.55	0.00	93.25	-90.46	-46.20	-4,018.66	1,399.62	1,306.38	93.24	15.010	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report

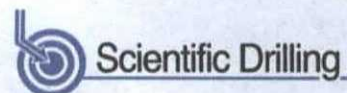


Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliot B2 (#2) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-UNKNOWN													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	2,423.94	2,380.55	2,423.94	0.00	93.22	-90.42	-46.20	-4,018.66	1,320.71	1,227.49	93.22	14.168		
5,200.00	2,423.34	2,379.95	2,423.34	0.00	93.20	-90.38	-46.20	-4,018.66	1,244.83	1,151.63	93.20	13.357		
5,300.00	2,422.74	2,379.35	2,422.74	0.00	93.17	-90.34	-46.20	-4,018.66	1,172.57	1,079.40	93.17	12.585		
5,400.00	2,422.14	2,378.75	2,422.14	0.00	93.15	-90.30	-46.20	-4,018.66	1,104.65	1,011.50	93.15	11.859		
5,500.00	2,421.53	2,378.14	2,421.53	0.00	93.13	-90.26	-46.20	-4,018.66	1,041.91	948.78	93.12	11.188		
5,600.00	2,420.93	2,377.54	2,420.93	0.00	93.10	-90.22	-46.20	-4,018.66	985.34	892.24	93.10	10.584		
5,700.00	2,420.33	2,376.94	2,420.33	0.00	93.08	-90.18	-46.20	-4,018.66	936.06	842.98	93.08	10.057		
5,800.00	2,419.73	2,376.34	2,419.73	0.00	93.05	-90.13	-46.20	-4,018.66	895.28	802.23	93.05	9.621		
5,900.00	2,419.12	2,375.73	2,419.12	0.00	93.03	-90.09	-46.20	-4,018.66	864.20	771.17	93.03	9.200		
6,000.00	2,418.52	2,375.13	2,418.52	0.00	93.01	-90.05	-46.20	-4,018.66	843.90	750.89	93.01	9.074		
6,100.00	2,417.92	2,374.53	2,417.92	0.00	92.98	-90.01	-46.20	-4,018.66	835.16	742.17	92.98	8.982		
6,123.41	2,417.78	2,374.39	2,417.78	0.00	92.98	-90.00	-46.20	-4,018.66	834.83	741.85	92.98	8.979	CC, ES, SF	
6,200.00	2,417.31	2,373.92	2,417.31	0.00	92.96	-89.97	-46.20	-4,018.66	838.33	745.38	92.96	9.018		
6,300.00	2,416.71	2,373.32	2,416.71	0.00	92.93	-89.93	-46.20	-4,018.66	853.30	760.37	92.93	9.182		
6,400.00	2,416.11	2,372.72	2,416.11	0.00	92.91	-89.89	-46.20	-4,018.66	879.45	786.54	92.91	9.466		
6,500.00	2,415.51	2,372.12	2,415.51	0.00	92.88	-89.84	-46.20	-4,018.66	915.83	822.95	92.88	9.860		
6,584.69	2,415.00	2,371.61	2,415.00	0.00	92.86	-89.81	-46.20	-4,018.66	953.78	860.92	92.86	10.271		



Anticollision Report



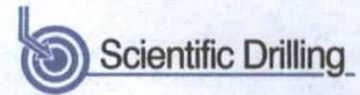
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott B2B - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 154-INCLINOMETER													Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Semi Major Axis (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	14.74	0.00	0.00	0.22	-73.65		844.31	-2,878.54	2,999.81				
100.00	100.00	114.74	100.00	0.00	1.74	-73.65		844.31	-2,878.54	2,999.81	2,998.06	1.74	1,721.236	
200.00	200.00	214.74	200.00	0.00	4.18	-73.65		844.31	-2,878.54	2,999.81	2,995.62	4.18	717.046	
300.00	300.00	314.74	300.00	0.00	7.22	-73.65		844.31	-2,878.54	2,999.81	2,992.58	7.22	415.465	
400.00	400.00	414.74	400.00	0.00	10.26	-73.65		844.31	-2,878.54	2,999.81	2,989.55	10.26	292.460	
500.00	500.00	514.74	500.00	0.00	13.29	-73.65		844.31	-2,878.54	2,999.81	2,986.51	13.29	225.652	
600.00	600.00	614.74	600.00	0.00	16.33	-73.65		844.31	-2,878.54	2,999.81	2,983.47	16.33	183.691	
700.00	700.00	714.75	700.00	0.00	19.37	-73.65		844.31	-2,878.54	2,999.81	2,980.44	19.37	154.885	
800.00	800.00	814.75	800.00	0.00	22.40	-73.65		844.31	-2,878.54	2,999.81	2,977.40	22.40	133.892	
900.00	900.00	914.75	900.00	0.00	25.44	-73.65		844.31	-2,878.54	2,999.81	2,974.36	25.44	117.910	
1,000.00	1,000.00	1,014.75	1,000.00	0.00	28.48	-73.65		844.31	-2,878.54	2,999.81	2,971.33	28.48	105.337	
1,100.00	1,100.00	1,114.75	1,100.00	0.00	31.51	-73.65		844.31	-2,878.54	2,999.81	2,968.29	31.52	95.186	
1,200.00	1,200.00	1,214.76	1,200.00	0.00	34.55	-73.65		844.31	-2,878.54	2,999.81	2,965.25	34.55	86.820	
1,300.00	1,300.00	1,314.76	1,300.00	0.00	37.59	-73.65		844.31	-2,878.54	2,999.81	2,962.22	37.59	79.806	
1,400.00	1,400.00	1,414.76	1,400.00	0.00	40.63	-73.65		844.31	-2,878.54	2,999.81	2,959.18	40.63	73.840	
1,500.00	1,500.00	1,514.76	1,500.00	0.00	43.66	-73.65		844.31	-2,878.54	2,999.81	2,956.14	43.66	68.705	
1,564.61	1,564.61	1,579.37	1,564.61	0.00	45.62	-73.65		844.31	-2,878.54	2,999.81	2,954.18	45.62	65.750	
1,600.00	1,600.00	1,609.00	1,594.20	0.00	46.52	-73.65		844.31	-2,878.54	2,999.81	2,953.29	46.52	64.479	
1,700.00	1,700.00	1,714.80	1,700.00	0.00	49.74	-73.65		844.31	-2,878.54	2,999.81	2,950.07	49.74	60.313	
1,800.00	1,800.00	1,814.80	1,800.00	0.00	52.77	-73.65		844.31	-2,878.54	2,999.81	2,947.03	52.77	56.843	
1,900.00	1,899.98	1,914.78	1,899.98	0.00	55.81	5.03		844.31	-2,878.54	2,998.74	2,943.04	55.71	53.830	
2,000.00	1,998.76	2,013.55	1,998.76	0.00	58.81	5.19		844.31	-2,878.54	2,984.05	2,926.84	57.21	52.158	
2,100.00	2,093.47	2,108.27	2,093.47	0.00	61.89	5.56		844.31	-2,878.54	2,952.49	2,895.83	56.66	52.112	
2,200.00	2,181.24	2,196.04	2,181.24	0.00	64.35	6.21		844.31	-2,878.54	2,905.03	2,851.16	53.87	53.927	
2,300.00	2,259.41	2,274.21	2,259.41	0.00	66.73	7.28		844.31	-2,878.54	2,843.13	2,794.26	48.87	58.183	
2,400.00	2,325.60	2,340.40	2,325.60	0.00	68.74	9.09		844.31	-2,878.54	2,768.66	2,726.68	41.98	65.945	
2,500.00	2,377.79	2,392.59	2,377.79	0.00	70.32	12.41		844.31	-2,878.54	2,683.90	2,649.48	34.42	77.966	
2,600.00	2,414.40	2,429.20	2,414.40	0.00	71.43	19.70		844.31	-2,878.54	2,591.44	2,560.41	31.04	83.497	
2,700.00	2,434.32	2,449.12	2,434.32	0.00	72.04	43.03		844.31	-2,878.54	2,494.10	2,444.46	49.64	50.248	
2,800.00	2,437.81	2,452.61	2,437.81	0.00	72.14	93.13		844.31	-2,878.54	2,394.82	2,322.78	72.04	33.245	
2,900.00	2,437.20	2,452.00	2,437.20	0.00	72.12	93.00		844.31	-2,878.54	2,295.45	2,223.42	72.03	31.870	
3,000.00	2,436.60	2,451.40	2,436.60	0.00	72.11	92.87		844.31	-2,878.54	2,196.13	2,124.12	72.02	30.495	
3,100.00	2,436.00	2,450.80	2,436.00	0.00	72.09	92.74		844.31	-2,878.54	2,096.88	2,024.88	72.01	29.121	
3,200.00	2,435.40	2,450.20	2,435.40	0.00	72.07	92.61		844.31	-2,878.54	1,997.71	1,925.72	72.00	27.748	
3,300.00	2,434.79	2,449.59	2,434.79	0.00	72.05	92.47		844.31	-2,878.54	1,898.62	1,826.64	71.98	26.375	
3,400.00	2,434.19	2,448.99	2,434.19	0.00	72.03	92.34		844.31	-2,878.54	1,799.64	1,727.67	71.97	25.004	
3,500.00	2,433.59	2,448.39	2,433.59	0.00	72.01	92.21		844.31	-2,878.54	1,700.77	1,628.81	71.96	23.634	
3,600.00	2,432.99	2,447.78	2,432.99	0.00	72.00	92.08		844.31	-2,878.54	1,602.04	1,530.09	71.95	22.266	
3,700.00	2,432.38	2,447.18	2,432.38	0.00	71.98	91.95		844.31	-2,878.54	1,503.48	1,431.55	71.94	20.900	
3,800.00	2,431.78	2,446.58	2,431.78	0.00	71.96	91.82		844.31	-2,878.54	1,405.13	1,333.20	71.92	19.536	
3,900.00	2,431.18	2,445.98	2,431.18	0.00	71.94	91.69		844.31	-2,878.54	1,307.02	1,235.11	71.91	18.176	
4,000.00	2,430.57	2,445.37	2,430.57	0.00	71.92	91.55		844.31	-2,878.54	1,209.22	1,137.33	71.90	16.819	
4,100.00	2,429.97	2,444.77	2,429.97	0.00	71.90	91.42		844.31	-2,878.54	1,111.82	1,039.94	71.88	15.467	
4,200.00	2,429.37	2,444.17	2,429.37	0.00	71.89	91.29		844.31	-2,878.54	1,014.92	943.05	71.87	14.122	
4,300.00	2,428.77	2,443.57	2,428.77	0.00	71.87	91.16		844.31	-2,878.54	918.68	846.83	71.85	12.785	
4,400.00	2,428.16	2,442.96	2,428.16	0.00	71.85	91.03		844.31	-2,878.54	823.34	751.50	71.84	11.461	
4,500.00	2,427.56	2,442.36	2,427.56	0.00	71.83	90.90		844.31	-2,878.54	729.25	657.43	71.82	10.153	
4,600.00	2,426.96	2,441.76	2,426.96	0.00	71.81	90.76		844.31	-2,878.54	636.96	565.16	71.81	8.870	
4,700.00	2,426.36	2,441.15	2,426.36	0.00	71.79	90.63		844.31	-2,878.54	547.39	475.60	71.79	7.625	
4,800.00	2,425.75	2,440.55	2,425.75	0.00	71.78	90.50		844.31	-2,878.54	462.11	390.34	71.77	6.438	
4,900.00	2,425.15	2,439.95	2,425.15	0.00	71.76	90.37		844.31	-2,878.54	384.01	312.25	71.76	5.352	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



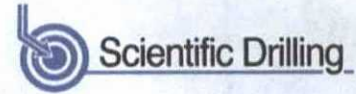
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott B2B - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 154-INCLINOMETER													Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
5,000.00	2,424.55	2,439.35	2,424.55	0.00	71.74	90.24	844.31	-2,878.54	318.39	246.65	71.74	4.438		
5,100.00	2,423.94	2,438.74	2,423.94	0.00	71.72	90.11	844.31	-2,878.54	274.38	202.66	71.72	3.826		
5,180.45	2,423.46	2,438.26	2,423.46	0.00	71.71	90.00	844.31	-2,878.54	262.32	190.62	71.71	3.658 CC, ES, SF		
5,200.00	2,423.34	2,438.14	2,423.34	0.00	71.70	89.97	844.31	-2,878.54	263.05	191.35	71.70	3.669		
5,300.00	2,422.74	2,437.54	2,422.74	0.00	71.69	89.84	844.31	-2,878.54	288.28	216.60	71.69	4.021		
5,400.00	2,422.14	2,436.93	2,422.14	0.00	71.67	89.71	844.31	-2,878.54	342.07	270.41	71.67	4.773		
5,500.00	2,421.53	2,436.33	2,421.53	0.00	71.65	89.58	844.31	-2,878.54	413.43	341.78	71.65	5.770		
5,600.00	2,420.93	2,435.73	2,420.93	0.00	71.63	89.45	844.31	-2,878.54	494.80	423.18	71.63	6.908		
5,700.00	2,420.33	2,435.13	2,420.33	0.00	71.61	89.32	844.31	-2,878.54	582.01	510.40	71.61	8.128		
5,800.00	2,419.73	2,434.52	2,419.73	0.00	71.59	89.18	844.31	-2,878.54	672.79	601.20	71.59	9.398		
5,900.00	2,419.12	2,433.92	2,419.12	0.00	71.58	89.05	844.31	-2,878.54	765.86	694.30	71.57	10.702		
6,000.00	2,418.52	2,433.32	2,418.52	0.00	71.56	88.92	844.31	-2,878.54	860.50	788.95	71.54	12.027		
6,100.00	2,417.92	2,432.72	2,417.92	0.00	71.54	88.79	844.31	-2,878.54	956.22	884.70	71.52	13.369		
6,200.00	2,417.31	2,432.11	2,417.31	0.00	71.52	88.66	844.31	-2,878.54	1,052.74	981.24	71.50	14.723		
6,300.00	2,416.71	2,431.51	2,416.71	0.00	71.50	88.53	844.31	-2,878.54	1,149.85	1,078.37	71.48	16.087		
6,400.00	2,416.11	2,430.91	2,416.11	0.00	71.48	88.39	844.31	-2,878.54	1,247.42	1,175.97	71.46	17.457		
6,500.00	2,415.51	2,430.30	2,415.51	0.00	71.47	88.26	844.31	-2,878.54	1,345.35	1,273.92	71.43	18.834		
6,584.69	2,415.00	2,429.79	2,415.00	0.00	71.45	88.15	844.31	-2,878.54	1,428.50	1,357.09	71.41	20.003		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



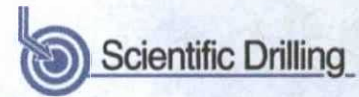
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott B4 - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-UNKNOWN													Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.00	0.00	0.00	8.87	0.00	0.00	-99.03	-125.04	-786.38	796.31					
100.00	100.00	91.13	100.00	0.00	1.59	-99.03	-125.04	-786.38	796.26	794.67	1.59	502.099		
200.00	200.00	191.13	200.00	0.00	5.39	-99.03	-125.04	-786.38	796.26	790.88	5.39	147.855		
300.00	300.00	291.13	300.00	0.00	9.39	-99.03	-125.04	-786.38	796.26	786.88	9.39	84.840		
400.00	400.00	391.13	400.00	0.00	13.39	-99.03	-125.04	-786.38	796.26	782.88	13.39	59.487		
500.00	500.00	491.13	500.00	0.00	17.39	-99.03	-125.04	-786.38	796.26	778.88	17.39	45.801		
600.00	600.00	591.13	600.00	0.00	21.39	-99.03	-125.04	-786.38	796.26	774.88	21.39	37.234		
700.00	700.00	691.13	700.00	0.00	25.39	-99.03	-125.04	-786.38	796.26	770.88	25.39	31.367		
800.00	800.00	791.13	800.00	0.00	29.39	-99.03	-125.04	-786.38	796.26	766.88	29.39	27.097		
900.00	900.00	891.13	900.00	0.00	33.39	-99.03	-125.04	-786.38	796.26	762.88	33.39	23.851		
1,000.00	1,000.00	991.13	1,000.00	0.00	37.39	-99.03	-125.04	-786.38	796.26	758.88	37.39	21.299		
1,100.00	1,100.00	1,091.13	1,100.00	0.00	41.39	-99.03	-125.04	-786.38	796.26	754.88	41.39	19.240		
1,200.00	1,200.00	1,191.13	1,200.00	0.00	45.39	-99.03	-125.04	-786.38	796.26	750.88	45.39	17.544		
1,300.00	1,300.00	1,291.13	1,300.00	0.00	49.39	-99.03	-125.04	-786.38	796.26	746.88	49.39	16.123		
1,400.00	1,400.00	1,391.13	1,400.00	0.00	53.39	-99.03	-125.04	-786.38	796.26	742.88	53.39	14.915		
1,500.00	1,500.00	1,491.13	1,500.00	0.00	57.39	-99.03	-125.04	-786.38	796.26	738.88	57.39	13.876		
1,600.00	1,600.00	1,591.13	1,600.00	0.00	61.39	-99.03	-125.04	-786.38	796.26	734.88	61.39	12.971		
1,700.00	1,700.00	1,691.13	1,700.00	0.00	65.39	-99.03	-125.04	-786.38	796.26	730.88	65.39	12.178		
1,800.00	1,800.00	1,791.13	1,800.00	0.00	69.39	-99.03	-125.04	-786.38	796.26	726.88	69.39	11.476		
1,900.00	1,899.98	1,891.11	1,899.98	0.00	73.38	-20.43	-125.04	-786.38	795.26	722.00	73.26	10.855		
2,000.00	1,998.76	1,989.89	1,998.76	0.00	77.34	-21.31	-125.04	-786.38	794.45	705.96	75.49	10.352		
2,100.00	2,093.47	2,084.60	2,093.47	0.00	81.12	-23.38	-125.04	-786.38	751.91	676.41	75.50	9.959		
2,200.00	2,181.24	2,172.37	2,181.24	0.00	84.64	-27.03	-125.04	-786.38	707.83	634.13	73.70	9.604		
2,300.00	2,259.41	2,250.54	2,259.41	0.00	87.76	-32.96	-125.04	-786.38	651.09	579.44	71.65	9.088		
2,400.00	2,325.60	2,316.73	2,325.60	0.00	90.41	-42.16	-125.04	-786.38	584.27	511.66	72.61	8.047		
2,500.00	2,377.79	2,368.92	2,377.79	0.00	92.50	-55.34	-125.04	-786.38	510.90	431.28	79.63	6.416		
2,600.00	2,414.40	2,405.53	2,414.40	0.00	93.96	-70.98	-125.04	-786.38	435.76	346.51	89.25	4.882		
2,700.00	2,434.32	2,425.45	2,434.32	0.00	94.76	-84.43	-125.04	-786.38	365.57	271.25	94.32	3.876		
2,800.00	2,437.81	2,428.94	2,437.81	0.00	94.90	-90.17	-125.04	-786.38	309.82	214.92	94.90	3.265		
2,900.00	2,437.20	2,428.33	2,437.20	0.00	94.87	-90.05	-125.04	-786.38	279.77	184.90	94.87	2.949		
2,938.58	2,436.97	2,428.10	2,436.97	0.00	94.86	-90.00	-125.04	-786.38	277.10	182.24	94.86	2.921 CC, ES, SF		
3,000.00	2,436.60	2,427.73	2,436.60	0.00	94.85	-89.92	-125.04	-786.38	283.82	188.97	94.85	2.992		
3,100.00	2,436.00	2,427.13	2,436.00	0.00	94.83	-89.80	-125.04	-786.38	320.68	225.86	94.82	3.382		
3,200.00	2,435.40	2,426.53	2,435.40	0.00	94.80	-89.67	-125.04	-786.38	380.95	286.15	94.80	4.018		
3,300.00	2,434.79	2,425.92	2,434.79	0.00	94.78	-89.55	-125.04	-786.38	455.41	360.64	94.77	4.805		
3,400.00	2,434.19	2,425.32	2,434.19	0.00	94.75	-89.42	-125.04	-786.38	538.22	443.47	94.75	5.681		
3,500.00	2,433.59	2,424.72	2,433.59	0.00	94.73	-89.30	-125.04	-786.38	626.07	531.35	94.72	6.610		
3,600.00	2,432.99	2,424.12	2,432.99	0.00	94.70	-89.18	-125.04	-786.38	717.10	622.41	94.70	7.573		
3,700.00	2,432.38	2,423.51	2,432.38	0.00	94.68	-89.05	-125.04	-786.38	810.26	715.59	94.67	8.559		
3,800.00	2,431.78	2,422.91	2,431.78	0.00	94.66	-88.93	-125.04	-786.38	904.87	810.23	94.64	9.561		
3,900.00	2,431.18	2,422.31	2,431.18	0.00	94.63	-88.80	-125.04	-786.38	1,000.53	905.92	94.61	10.575		
4,000.00	2,430.57	2,421.70	2,430.57	0.00	94.61	-88.68	-125.04	-786.38	1,096.97	1,002.39	94.58	11.598		
4,100.00	2,429.97	2,421.10	2,429.97	0.00	94.58	-88.55	-125.04	-786.38	1,193.99	1,099.44	94.55	12.628		
4,200.00	2,429.37	2,420.50	2,429.37	0.00	94.56	-88.43	-125.04	-786.38	1,291.47	1,196.95	94.52	13.663		
4,300.00	2,428.77	2,419.90	2,428.77	0.00	94.54	-88.30	-125.04	-786.38	1,389.31	1,294.81	94.49	14.702		
4,400.00	2,428.16	2,419.29	2,428.16	0.00	94.51	-88.18	-125.04	-786.38	1,487.43	1,392.96	94.46	15.746		
4,500.00	2,427.56	2,418.69	2,427.56	0.00	94.49	-88.05	-125.04	-786.38	1,585.78	1,491.35	94.43	16.793		
4,600.00	2,426.96	2,418.09	2,426.96	0.00	94.46	-87.93	-125.04	-786.38	1,684.34	1,589.93	94.40	17.842		
4,700.00	2,426.36	2,417.49	2,426.36	0.00	94.44	-87.81	-125.04	-786.38	1,783.05	1,688.68	94.37	18.894		
4,800.00	2,425.75	2,416.88	2,425.75	0.00	94.42	-87.68	-125.04	-786.38	1,881.89	1,787.56	94.34	19.948		
4,900.00	2,425.15	2,416.28	2,425.15	0.00	94.39	-87.56	-125.04	-786.38	1,980.86	1,886.55	94.31	21.005		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report

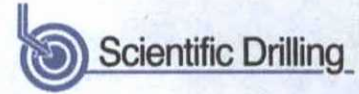


Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliot B4 - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 100-UNKNOWN												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Distance								Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,000.00	2,424.55	2,415.68	2,424.55	0.00	94.37	-87.43	-125.04	-786.38	2,079.92	1,985.65	94.27	22.063	
5,100.00	2,423.94	2,415.07	2,423.94	0.00	94.34	-87.31	-125.04	-786.38	2,179.07	2,084.83	94.24	23.123	
5,200.00	2,423.34	2,414.47	2,423.34	0.00	94.32	-87.18	-125.04	-786.38	2,278.29	2,184.08	94.21	24.184	
5,300.00	2,422.74	2,413.87	2,422.74	0.00	94.29	-87.06	-125.04	-786.38	2,377.58	2,283.40	94.17	25.247	
5,400.00	2,422.14	2,413.27	2,422.14	0.00	94.27	-86.94	-125.04	-786.38	2,476.92	2,382.78	94.14	26.312	
5,500.00	2,421.53	2,412.66	2,421.53	0.00	94.25	-86.81	-125.04	-786.38	2,576.31	2,482.21	94.10	27.378	
5,600.00	2,420.93	2,412.06	2,420.93	0.00	94.22	-86.69	-125.04	-786.38	2,675.75	2,581.69	94.07	28.446	
5,700.00	2,420.33	2,411.46	2,420.33	0.00	94.20	-86.56	-125.04	-786.38	2,775.23	2,681.20	94.03	29.515	
5,800.00	2,419.73	2,410.86	2,419.73	0.00	94.17	-86.44	-125.04	-786.38	2,874.75	2,780.76	93.99	30.585	
5,900.00	2,419.12	2,410.25	2,419.12	0.00	94.15	-86.31	-125.04	-786.38	2,974.30	2,880.34	93.96	31.656	
6,000.00	2,418.52	2,409.65	2,418.52	0.00	94.13	-86.19	-125.04	-786.38	3,073.88	2,979.96	93.92	32.729	
6,100.00	2,417.92	2,409.05	2,417.92	0.00	94.10	-86.07	-125.04	-786.38	3,173.48	3,079.60	93.88	33.803	
6,200.00	2,417.31	2,408.44	2,417.31	0.00	94.08	-85.94	-125.04	-786.38	3,273.11	3,179.26	93.84	34.879	
6,300.00	2,416.71	2,407.84	2,416.71	0.00	94.05	-85.82	-125.04	-786.38	3,372.76	3,278.95	93.80	35.956	
6,400.00	2,416.11	2,407.24	2,416.11	0.00	94.03	-85.69	-125.04	-786.38	3,472.43	3,378.66	93.76	37.034	
6,500.00	2,415.51	2,406.64	2,415.51	0.00	94.01	-85.57	-125.04	-786.38	3,572.11	3,478.39	93.72	38.113	
6,584.69	2,415.00	2,406.13	2,415.00	0.00	93.99	-85.47	-125.04	-786.38	3,656.55	3,562.86	93.69	39.028	



Anticollision Report



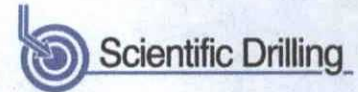
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott B5 - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 305-INCLINOMETER													Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Distance		Warning								
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	54.71	0.00	0.00	-93.73	-230.35	-3,533.14	3,541.06					
100.00	100.00	45.29	100.00	0.00	0.69	-93.73	-230.35	-3,533.14	3,540.64	3,539.95	0.69	5,145.659		
200.00	200.00	145.29	200.00	0.00	2.21	-93.73	-230.35	-3,533.14	3,540.64	3,538.43	2.21	1,804.854		
300.00	300.00	245.29	300.00	0.00	3.72	-93.73	-230.35	-3,533.14	3,540.64	3,536.91	3.72	950.538		
400.00	400.00	345.29	400.00	0.00	5.85	-93.73	-230.35	-3,533.14	3,540.64	3,534.78	5.86	604.714		
500.00	500.00	445.29	500.00	0.00	8.89	-93.73	-230.35	-3,533.14	3,540.64	3,531.75	8.89	398.186		
600.00	600.00	545.29	600.00	0.00	11.93	-93.73	-230.35	-3,533.14	3,540.64	3,528.71	11.93	296.815		
700.00	700.00	645.29	700.00	0.00	14.97	-93.73	-230.35	-3,533.14	3,540.64	3,525.67	14.97	236.585		
800.00	800.00	745.30	800.00	0.00	18.00	-93.73	-230.35	-3,533.14	3,540.64	3,522.64	18.00	196.673		
900.00	900.00	845.30	900.00	0.00	21.04	-93.73	-230.35	-3,533.14	3,540.64	3,519.60	21.04	168.285		
1,000.00	1,000.00	945.30	1,000.00	0.00	24.08	-93.73	-230.35	-3,533.14	3,540.64	3,516.56	24.08	147.059		
1,100.00	1,100.00	1,045.30	1,100.00	0.00	27.11	-93.73	-230.35	-3,533.14	3,540.64	3,513.53	27.11	130.587		
1,200.00	1,200.00	1,145.31	1,200.00	0.00	30.15	-93.73	-230.35	-3,533.14	3,540.64	3,510.49	30.15	117.433		
1,300.00	1,300.00	1,245.31	1,300.00	0.00	33.19	-93.73	-230.35	-3,533.14	3,540.64	3,507.45	33.19	106.687		
1,400.00	1,400.00	1,345.31	1,400.00	0.00	36.22	-93.73	-230.35	-3,533.14	3,540.64	3,504.41	36.22	97.743		
1,500.00	1,500.00	1,445.31	1,500.00	0.00	39.26	-93.73	-230.35	-3,533.14	3,540.64	3,501.38	39.26	90.183		
1,600.00	1,600.00	1,545.31	1,600.00	0.00	42.30	-93.73	-230.35	-3,533.14	3,540.64	3,498.34	42.30	83.708		
1,700.00	1,700.00	1,645.31	1,700.00	0.00	45.33	-93.73	-230.35	-3,533.14	3,540.64	3,495.30	45.33	78.101		
1,800.00	1,800.00	1,745.36	1,800.00	0.00	48.37	-93.73	-230.35	-3,533.14	3,540.64	3,492.27	48.37	73.195		
1,900.00	1,899.98	1,845.34	1,899.98	0.00	51.41	-15.09	-230.35	-3,533.14	3,539.61	3,488.29	51.32	68.971		
2,000.00	1,998.76	1,944.11	1,998.76	0.00	54.41	-15.54	-230.35	-3,533.14	3,525.36	3,472.34	53.03	66.482		
2,100.00	2,093.47	2,038.83	2,093.47	0.00	57.28	-16.57	-230.35	-3,533.14	3,494.79	3,441.82	52.97	65.975		
2,200.00	2,181.24	2,126.60	2,181.24	0.00	59.95	-18.36	-230.35	-3,533.14	3,448.85	3,397.71	51.13	67.448		
2,300.00	2,259.41	2,204.80	2,259.41	0.00	62.32	-21.25	-230.35	-3,533.14	3,388.97	3,341.06	47.91	70.736		
2,400.00	2,325.60	2,270.99	2,325.60	0.00	64.33	-25.89	-230.35	-3,533.14	3,317.05	3,272.48	44.57	74.427		
2,500.00	2,377.79	2,323.18	2,377.79	0.00	65.92	-33.61	-230.35	-3,533.14	3,235.33	3,191.24	44.09	73.379		
2,600.00	2,414.40	2,359.79	2,414.40	0.00	67.03	-47.10	-230.35	-3,533.14	3,146.35	3,095.47	50.88	61.839		
2,700.00	2,434.32	2,379.71	2,434.32	0.00	67.63	-70.28	-230.35	-3,533.14	3,052.90	2,989.16	63.74	47.896		
2,800.00	2,437.81	2,383.20	2,437.81	0.00	67.74	-91.06	-230.35	-3,533.14	2,957.83	2,890.10	67.73	43.671		
2,900.00	2,437.20	2,382.60	2,437.20	0.00	67.72	-91.02	-230.35	-3,533.14	2,862.96	2,795.25	67.71	42.281		
3,000.00	2,436.60	2,381.99	2,436.60	0.00	67.70	-90.98	-230.35	-3,533.14	2,768.46	2,700.76	67.69	40.896		
3,100.00	2,436.00	2,381.39	2,436.00	0.00	67.69	-90.94	-230.35	-3,533.14	2,674.35	2,606.67	67.68	39.516		
3,200.00	2,435.40	2,380.79	2,435.40	0.00	67.67	-90.91	-230.35	-3,533.14	2,580.88	2,513.02	67.66	38.142		
3,300.00	2,434.79	2,380.18	2,434.79	0.00	67.65	-90.87	-230.35	-3,533.14	2,487.51	2,419.87	67.64	36.775		
3,400.00	2,434.19	2,379.58	2,434.19	0.00	67.63	-90.83	-230.35	-3,533.14	2,394.89	2,327.26	67.62	35.415		
3,500.00	2,433.59	2,378.98	2,433.59	0.00	67.61	-90.79	-230.35	-3,533.14	2,302.88	2,235.28	67.61	34.063		
3,600.00	2,432.99	2,378.38	2,432.99	0.00	67.59	-90.75	-230.35	-3,533.14	2,211.57	2,143.98	67.59	32.721		
3,700.00	2,432.38	2,377.77	2,432.38	0.00	67.58	-90.72	-230.35	-3,533.14	2,121.04	2,053.47	67.57	31.390		
3,800.00	2,431.78	2,377.17	2,431.78	0.00	67.56	-90.68	-230.35	-3,533.14	2,031.41	1,963.85	67.55	30.071		
3,900.00	2,431.18	2,376.57	2,431.18	0.00	67.54	-90.64	-230.35	-3,533.14	1,942.78	1,875.24	67.54	28.767		
4,000.00	2,430.57	2,375.97	2,430.57	0.00	67.52	-90.60	-230.35	-3,533.14	1,855.31	1,787.79	67.52	27.479		
4,100.00	2,429.97	2,375.36	2,429.97	0.00	67.50	-90.57	-230.35	-3,533.14	1,769.16	1,701.66	67.50	26.210		
4,200.00	2,429.37	2,374.76	2,429.37	0.00	67.48	-90.53	-230.35	-3,533.14	1,684.55	1,617.07	67.48	24.963		
4,300.00	2,428.77	2,374.16	2,428.77	0.00	67.47	-90.49	-230.35	-3,533.14	1,601.72	1,534.25	67.46	23.742		
4,400.00	2,428.16	2,373.55	2,428.16	0.00	67.45	-90.45	-230.35	-3,533.14	1,520.94	1,453.50	67.45	22.551		
4,500.00	2,427.56	2,372.95	2,427.56	0.00	67.43	-90.42	-230.35	-3,533.14	1,442.58	1,375.16	67.43	21.394		
4,600.00	2,426.96	2,372.35	2,426.96	0.00	67.41	-90.38	-230.35	-3,533.14	1,367.05	1,299.64	67.41	20.280		
4,700.00	2,426.36	2,371.75	2,426.36	0.00	67.39	-90.34	-230.35	-3,533.14	1,294.83	1,227.44	67.39	19.213		
4,800.00	2,425.75	2,371.14	2,425.75	0.00	67.37	-90.30	-230.35	-3,533.14	1,226.53	1,159.15	67.37	18.205		
4,900.00	2,425.15	2,370.54	2,425.15	0.00	67.36	-90.27	-230.35	-3,533.14	1,162.82	1,095.46	67.36	17.264		
5,000.00	2,424.55	2,369.94	2,424.55	0.00	67.34	-90.23	-230.35	-3,533.14	1,104.50	1,037.16	67.34	16.402		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report

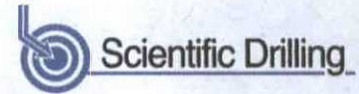


Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliot B5 - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 305-INCLINOMETER												Offset Well Error:	0.00 ft
Reference	Offset		Semi Major Axis		Distance								Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,100.00	2,423.94	2,369.33	2,423.94	0.00	67.32	-90.19	-230.35	-3,533.14	1,052.47	985.15	67.32	15.634	
5,200.00	2,423.34	2,368.73	2,423.34	0.00	67.30	-90.15	-230.35	-3,533.14	1,007.70	940.40	67.30	14.973	
5,300.00	2,422.74	2,368.13	2,422.74	0.00	67.28	-90.12	-230.35	-3,533.14	971.20	903.91	67.28	14.434	
5,400.00	2,422.14	2,367.53	2,422.14	0.00	67.26	-90.08	-230.35	-3,533.14	943.92	876.66	67.27	14.033	
5,500.00	2,421.53	2,366.92	2,421.53	0.00	67.25	-90.04	-230.35	-3,533.14	926.69	859.45	67.25	13.780	
5,600.00	2,420.93	2,366.32	2,420.93	0.00	67.23	-90.00	-230.35	-3,533.14	920.07	852.84	67.23	13.886	
5,611.17	2,420.86	2,366.25	2,420.86	0.00	67.23	-90.00	-230.35	-3,533.14	920.00	852.77	67.23	13.885 CC, ES, SF	
5,700.00	2,420.33	2,365.72	2,420.33	0.00	67.21	-89.97	-230.35	-3,533.14	924.28	857.07	67.21	13.752	
5,800.00	2,419.73	2,365.12	2,419.73	0.00	67.19	-89.93	-230.35	-3,533.14	939.18	871.99	67.19	13.978	
5,900.00	2,419.12	2,364.51	2,419.12	0.00	67.17	-89.89	-230.35	-3,533.14	964.27	897.10	67.17	14.355	
6,000.00	2,418.52	2,363.91	2,418.52	0.00	67.16	-89.85	-230.35	-3,533.14	998.79	931.64	67.16	14.873	
6,100.00	2,417.92	2,363.31	2,417.92	0.00	67.14	-89.82	-230.35	-3,533.14	1,041.80	974.67	67.14	15.518	
6,200.00	2,417.31	2,362.70	2,417.31	0.00	67.12	-89.78	-230.35	-3,533.14	1,092.30	1,025.18	67.12	16.274	
6,300.00	2,416.71	2,362.10	2,416.71	0.00	67.10	-89.74	-230.35	-3,533.14	1,149.29	1,082.19	67.10	17.128	
6,400.00	2,416.11	2,361.50	2,416.11	0.00	67.08	-89.70	-230.35	-3,533.14	1,211.87	1,144.79	67.08	18.066	
6,500.00	2,415.51	2,360.90	2,415.51	0.00	67.06	-89.67	-230.35	-3,533.14	1,279.22	1,212.15	67.06	19.075	
6,584.69	2,415.00	2,360.39	2,415.00	0.00	67.05	-89.63	-230.35	-3,533.14	1,339.44	1,272.40	67.05	19.978	



Anticollision Report



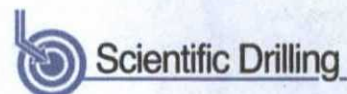
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott B5E - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 60-INCLINOMETER												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
0.00	0.00	0.00	0.30	0.00	0.00	-103.46	-143.71	-600.34	617.30				
100.00	100.00	99.70	100.00	0.00	1.92	-103.46	-143.71	-600.34	617.30	615.38	1.92	321.292	
200.00	200.00	199.70	200.00	0.00	4.96	-103.46	-143.71	-600.34	617.30	612.34	4.96	124.520	
300.00	300.00	299.70	300.00	0.00	7.99	-103.46	-143.71	-600.34	617.30	609.31	7.99	77.224	
400.00	400.00	399.70	400.00	0.00	11.03	-103.46	-143.71	-600.34	617.30	606.27	11.03	55.964	
500.00	500.00	499.70	500.00	0.00	14.07	-103.46	-143.71	-600.34	617.30	603.24	14.07	43.882	
600.00	600.00	599.70	600.00	0.00	17.10	-103.46	-143.71	-600.34	617.30	600.20	17.10	36.091	
700.00	700.00	699.70	700.00	0.00	20.14	-103.46	-143.71	-600.34	617.30	597.16	20.14	30.649	
800.00	800.00	799.70	800.00	0.00	23.18	-103.46	-143.71	-600.34	617.30	594.12	23.18	26.634	
900.00	900.00	899.71	900.00	0.00	26.21	-103.46	-143.71	-600.34	617.30	591.09	26.21	23.548	
1,000.00	1,000.00	999.71	1,000.00	0.00	29.25	-103.46	-143.71	-600.34	617.30	588.05	29.25	21.103	
1,100.00	1,100.00	1,099.71	1,100.00	0.00	32.29	-103.46	-143.71	-600.34	617.30	585.01	32.29	19.118	
1,200.00	1,200.00	1,199.71	1,200.00	0.00	35.32	-103.46	-143.71	-600.34	617.30	581.98	35.33	17.475	
1,300.00	1,300.00	1,299.73	1,300.00	0.00	38.36	-103.46	-143.71	-600.34	617.30	578.94	38.36	16.091	
1,400.00	1,400.00	1,399.73	1,400.00	0.00	41.40	-103.46	-143.71	-600.34	617.30	575.90	41.40	14.911	
1,500.00	1,500.00	1,499.73	1,500.00	0.00	44.44	-103.46	-143.71	-600.34	617.30	572.87	44.44	13.892	
1,600.00	1,600.00	1,599.73	1,600.00	0.00	47.47	-103.46	-143.71	-600.34	617.30	569.83	47.47	13.003	
1,700.00	1,700.00	1,699.73	1,700.00	0.00	50.51	-103.46	-143.71	-600.34	617.30	566.79	50.51	12.221	
1,800.00	1,800.00	1,799.73	1,800.00	0.00	53.55	-103.46	-143.71	-600.34	617.30	563.76	53.55	11.528	
1,900.00	1,899.98	1,899.71	1,899.98	0.00	56.58	-24.87	-143.71	-600.34	616.34	559.84	56.50	10.909	
2,000.00	1,998.76	1,998.48	1,998.76	0.00	59.58	-26.05	-143.71	-600.34	602.98	544.71	58.27	10.348	
2,100.00	2,093.47	2,093.20	2,093.47	0.00	62.46	-28.82	-143.71	-600.34	574.52	515.97	58.55	9.812	
2,200.00	2,181.24	2,180.97	2,181.24	0.00	65.12	-33.71	-143.71	-600.34	532.42	474.52	57.90	9.195	
2,300.00	2,259.41	2,259.14	2,259.41	0.00	67.50	-41.52	-143.71	-600.34	479.05	421.15	57.90	8.274	
2,400.00	2,325.60	2,325.32	2,325.60	0.00	69.51	-52.97	-143.71	-600.34	418.07	357.21	60.88	6.869	
2,500.00	2,377.79	2,377.51	2,377.79	0.00	71.09	-67.26	-143.71	-600.34	355.14	288.42	66.72	5.323	
2,600.00	2,414.40	2,414.13	2,414.40	0.00	72.20	-80.64	-143.71	-600.34	299.29	227.96	71.33	4.196	
2,700.00	2,434.32	2,434.05	2,434.32	0.00	72.81	-88.69	-143.71	-600.34	264.10	191.31	72.79	3.628	
2,752.55	2,438.63	2,438.36	2,438.63	0.00	72.94	-90.00	-143.71	-600.34	258.86	185.92	72.94	3.549 CC, ES, SF	
2,800.00	2,437.81	2,437.53	2,437.81	0.00	72.92	-89.94	-143.71	-600.34	263.18	190.26	72.92	3.609	
2,900.00	2,437.20	2,436.93	2,437.20	0.00	72.90	-89.80	-143.71	-600.34	297.93	225.03	72.90	4.087	
3,000.00	2,436.60	2,436.33	2,436.60	0.00	72.88	-89.67	-143.71	-600.34	358.14	285.26	72.88	4.914	
3,100.00	2,436.00	2,435.73	2,436.00	0.00	72.86	-89.54	-143.71	-600.34	433.31	360.45	72.86	5.947	
3,200.00	2,435.40	2,435.12	2,435.40	0.00	72.84	-89.40	-143.71	-600.34	516.97	444.13	72.84	7.097	
3,300.00	2,434.79	2,434.52	2,434.79	0.00	72.82	-89.27	-143.71	-600.34	605.60	532.78	72.82	8.317	
3,400.00	2,434.19	2,433.92	2,434.19	0.00	72.81	-89.14	-143.71	-600.34	697.32	624.52	72.80	9.579	
3,500.00	2,433.59	2,433.32	2,433.59	0.00	72.79	-89.00	-143.71	-600.34	791.04	718.26	72.78	10.869	
3,600.00	2,432.99	2,432.71	2,432.99	0.00	72.77	-88.87	-143.71	-600.34	886.14	813.38	72.76	12.180	
3,700.00	2,432.38	2,432.11	2,432.38	0.00	72.75	-88.74	-143.71	-600.34	982.21	909.47	72.73	13.504	
3,800.00	2,431.78	2,431.51	2,431.78	0.00	72.73	-88.60	-143.71	-600.34	1,078.99	1,006.28	72.71	14.839	
3,900.00	2,431.18	2,430.90	2,431.18	0.00	72.71	-88.47	-143.71	-600.34	1,176.32	1,103.63	72.69	16.183	
4,000.00	2,430.57	2,430.30	2,430.57	0.00	72.70	-88.34	-143.71	-600.34	1,274.05	1,201.39	72.67	17.533	
4,100.00	2,429.97	2,429.70	2,429.97	0.00	72.68	-88.20	-143.71	-600.34	1,372.12	1,299.47	72.64	18.889	
4,200.00	2,429.37	2,429.10	2,429.37	0.00	72.66	-88.07	-143.71	-600.34	1,470.44	1,397.82	72.62	20.249	
4,300.00	2,428.77	2,428.49	2,428.77	0.00	72.64	-87.94	-143.71	-600.34	1,568.97	1,496.38	72.59	21.613	
4,400.00	2,428.16	2,427.89	2,428.16	0.00	72.62	-87.80	-143.71	-600.34	1,667.68	1,595.11	72.57	22.980	
4,500.00	2,427.56	2,427.29	2,427.56	0.00	72.60	-87.67	-143.71	-600.34	1,766.54	1,693.99	72.54	24.351	
4,600.00	2,426.96	2,426.69	2,426.96	0.00	72.59	-87.54	-143.71	-600.34	1,865.51	1,792.99	72.52	25.724	
4,700.00	2,426.36	2,426.08	2,426.36	0.00	72.57	-87.40	-143.71	-600.34	1,964.59	1,892.10	72.49	27.100	
4,800.00	2,425.75	2,425.48	2,425.75	0.00	72.55	-87.27	-143.71	-600.34	2,063.76	1,991.29	72.47	28.478	
4,900.00	2,425.15	2,424.88	2,425.15	0.00	72.53	-87.14	-143.71	-600.34	2,163.01	2,090.57	72.44	29.859	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report

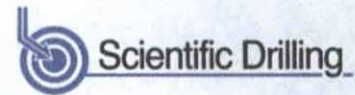


Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott B5E - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 60-INCLINOMETER													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,000.00	2,424.55	2,424.27	2,424.55	0.00	72.51	-87.00	-143.71	-600.34	2,262.32	2,189.90	72.41	31.241		
5,100.00	2,423.94	2,423.67	2,423.94	0.00	72.49	-86.87	-143.71	-600.34	2,361.69	2,289.30	72.39	32.626		
5,200.00	2,423.34	2,423.07	2,423.34	0.00	72.48	-86.74	-143.71	-600.34	2,461.11	2,388.75	72.36	34.012		
5,300.00	2,422.74	2,422.47	2,422.74	0.00	72.46	-86.61	-143.71	-600.34	2,560.57	2,488.24	72.33	35.401		
5,400.00	2,422.14	2,421.86	2,422.14	0.00	72.44	-86.47	-143.71	-600.34	2,660.08	2,587.77	72.30	36.791		
5,500.00	2,421.53	2,421.26	2,421.53	0.00	72.42	-86.34	-143.71	-600.34	2,759.62	2,687.34	72.27	38.183		
5,600.00	2,420.93	2,420.66	2,420.93	0.00	72.40	-86.21	-143.71	-600.34	2,859.19	2,786.95	72.25	39.576		
5,700.00	2,420.33	2,420.05	2,420.33	0.00	72.38	-86.07	-143.71	-600.34	2,958.79	2,886.58	72.22	40.972		
5,800.00	2,419.73	2,419.45	2,419.73	0.00	72.37	-85.94	-143.71	-600.34	3,058.42	2,986.23	72.19	42.369		
5,900.00	2,419.12	2,418.85	2,419.12	0.00	72.35	-85.81	-143.71	-600.34	3,158.07	3,085.92	72.16	43.768		
6,000.00	2,418.52	2,418.25	2,418.52	0.00	72.33	-85.68	-143.71	-600.34	3,257.74	3,185.62	72.12	45.168		
6,100.00	2,417.92	2,417.64	2,417.92	0.00	72.31	-85.54	-143.71	-600.34	3,357.43	3,285.34	72.09	46.570		
6,200.00	2,417.31	2,417.04	2,417.31	0.00	72.29	-85.41	-143.71	-600.34	3,457.14	3,385.08	72.06	47.974		
6,300.00	2,416.71	2,416.44	2,416.71	0.00	72.27	-85.28	-143.71	-600.34	3,556.87	3,484.84	72.03	49.380		
6,400.00	2,416.11	2,415.84	2,416.11	0.00	72.26	-85.15	-143.71	-600.34	3,656.61	3,584.61	72.00	50.787		
6,500.00	2,415.51	2,415.23	2,415.51	0.00	72.24	-85.01	-143.71	-600.34	3,756.36	3,684.40	71.97	52.196		
6,584.69	2,415.00	2,414.72	2,415.00	0.00	72.22	-84.90	-143.71	-600.34	3,840.85	3,768.91	71.94	53.391		



Anticollision Report



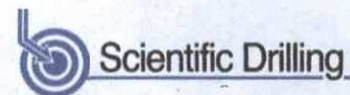
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott B7 - OH - OH													Offset Site Error: 0.00 ft
Survey Program: 207-INCLINOMETER													Offset Well Error: 0.00 ft
Reference	Offset	Semi Major Axis		Distance		Warning							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	44.23	0.00	0.00	-83.45	472.79	-4,119.96	4,147.23				
100.00	100.00	55.77	100.00	0.00	0.85	-83.45	472.79	-4,119.96	4,147.00	4,146.15	0.85	4,894.597	
200.00	200.00	155.77	200.00	0.00	2.37	-83.45	472.79	-4,119.96	4,147.00	4,144.63	2.37	1,752.934	
300.00	300.00	255.77	300.00	0.00	4.62	-83.45	472.79	-4,119.96	4,147.00	4,142.37	4.62	896.705	
400.00	400.00	355.77	400.00	0.00	7.66	-83.45	472.79	-4,119.96	4,147.00	4,139.34	7.66	541.278	
500.00	500.00	455.77	500.00	0.00	10.70	-83.45	472.79	-4,119.96	4,147.00	4,136.30	10.70	387.632	
600.00	600.00	555.77	600.00	0.00	13.73	-83.45	472.79	-4,119.96	4,147.00	4,133.26	13.74	301.928	
700.00	700.00	655.77	700.00	0.00	16.77	-83.45	472.79	-4,119.96	4,147.00	4,130.23	16.77	247.259	
800.00	800.00	755.78	800.00	0.00	19.81	-83.45	472.79	-4,119.96	4,147.00	4,127.19	19.81	209.348	
900.00	900.00	855.78	900.00	0.00	22.85	-83.45	472.79	-4,119.96	4,147.00	4,124.15	22.85	181.520	
1,000.00	1,000.00	955.78	1,000.00	0.00	25.88	-83.45	472.79	-4,119.96	4,147.00	4,121.11	25.88	160.222	
1,100.00	1,100.00	1,055.78	1,100.00	0.00	28.92	-83.45	472.79	-4,119.96	4,147.00	4,118.08	28.92	143.397	
1,200.00	1,200.00	1,155.78	1,200.00	0.00	31.96	-83.45	472.79	-4,119.96	4,147.00	4,115.04	31.96	129.770	
1,300.00	1,300.00	1,255.78	1,300.00	0.00	34.99	-83.45	472.79	-4,119.96	4,147.00	4,112.00	34.99	118.508	
1,400.00	1,400.00	1,355.78	1,400.00	0.00	38.03	-83.45	472.79	-4,119.96	4,147.00	4,108.97	38.03	109.045	
1,500.00	1,500.00	1,455.79	1,500.00	0.00	41.07	-83.45	472.79	-4,119.96	4,147.00	4,105.93	41.07	100.981	
1,600.00	1,600.00	1,555.79	1,600.00	0.00	44.10	-83.45	472.79	-4,119.96	4,147.00	4,102.89	44.10	94.028	
1,700.00	1,700.00	1,655.79	1,700.00	0.00	47.14	-83.45	472.79	-4,119.96	4,147.00	4,099.86	47.14	87.971	
1,800.00	1,800.00	1,755.80	1,800.00	0.00	50.18	-83.45	472.79	-4,119.96	4,147.00	4,096.82	50.18	82.646	
1,900.00	1,899.98	1,855.78	1,899.98	0.00	53.21	-4.79	472.79	-4,119.96	4,145.94	4,092.82	53.12	78.053	
2,000.00	1,998.76	1,954.56	1,998.76	0.00	56.21	-4.94	472.79	-4,119.96	4,131.23	4,076.55	54.69	75.544	
2,100.00	2,093.47	2,049.27	2,093.47	0.00	59.09	-5.27	472.79	-4,119.96	4,099.68	4,045.39	54.27	75.541	
2,200.00	2,181.24	2,137.05	2,181.24	0.00	61.76	-5.86	472.79	-4,119.96	4,052.19	4,000.50	51.69	78.398	
2,300.00	2,259.41	2,215.22	2,259.41	0.00	64.13	-6.84	472.79	-4,119.96	3,990.25	3,943.32	46.93	85.019	
2,400.00	2,325.80	2,281.40	2,325.80	0.00	66.14	-8.48	472.79	-4,119.96	3,915.74	3,875.45	40.30	97.172	
2,500.00	2,377.79	2,333.59	2,377.79	0.00	67.72	-11.48	472.79	-4,119.96	3,830.93	3,798.13	32.80	116.782	
2,600.00	2,414.40	2,370.20	2,414.40	0.00	68.84	-18.11	472.79	-4,119.96	3,738.40	3,709.74	28.66	130.426	
2,700.00	2,434.32	2,390.12	2,434.32	0.00	69.44	-40.11	472.79	-4,119.96	3,640.97	3,595.69	45.28	80.414	
2,800.00	2,437.81	2,393.61	2,437.81	0.00	69.55	-93.52	472.79	-4,119.96	3,541.57	3,472.15	69.42	51.019	
2,900.00	2,437.20	2,393.01	2,437.20	0.00	69.53	-93.42	472.79	-4,119.96	3,442.06	3,372.66	69.41	49.593	
3,000.00	2,436.60	2,392.41	2,436.60	0.00	69.51	-93.32	472.79	-4,119.96	3,342.59	3,273.19	69.39	48.168	
3,100.00	2,436.00	2,391.80	2,436.00	0.00	69.49	-93.22	472.79	-4,119.96	3,243.14	3,173.76	69.38	46.742	
3,200.00	2,435.40	2,391.20	2,435.40	0.00	69.47	-93.12	472.79	-4,119.96	3,143.73	3,074.36	69.37	45.317	
3,300.00	2,434.79	2,390.60	2,434.79	0.00	69.46	-93.02	472.79	-4,119.96	3,044.36	2,975.00	69.36	43.892	
3,400.00	2,434.19	2,390.00	2,434.19	0.00	69.44	-92.92	472.79	-4,119.96	2,945.03	2,875.68	69.35	42.468	
3,500.00	2,433.59	2,389.39	2,433.59	0.00	69.42	-92.82	472.79	-4,119.96	2,845.75	2,776.41	69.34	41.043	
3,600.00	2,432.99	2,388.79	2,432.99	0.00	69.40	-92.72	472.79	-4,119.96	2,746.52	2,677.20	69.32	39.619	
3,700.00	2,432.38	2,388.19	2,432.38	0.00	69.38	-92.62	472.79	-4,119.96	2,647.35	2,578.04	69.31	38.196	
3,800.00	2,431.78	2,387.58	2,431.78	0.00	69.36	-92.52	472.79	-4,119.96	2,548.24	2,478.94	69.30	36.772	
3,900.00	2,431.18	2,386.98	2,431.18	0.00	69.35	-92.42	472.79	-4,119.96	2,449.21	2,379.92	69.28	35.350	
4,000.00	2,430.57	2,386.38	2,430.57	0.00	69.33	-92.32	472.79	-4,119.96	2,350.25	2,280.98	69.27	33.928	
4,100.00	2,429.97	2,385.78	2,429.97	0.00	69.31	-92.22	472.79	-4,119.96	2,251.39	2,182.13	69.26	32.507	
4,200.00	2,429.37	2,385.17	2,429.37	0.00	69.29	-92.12	472.79	-4,119.96	2,152.63	2,083.39	69.24	31.088	
4,300.00	2,428.77	2,384.57	2,428.77	0.00	69.27	-92.02	472.79	-4,119.96	2,054.00	1,984.77	69.23	29.669	
4,400.00	2,428.16	2,383.97	2,428.16	0.00	69.25	-91.92	472.79	-4,119.96	1,955.50	1,886.28	69.22	28.252	
4,500.00	2,427.56	2,383.37	2,427.56	0.00	69.24	-91.82	472.79	-4,119.96	1,857.16	1,787.96	69.20	26.837	
4,600.00	2,426.96	2,382.76	2,426.96	0.00	69.22	-91.72	472.79	-4,119.96	1,759.01	1,689.82	69.19	25.424	
4,700.00	2,426.36	2,382.16	2,426.36	0.00	69.20	-91.62	472.79	-4,119.96	1,661.08	1,591.91	69.17	24.014	
4,800.00	2,425.75	2,381.56	2,425.75	0.00	69.18	-91.52	472.79	-4,119.96	1,563.41	1,494.26	69.16	22.607	
4,900.00	2,425.15	2,380.95	2,425.15	0.00	69.16	-91.42	472.79	-4,119.96	1,466.06	1,396.92	69.14	21.204	
5,000.00	2,424.55	2,380.35	2,424.55	0.00	69.14	-91.32	472.79	-4,119.96	1,369.09	1,299.96	69.13	19.806	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



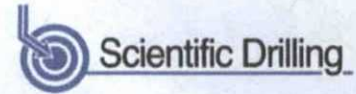
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott B7 - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 207-INCLINOMETER												Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)					
5,100.00	2,423.94	2,379.75	2,423.94	0.00	69.13	-91.22	472.79	-4,119.96	1,272.58	1,203.47	69.11	18.414	
5,200.00	2,423.34	2,379.15	2,423.34	0.00	69.11	-91.12	472.79	-4,119.96	1,176.66	1,107.57	69.09	17.030	
5,300.00	2,422.74	2,378.54	2,422.74	0.00	69.09	-91.02	472.79	-4,119.96	1,081.48	1,012.40	69.08	15.656	
5,400.00	2,422.14	2,377.94	2,422.14	0.00	69.07	-90.92	472.79	-4,119.96	987.25	918.19	69.06	14.295	
5,500.00	2,421.53	2,377.34	2,421.53	0.00	69.05	-90.82	472.79	-4,119.96	894.28	825.23	69.05	12.952	
5,600.00	2,420.93	2,376.73	2,420.93	0.00	69.03	-90.72	472.79	-4,119.96	802.99	733.96	69.03	11.633	
5,700.00	2,420.33	2,376.13	2,420.33	0.00	69.02	-90.62	472.79	-4,119.96	714.04	645.03	69.01	10.347	
5,800.00	2,419.73	2,375.53	2,419.73	0.00	69.00	-90.52	472.79	-4,119.96	628.43	559.43	69.00	9.108	
5,900.00	2,419.12	2,374.93	2,419.12	0.00	68.98	-90.42	472.79	-4,119.96	547.71	478.73	68.98	7.940	
6,000.00	2,418.52	2,374.32	2,418.52	0.00	68.96	-90.32	472.79	-4,119.96	474.39	405.43	68.96	6.879	
6,100.00	2,417.92	2,373.72	2,417.92	0.00	68.94	-90.22	472.79	-4,119.96	412.44	343.50	68.94	5.982	
6,200.00	2,417.31	2,373.12	2,417.31	0.00	68.92	-90.12	472.79	-4,119.96	367.65	298.72	68.92	5.334	
6,300.00	2,416.71	2,372.52	2,416.71	0.00	68.91	-90.02	472.79	-4,119.96	346.73	277.83	68.91	5.032	
6,324.71	2,416.56	2,372.37	2,416.56	0.00	68.90	-90.00	472.79	-4,119.96	345.85	276.95	68.90	5.019 CC, ES, SF	
6,400.00	2,416.11	2,371.91	2,416.11	0.00	68.89	-89.92	472.79	-4,119.96	353.95	285.07	68.89	5.138	
6,500.00	2,415.51	2,371.31	2,415.51	0.00	68.87	-89.82	472.79	-4,119.96	387.74	318.87	68.87	5.630	
6,584.69	2,415.00	2,370.80	2,415.00	0.00	68.85	-89.74	472.79	-4,119.96	432.67	363.81	68.85	6.284	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott J1 - OH - OH													Offset Site Error:
Survey Program: 182-INCLINOMETER													0.00 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	11.69	0.00	0.00	-106.92	-178.61	-587.24	613.91				
100.00	100.00	88.31	100.00	0.00	1.34	-106.92	-178.61	-587.24	613.80	612.46	1.34	457.635	
200.00	200.00	188.31	200.00	0.00	2.96	-106.92	-178.61	-587.24	613.80	610.85	2.96	207.688	
300.00	300.00	288.31	300.00	0.00	5.99	-106.92	-178.61	-587.24	613.80	607.81	5.99	102.432	
400.00	400.00	388.31	400.00	0.00	9.03	-106.92	-178.61	-587.24	613.80	604.77	9.03	67.980	
500.00	500.00	488.31	500.00	0.00	12.07	-106.92	-178.61	-587.24	613.80	601.74	12.07	50.870	
600.00	600.00	588.31	600.00	0.00	15.10	-106.92	-178.61	-587.24	613.80	598.70	15.10	40.642	
700.00	700.00	688.31	700.00	0.00	18.14	-106.92	-178.61	-587.24	613.80	595.66	18.14	33.838	
800.00	800.00	788.31	800.00	0.00	21.18	-106.92	-178.61	-587.24	613.80	592.63	21.18	28.985	
900.00	900.00	888.31	900.00	0.00	24.21	-106.92	-178.61	-587.24	613.80	589.59	24.21	25.350	
1,000.00	1,000.00	988.31	1,000.00	0.00	27.25	-106.92	-178.61	-587.24	613.80	586.55	27.25	22.525	
1,100.00	1,100.00	1,088.31	1,100.00	0.00	30.29	-106.92	-178.61	-587.24	613.80	583.52	30.29	20.266	
1,200.00	1,200.00	1,188.31	1,200.00	0.00	33.32	-106.92	-178.61	-587.24	613.80	580.48	33.32	18.419	
1,300.00	1,300.00	1,288.32	1,300.00	0.00	36.36	-106.92	-178.61	-587.24	613.80	577.44	36.36	16.881	
1,400.00	1,400.00	1,388.32	1,400.00	0.00	39.40	-106.92	-178.61	-587.24	613.80	574.40	39.40	15.580	
1,500.00	1,500.00	1,488.32	1,500.00	0.00	42.43	-106.92	-178.61	-587.24	613.80	571.37	42.43	14.465	
1,600.00	1,600.00	1,588.32	1,600.00	0.00	45.47	-106.92	-178.61	-587.24	613.80	568.33	45.47	13.499	
1,700.00	1,700.00	1,688.32	1,700.00	0.00	48.51	-106.92	-178.61	-587.24	613.80	565.29	48.51	12.654	
1,800.00	1,800.00	1,788.33	1,800.00	0.00	51.55	-106.92	-178.61	-587.24	613.80	562.26	51.55	11.908	
1,900.00	1,899.98	1,888.31	1,899.98	0.00	54.58	-28.34	-178.61	-587.24	612.86	558.36	54.50	11.244	
2,000.00	1,998.76	1,987.09	1,998.76	0.00	57.58	-29.65	-178.61	-587.24	599.91	543.52	56.39	10.638	
2,100.00	2,093.47	2,081.80	2,093.47	0.00	60.46	-32.71	-178.61	-587.24	572.40	515.42	56.98	10.046	
2,200.00	2,181.24	2,169.58	2,181.24	0.00	63.12	-38.02	-178.61	-587.24	531.89	475.01	56.89	9.350	
2,300.00	2,259.41	2,247.74	2,259.41	0.00	65.50	-46.25	-178.61	-587.24	481.02	423.37	57.65	8.344	
2,400.00	2,325.60	2,313.93	2,325.60	0.00	67.51	-57.71	-178.61	-587.24	423.82	362.82	61.00	6.948	
2,500.00	2,377.79	2,366.14	2,377.79	0.00	69.09	-71.05	-178.61	-587.24	366.50	300.37	66.13	5.542	
2,600.00	2,414.40	2,402.75	2,414.40	0.00	70.20	-82.73	-178.61	-587.24	318.48	248.79	69.69	4.570	
2,700.00	2,434.32	2,422.67	2,434.32	0.00	70.81	-89.27	-178.61	-587.24	292.33	221.53	70.80	4.129	
2,732.80	2,437.40	2,425.75	2,437.40	0.00	70.90	-90.00	-178.61	-587.24	290.50	219.60	70.90	4.097 CC, ES, SF	
2,800.00	2,437.81	2,426.16	2,437.81	0.00	70.92	-89.92	-178.61	-587.24	298.17	227.26	70.92	4.205	
2,900.00	2,437.20	2,425.55	2,437.20	0.00	70.90	-89.80	-178.61	-587.24	335.18	264.29	70.90	4.728	
3,000.00	2,436.60	2,424.95	2,436.60	0.00	70.88	-89.68	-178.61	-587.24	394.70	323.82	70.88	5.569	
3,100.00	2,436.00	2,424.35	2,436.00	0.00	70.86	-89.56	-178.61	-587.24	468.21	397.36	70.86	6.608	
3,200.00	2,435.40	2,423.75	2,435.40	0.00	70.84	-89.44	-178.61	-587.24	550.15	479.31	70.84	7.766	
3,300.00	2,434.79	2,423.14	2,434.79	0.00	70.82	-89.33	-178.61	-587.24	637.26	566.44	70.82	8.998	
3,400.00	2,434.19	2,422.54	2,434.19	0.00	70.81	-89.21	-178.61	-587.24	727.69	656.89	70.80	10.278	
3,500.00	2,433.59	2,421.94	2,433.59	0.00	70.79	-89.09	-178.61	-587.24	820.35	749.57	70.78	11.590	
3,600.00	2,432.99	2,421.34	2,432.99	0.00	70.77	-88.97	-178.61	-587.24	914.55	843.79	70.76	12.925	
3,700.00	2,432.38	2,420.73	2,432.38	0.00	70.75	-88.85	-178.61	-587.24	1,009.87	939.13	70.74	14.276	
3,800.00	2,431.78	2,420.13	2,431.78	0.00	70.73	-88.73	-178.61	-587.24	1,106.02	1,035.30	70.72	15.640	
3,900.00	2,431.18	2,419.53	2,431.18	0.00	70.71	-88.61	-178.61	-587.24	1,202.79	1,132.10	70.69	17.014	
4,000.00	2,430.57	2,418.92	2,430.57	0.00	70.70	-88.49	-178.61	-587.24	1,300.05	1,229.38	70.67	18.396	
4,100.00	2,429.97	2,418.32	2,429.97	0.00	70.68	-88.38	-178.61	-587.24	1,397.70	1,327.05	70.65	19.784	
4,200.00	2,429.37	2,417.72	2,429.37	0.00	70.66	-88.26	-178.61	-587.24	1,495.66	1,425.03	70.63	21.177	
4,300.00	2,428.77	2,417.12	2,428.77	0.00	70.64	-88.14	-178.61	-587.24	1,593.87	1,523.27	70.60	22.575	
4,400.00	2,428.16	2,416.51	2,428.16	0.00	70.62	-88.02	-178.61	-587.24	1,692.29	1,621.71	70.58	23.977	
4,500.00	2,427.56	2,415.91	2,427.56	0.00	70.60	-87.90	-178.61	-587.24	1,790.89	1,720.33	70.56	25.382	
4,600.00	2,426.96	2,415.31	2,426.96	0.00	70.59	-87.78	-178.61	-587.24	1,889.63	1,819.10	70.53	26.791	
4,700.00	2,426.36	2,414.70	2,426.36	0.00	70.57	-87.66	-178.61	-587.24	1,988.50	1,917.99	70.51	28.202	
4,800.00	2,425.75	2,414.10	2,425.75	0.00	70.55	-87.54	-178.61	-587.24	2,087.48	2,016.99	70.48	29.616	
4,900.00	2,425.15	2,413.50	2,425.15	0.00	70.53	-87.43	-178.61	-587.24	2,186.55	2,116.09	70.46	31.032	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

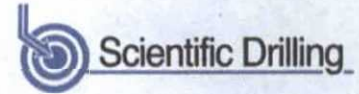


Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliot J1 - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 182-INCLINOMETER													Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
5,000.00	2,424.55	2,412.90	2,424.55	0.00	70.51	-87.31	-178.61	-587.24	2,285.70	2,215.26	70.44	32.451		
5,100.00	2,423.94	2,412.29	2,423.94	0.00	70.49	-87.19	-178.61	-587.24	2,384.92	2,314.51	70.41	33.872		
5,200.00	2,423.34	2,411.69	2,423.34	0.00	70.48	-87.07	-178.61	-587.24	2,484.20	2,413.82	70.38	35.295		
5,300.00	2,422.74	2,411.09	2,422.74	0.00	70.46	-86.95	-178.61	-587.24	2,583.54	2,513.18	70.36	36.720		
5,400.00	2,422.14	2,410.49	2,422.14	0.00	70.44	-86.83	-178.61	-587.24	2,682.93	2,612.60	70.33	38.146		
5,500.00	2,421.53	2,409.88	2,421.53	0.00	70.42	-86.71	-178.61	-587.24	2,782.36	2,712.05	70.31	39.575		
5,600.00	2,420.93	2,409.28	2,420.93	0.00	70.40	-86.60	-178.61	-587.24	2,881.83	2,811.55	70.28	41.005		
5,700.00	2,420.33	2,408.68	2,420.33	0.00	70.38	-86.48	-178.61	-587.24	2,981.34	2,911.08	70.25	42.438		
5,800.00	2,419.73	2,408.07	2,419.73	0.00	70.37	-86.36	-178.61	-587.24	3,080.87	3,010.65	70.23	43.871		
5,900.00	2,419.12	2,407.47	2,419.12	0.00	70.35	-86.24	-178.61	-587.24	3,180.44	3,110.24	70.20	45.307		
6,000.00	2,418.52	2,406.87	2,418.52	0.00	70.33	-86.12	-178.61	-587.24	3,280.03	3,209.86	70.17	46.744		
6,100.00	2,417.92	2,406.27	2,417.92	0.00	70.31	-86.00	-178.61	-587.24	3,379.65	3,309.51	70.14	48.183		
6,200.00	2,417.31	2,405.66	2,417.31	0.00	70.29	-85.89	-178.61	-587.24	3,479.29	3,409.18	70.11	49.624		
6,300.00	2,416.71	2,405.06	2,416.71	0.00	70.27	-85.77	-178.61	-587.24	3,578.95	3,508.86	70.08	51.066		
6,400.00	2,416.11	2,404.46	2,416.11	0.00	70.26	-85.65	-178.61	-587.24	3,678.62	3,608.57	70.06	52.510		
6,500.00	2,415.51	2,403.86	2,415.51	0.00	70.24	-85.53	-178.61	-587.24	3,778.32	3,708.29	70.03	53.956		
6,584.69	2,415.00	2,403.35	2,415.00	0.00	70.22	-85.43	-178.61	-587.24	3,862.76	3,792.76	70.00	55.162		



Anticollision Report

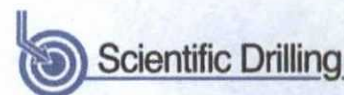


Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott B 8-1H - Lateral 1 ST1 - Plan #2													Offset Site Error:	0.00 ft
Survey Program: O-Gyro, 2671-Gyro													Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Semi Major Axis (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
2,871.00	2,437.38	2,871.00	2,437.38	0.00	0.00	0.00	0.00	133.38	-665.67	0.00	0.00	0.00	N/A	CC, ES
2,900.00	2,437.20	2,899.99	2,437.20	0.00	0.00	-89.56	-89.56	138.58	-694.19	0.51	0.51	0.00	N/A	
3,000.00	2,436.60	2,998.97	2,436.53	0.00	0.00	-89.56	-89.56	148.74	-792.59	9.99	9.99	0.00	N/A	
3,100.00	2,436.00	3,094.41	2,435.82	0.00	0.00	-89.56	-89.56	147.35	-887.96	31.10	31.10	0.00	N/A	
3,200.00	2,435.40	3,184.14	2,435.08	0.00	0.00	-89.56	-89.56	136.04	-976.93	63.01	63.01	0.00	N/A	
3,300.00	2,434.79	3,268.78	2,434.36	0.00	0.00	-89.56	-89.56	117.16	-1,057.34	104.60	104.60	0.00	N/A	
3,400.00	2,434.19	3,341.68	2,433.68	0.00	0.00	-89.56	-89.56	93.19	-1,128.28	154.64	154.64	0.00	N/A	
3,500.00	2,433.59	3,408.83	2,433.05	0.00	0.00	-89.56	-89.56	66.34	-1,189.80	211.93	211.93	0.00	N/A	
3,600.00	2,432.99	3,468.61	2,432.46	0.00	0.00	-89.56	-89.56	38.29	-1,242.58	275.32	275.32	0.00	N/A	
3,700.00	2,432.38	3,521.66	2,431.96	0.00	0.00	-89.56	-89.56	10.28	-1,287.61	343.83	343.83	0.00	N/A	
3,800.00	2,431.78	3,568.67	2,431.50	0.00	0.00	-89.56	-89.56	-16.92	-1,325.95	416.61	416.61	0.00	N/A	
3,900.00	2,431.18	3,610.37	2,431.10	0.00	0.00	-89.56	-89.56	-42.83	-1,358.61	492.96	492.96	0.00	N/A	
4,000.00	2,430.57	3,650.00	2,430.71	0.00	0.00	-89.56	-89.56	-68.95	-1,388.41	572.30	572.30	0.00	N/A	
4,100.00	2,429.97	3,680.45	2,430.41	0.00	0.00	-89.56	-89.56	-89.97	-1,410.44	654.13	654.13	0.00	N/A	
4,200.00	2,429.37	3,774.94	2,429.48	0.00	0.00	-89.56	-89.56	-156.19	-1,477.79	737.75	737.75	0.00	N/A	
4,300.00	2,428.77	4,427.06	2,423.73	0.00	0.00	-89.56	-89.56	-365.38	-2,078.04	779.60	779.60	0.00	N/A	
4,400.00	2,428.16	4,525.56	2,423.01	0.00	0.00	-89.56	-89.56	-363.94	-2,176.52	797.81	797.81	0.00	N/A	
4,500.00	2,427.56	4,624.06	2,422.28	0.00	0.00	-89.56	-89.56	-362.48	-2,275.01	816.01	816.01	0.00	N/A	
4,600.00	2,426.96	4,722.57	2,421.54	0.00	0.00	-89.56	-89.56	-361.01	-2,373.51	834.18	834.18	0.00	N/A	
4,700.00	2,426.36	4,821.08	2,420.79	0.00	0.00	-89.56	-89.56	-359.51	-2,472.01	852.34	852.34	0.00	N/A	
4,800.00	2,425.75	4,919.61	2,420.03	0.00	0.00	-89.55	-89.55	-357.99	-2,570.52	870.47	870.47	0.00	N/A	
4,900.00	2,425.15	5,018.14	2,419.26	0.00	0.00	-89.55	-89.55	-356.45	-2,669.04	888.58	888.58	0.00	N/A	
5,000.00	2,424.55	5,116.68	2,418.47	0.00	0.00	-89.55	-89.55	-354.89	-2,767.56	906.67	906.67	0.00	N/A	
5,100.00	2,423.94	5,215.23	2,417.68	0.00	0.00	-89.54	-89.54	-353.30	-2,866.09	924.74	924.74	0.00	N/A	
5,200.00	2,423.34	5,313.78	2,416.88	0.00	0.00	-89.54	-89.54	-351.70	-2,964.63	942.79	942.79	0.00	N/A	
5,300.00	2,422.74	5,412.34	2,416.06	0.00	0.00	-89.53	-89.53	-350.07	-3,063.17	960.82	960.82	0.00	N/A	
5,400.00	2,422.14	5,510.91	2,415.24	0.00	0.00	-89.53	-89.53	-348.43	-3,161.73	978.83	978.83	0.00	N/A	
5,500.00	2,421.53	5,609.49	2,414.41	0.00	0.00	-89.52	-89.52	-346.76	-3,260.29	996.81	996.81	0.00	N/A	
5,600.00	2,420.93	5,708.07	2,413.56	0.00	0.00	-89.51	-89.51	-345.08	-3,358.85	1,014.78	1,014.78	0.00	N/A	
5,700.00	2,420.33	5,806.67	2,412.71	0.00	0.00	-89.51	-89.51	-343.37	-3,457.43	1,032.72	1,032.72	0.00	N/A	
5,800.00	2,419.73	5,905.27	2,411.84	0.00	0.00	-89.50	-89.50	-341.64	-3,556.01	1,050.65	1,050.65	0.00	N/A	
5,900.00	2,419.12	6,003.87	2,410.96	0.00	0.00	-89.49	-89.49	-339.89	-3,654.60	1,068.55	1,068.55	0.00	N/A	
6,000.00	2,418.52	6,102.49	2,410.08	0.00	0.00	-89.48	-89.48	-338.12	-3,753.19	1,086.44	1,086.44	0.00	N/A	
6,100.00	2,417.92	6,201.11	2,409.18	0.00	0.00	-89.48	-89.48	-336.32	-3,851.79	1,104.30	1,104.30	0.00	N/A	
6,200.00	2,417.31	6,299.74	2,408.27	0.00	0.00	-89.47	-89.47	-334.51	-3,950.40	1,122.14	1,122.14	0.00	N/A	
6,300.00	2,416.71	6,398.38	2,407.35	0.00	0.00	-89.46	-89.46	-332.68	-4,049.02	1,139.96	1,139.96	0.00	N/A	
6,400.00	2,416.11	6,497.03	2,406.42	0.00	0.00	-89.45	-89.45	-330.82	-4,147.64	1,157.76	1,157.76	0.00	N/A	
6,500.00	2,415.51	6,595.68	2,405.48	0.00	0.00	-89.44	-89.44	-328.94	-4,246.27	1,175.54	1,175.54	0.00	N/A	
6,584.69	2,415.00	6,645.86	2,405.00	0.00	0.00	-89.44	-89.44	-327.98	-4,296.45	1,191.05	1,191.05	0.00	N/A	



Anticollision Report



Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott B 8-1H - Lateral 2 - Plan #2													Offset Site Error:	0.00 ft
Survey Program: 0-Gyro, 2920-Gyro													Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Distance		Warning								
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
2,920.00	2,437.08	2,920.00	2,437.08	0.00	0.00	0.00	143.01	-713.72	0.00	0.00	0.00	N/A	CC, ES	
3,000.00	2,436.60	2,999.87	2,436.14	0.00	0.00	-80.42	156.00	-792.50	2.79	2.79	0.00	N/A		
3,100.00	2,436.00	3,098.54	2,433.70	0.00	0.00	-80.42	164.52	-890.75	14.05	14.05	0.00	N/A		
3,200.00	2,435.40	3,196.48	2,430.22	0.00	0.00	-80.42	166.60	-988.60	31.85	31.85	0.00	N/A		
3,300.00	2,434.79	3,294.80	2,426.66	0.00	0.00	-80.42	168.25	-1,086.84	50.08	50.08	0.00	N/A		
3,400.00	2,434.19	3,393.13	2,423.09	0.00	0.00	-80.42	169.90	-1,185.09	68.32	68.32	0.00	N/A		
3,500.00	2,433.59	3,491.45	2,419.52	0.00	0.00	-80.42	171.55	-1,283.33	86.56	86.56	0.00	N/A		
3,600.00	2,432.99	3,589.77	2,415.96	0.00	0.00	-80.42	173.21	-1,381.58	104.79	104.79	0.00	N/A		
3,700.00	2,432.38	3,688.10	2,412.39	0.00	0.00	-80.42	174.86	-1,479.82	123.03	123.03	0.00	N/A		
3,800.00	2,431.78	3,786.42	2,408.83	0.00	0.00	-80.42	176.51	-1,578.06	141.27	141.27	0.00	N/A		
3,900.00	2,431.18	3,884.74	2,405.26	0.00	0.00	-80.42	178.16	-1,676.31	159.51	159.51	0.00	N/A		
4,000.00	2,430.57	3,983.06	2,401.70	0.00	0.00	-80.42	179.82	-1,774.55	177.74	177.74	0.00	N/A		
4,100.00	2,429.97	4,081.39	2,398.13	0.00	0.00	-80.42	181.47	-1,872.80	195.98	195.98	0.00	N/A		
4,200.00	2,429.37	4,179.71	2,394.56	0.00	0.00	-80.42	183.12	-1,971.04	214.22	214.22	0.00	N/A		
4,300.00	2,428.77	4,278.03	2,391.00	0.00	0.00	-80.42	184.77	-2,069.29	232.45	232.45	0.00	N/A		
4,400.00	2,428.16	4,376.36	2,387.43	0.00	0.00	-80.42	186.43	-2,167.53	250.69	250.69	0.00	N/A		
4,500.00	2,427.56	4,474.68	2,383.87	0.00	0.00	-80.42	188.08	-2,265.77	268.93	268.93	0.00	N/A		
4,600.00	2,426.96	4,573.00	2,380.30	0.00	0.00	-80.42	189.73	-2,364.02	287.17	287.17	0.00	N/A		
4,700.00	2,426.36	4,671.33	2,376.74	0.00	0.00	-80.42	191.38	-2,462.26	305.40	305.40	0.00	N/A		
4,800.00	2,425.75	4,769.65	2,373.17	0.00	0.00	-80.42	193.04	-2,560.51	323.64	323.64	0.00	N/A		
4,900.00	2,425.15	4,867.97	2,369.60	0.00	0.00	-80.42	194.69	-2,658.75	341.88	341.88	0.00	N/A		
5,000.00	2,424.55	4,966.29	2,366.04	0.00	0.00	-80.42	196.34	-2,757.00	360.11	360.11	0.00	N/A		
5,100.00	2,423.94	5,064.62	2,362.47	0.00	0.00	-80.42	197.99	-2,855.24	378.35	378.35	0.00	N/A		
5,200.00	2,423.34	5,162.94	2,358.91	0.00	0.00	-80.42	199.65	-2,953.49	396.59	396.59	0.00	N/A		
5,300.00	2,422.74	5,261.26	2,355.34	0.00	0.00	-80.42	201.30	-3,051.73	414.83	414.83	0.00	N/A		
5,400.00	2,422.14	5,359.59	2,351.77	0.00	0.00	-80.42	202.95	-3,149.97	433.06	433.06	0.00	N/A		
5,500.00	2,421.53	5,457.91	2,348.21	0.00	0.00	-80.42	204.60	-3,248.22	451.30	451.30	0.00	N/A		
5,600.00	2,420.93	5,556.23	2,344.64	0.00	0.00	-80.42	206.26	-3,346.46	469.54	469.54	0.00	N/A		
5,700.00	2,420.33	5,654.56	2,341.08	0.00	0.00	-80.42	207.91	-3,444.71	487.77	487.77	0.00	N/A		
5,800.00	2,419.73	5,752.88	2,337.51	0.00	0.00	-80.42	209.56	-3,542.95	506.01	506.01	0.00	N/A		
5,900.00	2,419.12	5,851.20	2,333.95	0.00	0.00	-80.42	211.21	-3,641.20	524.25	524.25	0.00	N/A		
6,000.00	2,418.52	5,949.52	2,330.38	0.00	0.00	-80.42	212.87	-3,739.44	542.48	542.48	0.00	N/A		
6,100.00	2,417.92	6,047.85	2,326.81	0.00	0.00	-80.42	214.52	-3,837.69	560.72	560.72	0.00	N/A		
6,200.00	2,417.31	6,146.17	2,323.25	0.00	0.00	-80.42	216.17	-3,935.93	578.96	578.96	0.00	N/A		
6,300.00	2,416.71	6,244.49	2,319.68	0.00	0.00	-80.42	217.82	-4,034.17	597.20	597.20	0.00	N/A		
6,400.00	2,416.11	6,342.82	2,316.12	0.00	0.00	-80.42	219.48	-4,132.42	615.43	615.43	0.00	N/A		
6,500.00	2,415.51	6,441.14	2,312.55	0.00	0.00	-80.42	221.13	-4,230.66	633.67	633.67	0.00	N/A		
6,584.69	2,415.00	6,511.48	2,310.00	0.00	0.00	-80.42	222.31	-4,300.95	649.24	649.24	0.00	N/A		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



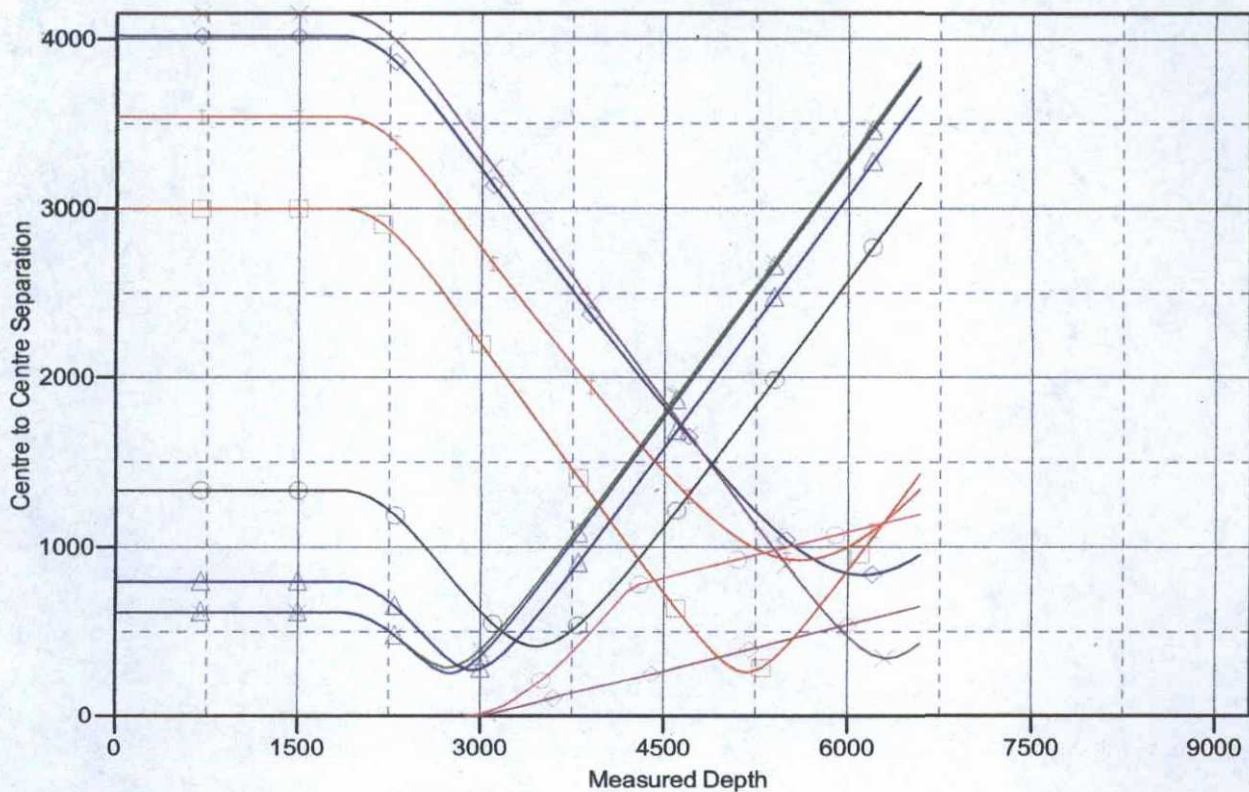
Company: B.P.
Project: San Juan County, NM NAD83
Reference Site: AL Elliott
Site Error: 0.00 ft
Reference Well: AL Elliott B 8-1H
Well Error: 0.00 ft
Reference Wellbore: Lateral 1
Reference Design: Plan 2

Local Co-ordinate Reference: Well AL Elliott B 8-1H
TVD Reference: GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
MD Reference: GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: Grand Junction District
Offset TVD Reference: Reference Datum

Reference Depths are relative to GL 5864.23' & RKB 11' @ 5875.23ft (A)
Offset Depths are relative to Offset Datum
Central Meridian is -107.833334

Coordinates are relative to: AL Elliott B 8-1H
Coordinate System is US State Plane 1983, New Mexico Western Zone
Grid Convergence at Surface is: 0.05°

Ladder Plot



LEGEND

- | | | |
|------------------------------|--------------------------|--|
| AL Elliot B2, OH, OH V0 | AL Elliot B5E, OH, OH V0 | AL Elliott B 8-1H, Lateral 1 ST1, Plan #2 V0 |
| AL Elliot B2 (#2), OH, OH V0 | AL Elliot B4, OH, OH V0 | AL Elliott B 8-1H, Lateral 2, Plan #2 V0 |
| AL Elliot J1, OH, OH V0 | AL Elliot B5, OH, OH V0 | |
| AL Elliot B7, OH, OH V0 | AL Elliot B2B, OH, OH V0 | |

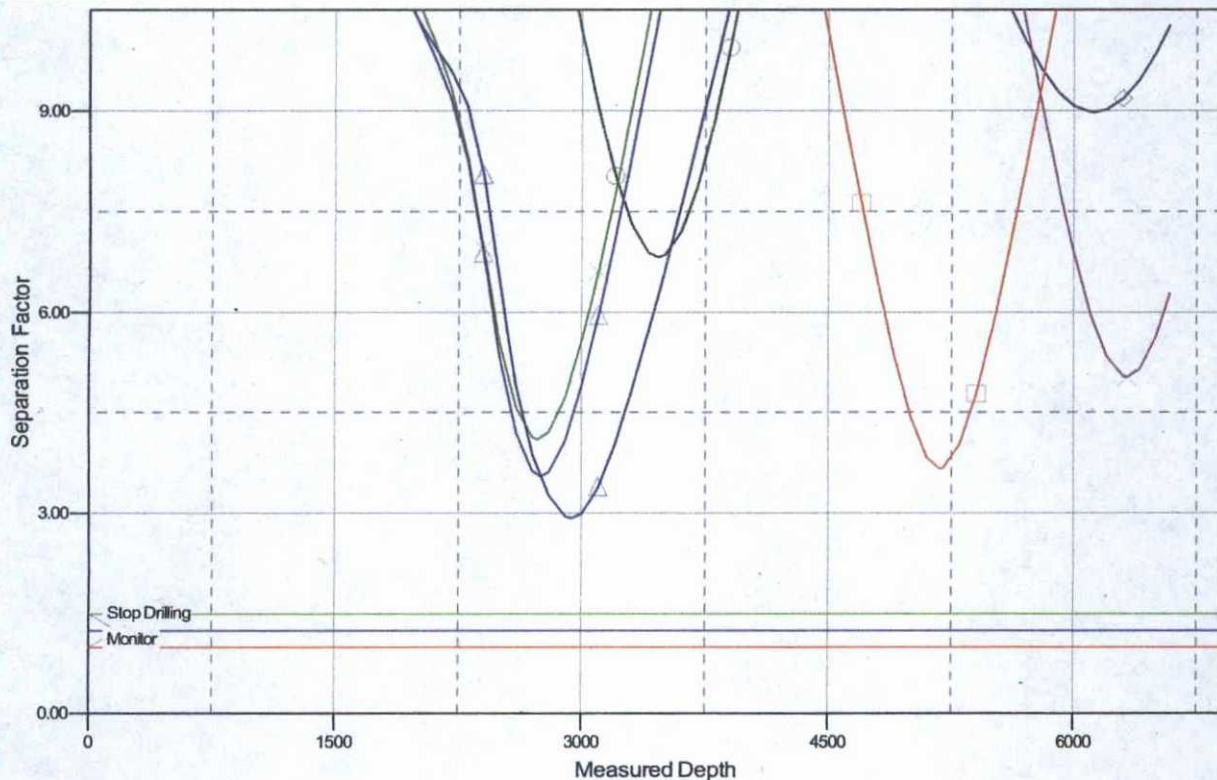


Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Reference Depths are relative to GL 5864.23' & RKB 11' @ 5875.23ft (A)
Offset Depths are relative to Offset Datum
Central Meridian is -107.8333334

Coordinates are relative to: AL Elliott B 8-1H
Coordinate System is US State Plane 1983, New Mexico Western Zone
Grid Convergence at Surface is: 0.05°

Separation Factor Plot



LEGEND

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|-------------------------------|---------------------------|--|
| AL Elliott B2, OH, OH V0 | AL Elliott B5E, OH, OH V0 | AL Elliott B 8-1H, Lateral 1 ST1, Plan #2 V0 |
| AL Elliott B2 (#2), OH, OH V0 | AL Elliott B4, OH, OH V0 | AL Elliott B 8-1H, Lateral 2, Plan #2 V0 |
| AL Elliott J1, OH, OH V0 | AL Elliott B5, OH, OH V0 | |
| AL Elliott B7, OH, OH V0 | AL Elliott B2B, OH, OH V0 | |



Anticollision Report

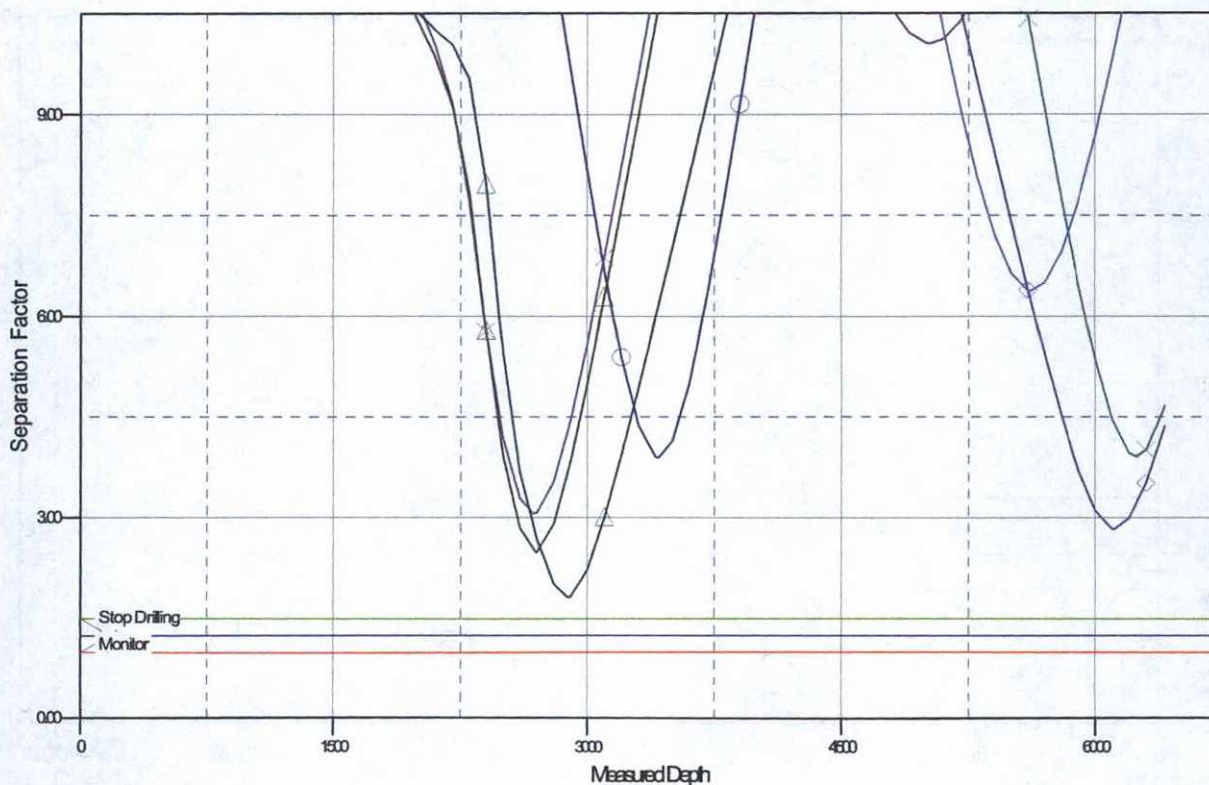


Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 2	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Reference Depths are relative to GL 5864.23' & RKB 11' @ 5875.22usft
Offset Depths are relative to Offset Datum
Central Meridian is -107.8333334

Coordinates are relative to: AL Elliott B 8-1H
Coordinate System is US State Plane 1983, New Mexico Western Zone
Grid Convergence at Surface is: 0.05°

Separation Factor Plot



LEGEND

- | | | |
|-------------------------------|---------------------------|--|
| AL Elliott B2, OH, OH V0 | AL Elliott B5E, OH, OH V0 | AL Elliott B 8-1H, Lateral 1, Plan 2 V0 |
| AL Elliott B2 (#2), OH, OH V0 | AL Elliott B4, OH, OH V0 | AL Elliott B 8-1H, Lateral 1 ST1, Plan #2 V0 |
| AL Elliott J1, OH, OH V0 | AL Elliott B5, OH, OH V0 | |
| AL Elliott B7, OH, OH V0 | AL Elliott B2B, OH, OH V0 | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 2	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Reference Depths are relative to GL 5864.23' & RKB 11' @ 5875.22usft

Offset Depths are relative to Offset Datum

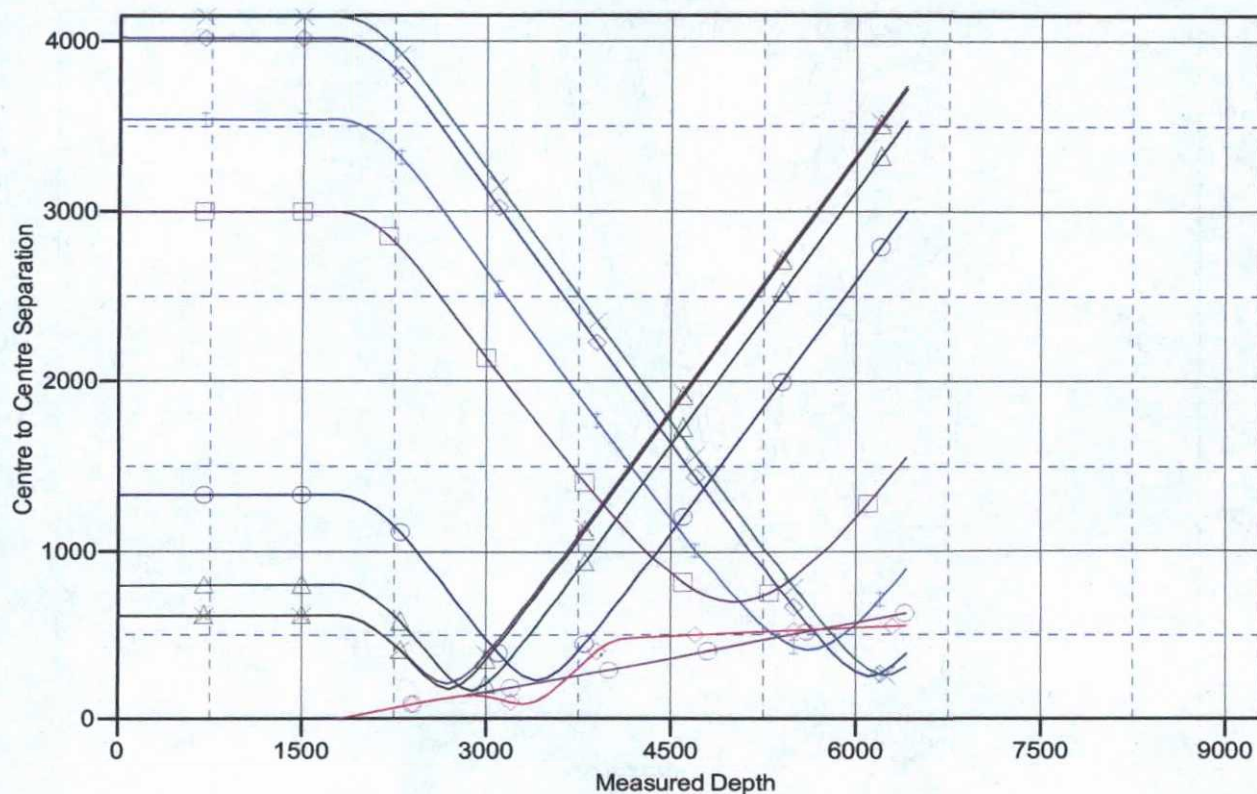
Central Meridian is -107.8333334

Coordinates are relative to: AL Elliott B 8-1H

Coordinate System is US State Plane 1983, New Mexico Western Zone

Grid Convergence at Surface is: 0.05°

Ladder Plot



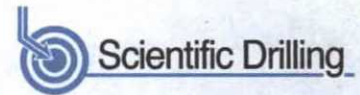
LEGEND

- | | | |
|-------------------------------|---------------------------|--|
| AL Elliott B2, OH, OH V0 | AL Elliott B5E, OH, OH V0 | AL Elliott B 8-1H, Lateral 1, Plan 2 V0 |
| AL Elliott B2 (#2), OH, OH V0 | AL Elliott B4, OH, OH V0 | AL Elliott B 8-1H, Lateral 1 ST1, Plan #2 V0 |
| AL Elliott J1, OH, OH V0 | AL Elliott B5, OH, OH V0 | |
| AL Elliott B7, OH, OH V0 | AL Elliott B2B, OH, OH V0 | |

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



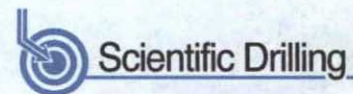
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 2	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott B 8-1H - Lateral 1 ST1 - Plan #2													Offset Site Error:	0.00 usft
Survey Program: 0-Gyro, 2871-Gyro													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
1,776.05	1,776.03	1,776.03	1,776.03	0.00	0.00	180.00	0.00	0.00	1.21	1.21	0.00	N/A		
1,800.00	1,799.99	1,799.99	1,799.99	0.00	0.00	180.00	0.00	0.00	0.50	0.50	0.00	N/A CC, ES		
1,900.00	1,899.04	1,899.80	1,899.77	0.00	0.00	179.28	0.21	-1.03	12.34	12.34	0.00	N/A		
2,000.00	1,994.34	2,002.09	2,000.79	0.00	0.00	175.06	3.20	-15.99	27.94					
2,100.00	2,083.01	2,107.16	2,100.02	0.00	0.00	170.16	9.90	-49.41	43.45	43.45	0.00	N/A		
2,200.00	2,162.36	2,214.97	2,193.62	0.00	0.00	164.94	20.35	-101.55	58.71					
2,300.00	2,229.97	2,325.37	2,277.42	0.00	0.00	159.47	34.42	-171.76	73.52	73.52	0.00	N/A		
2,400.00	2,283.78	2,438.10	2,347.23	0.00	0.00	153.79	51.76	-258.33	87.68	87.68	0.00	N/A		
2,500.00	2,322.17	2,552.79	2,399.14	0.00	0.00	147.91	71.81	-358.39	101.01	101.01	0.00	N/A		
2,600.00	2,343.96	2,668.91	2,429.96	0.00	0.00	141.88	93.77	-467.97	113.34	113.34	0.00	N/A		
2,700.00	2,348.89	2,783.18	2,437.91	0.00	0.00	135.95	116.13	-579.57	124.41	124.41	0.00	N/A		
2,800.00	2,348.38	2,883.68	2,437.30	0.00	0.00	131.46	135.78	-678.13	134.86	134.86	0.00	N/A		
2,900.00	2,347.87	2,998.11	2,436.54	0.00	0.00	129.48	148.70	-791.73	139.46	139.46	0.00	N/A		
3,000.00	2,347.36	3,112.31	2,435.67	0.00	0.00	131.78	145.86	-905.80	133.47	133.47	0.00	N/A		
3,100.00	2,346.85	3,222.09	2,434.76	0.00	0.00	139.25	128.37	-1,014.09	118.25	118.25	0.00	N/A		
3,200.00	2,346.34	3,324.17	2,433.84	0.00	0.00	154.47	99.37	-1,111.90	98.76	98.76	0.00	N/A		
3,300.00	2,345.83	3,416.62	2,432.98	0.00	0.00	179.32	62.90	-1,196.79	87.16	87.16	0.00	N/A		
3,304.50	2,345.81	3,420.54	2,432.94	0.00	0.00	-179.41	61.14	-1,200.29	87.13					
3,400.00	2,345.32	3,500.00	2,432.17	0.00	0.00	-153.36	22.06	-1,269.44	101.09	101.09	0.00	N/A		
3,500.00	2,344.81	3,570.86	2,431.48	0.00	0.00	-134.85	-18.24	-1,327.70	142.16	142.16	0.00	N/A		
3,600.00	2,344.31	3,633.76	2,430.86	0.00	0.00	-123.66	-58.08	-1,376.35	199.66					
3,700.00	2,343.80	3,688.51	2,430.32	0.00	0.00	-116.90	-95.67	-1,416.14	266.68	266.68	0.00	N/A		
3,800.00	2,343.29	3,775.71	2,429.47	0.00	0.00	-110.06	-156.71	-1,478.37	337.46	337.46	0.00	N/A		
3,900.00	2,342.78	3,911.15	2,428.15	0.00	0.00	-104.76	-238.07	-1,586.44	400.03	400.03	0.00	N/A		
4,000.00	2,342.27	4,086.73	2,426.49	0.00	0.00	-101.63	-315.47	-1,743.67	447.98	447.98	0.00	N/A		
4,100.00	2,341.76	4,300.23	2,424.67	0.00	0.00	-100.12	-362.41	-1,951.33	474.75	474.75	0.00	N/A		
4,200.00	2,341.25	4,450.59	2,423.55	0.00	0.00	-99.86	-365.03	-2,101.57	480.44	480.44	0.00	N/A		
4,300.00	2,340.74	4,550.63	2,422.82	0.00	0.00	-99.76	-363.57	-2,201.60	484.04	484.04	0.00	N/A		
4,400.00	2,340.23	4,650.88	2,422.08	0.00	0.00	-99.66	-362.09	-2,301.63	487.63	487.63	0.00	N/A		
4,500.00	2,339.72	4,750.72	2,421.32	0.00	0.00	-99.56	-360.58	-2,401.66	491.20	491.20	0.00	N/A		
4,600.00	2,339.21	4,850.77	2,420.56	0.00	0.00	-99.46	-359.05	-2,501.69	494.74	494.74	0.00	N/A		
4,700.00	2,338.70	4,950.82	2,419.78	0.00	0.00	-99.36	-357.50	-2,601.72	498.26	498.26	0.00	N/A		
4,800.00	2,338.19	5,050.87	2,418.99	0.00	0.00	-99.26	-355.93	-2,701.76	501.76	501.76	0.00	N/A		
4,900.00	2,337.68	5,150.92	2,418.19	0.00	0.00	-99.16	-354.34	-2,801.79	505.24	505.24	0.00	N/A		
5,000.00	2,337.18	5,250.97	2,417.39	0.00	0.00	-99.07	-352.72	-2,901.83	508.70	508.70	0.00	N/A		
5,100.00	2,336.67	5,351.02	2,416.57	0.00	0.00	-98.97	-351.09	-3,001.87	512.14	512.14	0.00	N/A		
5,200.00	2,336.16	5,451.08	2,415.74	0.00	0.00	-98.87	-349.43	-3,101.91	515.55	515.55	0.00	N/A		
5,300.00	2,335.65	5,551.14	2,414.90	0.00	0.00	-98.78	-347.75	-3,201.95	518.95	518.95	0.00	N/A		
5,400.00	2,335.14	5,651.20	2,414.05	0.00	0.00	-98.68	-346.05	-3,301.99	522.32	522.32	0.00	N/A		
5,500.00	2,334.63	5,751.26	2,413.18	0.00	0.00	-98.59	-344.33	-3,402.03	525.67	525.67	0.00	N/A		
5,600.00	2,334.12	5,851.32	2,412.31	0.00	0.00	-98.49	-342.59	-3,502.07	529.00	529.00	0.00	N/A		
5,700.00	2,333.61	5,951.38	2,411.43	0.00	0.00	-98.40	-340.82	-3,602.11	532.31	532.31	0.00	N/A		
5,800.00	2,333.10	6,051.44	2,410.53	0.00	0.00	-98.31	-339.03	-3,702.16	535.59	535.59	0.00	N/A		
5,900.00	2,332.59	6,151.51	2,409.63	0.00	0.00	-98.21	-337.23	-3,802.20	538.86	538.86	0.00	N/A		
6,000.00	2,332.08	6,251.58	2,408.71	0.00	0.00	-98.12	-335.40	-3,902.25	542.10	542.10	0.00	N/A		
6,100.00	2,331.57	6,351.64	2,407.78	0.00	0.00	-98.03	-333.55	-4,002.30	545.32	545.32	0.00	N/A		
6,200.00	2,331.06	6,451.71	2,406.85	0.00	0.00	-97.94	-331.67	-4,102.34	548.52	548.52	0.00	N/A		
6,300.00	2,330.55	6,551.78	2,405.90	0.00	0.00	-97.84	-329.78	-4,202.39	551.70	551.70	0.00	N/A		
6,400.00	2,330.05	6,651.85	2,405.00	0.00	0.00	-97.76	-327.98	-4,296.44	554.89	554.89	0.00	N/A		
6,410.72	2,329.99	6,645.85	2,405.00	0.00	0.00	-97.76	-327.98	-4,296.44	555.45	555.45	0.00	N/A		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 2	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design		AL Elliott - AL Elliott B 8-1H - Lateral 1 - Plan 2											Offset Site Error: 0.00 usft	
Survey Program: 0-Gyro													Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis			Distance		Between		Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
1,776.05	1,776.03	1,776.03	1,776.03	0.00	0.00	180.00	0.00	0.00	1.21	1.21	0.00	N/A		
1,800.00	1,799.99	1,799.99	1,799.99	0.00	0.00	180.00	0.00	0.00	0.50	0.50	0.00	N/A	CC, ES	
1,900.00	1,899.04	1,899.80	1,899.77	0.00	0.00	179.28	0.21	-1.03	12.34	12.34	0.00	N/A		
2,000.00	1,994.34	2,002.09	2,000.79	0.00	0.00	175.06	3.20	-15.99	27.94					
2,100.00	2,083.01	2,107.16	2,100.02	0.00	0.00	170.16	9.90	-49.41	43.45	43.45	0.00	N/A		
2,200.00	2,162.36	2,214.97	2,193.62	0.00	0.00	164.94	20.35	-101.55	58.71					
2,300.00	2,229.97	2,325.37	2,277.42	0.00	0.00	159.47	34.42	-171.76	73.52	73.52	0.00	N/A		
2,400.00	2,283.78	2,438.10	2,347.23	0.00	0.00	153.79	51.76	-258.33	87.68	87.68	0.00	N/A		
2,500.00	2,322.17	2,552.79	2,399.14	0.00	0.00	147.91	71.81	-358.39	101.01	101.01	0.00	N/A		
2,600.00	2,343.96	2,668.91	2,429.96	0.00	0.00	141.88	93.77	-467.97	113.34					
2,700.00	2,348.89	2,783.18	2,437.91	0.00	0.00	135.95	116.13	-579.57	124.41	124.41	0.00	N/A		
2,800.00	2,348.38	2,882.11	2,437.31	0.00	0.00	131.49	135.57	-676.57	134.92	134.92	0.00	N/A		
2,900.00	2,347.87	2,981.05	2,436.71	0.00	0.00	127.69	155.00	-773.58	146.13	146.13	0.00	N/A		
3,000.00	2,347.36	3,079.98	2,436.12	0.00	0.00	124.45	174.44	-870.58	157.89					
3,100.00	2,346.85	3,178.92	2,435.52	0.00	0.00	121.65	193.88	-967.59	170.08					
3,200.00	2,346.34	3,277.85	2,434.93	0.00	0.00	119.23	213.31	-1,064.59	182.62	182.62	0.00	N/A		
3,300.00	2,345.83	3,376.79	2,434.33	0.00	0.00	117.13	232.75	-1,161.60	195.44	195.44	0.00	N/A		
3,400.00	2,345.32	3,475.72	2,433.73	0.00	0.00	115.28	252.19	-1,258.60	208.49					
3,500.00	2,344.81	3,574.66	2,433.14	0.00	0.00	113.66	271.62	-1,355.60	221.73	221.73	0.00	N/A		
3,600.00	2,344.31	3,673.59	2,432.54	0.00	0.00	112.21	291.06	-1,452.61	235.12	235.12	0.00	N/A		
3,700.00	2,343.80	3,772.53	2,431.94	0.00	0.00	110.92	310.50	-1,549.61	248.64	248.64	0.00	N/A		
3,800.00	2,343.29	3,871.46	2,431.35	0.00	0.00	109.77	329.93	-1,646.62	262.28	262.28	0.00	N/A		
3,900.00	2,342.78	3,970.39	2,430.75	0.00	0.00	108.73	349.37	-1,743.62	276.01	276.01	0.00	N/A		
4,000.00	2,342.27	4,069.33	2,430.15	0.00	0.00	107.79	368.81	-1,840.63	289.82	289.82	0.00	N/A		
4,100.00	2,341.76	4,168.26	2,429.56	0.00	0.00	106.93	388.24	-1,937.63	303.70	303.70	0.00	N/A		
4,200.00	2,341.25	4,267.20	2,428.96	0.00	0.00	106.15	407.68	-2,034.64	317.64	317.64	0.00	N/A		
4,300.00	2,340.74	4,366.13	2,428.37	0.00	0.00	105.43	427.12	-2,131.64	331.63					
4,400.00	2,340.23	4,465.07	2,427.77	0.00	0.00	104.78	446.56	-2,228.65	345.67	345.67	0.00	N/A		
4,500.00	2,339.72	4,564.00	2,427.17	0.00	0.00	104.17	465.99	-2,325.65	359.75					
4,600.00	2,339.21	4,662.94	2,426.58	0.00	0.00	103.61	485.43	-2,422.66	373.87	373.87	0.00	N/A		
4,700.00	2,338.70	4,761.87	2,425.98	0.00	0.00	103.09	504.87	-2,519.66	388.02					
4,800.00	2,338.19	4,860.80	2,425.38	0.00	0.00	102.61	524.30	-2,616.66	402.20	402.20	0.00	N/A		
4,900.00	2,337.68	4,959.74	2,424.79	0.00	0.00	102.16	543.74	-2,713.67	416.41	416.41	0.00	N/A		
5,000.00	2,337.18	5,058.67	2,424.19	0.00	0.00	101.74	563.18	-2,810.67	430.64	430.64	0.00	N/A		
5,100.00	2,336.67	5,157.61	2,423.59	0.00	0.00	101.34	582.61	-2,907.68	444.89	444.89	0.00	N/A		
5,200.00	2,336.16	5,256.54	2,423.00	0.00	0.00	100.97	602.05	-3,004.68	459.16	459.16	0.00	N/A		
5,300.00	2,335.65	5,355.48	2,422.40	0.00	0.00	100.63	621.49	-3,101.69	473.45	473.45	0.00	N/A		
5,400.00	2,335.14	5,454.41	2,421.80	0.00	0.00	100.30	640.92	-3,198.69	487.75	487.75	0.00	N/A		
5,500.00	2,334.63	5,553.35	2,421.21	0.00	0.00	99.99	660.36	-3,295.70	502.07	502.07	0.00	N/A		
5,600.00	2,334.12	5,652.28	2,420.61	0.00	0.00	99.70	679.80	-3,392.70	516.40	516.40	0.00	N/A		
5,700.00	2,333.61	5,751.22	2,420.02	0.00	0.00	99.43	699.23	-3,489.71	530.75	530.75	0.00	N/A		
5,800.00	2,333.10	5,850.15	2,419.42	0.00	0.00	99.16	718.67	-3,586.71	545.10	545.10	0.00	N/A		
5,900.00	2,332.59	5,949.08	2,418.82	0.00	0.00	98.92	738.11	-3,683.71	559.47	559.47	0.00	N/A		
6,000.00	2,332.08	6,048.02	2,418.23	0.00	0.00	98.68	757.55	-3,780.72	573.85					
6,100.00	2,331.57	6,146.95	2,417.63	0.00	0.00	98.46	776.98	-3,877.72	588.23	588.23	0.00	N/A		
6,200.00	2,331.06	6,245.89	2,417.03	0.00	0.00	98.25	796.42	-3,974.73	602.63	602.63	0.00	N/A		
6,300.00	2,330.55	6,344.82	2,416.44	0.00	0.00	98.04	815.86	-4,071.73	617.03	617.03	0.00	N/A		
6,400.00	2,330.05	6,443.76	2,415.84	0.00	0.00	97.85	835.29	-4,168.74	631.44	631.44	0.00	N/A		
6,410.72	2,329.99	6,454.36	2,415.78	0.00	0.00	97.83	837.38	-4,179.14	632.98	632.98	0.00	N/A		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report

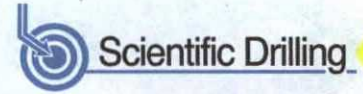


Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 2	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliot J1 - OH - OH													Offset Site Error:	0.00 usft
Survey Program: 182-INCLINOMETER													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.00	2,337.18	2,325.51	2,337.18	0.00	67.86	-86.76	-178.61	-587.24	2,329.01	2,261.26	67.75	34.376		
5,100.00	2,336.67	2,325.00	2,336.67	0.00	67.84	-86.62	-178.61	-587.24	2,428.63	2,360.90	67.73	35.859		
5,200.00	2,336.16	2,324.49	2,336.16	0.00	67.83	-86.48	-178.61	-587.24	2,528.27	2,460.57	67.70	37.345		
5,300.00	2,335.65	2,323.98	2,335.65	0.00	67.81	-86.34	-178.61	-587.24	2,627.94	2,560.26	67.68	38.832		
5,400.00	2,335.14	2,323.47	2,335.14	0.00	67.80	-86.20	-178.61	-587.24	2,727.63	2,659.99	67.65	40.320		
5,500.00	2,334.63	2,322.96	2,334.63	0.00	67.78	-86.06	-178.61	-587.24	2,827.35	2,759.73	67.62	41.811		
5,600.00	2,334.12	2,322.45	2,334.12	0.00	67.77	-85.92	-178.61	-587.24	2,927.09	2,859.49	67.60	43.303		
5,700.00	2,333.61	2,321.94	2,333.61	0.00	67.75	-85.79	-178.61	-587.24	3,026.84	2,959.27	67.57	44.797		
5,800.00	2,333.10	2,321.43	2,333.10	0.00	67.74	-85.65	-178.61	-587.24	3,126.61	3,059.07	67.54	46.292		
5,900.00	2,332.59	2,320.92	2,332.59	0.00	67.72	-85.51	-178.61	-587.24	3,226.39	3,158.88	67.51	47.789		
6,000.00	2,332.08	2,320.41	2,332.08	0.00	67.70	-85.37	-178.61	-587.24	3,326.18	3,258.70	67.48	49.288		
6,100.00	2,331.57	2,319.91	2,331.57	0.00	67.69	-85.23	-178.61	-587.24	3,425.99	3,358.54	67.46	50.789		
6,200.00	2,331.06	2,319.40	2,331.06	0.00	67.67	-85.09	-178.61	-587.24	3,525.81	3,458.38	67.43	52.291		
6,300.00	2,330.55	2,318.89	2,330.55	0.00	67.66	-84.95	-178.61	-587.24	3,625.64	3,558.24	67.40	53.795		
6,400.00	2,330.05	2,318.38	2,330.05	0.00	67.64	-84.81	-178.61	-587.24	3,725.48	3,658.11	67.37	55.301		
6,410.72	2,329.99	2,318.32	2,329.99	0.00	67.64	-84.80	-178.61	-587.24	3,736.18	3,668.82	67.36	55.463		



Anticollision Report



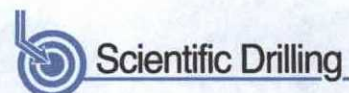
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 2	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott J1 - OH - OH												Offset Site Error:	0.00 usft
Survey Program: 182-INCLINOMETER												Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Distance		Warning							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.00	0.00	0.00	11.69	0.00	0.00	-106.92	-178.61	-587.24	613.91				
100.00	100.00	88.31	100.00	0.00	1.34	-106.92	-178.61	-587.24	613.80	612.46	1.34	457.633	
200.00	200.00	188.31	200.00	0.00	2.96	-106.92	-178.61	-587.24	613.80	610.85	2.96	207.687	
300.00	300.00	288.31	300.00	0.00	5.99	-106.92	-178.61	-587.24	613.80	607.81	5.99	102.432	
400.00	400.00	388.31	400.00	0.00	9.03	-106.92	-178.61	-587.24	613.80	604.77	9.03	67.980	
500.00	500.00	488.31	500.00	0.00	12.07	-106.92	-178.61	-587.24	613.80	601.74	12.07	50.870	
600.00	600.00	588.31	600.00	0.00	15.10	-106.92	-178.61	-587.24	613.80	598.70	15.10	40.641	
700.00	700.00	688.31	700.00	0.00	18.14	-106.92	-178.61	-587.24	613.80	595.66	18.14	33.837	
800.00	800.00	788.31	800.00	0.00	21.18	-106.92	-178.61	-587.24	613.80	592.62	21.18	28.985	
900.00	900.00	888.31	900.00	0.00	24.21	-106.92	-178.61	-587.24	613.80	589.59	24.21	25.350	
1,000.00	1,000.00	988.31	1,000.00	0.00	27.25	-106.92	-178.61	-587.24	613.80	586.55	27.25	22.525	
1,100.00	1,100.00	1,088.31	1,100.00	0.00	30.29	-106.92	-178.61	-587.24	613.80	583.51	30.29	20.266	
1,200.00	1,200.00	1,188.31	1,200.00	0.00	33.32	-106.92	-178.61	-587.24	613.80	580.48	33.32	18.419	
1,300.00	1,300.00	1,288.32	1,300.00	0.00	36.36	-106.92	-178.61	-587.24	613.80	577.44	36.36	16.881	
1,400.00	1,400.00	1,388.32	1,400.00	0.00	39.40	-106.92	-178.61	-587.24	613.80	574.40	39.40	15.580	
1,500.00	1,500.00	1,488.32	1,500.00	0.00	42.43	-106.92	-178.61	-587.24	613.80	571.37	42.43	14.465	
1,600.00	1,600.00	1,588.32	1,600.00	0.00	45.47	-106.92	-178.61	-587.24	613.80	568.33	45.47	13.499	
1,700.00	1,700.00	1,688.32	1,700.00	0.00	48.51	-106.92	-178.61	-587.24	613.80	565.29	48.51	12.653	
1,800.00	1,799.99	1,788.33	1,799.99	0.00	51.55	-19.91	-178.61	-587.24	613.33	561.82	51.51	11.908	
1,900.00	1,899.04	1,887.37	1,899.04	0.00	54.55	-20.75	-178.61	-587.24	601.26	547.81	53.45	11.248	
2,000.00	1,994.34	1,982.67	1,994.34	0.00	57.45	-22.91	-178.61	-587.24	573.35	519.53	53.82	10.652	
2,100.00	2,083.01	2,071.35	2,083.01	0.00	60.14	-26.86	-178.61	-587.24	530.81	477.93	52.88	10.038	
2,200.00	2,162.36	2,150.69	2,162.36	0.00	62.55	-33.47	-178.61	-587.24	475.64	423.85	51.79	9.184	
2,300.00	2,229.97	2,218.30	2,229.97	0.00	64.60	-44.02	-178.61	-587.24	410.85	357.68	53.17	7.728	
2,400.00	2,283.78	2,272.11	2,283.78	0.00	66.24	-59.08	-178.61	-587.24	341.06	282.05	59.01	5.780	
2,500.00	2,322.17	2,310.50	2,322.17	0.00	67.40	-75.57	-178.61	-587.24	274.01	208.52	65.48	4.184	
2,600.00	2,343.96	2,332.31	2,343.96	0.00	68.07	-87.09	-178.61	-587.24	223.53	155.55	67.98	3.288	
2,680.38	2,350.17	2,338.52	2,350.17	0.00	68.25	-90.00	-178.61	-587.24	208.69	140.43	68.25	3.057 CC, ES, SF	
2,700.00	2,348.89	2,337.24	2,348.89	0.00	68.22	-89.97	-178.61	-587.24	209.61	141.40	68.22	3.073	
2,800.00	2,348.38	2,336.73	2,348.38	0.00	68.20	-89.83	-178.61	-587.24	240.56	172.36	68.20	3.527	
2,900.00	2,347.87	2,336.22	2,347.87	0.00	68.18	-89.69	-178.61	-587.24	302.99	234.81	68.18	4.444	
3,000.00	2,347.36	2,335.71	2,347.36	0.00	68.17	-89.55	-178.61	-587.24	381.76	313.59	68.17	5.600	
3,100.00	2,346.85	2,335.20	2,346.85	0.00	68.15	-89.41	-178.61	-587.24	468.69	400.54	68.15	6.877	
3,200.00	2,346.34	2,334.69	2,346.34	0.00	68.14	-89.27	-178.61	-587.24	560.00	491.87	68.13	8.219	
3,300.00	2,345.83	2,334.18	2,345.83	0.00	68.12	-89.13	-178.61	-587.24	653.86	585.75	68.11	9.599	
3,400.00	2,345.32	2,333.67	2,345.32	0.00	68.11	-88.99	-178.61	-587.24	749.31	681.21	68.10	11.004	
3,500.00	2,344.81	2,333.16	2,344.81	0.00	68.09	-88.85	-178.61	-587.24	845.81	777.73	68.08	12.424	
3,600.00	2,344.31	2,332.65	2,344.31	0.00	68.08	-88.71	-178.61	-587.24	943.04	874.98	68.06	13.856	
3,700.00	2,343.80	2,332.15	2,343.80	0.00	68.06	-88.57	-178.61	-587.24	1,040.80	972.76	68.04	15.297	
3,800.00	2,343.29	2,331.64	2,343.29	0.00	68.04	-88.43	-178.61	-587.24	1,138.94	1,070.92	68.02	16.744	
3,900.00	2,342.78	2,331.13	2,342.78	0.00	68.03	-88.30	-178.61	-587.24	1,237.38	1,169.38	68.00	18.197	
4,000.00	2,342.27	2,330.62	2,342.27	0.00	68.01	-88.16	-178.61	-587.24	1,336.06	1,268.08	67.98	19.654	
4,100.00	2,341.76	2,330.11	2,341.76	0.00	68.00	-88.02	-178.61	-587.24	1,434.91	1,366.95	67.96	21.115	
4,200.00	2,341.25	2,330.00	2,341.25	0.00	68.00	-87.98	-178.61	-587.24	1,533.92	1,465.96	67.95	22.573	
4,300.00	2,340.74	2,330.00	2,341.65	0.00	68.00	-87.98	-178.61	-587.24	1,633.04	1,565.09	67.95	24.032	
4,400.00	2,340.23	2,330.00	2,341.65	0.00	68.00	-87.98	-178.61	-587.24	1,732.27	1,664.32	67.95	25.492	
4,500.00	2,339.72	2,330.00	2,341.65	0.00	68.00	-87.98	-178.61	-587.24	1,831.58	1,763.63	67.95	26.953	
4,600.00	2,339.21	2,330.00	2,341.65	0.00	68.00	-87.98	-178.61	-587.24	1,930.96	1,863.01	67.95	28.416	
4,700.00	2,338.70	2,330.00	2,341.65	0.00	68.00	-87.98	-178.61	-587.24	2,030.40	1,962.45	67.95	29.879	
4,800.00	2,338.19	2,330.00	2,341.65	0.00	68.00	-87.98	-178.61	-587.24	2,129.90	2,061.94	67.95	31.343	
4,900.00	2,337.68	2,330.00	2,341.65	0.00	68.00	-87.98	-178.61	-587.24	2,229.44	2,161.48	67.95	32.808	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report

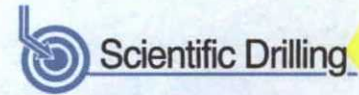


Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 2	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliot B7 - OH - OH													Offset Site Error: 0.00 usft
Survey Program: 207-INCLINOMETER													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (")	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)					
5,100.00	2,336.67	2,292.47	2,336.67	0.00	66.48	91.28	472.79	-4,119.95	1,171.09	1,104.63	66.46	17.621	
5,200.00	2,336.16	2,291.96	2,336.16	0.00	66.46	91.17	472.79	-4,119.95	1,073.81	1,007.36	66.45	16.160	
5,300.00	2,335.65	2,291.45	2,335.65	0.00	66.44	91.06	472.79	-4,119.95	977.07	910.84	66.43	14.707	
5,400.00	2,335.14	2,290.94	2,335.14	0.00	66.43	90.95	472.79	-4,119.95	881.06	814.64	66.42	13.265	
5,500.00	2,334.63	2,290.43	2,334.63	0.00	66.41	90.83	472.79	-4,119.95	786.05	719.65	66.41	11.837	
5,600.00	2,334.12	2,289.92	2,334.12	0.00	66.40	90.72	472.79	-4,119.95	692.45	626.05	66.39	10.429	
5,700.00	2,333.61	2,289.41	2,333.61	0.00	66.38	90.61	472.79	-4,119.95	600.91	534.53	66.38	9.053	
5,800.00	2,333.10	2,288.91	2,333.10	0.00	66.37	90.50	472.79	-4,119.95	512.53	446.17	66.37	7.723	
5,900.00	2,332.59	2,288.40	2,332.59	0.00	66.35	90.38	472.79	-4,119.95	429.29	362.94	66.35	6.470	
6,000.00	2,332.08	2,287.89	2,332.08	0.00	66.34	90.27	472.79	-4,119.95	354.82	288.48	66.34	5.349	
6,100.00	2,331.57	2,287.38	2,331.57	0.00	66.32	90.16	472.79	-4,119.95	295.80	229.48	66.32	4.460	
6,200.00	2,331.06	2,286.87	2,331.06	0.00	66.31	90.05	472.79	-4,119.95	262.87	196.56	66.31	3.964	
6,242.00	2,330.85	2,286.65	2,330.85	0.00	66.30	90.00	472.79	-4,119.95	259.49	193.19	66.30	3.914 CC, ES, SF	
6,300.00	2,330.55	2,286.36	2,330.55	0.00	66.29	89.93	472.79	-4,119.95	265.89	199.60	66.29	4.011	
6,400.00	2,330.05	2,285.85	2,330.05	0.00	66.27	89.82	472.79	-4,119.95	303.81	237.53	66.27	4.584	
6,410.72	2,329.99	2,285.80	2,329.99	0.00	66.27	89.81	472.79	-4,119.95	309.52	243.25	66.27	4.670	



Anticollision Report



Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 2	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliot B7 - OH - OH													Offset Site Error:	0.00 usft
Survey Program: 207-INCLINOMETER													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.00	0.00	0.00	44.23	0.00	0.00	-83.45	472.79	-4,119.95	4,147.23					
100.00	100.00	55.77	100.00	0.00	0.85	-83.45	472.79	-4,119.95	4,146.99	4,146.14	0.85	4,894.578		
200.00	200.00	155.77	200.00	0.00	2.37	-83.45	472.79	-4,119.95	4,146.99	4,144.62	2.37	1,752.929		
300.00	300.00	255.77	300.00	0.00	4.62	-83.45	472.79	-4,119.95	4,146.99	4,142.36	4.62	896.701		
400.00	400.00	355.77	400.00	0.00	7.66	-83.45	472.79	-4,119.95	4,146.99	4,139.33	7.66	541.276		
500.00	500.00	455.77	500.00	0.00	10.70	-83.45	472.79	-4,119.95	4,146.99	4,136.29	10.70	387.631		
600.00	600.00	555.77	600.00	0.00	13.73	-83.45	472.79	-4,119.95	4,146.99	4,133.25	13.74	301.927		
700.00	700.00	655.77	700.00	0.00	16.77	-83.45	472.79	-4,119.95	4,146.99	4,130.22	16.77	247.259		
800.00	800.00	755.78	800.00	0.00	19.81	-83.45	472.79	-4,119.95	4,146.99	4,127.18	19.81	209.348		
900.00	900.00	855.78	900.00	0.00	22.85	-83.45	472.79	-4,119.95	4,146.99	4,124.14	22.85	181.520		
1,000.00	1,000.00	955.78	1,000.00	0.00	25.88	-83.45	472.79	-4,119.95	4,146.99	4,121.11	25.88	160.222		
1,100.00	1,100.00	1,055.78	1,100.00	0.00	28.92	-83.45	472.79	-4,119.95	4,146.99	4,118.07	28.92	143.397		
1,200.00	1,200.00	1,155.78	1,200.00	0.00	31.96	-83.45	472.79	-4,119.95	4,146.99	4,115.03	31.96	129.770		
1,300.00	1,300.00	1,255.78	1,300.00	0.00	34.99	-83.45	472.79	-4,119.95	4,146.99	4,112.00	34.99	118.508		
1,400.00	1,400.00	1,355.78	1,400.00	0.00	38.03	-83.45	472.79	-4,119.95	4,146.99	4,108.96	38.03	109.045		
1,500.00	1,500.00	1,455.79	1,500.00	0.00	41.07	-83.45	472.79	-4,119.95	4,146.99	4,105.92	41.07	100.981		
1,600.00	1,600.00	1,555.79	1,600.00	0.00	44.10	-83.45	472.79	-4,119.95	4,146.99	4,102.89	44.10	94.028		
1,700.00	1,700.00	1,655.79	1,700.00	0.00	47.14	-83.45	472.79	-4,119.95	4,146.99	4,099.85	47.14	87.970		
1,800.00	1,799.99	1,755.80	1,799.99	0.00	50.18	3.59	472.79	-4,119.95	4,146.49	4,096.35	50.13	82.707		
1,900.00	1,899.04	1,854.84	1,899.04	0.00	53.19	3.68	472.79	-4,119.95	4,133.66	4,081.70	51.96	79.551		
2,000.00	1,994.34	1,950.15	1,994.34	0.00	56.08	3.92	472.79	-4,119.95	4,103.86	4,051.95	51.91	79.063		
2,100.00	2,083.01	2,038.82	2,083.01	0.00	58.77	4.34	472.79	-4,119.95	4,058.00	4,008.24	49.75	81.561		
2,200.00	2,162.36	2,118.16	2,162.36	0.00	61.18	5.03	472.79	-4,119.95	3,997.47	3,952.02	45.45	87.958		
2,300.00	2,229.97	2,185.77	2,229.97	0.00	63.24	6.20	472.79	-4,119.95	3,924.12	3,884.97	39.15	100.233		
2,400.00	2,283.78	2,239.59	2,283.78	0.00	64.87	8.32	472.79	-4,119.95	3,840.17	3,808.70	31.47	122.033		
2,500.00	2,322.17	2,277.97	2,322.17	0.00	66.04	12.92	472.79	-4,119.95	3,748.19	3,723.36	24.83	150.954		
2,600.00	2,343.96	2,299.77	2,343.96	0.00	66.70	28.30	472.79	-4,119.95	3,650.96	3,618.14	32.82	111.237		
2,700.00	2,348.89	2,304.69	2,348.89	0.00	66.85	93.98	472.79	-4,119.95	3,551.44	3,484.76	66.69	53.255		
2,800.00	2,348.38	2,304.18	2,348.38	0.00	66.83	93.86	472.79	-4,119.95	3,451.72	3,385.04	66.68	51.765		
2,900.00	2,347.87	2,303.67	2,347.87	0.00	66.82	93.75	472.79	-4,119.95	3,352.01	3,285.34	66.67	50.275		
3,000.00	2,347.36	2,303.17	2,347.36	0.00	66.80	93.64	472.79	-4,119.95	3,252.32	3,185.66	66.67	48.785		
3,100.00	2,346.85	2,302.66	2,346.85	0.00	66.79	93.53	472.79	-4,119.95	3,152.65	3,085.99	66.66	47.295		
3,200.00	2,346.34	2,302.15	2,346.34	0.00	66.77	93.42	472.79	-4,119.95	3,053.01	2,986.35	66.65	45.805		
3,300.00	2,345.83	2,301.64	2,345.83	0.00	66.75	93.30	472.79	-4,119.95	2,953.38	2,886.74	66.64	44.316		
3,400.00	2,345.32	2,301.13	2,345.32	0.00	66.74	93.19	472.79	-4,119.95	2,853.78	2,787.15	66.64	42.826		
3,500.00	2,344.81	2,300.62	2,344.81	0.00	66.72	93.08	472.79	-4,119.95	2,754.21	2,687.58	66.63	41.337		
3,600.00	2,344.31	2,300.11	2,344.31	0.00	66.71	92.97	472.79	-4,119.95	2,654.68	2,588.06	66.62	39.849		
3,700.00	2,343.80	2,299.60	2,343.80	0.00	66.69	92.86	472.79	-4,119.95	2,555.17	2,488.56	66.61	38.360		
3,800.00	2,343.29	2,299.09	2,343.29	0.00	66.68	92.74	472.79	-4,119.95	2,455.71	2,389.11	66.60	36.872		
3,900.00	2,342.78	2,298.58	2,342.78	0.00	66.66	92.63	472.79	-4,119.95	2,356.30	2,289.71	66.59	35.384		
4,000.00	2,342.27	2,298.07	2,342.27	0.00	66.65	92.52	472.79	-4,119.95	2,256.93	2,190.35	66.58	33.897		
4,100.00	2,341.76	2,297.56	2,341.76	0.00	66.63	92.41	472.79	-4,119.95	2,157.83	2,091.06	66.57	32.410		
4,200.00	2,341.25	2,297.05	2,341.25	0.00	66.61	92.29	472.79	-4,119.95	2,058.39	1,991.83	66.56	30.924		
4,300.00	2,340.74	2,296.54	2,340.74	0.00	66.60	92.18	472.79	-4,119.95	1,959.23	1,892.68	66.55	29.439		
4,400.00	2,340.23	2,296.04	2,340.23	0.00	66.58	92.07	472.79	-4,119.95	1,860.16	1,793.62	66.54	27.955		
4,500.00	2,339.72	2,295.53	2,339.72	0.00	66.57	91.96	472.79	-4,119.95	1,761.20	1,694.67	66.53	26.472		
4,600.00	2,339.21	2,295.02	2,339.21	0.00	66.55	91.85	472.79	-4,119.95	1,662.35	1,595.83	66.52	24.991		
4,700.00	2,338.70	2,294.51	2,338.70	0.00	66.54	91.73	472.79	-4,119.95	1,563.66	1,497.15	66.51	23.511		
4,800.00	2,338.19	2,294.00	2,338.19	0.00	66.52	91.62	472.79	-4,119.95	1,465.14	1,398.64	66.50	22.034		
4,900.00	2,337.68	2,293.49	2,337.68	0.00	66.51	91.51	472.79	-4,119.95	1,366.84	1,300.35	66.48	20.559		
5,000.00	2,337.18	2,292.98	2,337.18	0.00	66.49	91.40	472.79	-4,119.95	1,268.80	1,202.33	66.47	19.088		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report

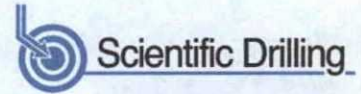


Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 2	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliot B5E - OH - OH												Offset Site Error:	0.00 usft
Survey Program: 60-INCLINOMETER												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
5,000.00	2,337.18	2,336.90	2,337.18	0.00	69.86	-86.15	-143.71	-600.34	2,311.36	2,241.65	69.70	33.160	
5,100.00	2,336.67	2,336.39	2,336.67	0.00	69.84	-85.99	-143.71	-600.34	2,411.08	2,341.41	69.67	34.605	
5,200.00	2,336.16	2,335.88	2,336.16	0.00	69.83	-85.82	-143.71	-600.34	2,510.83	2,441.19	69.64	36.052	
5,300.00	2,335.65	2,335.37	2,335.65	0.00	69.81	-85.65	-143.71	-600.34	2,610.60	2,540.98	69.61	37.501	
5,400.00	2,335.14	2,334.87	2,335.14	0.00	69.80	-85.49	-143.71	-600.34	2,710.38	2,640.80	69.58	38.952	
5,500.00	2,334.63	2,334.36	2,334.63	0.00	69.78	-85.32	-143.71	-600.34	2,810.18	2,740.63	69.55	40.405	
5,600.00	2,334.12	2,333.85	2,334.12	0.00	69.77	-85.15	-143.71	-600.34	2,909.99	2,840.47	69.52	41.859	
5,700.00	2,333.61	2,333.34	2,333.61	0.00	69.75	-84.99	-143.71	-600.34	3,009.81	2,940.33	69.49	43.315	
5,800.00	2,333.10	2,332.83	2,333.10	0.00	69.74	-84.82	-143.71	-600.34	3,109.65	3,040.20	69.45	44.774	
5,900.00	2,332.59	2,332.32	2,332.59	0.00	69.72	-84.66	-143.71	-600.34	3,209.50	3,140.08	69.42	46.234	
6,000.00	2,332.08	2,331.81	2,332.08	0.00	69.70	-84.49	-143.71	-600.34	3,309.35	3,239.97	69.38	47.696	
6,100.00	2,331.57	2,331.30	2,331.57	0.00	69.69	-84.33	-143.71	-600.34	3,409.22	3,339.87	69.35	49.160	
6,200.00	2,331.06	2,330.79	2,331.06	0.00	69.67	-84.16	-143.71	-600.34	3,509.09	3,439.77	69.31	50.626	
6,300.00	2,330.55	2,330.28	2,330.55	0.00	69.66	-83.99	-143.71	-600.34	3,608.97	3,539.69	69.28	52.094	
6,400.00	2,330.05	2,329.77	2,330.05	0.00	69.64	-83.83	-143.71	-600.34	3,708.85	3,639.61	69.24	53.564	
6,410.72	2,329.99	2,329.72	2,329.99	0.00	69.64	-83.81	-143.71	-600.34	3,719.56	3,650.32	69.24	53.722	



Anticollision Report



Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 2	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott B5E - OH - OH												Offset Site Error:	0.00 usft
Survey Program: 60-INCLINOMETER												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	0.00	0.30	0.00	0.00	-103.46	-143.71	-600.34	617.30				
100.00	100.00	99.70	100.00	0.00	1.92	-103.46	-143.71	-600.34	617.30	615.38	1.92	321.256	
200.00	200.00	199.70	200.00	0.00	4.96	-103.46	-143.71	-600.34	617.30	612.34	4.96	124.516	
300.00	300.00	299.70	300.00	0.00	7.99	-103.46	-143.71	-600.34	617.30	609.31	7.99	77.224	
400.00	400.00	399.70	400.00	0.00	11.03	-103.46	-143.71	-600.34	617.30	606.27	11.03	55.964	
500.00	500.00	499.70	500.00	0.00	14.07	-103.46	-143.71	-600.34	617.30	603.23	14.07	43.882	
600.00	600.00	599.70	600.00	0.00	17.10	-103.46	-143.71	-600.34	617.30	600.20	17.10	36.091	
700.00	700.00	699.70	700.00	0.00	20.14	-103.46	-143.71	-600.34	617.30	597.16	20.14	30.649	
800.00	800.00	799.70	800.00	0.00	23.18	-103.46	-143.71	-600.34	617.30	594.12	23.18	26.633	
900.00	900.00	899.71	900.00	0.00	26.21	-103.46	-143.71	-600.34	617.30	591.09	26.21	23.548	
1,000.00	1,000.00	999.71	1,000.00	0.00	29.25	-103.46	-143.71	-600.34	617.30	588.05	29.25	21.103	
1,100.00	1,100.00	1,099.71	1,100.00	0.00	32.29	-103.46	-143.71	-600.34	617.30	585.01	32.29	19.118	
1,200.00	1,200.00	1,199.71	1,200.00	0.00	35.32	-103.46	-143.71	-600.34	617.30	581.98	35.32	17.475	
1,300.00	1,300.00	1,299.73	1,300.00	0.00	38.36	-103.46	-143.71	-600.34	617.30	578.94	38.36	16.091	
1,400.00	1,400.00	1,399.73	1,400.00	0.00	41.40	-103.46	-143.71	-600.34	617.30	575.90	41.40	14.911	
1,500.00	1,500.00	1,499.73	1,500.00	0.00	44.44	-103.46	-143.71	-600.34	617.30	572.87	44.44	13.892	
1,600.00	1,600.00	1,599.73	1,600.00	0.00	47.47	-103.46	-143.71	-600.34	617.30	569.83	47.47	13.003	
1,700.00	1,700.00	1,699.73	1,700.00	0.00	50.51	-103.46	-143.71	-600.34	617.30	566.79	50.51	12.221	
1,800.00	1,799.99	1,799.72	1,799.99	0.00	53.55	-16.45	-143.71	-600.34	616.82	563.32	53.50	11.529	
1,900.00	1,899.04	1,898.76	1,899.04	0.00	56.55	-17.16	-143.71	-600.34	604.50	549.14	55.36	10.919	
2,000.00	1,994.34	1,994.07	1,994.34	0.00	59.45	-18.98	-143.71	-600.34	575.98	520.49	55.49	10.381	
2,100.00	2,083.01	2,082.74	2,083.01	0.00	62.14	-22.34	-143.71	-600.34	532.37	478.34	54.03	9.853	
2,200.00	2,162.36	2,162.09	2,162.36	0.00	64.55	-28.11	-143.71	-600.34	475.48	423.50	51.98	9.148	
2,300.00	2,229.97	2,229.69	2,229.97	0.00	66.60	-37.79	-143.71	-600.34	407.99	355.97	52.03	7.842	
2,400.00	2,283.78	2,283.51	2,283.78	0.00	68.24	-52.92	-143.71	-600.34	333.89	276.15	57.74	5.783	
2,500.00	2,322.17	2,321.90	2,322.17	0.00	69.40	-71.55	-143.71	-600.34	259.79	193.60	66.19	3.925	
2,600.00	2,343.96	2,343.69	2,343.96	0.00	70.07	-85.88	-143.71	-600.34	196.68	128.80	69.89	2.843	
2,695.27	2,350.34	2,350.07	2,350.34	0.00	70.26	-90.00	-143.71	-600.34	174.51	104.25	70.26	2.484 CC, ES, SF	
2,700.00	2,348.89	2,348.62	2,348.89	0.00	70.22	-89.99	-143.71	-600.34	174.57	104.36	70.22	2.486	
2,800.00	2,348.38	2,348.11	2,348.38	0.00	70.20	-89.82	-143.71	-600.34	203.55	133.35	70.20	2.900	
2,900.00	2,347.87	2,347.60	2,347.87	0.00	70.18	-89.66	-143.71	-600.34	269.06	198.87	70.18	3.834	
3,000.00	2,347.36	2,347.09	2,347.36	0.00	70.17	-89.49	-143.71	-600.34	351.21	281.04	70.17	5.005	
3,100.00	2,346.85	2,346.58	2,346.85	0.00	70.15	-89.32	-143.71	-600.34	440.80	370.65	70.15	6.284	
3,200.00	2,346.34	2,346.07	2,346.34	0.00	70.14	-89.16	-143.71	-600.34	534.10	463.97	70.13	7.616	
3,300.00	2,345.83	2,345.56	2,345.83	0.00	70.12	-88.99	-143.71	-600.34	629.46	559.34	70.11	8.978	
3,400.00	2,345.32	2,345.05	2,345.32	0.00	70.11	-88.82	-143.71	-600.34	726.06	655.97	70.09	10.359	
3,500.00	2,344.81	2,344.54	2,344.81	0.00	70.09	-88.65	-143.71	-600.34	823.48	753.41	70.07	11.752	
3,600.00	2,344.31	2,344.03	2,344.31	0.00	70.08	-88.49	-143.71	-600.34	921.45	851.40	70.05	13.154	
3,700.00	2,343.80	2,343.52	2,343.80	0.00	70.06	-88.32	-143.71	-600.34	1,019.82	949.79	70.03	14.562	
3,800.00	2,343.29	2,343.01	2,343.29	0.00	70.04	-88.15	-143.71	-600.34	1,118.47	1,048.46	70.01	15.976	
3,900.00	2,342.78	2,342.50	2,342.78	0.00	70.03	-87.99	-143.71	-600.34	1,217.35	1,147.36	69.99	17.394	
4,000.00	2,342.27	2,341.99	2,342.27	0.00	70.01	-87.82	-143.71	-600.34	1,316.39	1,246.43	69.96	18.815	
4,100.00	2,341.76	2,341.49	2,341.76	0.00	70.00	-87.65	-143.71	-600.34	1,415.57	1,345.63	69.94	20.240	
4,200.00	2,341.25	2,340.98	2,341.25	0.00	69.98	-87.49	-143.71	-600.34	1,514.86	1,444.94	69.92	21.667	
4,300.00	2,340.74	2,340.47	2,340.74	0.00	69.97	-87.32	-143.71	-600.34	1,614.23	1,544.34	69.89	23.096	
4,400.00	2,340.23	2,339.96	2,340.23	0.00	69.95	-87.15	-143.71	-600.34	1,713.68	1,643.81	69.87	24.528	
4,500.00	2,339.72	2,339.45	2,339.72	0.00	69.94	-86.99	-143.71	-600.34	1,813.18	1,743.34	69.84	25.962	
4,600.00	2,339.21	2,338.94	2,339.21	0.00	69.92	-86.82	-143.71	-600.34	1,912.74	1,842.93	69.81	27.398	
4,700.00	2,338.70	2,338.43	2,338.70	0.00	69.91	-86.65	-143.71	-600.34	2,012.35	1,942.56	69.79	28.835	
4,800.00	2,338.19	2,337.92	2,338.19	0.00	69.89	-86.49	-143.71	-600.34	2,111.99	2,042.23	69.76	30.275	
4,900.00	2,337.68	2,337.41	2,337.68	0.00	69.87	-86.32	-143.71	-600.34	2,211.66	2,141.93	69.73	31.717	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report

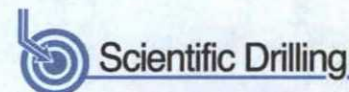


Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 2	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott B5 - OH - OH													Offset Site Error: 0.00 usft
Survey Program: 305-INCLINOMETER													Offset Well Error: 0.00 usft
Reference	Offset	Semi Major Axis		Distance		Minimum		Separation		Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (")	Offset Wellbore Centre +N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.00	2,336.67	2,282.06	2,336.67	0.00	64.67	-90.37	-230.35	-3,533.13	663.42	598.75	64.67	10.259	
5,200.00	2,336.16	2,281.55	2,336.16	0.00	64.65	-90.30	-230.35	-3,533.13	588.39	523.73	64.65	9.101	
5,300.00	2,335.65	2,281.04	2,335.65	0.00	64.64	-90.23	-230.35	-3,533.13	521.79	457.16	64.64	8.072	
5,400.00	2,335.14	2,280.53	2,335.14	0.00	64.62	-90.16	-230.35	-3,533.13	467.27	402.64	64.62	7.231	
5,500.00	2,334.63	2,280.02	2,334.63	0.00	64.61	-90.08	-230.35	-3,533.13	429.43	364.82	64.61	6.647	
5,600.00	2,334.12	2,279.51	2,334.12	0.00	64.59	-90.01	-230.35	-3,533.13	412.89	348.30	64.59	6.392	
5,619.66	2,334.02	2,279.41	2,334.02	0.00	64.59	-90.00	-230.35	-3,533.13	412.42	347.83	64.59	6.385 CC, ES, SF	
5,700.00	2,333.61	2,279.00	2,333.61	0.00	64.58	-89.94	-230.35	-3,533.13	420.18	355.60	64.58	6.507	
5,800.00	2,333.10	2,278.49	2,333.10	0.00	64.56	-89.87	-230.35	-3,533.13	450.13	385.57	64.56	6.972	
5,900.00	2,332.59	2,277.98	2,332.59	0.00	64.55	-89.80	-230.35	-3,533.13	498.68	434.14	64.55	7.726	
6,000.00	2,332.08	2,277.47	2,332.08	0.00	64.53	-89.73	-230.35	-3,533.13	561.03	496.50	64.53	8.694	
6,100.00	2,331.57	2,276.96	2,331.57	0.00	64.52	-89.66	-230.35	-3,533.13	633.10	568.59	64.51	9.813	
6,200.00	2,331.06	2,276.45	2,331.06	0.00	64.50	-89.59	-230.35	-3,533.13	711.96	647.46	64.50	11.038	
6,300.00	2,330.55	2,275.95	2,330.55	0.00	64.48	-89.52	-230.35	-3,533.13	795.58	731.10	64.48	12.338	
6,400.00	2,330.05	2,275.44	2,330.05	0.00	64.47	-89.45	-230.35	-3,533.13	882.62	818.15	64.47	13.691	
6,410.72	2,329.99	2,275.38	2,329.99	0.00	64.47	-89.44	-230.35	-3,533.13	892.11	827.65	64.46	13.839	



Anticollision Report



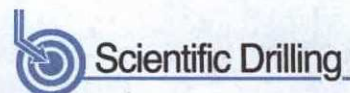
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 2	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott B5 - OH - OH													Offset Site Error:	0.00 usft
Survey Program: 305-INCLINOMETER													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.00	0.00	0.00	54.71	0.00	0.00	-93.73	-230.35	-3,533.13	3,541.05					
100.00	100.00	45.29	100.00	0.00	0.89	-93.73	-230.35	-3,533.13	3,540.63	3,539.94	0.69	5,145.631		
200.00	200.00	145.29	200.00	0.00	2.21	-93.73	-230.35	-3,533.13	3,540.63	3,538.42	2.21	1,604.648		
300.00	300.00	245.29	300.00	0.00	3.72	-93.73	-230.35	-3,533.13	3,540.63	3,536.91	3.72	950.534		
400.00	400.00	345.29	400.00	0.00	5.85	-93.73	-230.35	-3,533.13	3,540.63	3,534.78	5.86	604.711		
500.00	500.00	445.29	500.00	0.00	8.89	-93.73	-230.35	-3,533.13	3,540.63	3,531.74	8.89	398.185		
600.00	600.00	545.29	600.00	0.00	11.93	-93.73	-230.35	-3,533.13	3,540.63	3,528.70	11.93	296.814		
700.00	700.00	645.29	700.00	0.00	14.97	-93.73	-230.35	-3,533.13	3,540.63	3,525.67	14.97	236.584		
800.00	800.00	745.30	800.00	0.00	18.00	-93.73	-230.35	-3,533.13	3,540.63	3,522.63	18.00	196.673		
900.00	900.00	845.30	900.00	0.00	21.04	-93.73	-230.35	-3,533.13	3,540.63	3,519.59	21.04	168.285		
1,000.00	1,000.00	945.30	1,000.00	0.00	24.08	-93.73	-230.35	-3,533.13	3,540.63	3,516.55	24.08	147.058		
1,100.00	1,100.00	1,045.30	1,100.00	0.00	27.11	-93.73	-230.35	-3,533.13	3,540.63	3,513.52	27.11	130.587		
1,200.00	1,200.00	1,145.31	1,200.00	0.00	30.15	-93.73	-230.35	-3,533.13	3,540.63	3,510.48	30.15	117.432		
1,300.00	1,300.00	1,245.31	1,300.00	0.00	33.19	-93.73	-230.35	-3,533.13	3,540.63	3,507.44	33.19	106.687		
1,400.00	1,400.00	1,345.31	1,400.00	0.00	36.22	-93.73	-230.35	-3,533.13	3,540.63	3,504.41	36.22	97.742		
1,500.00	1,500.00	1,445.31	1,500.00	0.00	39.26	-93.73	-230.35	-3,533.13	3,540.63	3,501.37	39.26	90.182		
1,600.00	1,600.00	1,545.31	1,600.00	0.00	42.30	-93.73	-230.35	-3,533.13	3,540.63	3,498.33	42.30	83.708		
1,700.00	1,700.00	1,645.31	1,700.00	0.00	45.33	-93.73	-230.35	-3,533.13	3,540.63	3,495.30	45.33	78.101		
1,800.00	1,799.99	1,745.35	1,799.99	0.00	48.37	-6.70	-230.35	-3,533.13	3,540.13	3,491.80	48.33	73.248		
1,900.00	1,899.04	1,844.39	1,899.04	0.00	51.38	-6.87	-230.35	-3,533.13	3,527.37	3,477.16	50.21	70.250		
2,000.00	1,994.34	1,939.70	1,994.34	0.00	54.27	-7.32	-230.35	-3,533.13	3,497.71	3,447.43	50.29	69.556		
2,100.00	2,083.01	2,028.37	2,083.01	0.00	56.97	-8.11	-230.35	-3,533.13	3,452.09	3,403.72	48.37	71.375		
2,200.00	2,162.36	2,107.72	2,162.36	0.00	59.38	-9.42	-230.35	-3,533.13	3,391.87	3,347.42	44.46	76.296		
2,300.00	2,229.97	2,175.36	2,229.97	0.00	61.43	-11.60	-230.35	-3,533.13	3,318.92	3,280.00	38.92	85.269		
2,400.00	2,283.78	2,229.17	2,283.78	0.00	63.06	-15.50	-230.35	-3,533.13	3,235.45	3,202.38	33.07	97.829		
2,500.00	2,322.17	2,267.56	2,322.17	0.00	64.23	-23.63	-230.35	-3,533.13	3,144.03	3,112.45	31.57	99.580		
2,600.00	2,343.96	2,289.35	2,343.96	0.00	64.89	-45.91	-230.35	-3,533.13	3,047.43	3,000.33	47.10	64.699		
2,700.00	2,348.89	2,294.28	2,348.89	0.00	65.04	-92.06	-230.35	-3,533.13	2,948.60	2,883.60	65.00	45.364		
2,800.00	2,348.38	2,293.77	2,348.38	0.00	65.03	-91.99	-230.35	-3,533.13	2,849.62	2,784.63	64.99	43.849		
2,900.00	2,347.87	2,293.26	2,347.87	0.00	65.01	-91.92	-230.35	-3,533.13	2,750.71	2,685.74	64.97	42.336		
3,000.00	2,347.36	2,292.75	2,347.36	0.00	64.99	-91.85	-230.35	-3,533.13	2,651.89	2,586.93	64.96	40.823		
3,100.00	2,346.85	2,292.24	2,346.85	0.00	64.98	-91.78	-230.35	-3,533.13	2,553.15	2,488.20	64.95	39.311		
3,200.00	2,346.34	2,291.73	2,346.34	0.00	64.96	-91.71	-230.35	-3,533.13	2,454.52	2,389.59	64.94	37.800		
3,300.00	2,345.83	2,291.22	2,345.83	0.00	64.95	-91.64	-230.35	-3,533.13	2,356.00	2,291.08	64.92	36.290		
3,400.00	2,345.32	2,290.71	2,345.32	0.00	64.93	-91.57	-230.35	-3,533.13	2,257.62	2,192.71	64.91	34.781		
3,500.00	2,344.81	2,290.20	2,344.81	0.00	64.92	-91.50	-230.35	-3,533.13	2,159.38	2,094.48	64.90	33.275		
3,600.00	2,344.31	2,289.70	2,344.31	0.00	64.90	-91.43	-230.35	-3,533.13	2,061.31	1,996.43	64.88	31.770		
3,700.00	2,343.80	2,289.19	2,343.80	0.00	64.89	-91.36	-230.35	-3,533.13	1,963.43	1,898.57	64.87	30.268		
3,800.00	2,343.29	2,288.68	2,343.29	0.00	64.87	-91.29	-230.35	-3,533.13	1,865.78	1,800.93	64.85	28.769		
3,900.00	2,342.78	2,288.17	2,342.78	0.00	64.86	-91.22	-230.35	-3,533.13	1,768.40	1,703.56	64.84	27.273		
4,000.00	2,342.27	2,287.66	2,342.27	0.00	64.84	-91.15	-230.35	-3,533.13	1,671.32	1,606.49	64.83	25.781		
4,100.00	2,341.76	2,287.15	2,341.76	0.00	64.82	-91.08	-230.35	-3,533.13	1,574.61	1,509.79	64.81	24.294		
4,200.00	2,341.25	2,286.64	2,341.25	0.00	64.81	-91.00	-230.35	-3,533.13	1,478.33	1,413.53	64.80	22.814		
4,300.00	2,340.74	2,286.13	2,340.74	0.00	64.79	-90.93	-230.35	-3,533.13	1,382.58	1,317.80	64.79	21.341		
4,400.00	2,340.23	2,285.62	2,340.23	0.00	64.78	-90.86	-230.35	-3,533.13	1,287.48	1,222.71	64.77	19.877		
4,500.00	2,339.72	2,285.11	2,339.72	0.00	64.76	-90.79	-230.35	-3,533.13	1,193.18	1,128.43	64.76	18.426		
4,600.00	2,339.21	2,284.60	2,339.21	0.00	64.75	-90.72	-230.35	-3,533.13	1,099.89	1,035.15	64.74	16.989		
4,700.00	2,338.70	2,284.09	2,338.70	0.00	64.73	-90.65	-230.35	-3,533.13	1,007.89	943.16	64.73	15.571		
4,800.00	2,338.19	2,283.58	2,338.19	0.00	64.72	-90.58	-230.35	-3,533.13	917.56	852.84	64.71	14.179		
4,900.00	2,337.68	2,283.07	2,337.68	0.00	64.70	-90.51	-230.35	-3,533.13	829.45	764.75	64.70	12.820		
5,000.00	2,337.18	2,282.57	2,337.18	0.00	64.69	-90.44	-230.35	-3,533.13	744.35	679.66	64.68	11.508		

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report

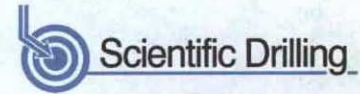


Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 2	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliot B4 - OH - OH													Offset Site Error: 0.00 usft
Survey Program: 100-UNKNOWN													Offset Well Error: 0.00 usft
Reference	Offset	Semi Major Axis		Distance									Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.00	2,337.18	2,328.31	2,337.18	0.00	90.87	-86.27	-125.04	-786.38	2,124.46	2,033.78	90.68	23.428	
5,100.00	2,336.67	2,327.80	2,336.67	0.00	90.85	-86.09	-125.04	-786.38	2,224.17	2,133.53	90.64	24.538	
5,200.00	2,336.16	2,327.29	2,336.16	0.00	90.83	-85.92	-125.04	-786.38	2,323.90	2,233.30	90.60	25.650	
5,300.00	2,335.65	2,326.78	2,335.65	0.00	90.81	-85.74	-125.04	-786.38	2,423.66	2,333.10	90.56	26.763	
5,400.00	2,335.14	2,326.27	2,335.14	0.00	90.79	-85.57	-125.04	-786.38	2,523.43	2,432.91	90.52	27.877	
5,500.00	2,334.63	2,325.76	2,334.63	0.00	90.77	-85.39	-125.04	-786.38	2,623.22	2,532.74	90.48	28.993	
5,600.00	2,334.12	2,325.25	2,334.12	0.00	90.75	-85.22	-125.04	-786.38	2,723.03	2,632.59	90.43	30.111	
5,700.00	2,333.61	2,324.74	2,333.61	0.00	90.73	-85.04	-125.04	-786.38	2,822.85	2,732.46	90.39	31.229	
5,800.00	2,333.10	2,324.23	2,333.10	0.00	90.71	-84.87	-125.04	-786.38	2,922.68	2,832.34	90.35	32.350	
5,900.00	2,332.59	2,323.72	2,332.59	0.00	90.69	-84.69	-125.04	-786.38	3,022.53	2,932.23	90.30	33.472	
6,000.00	2,332.08	2,323.21	2,332.08	0.00	90.67	-84.52	-125.04	-786.38	3,122.38	3,032.13	90.25	34.595	
6,100.00	2,331.57	2,322.70	2,331.57	0.00	90.65	-84.34	-125.04	-786.38	3,222.24	3,132.03	90.21	35.721	
6,200.00	2,331.06	2,322.19	2,331.06	0.00	90.63	-84.17	-125.04	-786.38	3,322.11	3,231.95	90.16	36.847	
6,300.00	2,330.55	2,321.68	2,330.55	0.00	90.61	-83.99	-125.04	-786.38	3,421.99	3,331.88	90.11	37.976	
6,400.00	2,330.05	2,321.18	2,330.05	0.00	90.59	-83.82	-125.04	-786.38	3,521.88	3,431.82	90.06	39.106	
6,410.72	2,329.99	2,321.12	2,329.99	0.00	90.58	-83.80	-125.04	-786.38	3,532.59	3,442.53	90.06	39.227	



Anticollision Report



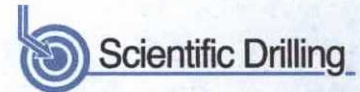
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 2	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design													AL Elliott - AL Elliot B4 - OH - OH		Offset Site Error: 0.00 usft	
Survey Program: 100-UNKNOWN													Offset Well Error: 0.00 usft			
Reference		Offset		Semi Major Axis			Distance						Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
0.00	0.00	0.00	8.87	0.00	0.00	-99.03	-125.04	-786.38	796.31							
100.00	100.00	91.13	100.00	0.00	1.59	-99.03	-125.04	-786.38	796.26	794.67	1.59	502.098				
200.00	200.00	191.13	200.00	0.00	5.39	-99.03	-125.04	-786.38	796.26	790.87	5.39	147.855				
300.00	300.00	291.13	300.00	0.00	9.39	-99.03	-125.04	-786.38	796.26	786.87	9.39	84.840				
400.00	400.00	391.13	400.00	0.00	13.39	-99.03	-125.04	-786.38	796.26	782.87	13.39	59.487				
500.00	500.00	491.13	500.00	0.00	17.39	-99.03	-125.04	-786.38	796.26	778.87	17.39	45.800				
600.00	600.00	591.13	600.00	0.00	21.39	-99.03	-125.04	-786.38	796.26	774.87	21.39	37.234				
700.00	700.00	691.13	700.00	0.00	25.39	-99.03	-125.04	-786.38	796.26	770.87	25.39	31.367				
800.00	800.00	791.13	800.00	0.00	29.39	-99.03	-125.04	-786.38	796.26	766.87	29.39	27.097				
900.00	900.00	891.13	900.00	0.00	33.39	-99.03	-125.04	-786.38	796.26	762.87	33.39	23.851				
1,000.00	1,000.00	991.13	1,000.00	0.00	37.39	-99.03	-125.04	-786.38	796.26	758.87	37.39	21.299				
1,100.00	1,100.00	1,091.13	1,100.00	0.00	41.39	-99.03	-125.04	-786.38	796.26	754.87	41.39	19.240				
1,200.00	1,200.00	1,191.13	1,200.00	0.00	45.39	-99.03	-125.04	-786.38	796.26	750.87	45.39	17.544				
1,300.00	1,300.00	1,291.13	1,300.00	0.00	49.39	-99.03	-125.04	-786.38	796.26	746.87	49.39	16.123				
1,400.00	1,400.00	1,391.13	1,400.00	0.00	53.39	-99.03	-125.04	-786.38	796.26	742.87	53.39	14.915				
1,500.00	1,500.00	1,491.13	1,500.00	0.00	57.39	-99.03	-125.04	-786.38	796.26	738.87	57.39	13.876				
1,600.00	1,600.00	1,591.13	1,600.00	0.00	61.39	-99.03	-125.04	-786.38	796.26	734.87	61.39	12.971				
1,700.00	1,700.00	1,691.13	1,700.00	0.00	65.39	-99.03	-125.04	-786.38	796.26	730.87	65.39	12.178				
1,800.00	1,799.99	1,791.12	1,799.99	0.00	69.38	-12.01	-125.04	-786.38	795.77	726.44	69.33	11.478				
1,900.00	1,899.04	1,890.17	1,899.04	0.00	73.35	-12.48	-125.04	-786.38	793.20	711.48	71.72	10.921				
2,000.00	1,994.34	1,985.47	1,994.34	0.00	77.16	-13.67	-125.04	-786.38	754.04	682.36	71.68	10.520				
2,100.00	2,083.01	2,074.14	2,083.01	0.00	80.71	-15.86	-125.04	-786.38	709.28	640.12	69.16	10.255				
2,200.00	2,162.36	2,153.49	2,162.36	0.00	83.88	-19.60	-125.04	-786.38	650.45	585.66	64.79	10.040				
2,300.00	2,229.97	2,221.10	2,229.97	0.00	86.58	-26.02	-125.04	-786.38	579.66	518.86	60.80	9.534				
2,400.00	2,283.78	2,274.91	2,283.78	0.00	88.74	-37.14	-125.04	-786.38	499.61	436.79	62.81	7.954				
2,500.00	2,322.17	2,313.30	2,322.17	0.00	90.27	-55.27	-125.04	-786.38	413.74	337.93	75.81	5.458				
2,600.00	2,343.96	2,335.09	2,343.96	0.00	91.14	-77.30	-125.04	-786.38	326.74	237.78	88.95	3.673				
2,700.00	2,348.89	2,340.02	2,348.89	0.00	91.34	-90.32	-125.04	-786.38	245.95	154.61	91.34	2.693				
2,800.00	2,348.38	2,339.51	2,348.38	0.00	91.32	-90.14	-125.04	-786.38	184.66	93.33	91.32	2.022				
2,881.97	2,347.96	2,339.09	2,347.96	0.00	91.30	-90.00	-125.04	-786.38	165.47	74.16	91.30	1.812 CC, ES, SF				
2,900.00	2,347.87	2,339.00	2,347.87	0.00	91.30	-89.97	-125.04	-786.38	166.45	75.15	91.30	1.823				
3,000.00	2,347.36	2,338.49	2,347.36	0.00	91.28	-89.79	-125.04	-786.38	203.25	111.97	91.28	2.227				
3,100.00	2,346.85	2,337.98	2,346.85	0.00	91.26	-89.62	-125.04	-786.38	273.71	182.45	91.26	2.999				
3,200.00	2,346.34	2,337.47	2,346.34	0.00	91.24	-89.44	-125.04	-786.38	358.50	267.26	91.23	3.929				
3,300.00	2,345.83	2,336.96	2,345.83	0.00	91.22	-89.26	-125.04	-786.38	449.58	358.37	91.21	4.929				
3,400.00	2,345.32	2,336.45	2,345.32	0.00	91.20	-89.09	-125.04	-786.38	543.81	452.62	91.19	5.964				
3,500.00	2,344.81	2,335.94	2,344.81	0.00	91.18	-88.91	-125.04	-786.38	639.79	548.63	91.16	7.018				
3,600.00	2,344.31	2,335.44	2,344.31	0.00	91.16	-88.73	-125.04	-786.38	736.84	645.71	91.14	8.085				
3,700.00	2,343.80	2,334.93	2,343.80	0.00	91.14	-88.56	-125.04	-786.38	834.59	743.48	91.11	9.160				
3,800.00	2,343.29	2,334.42	2,343.29	0.00	91.12	-88.38	-125.04	-786.38	932.81	841.73	91.08	10.242				
3,900.00	2,342.78	2,333.91	2,342.78	0.00	91.10	-88.21	-125.04	-786.38	1,031.38	940.33	91.05	11.327				
4,000.00	2,342.27	2,333.40	2,342.27	0.00	91.08	-88.03	-125.04	-786.38	1,130.20	1,039.17	91.02	12.417				
4,100.00	2,341.76	2,332.89	2,341.76	0.00	91.06	-87.85	-125.04	-786.38	1,229.20	1,138.21	90.99	13.509				
4,200.00	2,341.25	2,332.38	2,341.25	0.00	91.04	-87.68	-125.04	-786.38	1,328.36	1,237.40	90.96	14.604				
4,300.00	2,340.74	2,331.87	2,340.74	0.00	91.01	-87.50	-125.04	-786.38	1,427.64	1,336.71	90.93	15.701				
4,400.00	2,340.23	2,331.36	2,340.23	0.00	90.99	-87.32	-125.04	-786.38	1,527.00	1,436.11	90.90	16.800				
4,500.00	2,339.72	2,330.85	2,339.72	0.00	90.97	-87.15	-125.04	-786.38	1,626.45	1,535.59	90.86	17.900				
4,600.00	2,339.21	2,330.34	2,339.21	0.00	90.95	-86.97	-125.04	-786.38	1,725.96	1,635.13	90.83	19.003				
4,700.00	2,338.70	2,329.83	2,338.70	0.00	90.93	-86.80	-125.04	-786.38	1,825.52	1,734.73	90.79	20.107				
4,800.00	2,338.19	2,329.32	2,338.19	0.00	90.91	-86.62	-125.04	-786.38	1,925.13	1,834.38	90.76	21.212				
4,900.00	2,337.68	2,328.81	2,337.68	0.00	90.89	-86.45	-125.04	-786.38	2,024.78	1,934.06	90.72	22.319				

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



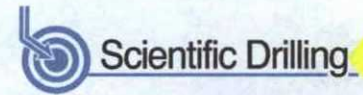
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 2	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliot B2B - OH - OH													Offset Site Error:	0.00 usft
Survey Program: 154-INCLINOMETER													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.00	2,337.18	2,351.97	2,337.18	0.00	69.09	90.01	844.31	-2,878.53	694.92	625.84	69.09	10.059		
5,021.39	2,337.07	2,351.87	2,337.07	0.00	69.08	90.00	844.31	-2,878.53	694.60	625.51	69.08	10.054	CC, ES, SF	
5,100.00	2,336.67	2,351.46	2,336.67	0.00	69.07	89.97	844.31	-2,878.53	699.03	629.96	69.07	10.120		
5,200.00	2,336.16	2,350.96	2,336.16	0.00	69.06	89.92	844.31	-2,878.53	717.19	648.13	69.06	10.386		
5,300.00	2,335.65	2,350.45	2,335.65	0.00	69.04	89.88	844.31	-2,878.53	748.39	679.35	69.04	10.840		
5,400.00	2,335.14	2,349.94	2,335.14	0.00	69.02	89.84	844.31	-2,878.53	791.08	722.05	69.02	11.461		
5,500.00	2,334.63	2,349.43	2,334.63	0.00	69.01	89.80	844.31	-2,878.53	843.52	774.51	69.01	12.223		
5,600.00	2,334.12	2,348.92	2,334.12	0.00	68.99	89.76	844.31	-2,878.53	904.01	835.02	68.99	13.103		
5,700.00	2,333.61	2,348.41	2,333.61	0.00	68.98	89.71	844.31	-2,878.53	971.06	902.08	68.98	14.078		
5,800.00	2,333.10	2,347.90	2,333.10	0.00	68.96	89.67	844.31	-2,878.53	1,043.40	974.43	68.96	15.130		
5,900.00	2,332.59	2,347.39	2,332.59	0.00	68.95	89.63	844.31	-2,878.53	1,120.00	1,051.05	68.95	16.244		
6,000.00	2,332.08	2,346.88	2,332.08	0.00	68.93	89.59	844.31	-2,878.53	1,200.04	1,131.11	68.93	17.409		
6,100.00	2,331.57	2,346.37	2,331.57	0.00	68.92	89.55	844.31	-2,878.53	1,282.90	1,213.98	68.91	18.616		
6,200.00	2,331.06	2,345.86	2,331.06	0.00	68.90	89.50	844.31	-2,878.53	1,368.04	1,299.14	68.90	19.856		
6,300.00	2,330.55	2,345.35	2,330.55	0.00	68.89	89.46	844.31	-2,878.53	1,455.08	1,386.20	68.88	21.124		
6,400.00	2,330.05	2,344.84	2,330.05	0.00	68.87	89.42	844.31	-2,878.53	1,543.69	1,474.82	68.87	22.416		
6,410.72	2,329.99	2,344.79	2,329.99	0.00	68.87	89.42	844.31	-2,878.53	1,553.27	1,484.40	68.87	22.555		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



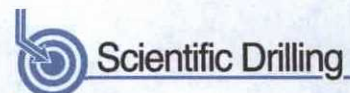
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 2	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design													AL Elliott - AL Elliott B2B - OH - OH		Offset Site Error: 0.00 usft	
Survey Program: 154-INCLINOMETER													Offset Well Error: 0.00 usft			
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore +N/-S (usft)	Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
0.00	0.00	14.74	0.00	0.00	0.22	-73.65	844.31	-2,878.53	2,999.80							
100.00	100.00	114.74	100.00	0.00	1.74	-73.65	844.31	-2,878.53	2,999.80	2,998.06	1.74	1,721.247				
200.00	200.00	214.74	200.00	0.00	4.18	-73.65	844.31	-2,878.53	2,999.80	2,995.62	4.18	717.047				
300.00	300.00	314.74	300.00	0.00	7.22	-73.65	844.31	-2,878.53	2,999.80	2,992.58	7.22	415.465				
400.00	400.00	414.74	400.00	0.00	10.26	-73.65	844.31	-2,878.53	2,999.80	2,989.54	10.26	292.460				
500.00	500.00	514.74	500.00	0.00	13.29	-73.65	844.31	-2,878.53	2,999.80	2,986.51	13.29	225.652				
600.00	600.00	614.74	600.00	0.00	16.33	-73.65	844.31	-2,878.53	2,999.80	2,983.47	16.33	183.691				
700.00	700.00	714.75	700.00	0.00	19.37	-73.65	844.31	-2,878.53	2,999.80	2,980.43	19.37	154.885				
800.00	800.00	814.75	800.00	0.00	22.40	-73.65	844.31	-2,878.53	2,999.80	2,977.39	22.40	133.891				
900.00	900.00	914.75	900.00	0.00	25.44	-73.65	844.31	-2,878.53	2,999.80	2,974.36	25.44	117.910				
1,000.00	1,000.00	1,014.75	1,000.00	0.00	28.48	-73.65	844.31	-2,878.53	2,999.80	2,971.32	28.48	105.336				
1,100.00	1,100.00	1,114.75	1,100.00	0.00	31.51	-73.65	844.31	-2,878.53	2,999.80	2,968.28	31.52	95.186				
1,200.00	1,200.00	1,214.76	1,200.00	0.00	34.55	-73.65	844.31	-2,878.53	2,999.80	2,965.25	34.55	86.820				
1,300.00	1,300.00	1,314.76	1,300.00	0.00	37.59	-73.65	844.31	-2,878.53	2,999.80	2,962.21	37.59	79.806				
1,400.00	1,400.00	1,414.76	1,400.00	0.00	40.63	-73.65	844.31	-2,878.53	2,999.80	2,959.17	40.63	73.840				
1,500.00	1,500.00	1,514.76	1,500.00	0.00	43.66	-73.65	844.31	-2,878.53	2,999.80	2,956.14	43.66	68.705				
1,564.61	1,564.61	1,579.37	1,564.61	0.00	45.62	-73.65	844.31	-2,878.53	2,999.80	2,954.17	45.62	65.750				
1,600.00	1,600.00	1,609.00	1,594.20	0.00	46.52	-73.65	844.31	-2,878.53	2,999.80	2,953.28	46.52	64.479				
1,700.00	1,700.00	1,714.80	1,700.00	0.00	49.74	-73.65	844.31	-2,878.53	2,999.80	2,950.06	49.74	60.313				
1,800.00	1,799.99	1,814.79	1,799.99	0.00	52.77	13.40	844.31	-2,878.53	2,999.31	2,946.58	52.73	56.880				
1,900.00	1,899.04	1,913.83	1,899.04	0.00	55.78	13.76	844.31	-2,878.53	2,986.81	2,932.24	54.57	54.738				
2,000.00	1,994.34	2,009.14	1,994.34	0.00	58.68	14.64	844.31	-2,878.53	2,957.78	2,903.20	54.58	54.196				
2,100.00	2,083.01	2,097.81	2,083.01	0.00	61.37	16.21	844.31	-2,878.53	2,913.13	2,860.44	52.69	55.291				
2,200.00	2,162.36	2,177.16	2,162.36	0.00	63.78	18.76	844.31	-2,878.53	2,854.26	2,805.07	49.19	58.025				
2,300.00	2,229.97	2,244.77	2,229.97	0.00	65.83	22.90	844.31	-2,878.53	2,783.02	2,737.87	45.15	61.646				
2,400.00	2,283.78	2,298.58	2,283.78	0.00	67.47	29.86	844.31	-2,878.53	2,701.63	2,658.30	43.33	62.356				
2,500.00	2,322.17	2,336.97	2,322.17	0.00	68.63	42.36	844.31	-2,878.53	2,612.63	2,563.79	48.84	53.498				
2,600.00	2,343.96	2,358.76	2,343.96	0.00	69.29	65.24	844.31	-2,878.53	2,518.81	2,455.74	63.07	39.937				
2,700.00	2,348.89	2,363.69	2,348.89	0.00	69.44	90.98	844.31	-2,878.53	2,423.05	2,353.62	69.43	34.898				
2,800.00	2,348.38	2,363.18	2,348.38	0.00	69.43	90.93	844.31	-2,878.53	2,327.43	2,258.01	69.42	33.528				
2,900.00	2,347.87	2,362.67	2,347.87	0.00	69.41	90.89	844.31	-2,878.53	2,232.19	2,162.78	69.40	32.162				
3,000.00	2,347.36	2,362.16	2,347.36	0.00	69.40	90.85	844.31	-2,878.53	2,137.38	2,067.99	69.39	30.803				
3,100.00	2,346.85	2,361.65	2,346.85	0.00	69.38	90.81	844.31	-2,878.53	2,043.07	1,973.69	69.37	29.450				
3,200.00	2,346.34	2,361.14	2,346.34	0.00	69.37	90.77	844.31	-2,878.53	1,949.32	1,879.96	69.36	28.105				
3,300.00	2,345.83	2,360.63	2,345.83	0.00	69.35	90.72	844.31	-2,878.53	1,856.23	1,786.88	69.34	26.768				
3,400.00	2,345.32	2,360.12	2,345.32	0.00	69.33	90.68	844.31	-2,878.53	1,763.89	1,694.56	69.33	25.442				
3,500.00	2,344.81	2,359.61	2,344.81	0.00	69.32	90.64	844.31	-2,878.53	1,672.44	1,603.12	69.31	24.128				
3,600.00	2,344.31	2,359.10	2,344.31	0.00	69.30	90.60	844.31	-2,878.53	1,582.01	1,512.72	69.30	22.829				
3,700.00	2,343.80	2,358.59	2,343.80	0.00	69.29	90.56	844.31	-2,878.53	1,492.82	1,423.53	69.28	21.546				
3,800.00	2,343.29	2,358.09	2,343.29	0.00	69.27	90.51	844.31	-2,878.53	1,405.07	1,335.80	69.27	20.284				
3,900.00	2,342.78	2,357.58	2,342.78	0.00	69.26	90.47	844.31	-2,878.53	1,319.07	1,249.82	69.25	19.047				
4,000.00	2,342.27	2,357.07	2,342.27	0.00	69.24	90.43	844.31	-2,878.53	1,235.18	1,165.94	69.24	17.839				
4,100.00	2,341.76	2,356.56	2,341.76	0.00	69.23	90.39	844.31	-2,878.53	1,153.87	1,084.64	69.22	16.668				
4,200.00	2,341.25	2,356.05	2,341.25	0.00	69.21	90.35	844.31	-2,878.53	1,075.70	1,006.49	69.21	15.543				
4,300.00	2,340.74	2,355.54	2,340.74	0.00	69.19	90.30	844.31	-2,878.53	1,001.43	932.23	69.19	14.473				
4,400.00	2,340.23	2,355.03	2,340.23	0.00	69.18	90.26	844.31	-2,878.53	931.98	862.80	69.18	13.472				
4,500.00	2,339.72	2,354.52	2,339.72	0.00	69.16	90.22	844.31	-2,878.53	868.51	799.34	69.16	12.557				
4,600.00	2,339.21	2,354.01	2,339.21	0.00	69.15	90.18	844.31	-2,878.53	812.42	743.27	69.15	11.749				
4,700.00	2,338.70	2,353.50	2,338.70	0.00	69.13	90.14	844.31	-2,878.53	765.35	696.21	69.13	11.071				
4,800.00	2,338.19	2,352.99	2,338.19	0.00	69.12	90.09	844.31	-2,878.53	729.02	659.91	69.12	10.548				
4,900.00	2,337.68	2,352.48	2,337.68	0.00	69.10	90.05	844.31	-2,878.53	705.12	636.02	69.10	10.204				

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



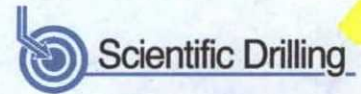
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 2	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliot B2 (#2) - OH - OH												Offset Site Error:	0.00 usft
Survey Program: 100-UNKNOWN												Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Distance		Minimum		Separation		Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.00	2,336.67	2,293.28	2,336.67	0.00	89.73	-91.17	-46.20	-4,018.65	1,045.25	955.54	89.71	11.651	
5,200.00	2,336.16	2,292.77	2,336.16	0.00	89.71	-91.05	-46.20	-4,018.65	948.55	858.86	89.70	10.575	
5,300.00	2,335.65	2,292.26	2,335.65	0.00	89.69	-90.94	-46.20	-4,018.65	852.61	762.93	89.68	9.507	
5,400.00	2,335.14	2,291.75	2,335.14	0.00	89.67	-90.82	-46.20	-4,018.65	757.72	668.06	89.66	8.451	
5,500.00	2,334.63	2,291.24	2,334.63	0.00	89.65	-90.71	-46.20	-4,018.65	664.33	574.69	89.64	7.411	
5,600.00	2,334.12	2,290.73	2,334.12	0.00	89.63	-90.59	-46.20	-4,018.65	573.18	483.55	89.62	6.395	
5,700.00	2,333.61	2,290.22	2,333.61	0.00	89.61	-90.48	-46.20	-4,018.65	485.52	395.91	89.61	5.418	
5,800.00	2,333.10	2,289.71	2,333.10	0.00	89.59	-90.36	-46.20	-4,018.65	403.64	314.05	89.59	4.506	
5,900.00	2,332.59	2,289.20	2,332.59	0.00	89.57	-90.25	-46.20	-4,018.65	331.84	242.27	89.57	3.705	
6,000.00	2,332.08	2,288.69	2,332.08	0.00	89.55	-90.13	-46.20	-4,018.65	278.04	188.50	89.55	3.105	
6,100.00	2,331.57	2,288.18	2,331.57	0.00	89.53	-90.02	-46.20	-4,018.65	253.97	164.44	89.53	2.837	
6,114.04	2,331.50	2,288.11	2,331.50	0.00	89.52	-90.00	-46.20	-4,018.65	253.58	164.06	89.52	2.833	CC, ES, SF
6,200.00	2,331.06	2,287.67	2,331.06	0.00	89.51	-89.90	-46.20	-4,018.65	267.75	178.25	89.51	2.991	
6,300.00	2,330.55	2,287.16	2,330.55	0.00	89.49	-89.79	-46.20	-4,018.65	314.46	224.97	89.49	3.514	
6,400.00	2,330.05	2,286.66	2,330.05	0.00	89.47	-89.67	-46.20	-4,018.65	382.20	292.73	89.46	4.272	
6,410.72	2,329.99	2,286.60	2,329.99	0.00	89.46	-89.66	-46.20	-4,018.65	390.28	300.82	89.46	4.363	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 2	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliot B2 (#2) - OH - OH													Offset Site Error:	0.00 usft
Survey Program: 100-UNKNOWN													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	43.39	0.00	0.00	-90.66	-46.20	-4,018.65	4,019.15					
100.00	100.00	56.61	100.00	0.00	1.13	-90.66	-46.20	-4,018.65	4,018.92	4,017.78	1.13	3,548.747		
200.00	200.00	156.61	200.00	0.00	4.26	-90.66	-46.20	-4,018.65	4,018.92	4,014.65	4.26	942.388		
300.00	300.00	256.61	300.00	0.00	8.26	-90.66	-46.20	-4,018.65	4,018.92	4,010.65	8.26	466.280		
400.00	400.00	356.61	400.00	0.00	12.26	-90.66	-46.20	-4,018.65	4,018.92	4,006.65	12.26	327.684		
500.00	500.00	456.61	500.00	0.00	16.26	-90.66	-46.20	-4,018.65	4,018.92	4,002.65	16.26	247.096		
600.00	600.00	556.61	600.00	0.00	20.26	-90.66	-46.20	-4,018.65	4,018.92	3,998.65	20.26	198.322		
700.00	700.00	656.61	700.00	0.00	24.26	-90.66	-46.20	-4,018.65	4,018.92	3,994.65	24.26	165.629		
800.00	800.00	756.61	800.00	0.00	28.26	-90.66	-46.20	-4,018.65	4,018.92	3,990.65	28.26	142.189		
900.00	900.00	856.61	900.00	0.00	32.26	-90.66	-46.20	-4,018.65	4,018.92	3,986.65	32.26	124.561		
1,000.00	1,000.00	956.61	1,000.00	0.00	36.26	-90.66	-46.20	-4,018.65	4,018.92	3,982.65	36.26	110.822		
1,100.00	1,100.00	1,056.61	1,100.00	0.00	40.26	-90.66	-46.20	-4,018.65	4,018.92	3,978.65	40.26	99.813		
1,200.00	1,200.00	1,156.61	1,200.00	0.00	44.26	-90.66	-46.20	-4,018.65	4,018.92	3,974.65	44.26	90.793		
1,300.00	1,300.00	1,256.61	1,300.00	0.00	48.26	-90.66	-46.20	-4,018.65	4,018.92	3,970.65	48.26	83.268		
1,400.00	1,400.00	1,356.61	1,400.00	0.00	52.26	-90.66	-46.20	-4,018.65	4,018.92	3,966.65	52.26	76.896		
1,500.00	1,500.00	1,456.61	1,500.00	0.00	56.26	-90.66	-46.20	-4,018.65	4,018.92	3,962.65	56.26	71.429		
1,600.00	1,600.00	1,556.61	1,600.00	0.00	60.26	-90.66	-46.20	-4,018.65	4,018.92	3,958.65	60.26	66.688		
1,700.00	1,700.00	1,656.61	1,700.00	0.00	64.26	-90.66	-46.20	-4,018.65	4,018.92	3,954.65	64.26	62.537		
1,800.00	1,799.99	1,756.60	1,799.99	0.00	68.26	-3.62	-46.20	-4,018.65	4,018.42	3,950.21	68.20	58.917		
1,900.00	1,899.04	1,855.65	1,899.04	0.00	72.23	-3.72	-46.20	-4,018.65	4,005.59	3,935.04	70.55	56.777		
2,000.00	1,994.34	1,950.95	1,994.34	0.00	76.04	-3.95	-46.20	-4,018.65	3,975.79	3,905.46	70.33	56.529		
2,100.00	2,083.01	2,039.62	2,083.01	0.00	79.58	-4.38	-46.20	-4,018.65	3,929.93	3,862.65	67.28	58.413		
2,200.00	2,162.36	2,118.97	2,162.36	0.00	82.76	-5.08	-46.20	-4,018.65	3,869.40	3,808.08	61.32	63.104		
2,300.00	2,229.97	2,186.58	2,229.97	0.00	85.46	-6.26	-46.20	-4,018.65	3,796.05	3,743.38	52.67	72.072		
2,400.00	2,283.78	2,240.39	2,283.78	0.00	87.62	-8.41	-46.20	-4,018.65	3,712.11	3,669.96	42.15	88.059		
2,500.00	2,322.17	2,278.78	2,322.17	0.00	89.15	-13.07	-46.20	-4,018.65	3,620.13	3,587.02	33.11	109.332		
2,600.00	2,343.96	2,300.57	2,343.96	0.00	90.02	-28.61	-46.20	-4,018.65	3,522.91	3,478.56	44.35	79.431		
2,700.00	2,348.89	2,305.50	2,348.89	0.00	90.22	-93.92	-46.20	-4,018.65	3,423.40	3,333.39	90.01	38.034		
2,800.00	2,348.38	2,304.99	2,348.38	0.00	90.20	-93.81	-46.20	-4,018.65	3,323.68	3,233.68	90.00	36.930		
2,900.00	2,347.87	2,304.48	2,347.87	0.00	90.18	-93.69	-46.20	-4,018.65	3,223.99	3,133.99	89.99	35.825		
3,000.00	2,347.36	2,303.97	2,347.36	0.00	90.16	-93.58	-46.20	-4,018.65	3,124.31	3,034.32	89.98	34.721		
3,100.00	2,346.85	2,303.46	2,346.85	0.00	90.14	-93.46	-46.20	-4,018.65	3,024.65	2,934.68	89.97	33.617		
3,200.00	2,346.34	2,302.95	2,346.34	0.00	90.12	-93.35	-46.20	-4,018.65	2,925.02	2,835.05	89.96	32.513		
3,300.00	2,345.83	2,302.44	2,345.83	0.00	90.10	-93.23	-46.20	-4,018.65	2,825.41	2,735.45	89.95	31.409		
3,400.00	2,345.32	2,301.93	2,345.32	0.00	90.08	-93.12	-46.20	-4,018.65	2,725.83	2,635.88	89.94	30.306		
3,500.00	2,344.81	2,301.42	2,344.81	0.00	90.06	-93.01	-46.20	-4,018.65	2,626.28	2,536.34	89.93	29.202		
3,600.00	2,344.31	2,300.92	2,344.31	0.00	90.04	-92.89	-46.20	-4,018.65	2,526.76	2,436.84	89.92	28.099		
3,700.00	2,343.80	2,300.41	2,343.80	0.00	90.02	-92.78	-46.20	-4,018.65	2,427.29	2,337.38	89.91	26.997		
3,800.00	2,343.29	2,299.90	2,343.29	0.00	90.00	-92.66	-46.20	-4,018.65	2,327.86	2,237.96	89.90	25.894		
3,900.00	2,342.78	2,299.39	2,342.78	0.00	89.98	-92.55	-46.20	-4,018.65	2,228.49	2,138.60	89.89	24.792		
4,000.00	2,342.27	2,298.88	2,342.27	0.00	89.96	-92.43	-46.20	-4,018.65	2,129.17	2,039.29	89.87	23.690		
4,100.00	2,341.76	2,298.37	2,341.76	0.00	89.93	-92.32	-46.20	-4,018.65	2,029.92	1,940.05	89.86	22.589		
4,200.00	2,341.25	2,297.86	2,341.25	0.00	89.91	-92.20	-46.20	-4,018.65	1,930.74	1,840.89	89.85	21.489		
4,300.00	2,340.74	2,297.35	2,340.74	0.00	89.89	-92.09	-46.20	-4,018.65	1,831.65	1,741.82	89.83	20.389		
4,400.00	2,340.23	2,296.84	2,340.23	0.00	89.87	-91.97	-46.20	-4,018.65	1,732.67	1,642.85	89.82	19.290		
4,500.00	2,339.72	2,296.33	2,339.72	0.00	89.85	-91.86	-46.20	-4,018.65	1,633.82	1,544.01	89.81	18.193		
4,600.00	2,339.21	2,295.82	2,339.21	0.00	89.83	-91.74	-46.20	-4,018.65	1,535.11	1,445.32	89.79	17.096		
4,700.00	2,338.70	2,295.31	2,338.70	0.00	89.81	-91.63	-46.20	-4,018.65	1,436.58	1,346.80	89.78	16.002		
4,800.00	2,338.19	2,294.80	2,338.19	0.00	89.79	-91.51	-46.20	-4,018.65	1,338.27	1,248.51	89.76	14.909		
4,900.00	2,337.68	2,294.29	2,337.68	0.00	89.77	-91.40	-46.20	-4,018.65	1,240.23	1,150.48	89.75	13.819		
5,000.00	2,337.18	2,293.79	2,337.18	0.00	89.75	-91.28	-46.20	-4,018.65	1,142.52	1,052.79	89.73	12.733		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report

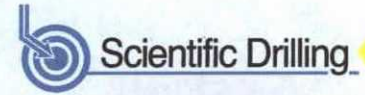


Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 2	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design													Offset Site Error:	0.00 usft
AL Elliott - AL Elliot B2 - OH - OH													Offset Well Error:	0.00 usft
Survey Program: 808-INCLINOMETER														
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
6,300.00	2,330.55	2,308.76	2,330.55	0.00	57.84	-86.29	-158.50	-1,324.48	2,891.23	2,833.51	57.72	50.088		
6,400.00	2,330.05	2,308.25	2,330.05	0.00	57.83	-86.17	-158.50	-1,324.48	2,990.93	2,933.23	57.70	51.837		
6,410.72	2,329.99	2,308.19	2,329.99	0.00	57.83	-86.15	-158.50	-1,324.48	3,001.62	2,943.93	57.70	52.024		



Anticollision Report



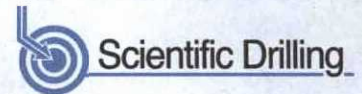
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 2	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliot B2 - OH - OH													Offset Site Error:	0.00 usft
Survey Program: 808-INCLINOMETER													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (usft)	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
1,300.00	1,300.00	1,278.13	1,300.00	0.00	26.55	-96.82	-158.50	-1,324.48	1,333.93	1,307.38	26.55	50.250		
1,400.00	1,400.00	1,378.13	1,400.00	0.00	29.58	-96.82	-158.50	-1,324.48	1,333.93	1,304.35	29.58	45.092		
1,500.00	1,500.00	1,478.13	1,500.00	0.00	32.62	-96.82	-158.50	-1,324.48	1,333.93	1,301.31	32.62	40.894		
1,600.00	1,600.00	1,578.13	1,600.00	0.00	35.66	-96.82	-158.50	-1,324.48	1,333.93	1,298.27	35.66	37.411		
1,700.00	1,700.00	1,678.13	1,700.00	0.00	38.69	-96.82	-158.50	-1,324.48	1,333.93	1,295.24	38.69	34.475		
1,800.00	1,799.99	1,778.12	1,799.99	0.00	41.73	-9.80	-158.50	-1,324.48	1,333.44	1,291.74	41.69	31.981		
1,900.00	1,899.04	1,877.17	1,899.04	0.00	44.74	-10.11	-158.50	-1,324.48	1,320.77	1,277.03	43.74	30.196		
2,000.00	1,994.34	1,972.47	1,994.34	0.00	47.63	-10.91	-158.50	-1,324.48	1,291.37	1,247.15	44.21	29.208		
2,100.00	2,083.01	2,061.14	2,083.01	0.00	50.32	-12.36	-158.50	-1,324.48	1,246.15	1,203.19	42.96	29.007		
2,200.00	2,162.36	2,140.49	2,162.36	0.00	52.73	-14.76	-158.50	-1,324.48	1,186.56	1,146.45	40.11	29.582		
2,300.00	2,229.97	2,208.17	2,229.97	0.00	54.79	-18.80	-158.50	-1,324.48	1,114.49	1,078.07	36.42	30.599		
2,400.00	2,283.78	2,261.99	2,283.78	0.00	56.42	-25.91	-158.50	-1,324.48	1,032.26	997.97	34.28	30.109		
2,500.00	2,322.17	2,300.37	2,322.17	0.00	57.59	-39.32	-158.50	-1,324.48	942.52	903.46	39.06	24.130		
2,600.00	2,343.96	2,322.17	2,343.96	0.00	58.25	-64.49	-158.50	-1,324.48	848.24	795.53	52.71	16.091		
2,700.00	2,348.89	2,327.09	2,348.89	0.00	58.40	-90.92	-158.50	-1,324.48	752.56	694.17	58.39	12.888		
2,800.00	2,348.38	2,326.58	2,348.38	0.00	58.38	-90.80	-158.50	-1,324.48	657.90	599.52	58.38	11.270		
2,900.00	2,347.87	2,326.07	2,347.87	0.00	58.37	-90.67	-158.50	-1,324.48	565.07	506.71	58.36	9.682		
3,000.00	2,347.36	2,325.56	2,347.36	0.00	58.35	-90.54	-158.50	-1,324.48	475.17	416.82	58.35	8.143		
3,100.00	2,346.85	2,325.06	2,346.85	0.00	58.34	-90.41	-158.50	-1,324.48	390.21	331.87	58.34	6.689		
3,200.00	2,346.34	2,324.55	2,346.34	0.00	58.32	-90.28	-158.50	-1,324.48	314.22	255.90	58.32	5.388		
3,300.00	2,345.83	2,324.04	2,345.83	0.00	58.31	-90.15	-158.50	-1,324.48	255.36	197.06	58.31	4.380		
3,400.00	2,345.32	2,323.53	2,345.32	0.00	58.29	-90.02	-158.50	-1,324.48	227.34	169.05	58.29	3.900		
3,417.63	2,345.23	2,323.44	2,345.23	0.00	58.29	-90.00	-158.50	-1,324.48	226.66	168.37	58.29	3.889	CC, ES, SF	
3,500.00	2,344.81	2,323.02	2,344.81	0.00	58.28	-89.89	-158.50	-1,324.48	241.16	182.88	58.28	4.138		
3,600.00	2,344.31	2,322.51	2,344.31	0.00	58.26	-89.77	-158.50	-1,324.48	290.92	232.66	58.26	4.993		
3,700.00	2,343.80	2,322.00	2,343.80	0.00	58.24	-89.64	-158.50	-1,324.48	362.08	303.84	58.24	6.217		
3,800.00	2,343.29	2,321.49	2,343.29	0.00	58.23	-89.51	-158.50	-1,324.48	444.50	386.27	58.23	7.634		
3,900.00	2,342.78	2,320.98	2,342.78	0.00	58.21	-89.38	-158.50	-1,324.48	532.96	474.75	58.21	9.156		
4,000.00	2,342.27	2,320.47	2,342.27	0.00	58.20	-89.25	-158.50	-1,324.48	624.92	566.72	58.19	10.739		
4,100.00	2,341.76	2,319.96	2,341.76	0.00	58.18	-89.12	-158.50	-1,324.48	719.02	660.84	58.18	12.359		
4,200.00	2,341.25	2,319.45	2,341.25	0.00	58.17	-88.99	-158.50	-1,324.48	814.53	756.37	58.16	14.005		
4,300.00	2,340.74	2,318.94	2,340.74	0.00	58.15	-88.86	-158.50	-1,324.48	911.01	852.86	58.14	15.669		
4,400.00	2,340.23	2,318.43	2,340.23	0.00	58.14	-88.74	-158.50	-1,324.48	1,008.17	950.04	58.12	17.345		
4,500.00	2,339.72	2,317.93	2,339.72	0.00	58.12	-88.61	-158.50	-1,324.48	1,105.83	1,047.73	58.10	19.032		
4,600.00	2,339.21	2,317.42	2,339.21	0.00	58.11	-88.48	-158.50	-1,324.48	1,203.88	1,145.80	58.09	20.726		
4,700.00	2,338.70	2,316.91	2,338.70	0.00	58.09	-88.35	-158.50	-1,324.48	1,302.23	1,244.16	58.07	22.427		
4,800.00	2,338.19	2,316.40	2,338.19	0.00	58.07	-88.22	-158.50	-1,324.48	1,400.81	1,342.76	58.05	24.132		
4,900.00	2,337.68	2,315.89	2,337.68	0.00	58.06	-88.09	-158.50	-1,324.48	1,499.58	1,441.55	58.03	25.843		
5,000.00	2,337.18	2,315.38	2,337.18	0.00	58.04	-87.96	-158.50	-1,324.48	1,598.50	1,540.49	58.01	27.557		
5,100.00	2,336.67	2,314.87	2,336.67	0.00	58.03	-87.84	-158.50	-1,324.48	1,697.55	1,639.56	57.99	29.274		
5,200.00	2,336.16	2,314.36	2,336.16	0.00	58.01	-87.71	-158.50	-1,324.48	1,796.70	1,738.73	57.97	30.995		
5,300.00	2,335.65	2,313.85	2,335.65	0.00	58.00	-87.58	-158.50	-1,324.48	1,895.94	1,838.00	57.95	32.719		
5,400.00	2,335.14	2,313.34	2,335.14	0.00	57.98	-87.45	-158.50	-1,324.48	1,995.26	1,937.33	57.93	34.446		
5,500.00	2,334.63	2,312.83	2,334.63	0.00	57.97	-87.32	-158.50	-1,324.48	2,094.64	2,036.74	57.90	36.175		
5,600.00	2,334.12	2,312.32	2,334.12	0.00	57.95	-87.19	-158.50	-1,324.48	2,194.08	2,136.20	57.88	37.906		
5,700.00	2,333.61	2,311.81	2,333.61	0.00	57.94	-87.06	-158.50	-1,324.48	2,293.57	2,235.71	57.86	39.640		
5,800.00	2,333.10	2,311.30	2,333.10	0.00	57.92	-86.94	-158.50	-1,324.48	2,393.10	2,335.26	57.84	41.376		
5,900.00	2,332.59	2,310.80	2,332.59	0.00	57.90	-86.81	-158.50	-1,324.48	2,492.66	2,434.85	57.82	43.114		
6,000.00	2,332.08	2,310.29	2,332.08	0.00	57.89	-86.68	-158.50	-1,324.48	2,592.26	2,534.47	57.79	44.854		
6,100.00	2,331.57	2,309.78	2,331.57	0.00	57.87	-86.55	-158.50	-1,324.48	2,691.89	2,634.12	57.77	46.597		
6,200.00	2,331.06	2,309.27	2,331.06	0.00	57.86	-86.42	-158.50	-1,324.48	2,791.55	2,733.80	57.75	48.342		

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 2	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Reference	Plan #2		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.00usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 30,000.00 usft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	9/28/2015	
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	1,776.05	Plan 2 (Lateral 1)	Gyro	
1,776.05	6,409.82	Plan #2 (Lateral 2)	Gyro	

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
AL Elliott						
AL Elliot B2 - OH - OH	3,417.63	2,323.44	226.66	168.37	3.889	CC, ES, SF
AL Elliot B2 (#2) - OH - OH	6,114.04	2,288.11	253.58	164.06	2.833	CC, ES, SF
AL Elliot B2B - OH - OH	5,021.39	2,351.87	694.60	625.51	10.054	CC, ES, SF
AL Elliot B4 - OH - OH	2,881.97	2,339.09	165.47	74.16	1.812	CC, ES, SF
AL Elliot B5 - OH - OH	5,619.66	2,279.41	412.42	347.83	6.385	CC, ES, SF
AL Elliot B5E - OH - OH	2,695.27	2,350.07	174.51	104.25	2.484	CC, ES, SF
AL Elliot B7 - OH - OH	6,242.00	2,286.65	259.49	193.19	3.914	CC, ES, SF
AL Elliot J1 - OH - OH	2,680.38	2,338.52	208.69	140.43	3.057	CC, ES, SF
AL Elliott B 8-1H - Lateral 1 - Plan 2						Out of range
AL Elliott B 8-1H - Lateral 1 - Plan 2	1,800.00	1,799.99	0.50	0.50	10,000.000	CC, ES
AL Elliott B 8-1H - Lateral 1 ST1 - Plan #2						Out of range
AL Elliott B 8-1H - Lateral 1 ST1 - Plan #2	1,800.00	1,799.99	0.50	0.50	10,000.000	CC, ES

Offset Design AL Elliott - AL Elliot B2 - OH - OH												Offset Site Error:	0.00 usft
Survey Program: 808-INCLINOMETER												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)		Separation Factor
0.00	0.00	0.00	21.87	0.00	0.00	-96.82	-158.50	-1,324.48	1,334.11				
100.00	100.00	78.13	100.00	0.00	1.19	-96.82	-158.50	-1,324.48	1,333.93	1,332.74	1.19	1,124.032	
200.00	200.00	178.13	200.00	0.00	2.70	-96.82	-158.50	-1,324.48	1,333.93	1,331.22	2.71	493.108	
300.00	300.00	278.13	300.00	0.00	4.22	-96.82	-158.50	-1,324.48	1,333.93	1,329.71	4.22	315.831	
400.00	400.00	378.13	400.00	0.00	5.74	-96.82	-158.50	-1,324.48	1,333.93	1,328.19	5.74	232.312	
500.00	500.00	478.13	500.00	0.00	7.26	-96.82	-158.50	-1,324.48	1,333.93	1,326.67	7.26	183.727	
600.00	600.00	578.13	600.00	0.00	8.78	-96.82	-158.50	-1,324.48	1,333.93	1,325.15	8.78	151.949	
700.00	700.00	678.13	700.00	0.00	10.30	-96.82	-158.50	-1,324.48	1,333.93	1,323.63	10.30	129.543	
800.00	800.00	778.13	800.00	0.00	11.82	-96.82	-158.50	-1,324.48	1,333.93	1,322.11	11.82	112.895	
900.00	900.00	878.13	900.00	0.00	14.40	-96.82	-158.50	-1,324.48	1,333.93	1,319.53	14.40	92.641	
1,000.00	1,000.00	978.13	1,000.00	0.00	17.44	-96.82	-158.50	-1,324.48	1,333.93	1,316.49	17.44	76.506	
1,100.00	1,100.00	1,078.13	1,100.00	0.00	20.47	-96.82	-158.50	-1,324.48	1,333.93	1,313.46	20.47	65.158	
1,200.00	1,200.00	1,178.13	1,200.00	0.00	23.51	-96.82	-158.50	-1,324.48	1,333.93	1,310.42	23.51	56.741	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



B.P.

San Juan County, NM NAD83

AL Elliott

AL Elliott B 8-1H

Lateral 2

Plan #2

Anticollision Report

28 September, 2015

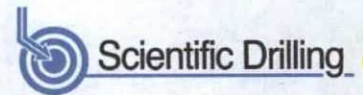


Scientific Drilling

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Planning Report



Database:	Grand Junction District	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Company:	B.P.	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Project:	San Juan County, NM NAD83	MD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Site:	AL Elliott	North Reference:	Grid
Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral 2		
Design:	Plan #2		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
Elliott Lat 2 PBHL	0.00	0.00	2,330.00	222.31	-4,300.94	2,087,115.77	2,740,878.87	36.7356959	-107.7726295
- plan hits target center									
- Point									



Database:	Grand Junction District	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Company:	B.P.	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Project:	San Juan County, NM NAD83	MD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Site:	AL Elliott	North Reference:	Grid
Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral 2		
Design:	Plan #2		

Planned 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)
1,776.05	0.00	0.00	1,776.05	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	2.40	272.96	1,799.99	0.03	-0.50	0.50	10.00	10.00	0.00
1,900.00	12.40	272.96	1,899.04	0.69	-13.34	13.36	10.00	10.00	0.00
2,000.00	22.40	272.96	1,994.34	2.23	-43.16	43.21	10.00	10.00	0.00
2,100.00	32.40	272.96	2,083.01	4.60	-89.05	89.17	10.00	10.00	0.00
2,200.00	42.40	272.96	2,162.36	7.73	-149.62	149.82	10.00	10.00	0.00
2,300.00	52.40	272.96	2,229.97	11.53	-223.04	223.33	10.00	10.00	0.00
2,400.00	62.40	272.96	2,283.78	15.87	-307.06	307.47	10.00	10.00	0.00
2,500.00	72.40	272.96	2,322.17	20.63	-399.14	399.67	10.00	10.00	0.00
2,600.00	82.40	272.96	2,343.96	25.66	-496.47	497.14	10.00	10.00	0.00
2,678.96	90.29	272.96	2,349.00	29.73	-575.11	575.87	10.00	10.00	0.00
2,700.00	90.29	272.96	2,348.89	30.81	-596.12	596.91	0.00	0.00	0.00
2,800.00	90.29	272.96	2,348.38	35.97	-695.98	696.91	0.00	0.00	0.00
2,900.00	90.29	272.96	2,347.87	41.14	-795.85	796.91	0.00	0.00	0.00
3,000.00	90.29	272.96	2,347.36	46.30	-895.71	896.91	0.00	0.00	0.00
3,100.00	90.29	272.96	2,346.85	51.46	-995.58	996.91	0.00	0.00	0.00
3,200.00	90.29	272.96	2,346.34	56.62	-1,095.44	1,096.91	0.00	0.00	0.00
3,300.00	90.29	272.96	2,345.83	61.78	-1,195.31	1,196.90	0.00	0.00	0.00
3,400.00	90.29	272.96	2,345.32	66.95	-1,295.17	1,296.90	0.00	0.00	0.00
3,500.00	90.29	272.96	2,344.81	72.11	-1,395.04	1,396.90	0.00	0.00	0.00
3,600.00	90.29	272.96	2,344.31	77.27	-1,494.90	1,496.90	0.00	0.00	0.00
3,700.00	90.29	272.96	2,343.80	82.43	-1,594.77	1,596.90	0.00	0.00	0.00
3,800.00	90.29	272.96	2,343.29	87.59	-1,694.64	1,696.90	0.00	0.00	0.00
3,900.00	90.29	272.96	2,342.78	92.76	-1,794.50	1,796.90	0.00	0.00	0.00
4,000.00	90.29	272.96	2,342.27	97.92	-1,894.37	1,896.89	0.00	0.00	0.00
4,100.00	90.29	272.96	2,341.76	103.08	-1,994.23	1,996.89	0.00	0.00	0.00
4,200.00	90.29	272.96	2,341.25	108.24	-2,094.10	2,096.89	0.00	0.00	0.00
4,300.00	90.29	272.96	2,340.74	113.40	-2,193.96	2,196.89	0.00	0.00	0.00
4,400.00	90.29	272.96	2,340.23	118.56	-2,293.83	2,296.89	0.00	0.00	0.00
4,500.00	90.29	272.96	2,339.72	123.73	-2,393.69	2,396.89	0.00	0.00	0.00
4,600.00	90.29	272.96	2,339.21	128.89	-2,493.56	2,496.89	0.00	0.00	0.00
4,700.00	90.29	272.96	2,338.70	134.05	-2,593.42	2,596.89	0.00	0.00	0.00
4,800.00	90.29	272.96	2,338.19	139.21	-2,693.29	2,696.88	0.00	0.00	0.00
4,900.00	90.29	272.96	2,337.68	144.37	-2,793.15	2,796.88	0.00	0.00	0.00
5,000.00	90.29	272.96	2,337.18	149.54	-2,893.02	2,896.88	0.00	0.00	0.00
5,100.00	90.29	272.96	2,336.67	154.70	-2,992.89	2,996.88	0.00	0.00	0.00
5,200.00	90.29	272.96	2,336.16	159.86	-3,092.75	3,096.88	0.00	0.00	0.00
5,300.00	90.29	272.96	2,335.65	165.02	-3,192.62	3,196.88	0.00	0.00	0.00
5,400.00	90.29	272.96	2,335.14	170.18	-3,292.48	3,296.88	0.00	0.00	0.00
5,500.00	90.29	272.96	2,334.63	175.35	-3,392.35	3,396.88	0.00	0.00	0.00
5,600.00	90.29	272.96	2,334.12	180.51	-3,492.21	3,496.87	0.00	0.00	0.00
5,700.00	90.29	272.96	2,333.61	185.67	-3,592.08	3,596.87	0.00	0.00	0.00
5,800.00	90.29	272.96	2,333.10	190.83	-3,691.94	3,696.87	0.00	0.00	0.00
5,900.00	90.29	272.96	2,332.59	195.99	-3,791.81	3,796.87	0.00	0.00	0.00
6,000.00	90.29	272.96	2,332.08	201.16	-3,891.67	3,896.87	0.00	0.00	0.00
6,100.00	90.29	272.96	2,331.57	206.32	-3,991.54	3,996.87	0.00	0.00	0.00
6,200.00	90.29	272.96	2,331.06	211.48	-4,091.40	4,096.87	0.00	0.00	0.00
6,300.00	90.29	272.96	2,330.55	216.64	-4,191.27	4,196.87	0.00	0.00	0.00
6,400.00	90.29	272.96	2,330.05	221.80	-4,291.14	4,296.86	0.00	0.00	0.00
6,409.82	90.29	272.96	2,330.00	222.31	-4,300.94	4,306.68	0.00	0.00	0.00

Elliott Lat 2 PBHL



Database:	Grand Junction District	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Company:	B.P.	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Project:	San Juan County, NM NAD83	MD Reference:	GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)
Site:	AL Elliott	North Reference:	Grid
Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral 2		
Design:	Plan #2		

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	-75.03 usft	Northing:	2,086,893.46 usft	Latitude:	36.7350768
	+E/-W	93.44 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 2				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	7/14/2015	9.27	63.37	50,163

Design	Plan #2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	1,776.05
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	272.96

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
1,776.05	0.00	0.00	1,776.05	0.00	0.00	0.00	0.00	0.00	0.00	
2,678.96	90.29	272.96	2,349.00	29.73	-575.11	10.00	10.00	-9.64	272.96	
6,409.82	90.29	272.96	2,330.00	222.31	-4,300.94	0.00	0.00	0.00	0.00	Elliott Lat 2 PBHL



B.P.

San Juan County, NM NAD83

AL Elliott

AL Elliott B 8-1H

Lateral 2

Plan: Plan #2

Standard Planning Report

28 September, 2015



www.scientificdrilling.com



Company: B.P.
Project: San Juan County, NM NAD83
Site: AL Elliott
Well: AL Elliott B 8-1H
Wellbore: Lateral 2
Design: Plan #2

PROJECT DETAILS: San Juan County, NM NAD83

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Western Zone
System Datum: Mean Sea Level
Local North: Grid



Scientific Drilling



Azimuths to Grid North
True North: -0.04°
Magnetic North: 9.22°

Magnetic Field
Strength: 50162.6nT
Dip Angle: 63.37°
Date: 7/14/2015
Model: HDGM

WELL DETAILS: AL Elliott B 8-1H

GL 5864.23' & RKB 11' @ 5875.22usft (Aztec 507)

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	2086893.46	2745179.81	36.7350768	-107.7579518

Plan: Plan #2 (AL Elliott B 8-1H/Lateral 2)

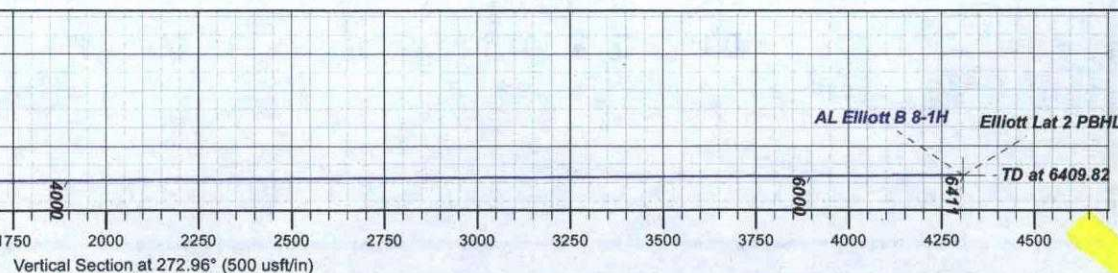
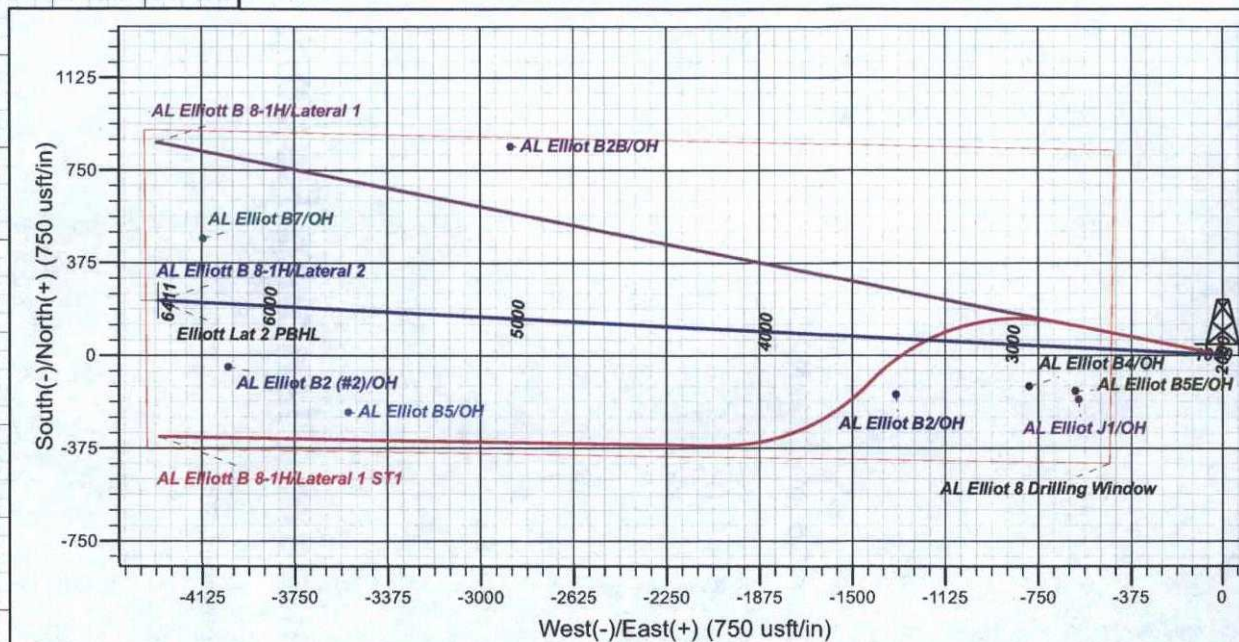
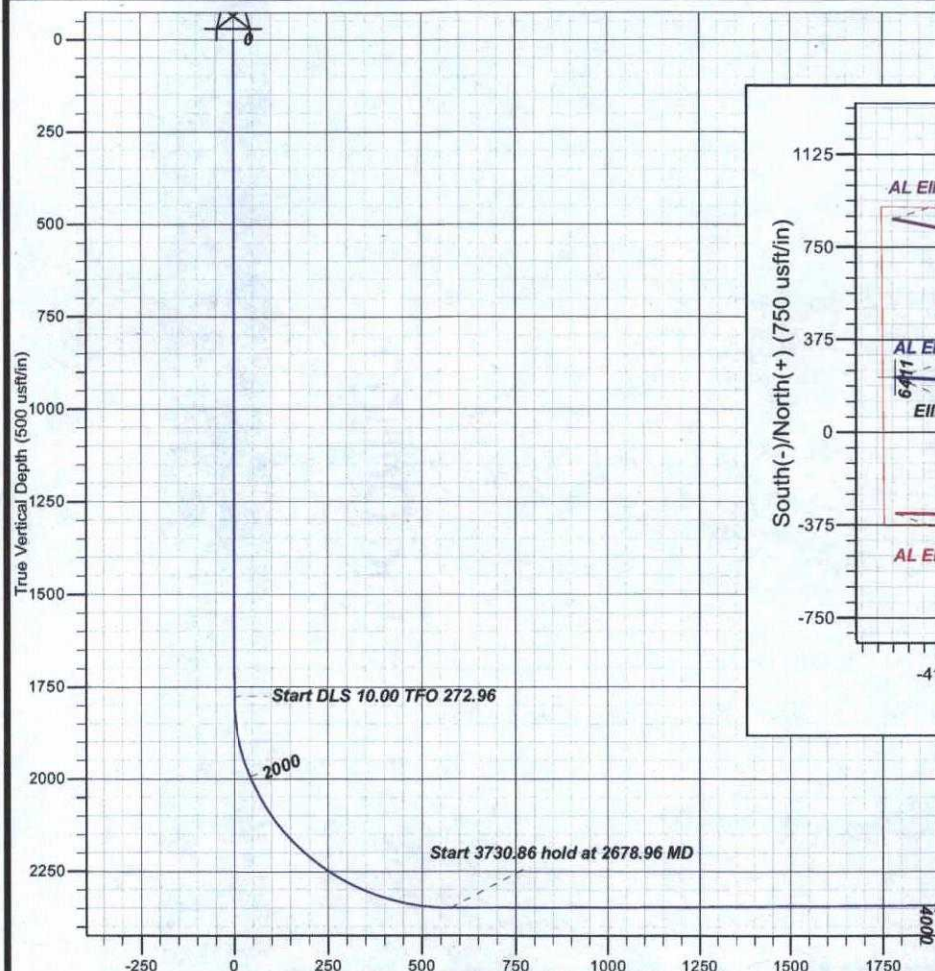
Created By: Janie Collins Date: 10:33, September 28 2015

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Elliott Lat 2 PBHL	2330.00	222.31	-4300.94	2087115.77	2740878.87	36.7356959	-107.7726294

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target	Annotation
1776.05	0.00	0.00	1776.05	0.00	0.00	0.00	0.00	0.00		
2678.96	90.29	272.96	2349.00	29.73	-575.11	10.00	272.96	575.87		
6409.82	90.29	272.96	2330.00	222.31	-4300.94	0.00	0.00	4306.68	Elliott Lat 2 PBHL	



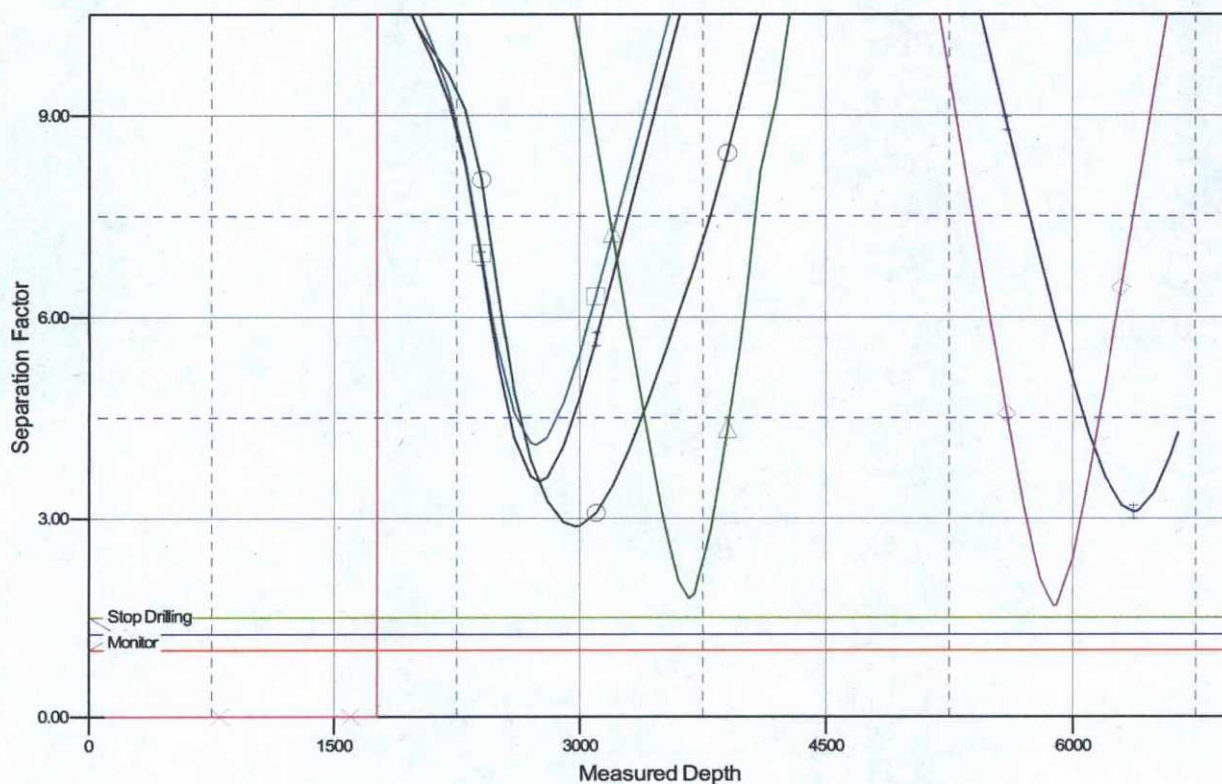


Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1 ST1	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Reference Depths are relative to GL 5864.23' & RKB 11' @ 5875.23ft (A)
Offset Depths are relative to Offset Datum
Central Meridian is -107.8333334

Coordinates are relative to: AL Elliott B 8-1H
Coordinate System is US State Plane 1983, New Mexico Western Zone
Grid Convergence at Surface is: 0.05°

Separation Factor Plot



LEGEND

- | | | |
|--|---------------------------|--------------------------|
| AL Elliott B 8-1H, Lateral 1, Plan 2 V0 | AL Elliott B2B, OH, OH V0 | AL Elliott B7, OH, OH V0 |
| AL Elliott B 8-1H, Lateral 2, Plan #1 V0 | AL Elliott B4, OH, OH V0 | AL Elliott J1, OH, OH V0 |
| AL Elliott B2, OH, OH V0 | AL Elliott B5, OH, OH V0 | |
| AL Elliott B2 (#2), OH, OH V0 | AL Elliott B5E, OH, OH V0 | |



Anticollision Report

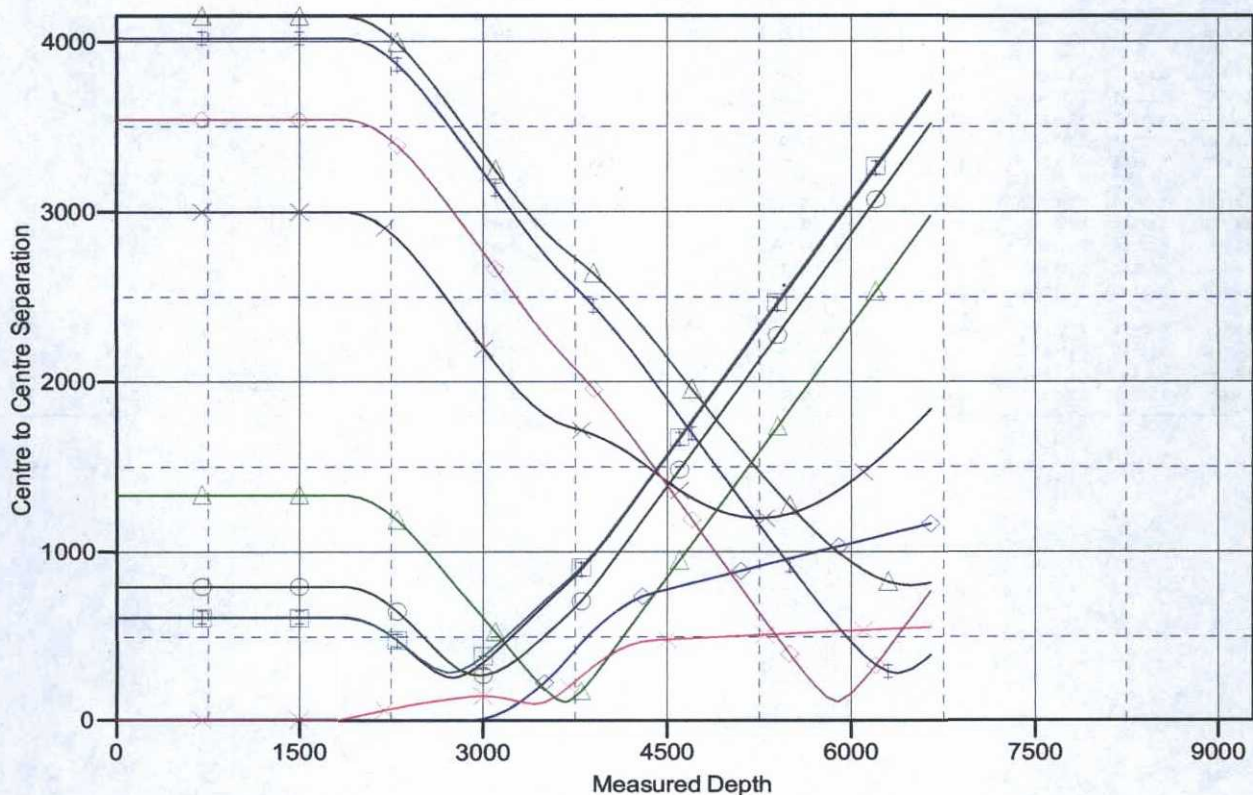


Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1 ST1	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Reference Depths are relative to GL 5864.23' & RKB 11' @ 5875.23ft (A)
Offset Depths are relative to Offset Datum
Central Meridian is -107.8333334

Coordinates are relative to: AL Elliott B 8-1H
Coordinate System is US State Plane 1983, New Mexico Western Zone
Grid Convergence at Surface is: 0.05°

Ladder Plot



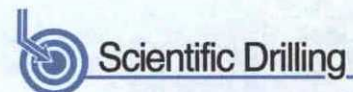
LEGEND

- | | | |
|--|---------------------------|--------------------------|
| AL Elliott B 8-1H, Lateral 1, Plan 2 V0 | AL Elliott B2B, OH, OH V0 | AL Elliott B7, OH, OH V0 |
| AL Elliott B 8-1H, Lateral 2, Plan #1 V0 | AL Elliott B4, OH, OH V0 | AL Elliott J1, OH, OH V0 |
| AL Elliott B2, OH, OH V0 | AL Elliott B5, OH, OH V0 | |
| AL Elliott B2 (#2), OH, OH V0 | AL Elliott B5E, OH, OH V0 | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report

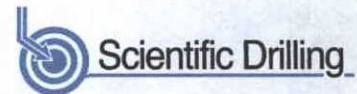


Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1 ST1	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design													Offset Site Error:		0.00 ft
Survey Program:													Offset Well Error:		0.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning		
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre +N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)				
4,900.00	2,420.18	4,622.41	2,324.31	0.00	0.00	78.89	130.51	-2,524.88	498.79						
5,000.00	2,419.40	4,722.35	2,323.50	0.00	0.00	78.97	135.67	-2,624.68	502.33						
5,100.00	2,418.61	4,822.28	2,322.70	0.00	0.00	79.05	140.82	-2,724.47	505.85						
5,200.00	2,417.80	4,922.22	2,321.90	0.00	0.00	79.12	145.98	-2,824.27	509.35						
5,300.00	2,416.99	5,022.16	2,321.09	0.00	0.00	79.20	151.14	-2,924.08	512.83						
5,400.00	2,416.17	5,122.10	2,320.29	0.00	0.00	79.27	156.30	-3,023.88	516.28						
5,500.00	2,415.33	5,222.03	2,319.48	0.00	0.00	79.35	161.46	-3,123.68	519.71						
5,600.00	2,414.49	5,321.97	2,318.68	0.00	0.00	79.42	166.62	-3,223.48	523.12						
5,700.00	2,413.63	5,421.91	2,317.88	0.00	0.00	79.50	171.78	-3,323.29	526.50						
5,800.00	2,412.76	5,521.86	2,317.07	0.00	0.00	79.57	176.94	-3,423.09	529.87						
5,900.00	2,411.89	5,621.80	2,316.27	0.00	0.00	79.65	182.09	-3,522.90	533.21						
6,000.00	2,411.00	5,721.74	2,315.46	0.00	0.00	79.72	187.25	-3,622.70	536.53						
6,100.00	2,410.10	5,821.68	2,314.66	0.00	0.00	79.79	192.41	-3,722.51	539.82						
6,200.00	2,409.19	5,921.63	2,313.86	0.00	0.00	79.87	197.57	-3,822.32	543.10						
6,300.00	2,408.27	6,021.57	2,313.05	0.00	0.00	79.94	202.73	-3,922.13	546.35						
6,400.00	2,407.34	6,121.52	2,312.25	0.00	0.00	80.01	207.89	-4,021.93	549.58						
6,500.00	2,406.39	6,221.46	2,311.44	0.00	0.00	80.09	213.05	-4,121.74	552.79						
6,600.00	2,405.44	6,321.41	2,310.64	0.00	0.00	80.16	218.21	-4,221.55	555.98						
6,645.86	2,405.00	6,367.25	2,310.27	0.00	0.00	80.19	220.57	-4,267.33	557.43						



Anticollision Report



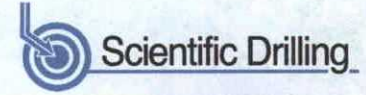
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1 ST1	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott B 8-1H - Lateral 2 - Plan #1													Offset Site Error:	0.00 ft
Survey Program:													Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000 Stop Drilling	
100.00	100.00	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000 Stop Drilling	
200.00	200.00	200.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000 Stop Drilling	
300.00	300.00	300.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000 Stop Drilling	
400.00	400.00	400.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000 Stop Drilling	
500.00	500.00	500.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000 Stop Drilling	
600.00	600.00	600.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000 Stop Drilling	
700.00	700.00	700.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000 Stop Drilling	
800.00	800.00	800.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000 Stop Drilling	
900.00	900.00	900.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000 Stop Drilling	
1,000.00	1,000.00	1,000.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000 Stop Drilling	
1,100.00	1,100.00	1,100.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000 Stop Drilling	
1,200.00	1,200.00	1,200.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000 Stop Drilling	
1,300.00	1,300.00	1,300.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000 Stop Drilling	
1,400.00	1,400.00	1,400.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000 Stop Drilling	
1,500.00	1,500.00	1,500.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000 Stop Drilling	
1,600.00	1,600.00	1,600.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000 Stop Drilling	
1,700.00	1,700.00	1,700.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000 Stop Drilling	
1,761.05	1,761.05	1,761.05	1,761.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000 Stop Drilling, CC, ES, SF	
1,800.00	1,800.00	1,799.96	1,799.95	0.00	0.00	-87.04	0.05	-0.94	0.95	0.95	0.00	2,365.245	N/A	
1,900.00	1,899.98	1,897.90	1,896.77	0.00	0.00	-8.91	0.77	-14.85	14.19	14.19	0.00	N/A		
2,000.00	1,998.76	1,992.81	1,987.01	0.00	0.00	-12.19	2.27	-43.84	30.68	30.68	0.00	N/A		
2,100.00	2,093.47	2,085.30	2,069.18	0.00	0.00	-15.82	4.45	-86.01	46.57					
2,200.00	2,181.24	2,175.66	2,141.90	0.00	0.00	-19.45	7.21	-139.44	61.72					
2,300.00	2,259.41	2,264.21	2,204.14	0.00	0.00	-23.06	10.45	-202.22	75.99					
2,400.00	2,325.60	2,350.00	2,254.51	0.00	0.00	-26.59	14.03	-271.47	89.31					
2,500.00	2,377.79	2,437.19	2,294.52	0.00	0.00	-30.27	18.03	-348.74	101.56					
2,600.00	2,414.40	2,522.28	2,321.82	0.00	0.00	-33.93	22.18	-429.14	112.73					
2,700.00	2,434.32	2,606.90	2,336.86	0.00	0.00	-37.66	26.48	-512.22	122.78					
2,800.00	2,437.81	2,694.74	2,339.81	0.00	0.00	-41.72	31.00	-599.84	132.05					
2,900.00	2,437.20	2,793.75	2,339.02	0.00	0.00	-46.03	36.12	-698.71	141.98					
3,000.00	2,436.53	2,893.56	2,338.21	0.00	0.00	-47.59	41.27	-798.38	145.77					
3,100.00	2,435.77	2,993.25	2,337.41	0.00	0.00	-45.46	46.41	-897.94	140.70					
3,200.00	2,434.95	3,091.37	2,336.62	0.00	0.00	-38.92	51.48	-995.93	127.80					
3,300.00	2,434.06	3,186.49	2,335.86	0.00	0.00	-25.97	56.39	-1,090.91	110.64					
3,400.00	2,433.14	3,277.22	2,335.13	0.00	0.00	-4.87	61.07	-1,181.52	98.43					
3,419.75	2,432.95	3,294.49	2,334.99	0.00	0.00	0.03	61.96	-1,198.77	97.96					
3,500.00	2,432.18	3,362.23	2,334.44	0.00	0.00	19.71	65.46	-1,266.41	106.97					
3,600.00	2,431.20	3,440.28	2,333.82	0.00	0.00	38.51	69.49	-1,344.36	143.87					
3,700.00	2,430.22	3,510.25	2,333.25	0.00	0.00	49.64	73.10	-1,414.23	202.05					
3,800.00	2,429.24	3,579.20	2,332.70	0.00	0.00	61.67	76.66	-1,483.09	267.63					
3,900.00	2,428.26	3,656.34	2,332.08	0.00	0.00	68.82	80.64	-1,560.12	327.59					
4,000.00	2,427.30	3,740.57	2,331.40	0.00	0.00	73.05	84.99	-1,644.24	379.25					
4,100.00	2,426.38	3,830.68	2,330.68	0.00	0.00	75.65	89.64	-1,734.22	421.17					
4,200.00	2,425.50	3,925.34	2,329.91	0.00	0.00	77.24	94.53	-1,828.75	452.42					
4,300.00	2,424.67	4,023.17	2,329.13	0.00	0.00	78.14	99.58	-1,926.45	472.38					
4,400.00	2,423.92	4,122.75	2,328.33	0.00	0.00	78.51	104.72	-2,025.90	480.75					
4,500.00	2,423.20	4,222.68	2,327.52	0.00	0.00	78.59	109.87	-2,125.69	484.40					
4,600.00	2,422.46	4,322.61	2,326.72	0.00	0.00	78.66	115.03	-2,225.49	488.03					
4,700.00	2,421.71	4,422.55	2,325.91	0.00	0.00	78.74	120.19	-2,325.28	491.64					
4,800.00	2,420.95	4,522.48	2,325.11	0.00	0.00	78.82	125.35	-2,425.08	495.23					

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1 ST1	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott B 8-1H - Lateral 1 - Plan 2													Offset Site Error:	0.00 ft
Survey Program: 0-Gyro													Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Reference Depth (ft)	Measured Depth (ft)	Vertical Offset Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
2,671.00	2,437.37	2,870.99	2,437.38	0.00	0.00	90.44	133.38	-665.67	0.88	0.88	0.00	N/A		
2,900.00	2,437.20	2,899.99	2,437.20	0.00	0.00	90.43	139.08	-694.10	0.51	0.51	0.00	N/A	CC, ES	
3,000.00	2,436.53	2,999.48	2,436.61	0.00	0.00	90.39	158.62	-791.65	10.03	10.03	0.00	N/A		
3,100.00	2,435.77	3,097.09	2,436.02	0.00	0.00	90.33	177.80	-887.35	31.49	31.49	0.00	N/A		
3,200.00	2,434.95	3,191.40	2,435.45	0.00	0.00	90.28	196.33	-979.82	64.55	64.55	0.00	N/A		
3,300.00	2,434.06	3,281.04	2,434.91	0.00	0.00	90.22	213.94	-1,067.71	108.74	108.74	0.00	N/A		
3,400.00	2,433.14	3,364.70	2,434.40	0.00	0.00	90.15	230.37	-1,149.74	163.41	163.41	0.00	N/A		
3,500.00	2,432.18	3,441.15	2,433.94	0.00	0.00	90.08	245.39	-1,224.70	227.77	227.77	0.00	N/A		
3,600.00	2,431.20	3,509.29	2,433.53	0.00	0.00	90.02	258.78	-1,291.51	300.88	300.88	0.00	N/A		
3,700.00	2,430.22	3,568.12	2,433.18	0.00	0.00	89.95	270.34	-1,349.20	381.67	381.67	0.00	N/A		
3,800.00	2,429.24	3,625.80	2,432.83	0.00	0.00	90.01	281.67	-1,405.75	463.29	463.29	0.00	N/A		
3,900.00	2,428.26	3,682.87	2,432.43	0.00	0.00	90.08	294.85	-1,471.51	537.38	537.38	0.00	N/A		
4,000.00	2,427.30	3,768.37	2,431.97	0.00	0.00	90.14	309.68	-1,545.54	602.85	602.85	0.00	N/A		
4,100.00	2,426.38	3,851.23	2,431.47	0.00	0.00	90.21	325.96	-1,626.78	658.74	658.74	0.00	N/A		
4,200.00	2,425.50	3,940.21	2,430.94	0.00	0.00	90.27	343.44	-1,714.03	704.23	704.23	0.00	N/A		
4,300.00	2,424.67	4,034.03	2,430.37	0.00	0.00	90.33	361.87	-1,806.02	738.67	738.67	0.00	N/A		
4,400.00	2,423.92	4,131.30	2,429.78	0.00	0.00	90.37	380.98	-1,901.39	761.61	761.61	0.00	N/A		
4,500.00	2,423.20	4,229.63	2,429.19	0.00	0.00	90.37	400.30	-1,997.80	779.83	779.83	0.00	N/A		
4,600.00	2,422.46	4,327.96	2,428.60	0.00	0.00	90.37	419.62	-2,094.21	798.03	798.03	0.00	N/A		
4,700.00	2,421.71	4,426.29	2,428.01	0.00	0.00	90.37	438.94	-2,190.63	816.21	816.21	0.00	N/A		
4,800.00	2,420.95	4,524.63	2,427.41	0.00	0.00	90.37	458.26	-2,287.05	834.36	834.36	0.00	N/A		
4,900.00	2,420.18	4,622.97	2,426.82	0.00	0.00	90.37	477.58	-2,383.47	852.50	852.50	0.00	N/A		
5,000.00	2,419.40	4,721.32	2,426.23	0.00	0.00	90.37	496.90	-2,479.90	870.62	870.62	0.00	N/A		
5,100.00	2,418.61	4,819.67	2,425.63	0.00	0.00	90.38	516.22	-2,576.33	888.71	888.71	0.00	N/A		
5,200.00	2,417.80	4,918.02	2,425.04	0.00	0.00	90.38	535.54	-2,672.76	906.78	906.78	0.00	N/A		
5,300.00	2,416.99	5,016.38	2,424.45	0.00	0.00	90.38	554.87	-2,769.20	924.84	924.84	0.00	N/A		
5,400.00	2,416.17	5,114.74	2,423.86	0.00	0.00	90.39	574.19	-2,865.64	942.87	942.87	0.00	N/A		
5,500.00	2,415.33	5,213.10	2,423.26	0.00	0.00	90.39	593.52	-2,962.09	960.88	960.88	0.00	N/A		
5,600.00	2,414.49	5,311.47	2,422.67	0.00	0.00	90.40	612.84	-3,058.54	978.87	978.87	0.00	N/A		
5,700.00	2,413.63	5,409.84	2,422.08	0.00	0.00	90.40	632.17	-3,154.99	996.84	996.84	0.00	N/A		
5,800.00	2,412.76	5,508.22	2,421.48	0.00	0.00	90.41	651.50	-3,251.45	1,014.78	1,014.78	0.00	N/A		
5,900.00	2,411.89	5,606.60	2,420.89	0.00	0.00	90.42	670.82	-3,347.91	1,032.71	1,032.71	0.00	N/A		
6,000.00	2,411.00	5,704.99	2,420.30	0.00	0.00	90.42	690.15	-3,444.38	1,050.61	1,050.61	0.00	N/A		
6,100.00	2,410.10	5,803.37	2,419.70	0.00	0.00	90.43	709.48	-3,540.85	1,068.50	1,068.50	0.00	N/A		
6,200.00	2,409.19	5,901.76	2,419.11	0.00	0.00	90.44	728.81	-3,637.32	1,086.36	1,086.36	0.00	N/A		
6,300.00	2,408.27	6,000.16	2,418.52	0.00	0.00	90.44	748.14	-3,733.79	1,104.20	1,104.20	0.00	N/A		
6,400.00	2,407.34	6,098.56	2,417.93	0.00	0.00	90.45	767.47	-3,830.27	1,122.02	1,122.02	0.00	N/A		
6,500.00	2,406.39	6,196.96	2,417.33	0.00	0.00	90.46	786.81	-3,926.76	1,139.82	1,139.82	0.00	N/A		
6,600.00	2,405.44	6,295.37	2,416.74	0.00	0.00	90.47	806.14	-4,023.24	1,157.60	1,157.60	0.00	N/A		
6,645.86	2,405.00	6,340.50	2,416.47	0.00	0.00	90.47	815.01	-4,067.50	1,165.75	1,165.75	0.00	N/A		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report

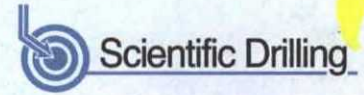


Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1 ST1	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliot J1 - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 182-INCLINOMETER													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,000.00	2,419.40	2,407.75	2,419.40	0.00	70.36	85.60	-178.61	-587.24	2,071.33	2,001.18	70.15	29.527		
5,100.00	2,418.61	2,406.96	2,418.61	0.00	70.33	85.33	-178.61	-587.24	2,170.83	2,100.73	70.10	30.968		
5,200.00	2,417.80	2,406.15	2,417.80	0.00	70.31	85.06	-178.61	-587.24	2,270.38	2,200.33	70.05	32.412		
5,300.00	2,416.99	2,405.34	2,416.99	0.00	70.28	84.79	-178.61	-587.24	2,369.96	2,299.96	69.99	33.859		
5,400.00	2,416.17	2,404.52	2,416.17	0.00	70.26	84.51	-178.61	-587.24	2,469.57	2,399.63	69.94	35.311		
5,500.00	2,415.33	2,403.68	2,415.33	0.00	70.23	84.23	-178.61	-587.24	2,569.21	2,499.33	69.88	36.766		
5,600.00	2,414.49	2,402.84	2,414.49	0.00	70.21	83.95	-178.61	-587.24	2,668.87	2,599.05	69.82	38.226		
5,700.00	2,413.63	2,401.98	2,413.63	0.00	70.18	83.66	-178.61	-587.24	2,768.56	2,698.80	69.75	39.690		
5,800.00	2,412.76	2,401.11	2,412.76	0.00	70.15	83.37	-178.61	-587.24	2,868.26	2,798.58	69.69	41.159		
5,900.00	2,411.89	2,400.24	2,411.89	0.00	70.13	83.08	-178.61	-587.24	2,967.99	2,898.37	69.62	42.631		
6,000.00	2,411.00	2,399.35	2,411.00	0.00	70.10	82.78	-178.61	-587.24	3,067.73	2,998.18	69.55	44.109		
6,100.00	2,410.10	2,398.45	2,410.10	0.00	70.07	82.48	-178.61	-587.24	3,167.48	3,098.01	69.47	45.592		
6,200.00	2,409.19	2,397.54	2,409.19	0.00	70.05	82.18	-178.61	-587.24	3,267.25	3,197.85	69.40	47.080		
6,300.00	2,408.27	2,396.62	2,408.27	0.00	70.02	81.88	-178.61	-587.24	3,367.03	3,297.71	69.32	48.573		
6,400.00	2,407.34	2,395.69	2,407.34	0.00	69.99	81.57	-178.61	-587.24	3,466.82	3,397.58	69.24	50.071		
6,500.00	2,406.39	2,394.74	2,406.39	0.00	69.96	81.26	-178.61	-587.24	3,566.62	3,497.47	69.15	51.575		
6,600.00	2,405.44	2,393.79	2,405.44	0.00	69.93	80.95	-178.61	-587.24	3,666.43	3,597.37	69.07	53.085		
6,645.88	2,405.00	2,393.35	2,405.00	0.00	69.92	80.81	-178.61	-587.24	3,712.21	3,643.19	69.03	53.780		



Anticollision Report



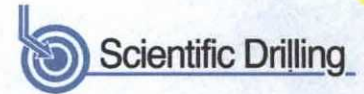
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1 ST1	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott J1 - OH - OH														Offset Site Error:	0.00 ft
Survey Program: 182-INCLINOMETER														Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Distance		Minimum		Separation		Warning					
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor			
0.00	0.00	0.00	11.69	0.00	0.00	-106.92	-178.61	-587.24	613.91						
100.00	100.00	88.31	100.00	0.00	1.34	-106.92	-178.61	-587.24	613.80	612.46	1.34	457.635			
200.00	200.00	188.31	200.00	0.00	2.96	-106.92	-178.61	-587.24	613.80	610.85	2.96	207.688			
300.00	300.00	288.31	300.00	0.00	5.99	-106.92	-178.61	-587.24	613.80	607.81	5.99	102.432			
400.00	400.00	388.31	400.00	0.00	9.03	-106.92	-178.61	-587.24	613.80	604.77	9.03	67.980			
500.00	500.00	488.31	500.00	0.00	12.07	-106.92	-178.61	-587.24	613.80	601.74	12.07	50.870			
600.00	600.00	588.31	600.00	0.00	15.10	-106.92	-178.61	-587.24	613.80	598.70	15.10	40.642			
700.00	700.00	688.31	700.00	0.00	18.14	-106.92	-178.61	-587.24	613.80	595.66	18.14	33.838			
800.00	800.00	788.31	800.00	0.00	21.18	-106.92	-178.61	-587.24	613.80	592.63	21.18	28.985			
900.00	900.00	888.31	900.00	0.00	24.21	-106.92	-178.61	-587.24	613.80	589.59	24.21	25.350			
1,000.00	1,000.00	988.31	1,000.00	0.00	27.25	-106.92	-178.61	-587.24	613.80	586.55	27.25	22.525			
1,100.00	1,100.00	1,088.31	1,100.00	0.00	30.29	-106.92	-178.61	-587.24	613.80	583.52	30.29	20.266			
1,200.00	1,200.00	1,188.31	1,200.00	0.00	33.32	-106.92	-178.61	-587.24	613.80	580.48	33.32	18.419			
1,300.00	1,300.00	1,288.32	1,300.00	0.00	36.36	-106.92	-178.61	-587.24	613.80	577.44	36.36	16.881			
1,400.00	1,400.00	1,388.32	1,400.00	0.00	39.40	-106.92	-178.61	-587.24	613.80	574.40	39.40	15.580			
1,500.00	1,500.00	1,488.32	1,500.00	0.00	42.43	-106.92	-178.61	-587.24	613.80	571.37	42.43	14.465			
1,600.00	1,600.00	1,588.32	1,600.00	0.00	45.47	-106.92	-178.61	-587.24	613.80	568.33	45.47	13.499			
1,700.00	1,700.00	1,688.32	1,700.00	0.00	48.51	-106.92	-178.61	-587.24	613.80	565.29	48.51	12.654			
1,800.00	1,800.00	1,788.33	1,800.00	0.00	51.55	-106.92	-178.61	-587.24	613.80	562.26	51.55	11.908			
1,900.00	1,899.98	1,888.31	1,899.98	0.00	54.58	-28.34	-178.61	-587.24	612.86	558.36	54.50	11.244			
2,000.00	1,998.76	1,987.09	1,998.76	0.00	57.58	-29.65	-178.61	-587.24	599.91	543.52	56.39	10.638			
2,100.00	2,093.47	2,081.80	2,093.47	0.00	60.46	-32.71	-178.61	-587.24	572.40	515.42	56.98	10.046			
2,200.00	2,181.24	2,169.58	2,181.24	0.00	63.12	-38.02	-178.61	-587.24	531.89	475.01	56.89	9.350			
2,300.00	2,259.41	2,247.74	2,259.41	0.00	65.50	-46.25	-178.61	-587.24	481.02	423.37	57.65	8.344			
2,400.00	2,325.80	2,313.93	2,325.80	0.00	67.51	-57.71	-178.61	-587.24	423.82	362.82	61.00	6.948			
2,500.00	2,377.79	2,366.14	2,377.79	0.00	69.09	-71.05	-178.61	-587.24	366.50	300.37	66.13	5.542			
2,600.00	2,414.40	2,402.75	2,414.40	0.00	70.20	-82.73	-178.61	-587.24	318.48	248.79	69.69	4.570			
2,700.00	2,434.32	2,422.67	2,434.32	0.00	70.81	-89.27	-178.61	-587.24	292.33	221.53	70.80	4.129			
2,732.80	2,437.40	2,425.75	2,437.40	0.00	70.90	-90.00	-178.61	-587.24	290.50	219.60	70.90	4.097	CC, ES, SF		
2,800.00	2,437.81	2,426.16	2,437.81	0.00	70.92	-89.92	-178.61	-587.24	298.17	227.26	70.92	4.205			
2,900.00	2,437.20	2,425.55	2,437.20	0.00	70.90	-89.81	-178.61	-587.24	334.74	263.84	70.90	4.722			
3,000.00	2,436.53	2,424.88	2,436.53	0.00	70.88	-89.72	-178.61	-587.24	387.01	316.14	70.88	5.460			
3,100.00	2,435.77	2,424.12	2,435.77	0.00	70.85	-89.64	-178.61	-587.24	446.98	376.13	70.85	6.309			
3,200.00	2,434.95	2,423.30	2,434.95	0.00	70.83	-89.57	-178.61	-587.24	511.24	440.41	70.83	7.218			
3,300.00	2,434.06	2,422.41	2,434.06	0.00	70.80	-89.53	-178.61	-587.24	577.57	506.77	70.80	8.158			
3,400.00	2,433.14	2,421.49	2,433.14	0.00	70.77	-89.51	-178.61	-587.24	644.53	573.76	70.77	9.107			
3,500.00	2,432.18	2,420.53	2,432.18	0.00	70.74	-89.51	-178.61	-587.24	711.10	640.38	70.74	10.052			
3,600.00	2,431.20	2,419.55	2,431.20	0.00	70.71	-89.52	-178.61	-587.24	776.53	705.82	70.71	10.982			
3,700.00	2,430.22	2,418.57	2,430.22	0.00	70.68	-89.55	-178.61	-587.24	840.25	769.57	70.68	11.888			
3,800.00	2,429.24	2,417.59	2,429.24	0.00	70.66	-89.34	-178.61	-587.24	909.53	838.88	70.65	12.874			
3,900.00	2,428.26	2,416.61	2,428.26	0.00	70.63	-89.04	-178.61	-587.24	991.26	920.64	70.62	14.037			
4,000.00	2,427.30	2,415.65	2,427.30	0.00	70.60	-88.57	-178.61	-587.24	1,081.61	1,011.03	70.57	15.326			
4,100.00	2,426.38	2,414.73	2,426.38	0.00	70.57	-87.63	-178.61	-587.24	1,177.44	1,106.93	70.51	16.699			
4,200.00	2,425.50	2,413.85	2,425.50	0.00	70.54	-84.08	-178.61	-587.24	1,276.27	1,206.10	70.17	18.189			
4,300.00	2,424.67	2,413.02	2,424.67	0.00	70.52	78.95	-178.61	-587.24	1,376.19	1,306.97	69.22	19.882			
4,400.00	2,423.92	2,412.27	2,423.92	0.00	70.49	87.10	-178.61	-587.24	1,475.66	1,405.26	70.40	20.960			
4,500.00	2,423.20	2,411.55	2,423.20	0.00	70.47	86.86	-178.61	-587.24	1,574.72	1,504.35	70.37	22.379			
4,600.00	2,422.46	2,410.81	2,422.46	0.00	70.45	86.62	-178.61	-587.24	1,673.89	1,603.56	70.33	23.801			
4,700.00	2,421.71	2,410.06	2,421.71	0.00	70.43	86.37	-178.61	-587.24	1,773.14	1,702.86	70.29	25.228			
4,800.00	2,420.95	2,409.30	2,420.95	0.00	70.40	86.12	-178.61	-587.24	1,872.48	1,802.24	70.24	26.657			
4,900.00	2,420.18	2,408.53	2,420.18	0.00	70.38	85.86	-178.61	-587.24	1,971.88	1,901.68	70.20	28.090			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



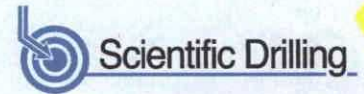
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1 ST1	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliot B7 - OH - OH													Offset Site Error:		0.00 ft
Survey Program: 207-INCLINOMETER													Offset Well Error:		0.00 ft
Reference				Offset			Semi Major Axis		Distance				Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor			
5,100.00	2,418.61	2,374.41	2,418.61	0.00	68.96	90.78	472.79	-4,119.96	1,599.95	1,531.00	68.96	23.202			
5,200.00	2,417.80	2,373.61	2,417.80	0.00	68.94	90.74	472.79	-4,119.96	1,514.41	1,445.47	68.93	21.969			
5,300.00	2,416.99	2,372.80	2,416.99	0.00	68.92	90.69	472.79	-4,119.96	1,430.72	1,361.81	68.91	20.762			
5,400.00	2,416.17	2,371.97	2,416.17	0.00	68.89	90.64	472.79	-4,119.96	1,349.25	1,280.36	68.89	19.587			
5,500.00	2,415.33	2,371.14	2,415.33	0.00	68.86	90.59	472.79	-4,119.96	1,270.41	1,201.55	68.86	18.449			
5,600.00	2,414.49	2,370.29	2,414.49	0.00	68.84	90.53	472.79	-4,119.96	1,194.73	1,125.89	68.84	17.356			
5,700.00	2,413.63	2,369.44	2,413.63	0.00	68.81	90.48	472.79	-4,119.96	1,122.84	1,054.03	68.81	16.318			
5,800.00	2,412.76	2,368.57	2,412.76	0.00	68.79	90.42	472.79	-4,119.96	1,055.52	986.74	68.79	15.345			
5,900.00	2,411.89	2,367.69	2,411.89	0.00	68.76	90.37	472.79	-4,119.96	993.71	924.95	68.76	14.452			
6,000.00	2,411.00	2,366.80	2,411.00	0.00	68.73	90.31	472.79	-4,119.96	938.48	869.75	68.73	13.654			
6,100.00	2,410.10	2,365.90	2,410.10	0.00	68.71	90.25	472.79	-4,119.96	891.06	822.36	68.71	12.969			
6,200.00	2,409.19	2,364.99	2,409.19	0.00	68.68	90.19	472.79	-4,119.96	852.77	784.09	68.68	12.417			
6,300.00	2,408.27	2,364.07	2,408.27	0.00	68.65	90.12	472.79	-4,119.96	824.86	756.21	68.65	12.015			
6,400.00	2,407.34	2,363.14	2,407.34	0.00	68.62	90.06	472.79	-4,119.96	808.41	739.79	68.62	11.781			
6,484.52	2,406.54	2,362.34	2,406.54	0.00	68.60	90.00	472.79	-4,119.96	803.99	735.39	68.60	11.720			CC, ES, SF
6,500.00	2,406.39	2,362.20	2,406.39	0.00	68.59	89.99	472.79	-4,119.96	804.14	735.55	68.59	11.723			
6,600.00	2,405.44	2,361.25	2,405.44	0.00	68.56	89.92	472.79	-4,119.96	812.23	743.66	68.56	11.846			
6,645.86	2,405.00	2,360.80	2,405.00	0.00	68.55	89.89	472.79	-4,119.96	819.99	751.44	68.55	11.962			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



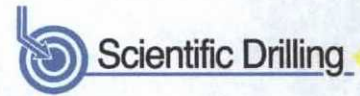
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1 ST1	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott B7 - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 207-INCLINOMETER													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (ft)	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.00	0.00	0.00	44.23	0.00	0.00	-83.45	472.79	-4,119.96	4,147.23					
100.00	100.00	55.77	100.00	0.00	0.85	-83.45	472.79	-4,119.96	4,147.00	4,146.15	0.85	4,894.597		
200.00	200.00	155.77	200.00	0.00	2.37	-83.45	472.79	-4,119.96	4,147.00	4,144.63	2.37	1,752.934		
300.00	300.00	255.77	300.00	0.00	4.62	-83.45	472.79	-4,119.96	4,147.00	4,142.37	4.62	896.705		
400.00	400.00	355.77	400.00	0.00	7.66	-83.45	472.79	-4,119.96	4,147.00	4,139.34	7.66	541.278		
500.00	500.00	455.77	500.00	0.00	10.70	-83.45	472.79	-4,119.96	4,147.00	4,136.30	10.70	387.632		
600.00	600.00	555.77	600.00	0.00	13.73	-83.45	472.79	-4,119.96	4,147.00	4,133.26	13.74	301.928		
700.00	700.00	655.77	700.00	0.00	16.77	-83.45	472.79	-4,119.96	4,147.00	4,130.23	16.77	247.259		
800.00	800.00	755.78	800.00	0.00	19.81	-83.45	472.79	-4,119.96	4,147.00	4,127.19	19.81	209.348		
900.00	900.00	855.78	900.00	0.00	22.85	-83.45	472.79	-4,119.96	4,147.00	4,124.15	22.85	181.520		
1,000.00	1,000.00	955.78	1,000.00	0.00	25.88	-83.45	472.79	-4,119.96	4,147.00	4,121.11	25.88	160.222		
1,100.00	1,100.00	1,055.78	1,100.00	0.00	28.92	-83.45	472.79	-4,119.96	4,147.00	4,118.08	28.92	143.397		
1,200.00	1,200.00	1,155.78	1,200.00	0.00	31.96	-83.45	472.79	-4,119.96	4,147.00	4,115.04	31.96	129.770		
1,300.00	1,300.00	1,255.78	1,300.00	0.00	34.99	-83.45	472.79	-4,119.96	4,147.00	4,112.00	34.99	118.508		
1,400.00	1,400.00	1,355.78	1,400.00	0.00	38.03	-83.45	472.79	-4,119.96	4,147.00	4,108.97	38.03	109.045		
1,500.00	1,500.00	1,455.79	1,500.00	0.00	41.07	-83.45	472.79	-4,119.96	4,147.00	4,105.93	41.07	100.981		
1,600.00	1,600.00	1,555.79	1,600.00	0.00	44.10	-83.45	472.79	-4,119.96	4,147.00	4,102.89	44.10	94.028		
1,700.00	1,700.00	1,655.79	1,700.00	0.00	47.14	-83.45	472.79	-4,119.96	4,147.00	4,099.86	47.14	87.971		
1,800.00	1,800.00	1,755.80	1,800.00	0.00	50.18	-83.45	472.79	-4,119.96	4,147.00	4,096.82	50.18	82.646		
1,900.00	1,899.98	1,855.78	1,899.98	0.00	53.21	-4.79	472.79	-4,119.96	4,145.94	4,092.82	53.12	78.053		
2,000.00	1,998.76	1,954.56	1,998.76	0.00	56.21	-4.94	472.79	-4,119.96	4,131.23	4,076.55	54.69	75.544		
2,100.00	2,093.47	2,049.27	2,093.47	0.00	59.09	-5.27	472.79	-4,119.96	4,099.66	4,045.39	54.27	75.541		
2,200.00	2,181.24	2,137.05	2,181.24	0.00	61.76	-5.86	472.79	-4,119.96	4,052.19	4,000.50	51.69	78.398		
2,300.00	2,259.41	2,215.22	2,259.41	0.00	64.13	-6.84	472.79	-4,119.96	3,990.25	3,943.32	46.93	85.019		
2,400.00	2,325.60	2,281.40	2,325.60	0.00	66.14	-8.48	472.79	-4,119.96	3,915.74	3,875.45	40.30	97.172		
2,500.00	2,377.79	2,333.59	2,377.79	0.00	67.72	-11.48	472.79	-4,119.96	3,830.93	3,798.13	32.80	116.782		
2,600.00	2,414.40	2,370.20	2,414.40	0.00	68.84	-18.11	472.79	-4,119.96	3,738.40	3,709.74	28.66	130.426		
2,700.00	2,434.32	2,390.12	2,434.32	0.00	69.44	-40.11	472.79	-4,119.96	3,640.97	3,595.69	45.28	80.414		
2,800.00	2,437.81	2,393.61	2,437.81	0.00	69.55	-83.52	472.79	-4,119.96	3,541.57	3,472.15	69.42	51.019		
2,900.00	2,437.20	2,393.01	2,437.20	0.00	69.53	-95.49	472.79	-4,119.96	3,442.02	3,372.81	69.21	49.732		
3,000.00	2,436.53	2,392.33	2,436.53	0.00	69.51	97.38	472.79	-4,119.96	3,342.08	3,273.15	68.94	48.481		
3,100.00	2,435.77	2,391.58	2,435.77	0.00	69.49	92.50	472.79	-4,119.96	3,242.84	3,173.42	69.42	46.713		
3,200.00	2,434.95	2,390.75	2,434.95	0.00	69.46	91.54	472.79	-4,119.96	3,145.86	3,076.42	69.44	45.306		
3,300.00	2,434.06	2,389.87	2,434.06	0.00	69.43	91.10	472.79	-4,119.96	3,052.84	2,983.42	69.42	43.976		
3,400.00	2,433.14	2,388.94	2,433.14	0.00	69.41	90.83	472.79	-4,119.96	2,965.58	2,896.18	69.40	42.733		
3,500.00	2,432.18	2,387.98	2,432.18	0.00	69.38	90.64	472.79	-4,119.96	2,885.93	2,816.56	69.37	41.601		
3,600.00	2,431.20	2,387.00	2,431.20	0.00	69.35	90.48	472.79	-4,119.96	2,815.74	2,746.39	69.34	40.605		
3,700.00	2,430.22	2,386.02	2,430.22	0.00	69.32	90.35	472.79	-4,119.96	2,756.79	2,687.47	69.32	39.772		
3,800.00	2,429.24	2,385.04	2,429.24	0.00	69.29	90.41	472.79	-4,119.96	2,701.43	2,632.15	69.29	38.990		
3,900.00	2,428.26	2,384.06	2,428.26	0.00	69.26	90.49	472.79	-4,119.96	2,638.78	2,569.52	69.25	38.102		
4,000.00	2,427.30	2,383.11	2,427.30	0.00	69.23	90.58	472.79	-4,119.96	2,569.20	2,499.97	69.22	37.114		
4,100.00	2,426.38	2,382.18	2,426.38	0.00	69.20	90.67	472.79	-4,119.96	2,493.18	2,423.98	69.20	36.031		
4,200.00	2,425.50	2,381.30	2,425.50	0.00	69.17	90.78	472.79	-4,119.96	2,411.27	2,342.10	69.17	34.861		
4,300.00	2,424.67	2,380.48	2,424.67	0.00	69.15	90.91	472.79	-4,119.96	2,324.10	2,254.96	69.14	33.614		
4,400.00	2,423.92	2,379.73	2,423.92	0.00	69.13	91.06	472.79	-4,119.96	2,232.45	2,163.34	69.11	32.301		
4,500.00	2,423.20	2,379.00	2,423.20	0.00	69.10	91.03	472.79	-4,119.96	2,139.55	2,070.45	69.09	30.966		
4,600.00	2,422.46	2,378.26	2,422.46	0.00	69.08	90.99	472.79	-4,119.96	2,047.30	1,978.23	69.07	29.641		
4,700.00	2,421.71	2,377.51	2,421.71	0.00	69.06	90.95	472.79	-4,119.96	1,955.81	1,886.76	69.05	28.325		
4,800.00	2,420.95	2,376.75	2,420.95	0.00	69.04	90.91	472.79	-4,119.96	1,865.18	1,796.16	69.03	27.021		
4,900.00	2,420.18	2,375.98	2,420.18	0.00	69.01	90.87	472.79	-4,119.96	1,775.56	1,706.55	69.00	25.731		
5,000.00	2,419.40	2,375.20	2,419.40	0.00	68.99	90.83	472.79	-4,119.96	1,687.08	1,618.10	68.98	24.457		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report

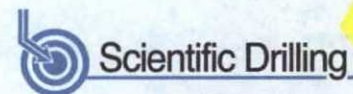


Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1 ST1	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott B5E - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 60-INCLINOMETER													Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
5,000.00	2,419.40	2,419.13	2,419.40	0.00	72.36	86.24	-143.71	-600.34	2,061.59	1,989.39	72.20	28.553		
5,100.00	2,418.61	2,418.33	2,418.61	0.00	72.33	86.01	-143.71	-600.34	2,160.91	2,088.75	72.16	29.947		
5,200.00	2,417.80	2,417.53	2,417.80	0.00	72.31	85.78	-143.71	-600.34	2,260.29	2,188.17	72.11	31.344		
5,300.00	2,416.99	2,416.72	2,416.99	0.00	72.28	85.55	-143.71	-600.34	2,359.71	2,287.65	72.07	32.744		
5,400.00	2,416.17	2,415.89	2,416.17	0.00	72.26	85.31	-143.71	-600.34	2,459.18	2,387.17	72.02	34.147		
5,500.00	2,415.33	2,415.06	2,415.33	0.00	72.23	85.06	-143.71	-600.34	2,558.69	2,486.73	71.97	35.554		
5,600.00	2,414.49	2,414.21	2,414.49	0.00	72.21	84.82	-143.71	-600.34	2,658.24	2,586.32	71.91	36.965		
5,700.00	2,413.63	2,413.36	2,413.63	0.00	72.18	84.57	-143.71	-600.34	2,757.81	2,685.95	71.86	38.379		
5,800.00	2,412.76	2,412.49	2,412.76	0.00	72.15	84.31	-143.71	-600.34	2,857.41	2,785.61	71.80	39.796		
5,900.00	2,411.89	2,411.61	2,411.89	0.00	72.13	84.06	-143.71	-600.34	2,957.04	2,885.30	71.74	41.218		
6,000.00	2,411.00	2,410.72	2,411.00	0.00	72.10	83.80	-143.71	-600.34	3,056.69	2,985.01	71.68	42.643		
6,100.00	2,410.10	2,409.83	2,410.10	0.00	72.07	83.54	-143.71	-600.34	3,156.36	3,084.74	71.62	44.072		
6,200.00	2,409.19	2,408.92	2,409.19	0.00	72.05	83.28	-143.71	-600.34	3,256.04	3,184.49	71.55	45.506		
6,300.00	2,408.27	2,407.99	2,408.27	0.00	72.02	83.01	-143.71	-600.34	3,355.75	3,284.26	71.49	46.943		
6,400.00	2,407.34	2,407.06	2,407.34	0.00	71.99	82.74	-143.71	-600.34	3,455.47	3,384.05	71.42	48.366		
6,500.00	2,406.39	2,406.12	2,406.39	0.00	71.96	82.47	-143.71	-600.34	3,555.20	3,483.86	71.34	49.832		
6,600.00	2,405.44	2,405.17	2,405.44	0.00	71.93	82.20	-143.71	-600.34	3,654.95	3,583.68	71.27	51.284		
6,645.86	2,405.00	2,404.73	2,405.00	0.00	71.92	82.07	-143.71	-600.34	3,700.70	3,629.46	71.23	51.951		



Anticollision Report



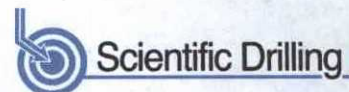
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1 ST1	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design		AL Elliott - AL Elliot B5E - OH - OH										Offset Site Error:		0.00 ft
Survey Program:		60-INCLINOMETER										Offset Well Error:		0.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.30	0.00	0.00	-103.46	-143.71	-600.34	617.30					
100.00	100.00	99.70	100.00	0.00	1.92	-103.46	-143.71	-600.34	617.30	615.38	1.92	321.292		
200.00	200.00	199.70	200.00	0.00	4.96	-103.46	-143.71	-600.34	617.30	612.34	4.96	124.520		
300.00	300.00	299.70	300.00	0.00	7.99	-103.46	-143.71	-600.34	617.30	609.31	7.99	77.224		
400.00	400.00	399.70	400.00	0.00	11.03	-103.46	-143.71	-600.34	617.30	606.27	11.03	55.964		
500.00	500.00	499.70	500.00	0.00	14.07	-103.46	-143.71	-600.34	617.30	603.24	14.07	43.882		
600.00	600.00	599.70	600.00	0.00	17.10	-103.46	-143.71	-600.34	617.30	600.20	17.10	36.091		
700.00	700.00	699.70	700.00	0.00	20.14	-103.46	-143.71	-600.34	617.30	597.16	20.14	30.649		
800.00	800.00	799.70	800.00	0.00	23.18	-103.46	-143.71	-600.34	617.30	594.12	23.18	26.634		
900.00	900.00	899.71	900.00	0.00	26.21	-103.46	-143.71	-600.34	617.30	591.09	26.21	23.548		
1,000.00	1,000.00	999.71	1,000.00	0.00	29.25	-103.46	-143.71	-600.34	617.30	588.05	29.25	21.103		
1,100.00	1,100.00	1,099.71	1,100.00	0.00	32.29	-103.46	-143.71	-600.34	617.30	585.01	32.29	19.118		
1,200.00	1,200.00	1,199.71	1,200.00	0.00	35.32	-103.46	-143.71	-600.34	617.30	581.98	35.33	17.475		
1,300.00	1,300.00	1,299.73	1,300.00	0.00	38.36	-103.46	-143.71	-600.34	617.30	578.94	38.36	16.091		
1,400.00	1,400.00	1,399.73	1,400.00	0.00	41.40	-103.46	-143.71	-600.34	617.30	575.90	41.40	14.911		
1,500.00	1,500.00	1,499.73	1,500.00	0.00	44.44	-103.46	-143.71	-600.34	617.30	572.87	44.44	13.892		
1,600.00	1,600.00	1,599.73	1,600.00	0.00	47.47	-103.46	-143.71	-600.34	617.30	569.83	47.47	13.003		
1,700.00	1,700.00	1,699.73	1,700.00	0.00	50.51	-103.46	-143.71	-600.34	617.30	566.79	50.51	12.221		
1,800.00	1,800.00	1,799.73	1,800.00	0.00	53.55	-103.46	-143.71	-600.34	617.30	563.76	53.55	11.528		
1,900.00	1,899.98	1,899.71	1,899.98	0.00	56.58	-24.87	-143.71	-600.34	616.34	559.84	56.50	10.909		
2,000.00	1,998.76	1,998.48	1,998.76	0.00	59.58	-26.05	-143.71	-600.34	602.98	544.71	58.27	10.348		
2,100.00	2,093.47	2,093.20	2,093.47	0.00	62.46	-28.82	-143.71	-600.34	574.52	515.97	58.55	9.812		
2,200.00	2,181.24	2,180.97	2,181.24	0.00	65.12	-33.71	-143.71	-600.34	532.42	474.52	57.90	9.195		
2,300.00	2,259.41	2,259.14	2,259.41	0.00	67.50	-41.52	-143.71	-600.34	479.05	421.15	57.90	8.274		
2,400.00	2,325.60	2,325.32	2,325.60	0.00	69.51	-52.97	-143.71	-600.34	418.07	357.21	60.86	6.869		
2,500.00	2,377.79	2,377.51	2,377.79	0.00	71.09	-67.26	-143.71	-600.34	355.14	288.42	66.72	5.323		
2,600.00	2,414.40	2,414.13	2,414.40	0.00	72.20	-80.64	-143.71	-600.34	299.29	227.96	71.33	4.196		
2,700.00	2,434.32	2,434.05	2,434.32	0.00	72.81	-88.69	-143.71	-600.34	264.10	191.31	72.79	3.628		
2,752.55	2,438.63	2,438.36	2,438.63	0.00	72.94	-90.00	-143.71	-600.34	258.86	185.92	72.94	3.549	CC, ES, SF	
2,800.00	2,437.81	2,437.53	2,437.81	0.00	72.92	-89.94	-143.71	-600.34	263.18	190.26	72.92	3.609		
2,900.00	2,437.20	2,436.93	2,437.20	0.00	72.90	-89.81	-143.71	-600.34	297.49	224.59	72.90	4.081		
3,000.00	2,436.53	2,436.25	2,436.53	0.00	72.88	-89.70	-143.71	-600.34	350.58	277.71	72.88	4.811		
3,100.00	2,435.77	2,435.50	2,435.77	0.00	72.85	-89.61	-143.71	-600.34	412.84	339.98	72.85	5.667		
3,200.00	2,434.95	2,434.67	2,434.95	0.00	72.83	-89.54	-143.71	-600.34	479.98	407.15	72.83	6.591		
3,300.00	2,434.06	2,433.79	2,434.06	0.00	72.80	-89.49	-143.71	-600.34	549.43	476.63	72.80	7.547		
3,400.00	2,433.14	2,432.86	2,433.14	0.00	72.77	-89.47	-143.71	-600.34	619.57	546.80	72.77	8.514		
3,500.00	2,432.18	2,431.90	2,432.18	0.00	72.74	-89.47	-143.71	-600.34	689.33	616.59	72.74	9.476		
3,600.00	2,431.20	2,430.92	2,431.20	0.00	72.71	-89.48	-143.71	-600.34	757.93	685.22	72.71	10.424		
3,700.00	2,430.22	2,429.94	2,430.22	0.00	72.68	-89.51	-143.71	-600.34	824.78	752.10	72.68	11.348		
3,800.00	2,429.24	2,428.96	2,429.24	0.00	72.66	-89.28	-143.71	-600.34	896.87	824.22	72.65	12.345		
3,900.00	2,428.26	2,427.99	2,428.26	0.00	72.63	-88.95	-143.71	-600.34	980.70	908.09	72.61	13.506		
4,000.00	2,427.30	2,427.03	2,427.30	0.00	72.60	-88.41	-143.71	-600.34	1,072.49	999.92	72.57	14.779		
4,100.00	2,426.38	2,426.10	2,426.38	0.00	72.57	-87.22	-143.71	-600.34	1,169.18	1,096.70	72.48	16.130		
4,200.00	2,425.50	2,425.22	2,425.50	0.00	72.54	-80.94	-143.71	-600.34	1,268.41	1,196.77	71.64	17.705		
4,300.00	2,424.67	2,424.40	2,424.67	0.00	72.52	83.29	-143.71	-600.34	1,368.35	1,296.32	72.02	18.999		
4,400.00	2,423.92	2,423.65	2,423.92	0.00	72.49	87.54	-143.71	-600.34	1,467.54	1,395.11	72.43	20.262		
4,500.00	2,423.20	2,422.92	2,423.20	0.00	72.47	87.33	-143.71	-600.34	1,566.24	1,493.85	72.39	21.635		
4,600.00	2,422.46	2,422.18	2,422.46	0.00	72.45	87.12	-143.71	-600.34	1,665.10	1,592.74	72.36	23.012		
4,700.00	2,421.71	2,421.44	2,421.71	0.00	72.43	86.91	-143.71	-600.34	1,764.08	1,691.76	72.32	24.392		
4,800.00	2,420.95	2,420.68	2,420.95	0.00	72.40	86.69	-143.71	-600.34	1,863.16	1,790.88	72.28	25.776		
4,900.00	2,420.18	2,419.91	2,420.18	0.00	72.38	86.47	-143.71	-600.34	1,962.34	1,890.10	72.24	27.163		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



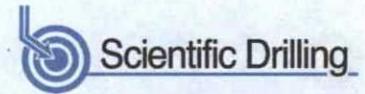
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1 ST1	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliot B5 - OH - OH													Offset Site Error: 0.00 ft
Survey Program: 305-INCLINOMETER													Offset Well Error: 0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
5,100.00	2,418.61	2,364.00	2,418.61	0.00	67.16	93.18	-230.35	-3,533.14	792.15	725.09	67.05	11.813	
5,200.00	2,417.80	2,363.19	2,417.80	0.00	67.13	92.82	-230.35	-3,533.14	693.30	626.25	67.05	10.340	
5,300.00	2,416.99	2,362.38	2,416.99	0.00	67.11	92.44	-230.35	-3,533.14	594.84	527.79	67.05	8.872	
5,400.00	2,416.17	2,361.56	2,416.17	0.00	67.08	92.05	-230.35	-3,533.14	496.99	429.95	67.04	7.413	
5,500.00	2,415.33	2,360.72	2,415.33	0.00	67.06	91.65	-230.35	-3,533.14	400.19	333.16	67.03	5.970	
5,600.00	2,414.49	2,359.88	2,414.49	0.00	67.03	91.24	-230.35	-3,533.14	305.46	238.44	67.02	4.558	
5,700.00	2,413.63	2,359.02	2,413.63	0.00	67.01	90.81	-230.35	-3,533.14	215.52	148.52	67.00	3.217	
5,800.00	2,412.76	2,358.15	2,412.76	0.00	66.98	90.38	-230.35	-3,533.14	139.95	72.97	66.98	2.089	
5,884.36	2,412.02	2,357.41	2,412.02	0.00	66.96	90.00	-230.35	-3,533.14	111.67	44.72	66.96	1.668	CC, ES, SF
5,900.00	2,411.89	2,357.28	2,411.89	0.00	66.95	89.93	-230.35	-3,533.14	112.76	45.81	66.95	1.684	
6,000.00	2,411.00	2,356.39	2,411.00	0.00	66.93	89.47	-230.35	-3,533.14	160.75	93.82	66.92	2.402	
6,100.00	2,410.10	2,355.49	2,410.10	0.00	66.90	89.00	-230.35	-3,533.14	242.81	175.92	66.89	3.630	
6,200.00	2,409.19	2,354.58	2,409.19	0.00	66.87	88.52	-230.35	-3,533.14	334.77	267.92	66.85	5.008	
6,300.00	2,408.27	2,353.66	2,408.27	0.00	66.84	88.03	-230.35	-3,533.14	430.32	363.51	66.80	6.441	
6,400.00	2,407.34	2,352.73	2,407.34	0.00	66.82	87.53	-230.35	-3,533.14	527.52	460.76	66.75	7.902	
6,500.00	2,406.39	2,351.78	2,406.39	0.00	66.79	87.02	-230.35	-3,533.14	625.59	558.89	66.70	9.380	
6,600.00	2,405.44	2,350.83	2,405.44	0.00	66.76	86.50	-230.35	-3,533.14	724.19	657.55	66.63	10.868	
6,645.86	2,405.00	2,350.39	2,405.00	0.00	66.74	86.26	-230.35	-3,533.14	769.53	702.93	66.60	11.554	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1 ST1	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliot B5 - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 305-INCLINOMETER													Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Distance		Warning								
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	54.71	0.00	0.00	-93.73	-230.35	-3,533.14	3,541.06					
100.00	100.00	45.29	100.00	0.00	0.69	-93.73	-230.35	-3,533.14	3,540.64	3,539.95	0.69	5,145.659		
200.00	200.00	145.29	200.00	0.00	2.21	-93.73	-230.35	-3,533.14	3,540.64	3,538.43	2.21	1,604.654		
300.00	300.00	245.29	300.00	0.00	3.72	-93.73	-230.35	-3,533.14	3,540.64	3,536.91	3.72	950.538		
400.00	400.00	345.29	400.00	0.00	5.85	-93.73	-230.35	-3,533.14	3,540.64	3,534.78	5.86	604.714		
500.00	500.00	445.29	500.00	0.00	8.89	-93.73	-230.35	-3,533.14	3,540.64	3,531.75	8.89	398.186		
600.00	600.00	545.29	600.00	0.00	11.93	-93.73	-230.35	-3,533.14	3,540.64	3,528.71	11.93	296.815		
700.00	700.00	645.29	700.00	0.00	14.97	-93.73	-230.35	-3,533.14	3,540.64	3,525.67	14.97	236.585		
800.00	800.00	745.30	800.00	0.00	18.00	-93.73	-230.35	-3,533.14	3,540.64	3,522.64	18.00	196.673		
900.00	900.00	845.30	900.00	0.00	21.04	-93.73	-230.35	-3,533.14	3,540.64	3,519.60	21.04	168.285		
1,000.00	1,000.00	945.30	1,000.00	0.00	24.08	-93.73	-230.35	-3,533.14	3,540.64	3,516.56	24.08	147.059		
1,100.00	1,100.00	1,045.30	1,100.00	0.00	27.11	-93.73	-230.35	-3,533.14	3,540.64	3,513.53	27.11	130.587		
1,200.00	1,200.00	1,145.31	1,200.00	0.00	30.15	-93.73	-230.35	-3,533.14	3,540.64	3,510.49	30.15	117.433		
1,300.00	1,300.00	1,245.31	1,300.00	0.00	33.19	-93.73	-230.35	-3,533.14	3,540.64	3,507.45	33.19	106.687		
1,400.00	1,400.00	1,345.31	1,400.00	0.00	36.22	-93.73	-230.35	-3,533.14	3,540.64	3,504.41	36.22	97.743		
1,500.00	1,500.00	1,445.31	1,500.00	0.00	39.26	-93.73	-230.35	-3,533.14	3,540.64	3,501.38	39.26	90.183		
1,600.00	1,600.00	1,545.31	1,600.00	0.00	42.30	-93.73	-230.35	-3,533.14	3,540.64	3,498.34	42.30	83.708		
1,700.00	1,700.00	1,645.31	1,700.00	0.00	45.33	-93.73	-230.35	-3,533.14	3,540.64	3,495.30	45.33	78.101		
1,800.00	1,800.00	1,745.36	1,800.00	0.00	48.37	-93.73	-230.35	-3,533.14	3,540.64	3,492.27	48.37	73.195		
1,900.00	1,899.98	1,845.34	1,899.98	0.00	51.41	-15.09	-230.35	-3,533.14	3,539.61	3,488.29	51.32	68.971		
2,000.00	1,998.76	1,944.11	1,998.76	0.00	54.41	-15.54	-230.35	-3,533.14	3,525.36	3,472.34	53.03	66.482		
2,100.00	2,093.47	2,038.83	2,093.47	0.00	57.28	-16.57	-230.35	-3,533.14	3,494.79	3,441.82	52.97	65.975		
2,200.00	2,181.24	2,126.60	2,181.24	0.00	59.95	-18.36	-230.35	-3,533.14	3,448.85	3,397.71	51.13	67.448		
2,300.00	2,259.41	2,204.80	2,259.41	0.00	62.32	-21.25	-230.35	-3,533.14	3,388.97	3,341.06	47.91	70.736		
2,400.00	2,325.60	2,270.99	2,325.60	0.00	64.33	-25.89	-230.35	-3,533.14	3,317.05	3,272.48	44.57	74.427		
2,500.00	2,377.79	2,323.18	2,377.79	0.00	65.92	-33.61	-230.35	-3,533.14	3,235.33	3,191.24	44.09	73.379		
2,600.00	2,414.40	2,359.79	2,414.40	0.00	67.03	-47.10	-230.35	-3,533.14	3,146.35	3,095.47	50.88	61.839		
2,700.00	2,434.32	2,379.71	2,434.32	0.00	67.63	-70.28	-230.35	-3,533.14	3,052.90	2,989.16	63.74	47.896		
2,800.00	2,437.81	2,383.20	2,437.81	0.00	67.74	-91.06	-230.35	-3,533.14	2,957.83	2,890.10	67.73	43.671		
2,900.00	2,437.20	2,382.59	2,437.20	0.00	67.72	-91.20	-230.35	-3,533.14	2,862.81	2,795.10	67.71	42.282		
3,000.00	2,436.53	2,381.92	2,436.53	0.00	67.70	-92.26	-230.35	-3,533.14	2,765.63	2,697.98	67.65	40.882		
3,100.00	2,435.77	2,381.16	2,435.77	0.00	67.68	-97.16	-230.35	-3,533.14	2,666.43	2,599.27	67.15	39.706		
3,200.00	2,434.95	2,380.34	2,434.95	0.00	67.65	-98.42	-230.35	-3,533.14	2,566.49	2,499.56	66.93	38.347		
3,300.00	2,434.06	2,379.45	2,434.06	0.00	67.63	-92.80	-230.35	-3,533.14	2,467.28	2,399.73	67.55	36.527		
3,400.00	2,433.14	2,378.53	2,433.14	0.00	67.60	-91.67	-230.35	-3,533.14	2,370.43	2,302.85	67.57	35.081		
3,500.00	2,432.18	2,377.57	2,432.18	0.00	67.57	-91.15	-230.35	-3,533.14	2,277.72	2,210.17	67.56	33.716		
3,600.00	2,431.20	2,376.59	2,431.20	0.00	67.54	-90.83	-230.35	-3,533.14	2,191.14	2,123.61	67.53	32.445		
3,700.00	2,430.22	2,375.61	2,430.22	0.00	67.51	-90.61	-230.35	-3,533.14	2,112.76	2,045.26	67.51	31.297		
3,800.00	2,429.24	2,374.63	2,429.24	0.00	67.48	-90.71	-230.35	-3,533.14	2,037.21	1,969.73	67.48	30.192		
3,900.00	2,428.26	2,373.65	2,428.26	0.00	67.45	-90.85	-230.35	-3,533.14	1,956.08	1,888.64	67.44	29.003		
4,000.00	2,427.30	2,372.69	2,427.30	0.00	67.42	-91.03	-230.35	-3,533.14	1,869.88	1,802.47	67.41	27.738		
4,100.00	2,426.38	2,371.77	2,426.38	0.00	67.39	-91.28	-230.35	-3,533.14	1,779.23	1,711.85	67.38	26.407		
4,200.00	2,425.50	2,370.89	2,425.50	0.00	67.37	-91.68	-230.35	-3,533.14	1,684.84	1,617.50	67.34	25.020		
4,300.00	2,424.67	2,370.07	2,424.67	0.00	67.34	-92.53	-230.35	-3,533.14	1,587.54	1,520.26	67.28	23.597		
4,400.00	2,423.92	2,369.31	2,423.92	0.00	67.32	-95.37	-230.35	-3,533.14	1,488.33	1,421.30	67.03	22.205		
4,500.00	2,423.20	2,368.59	2,423.20	0.00	67.30	-95.09	-230.35	-3,533.14	1,388.64	1,321.61	67.03	20.716		
4,600.00	2,422.46	2,367.85	2,422.46	0.00	67.27	-94.81	-230.35	-3,533.14	1,289.01	1,221.97	67.04	19.228		
4,700.00	2,421.71	2,367.10	2,421.71	0.00	67.25	-94.51	-230.35	-3,533.14	1,189.43	1,122.38	67.05	17.741		
4,800.00	2,420.95	2,366.34	2,420.95	0.00	67.23	-94.20	-230.35	-3,533.14	1,089.93	1,022.88	67.05	16.255		
4,900.00	2,420.18	2,365.57	2,420.18	0.00	67.21	-93.87	-230.35	-3,533.14	990.52	923.47	67.05	14.772		
5,000.00	2,419.40	2,364.79	2,419.40	0.00	67.18	-93.54	-230.35	-3,533.14	891.24	824.19	67.05	13.291		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report

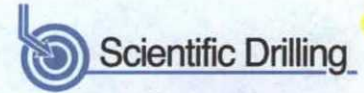


Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1 ST1	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott B4 - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-UNKNOWN													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,000.00	2,419.40	2,410.53	2,419.40	0.00	94.16	86.79	-125.04	-786.38	1,878.86	1,784.84	94.01	19.965		
5,100.00	2,418.61	2,409.74	2,418.61	0.00	94.13	86.58	-125.04	-786.38	1,977.93	1,883.97	93.96	21.050		
5,200.00	2,417.80	2,408.93	2,417.80	0.00	94.10	86.36	-125.04	-786.38	2,077.09	1,983.19	93.91	22.118		
5,300.00	2,416.99	2,408.12	2,416.99	0.00	94.06	86.14	-125.04	-786.38	2,176.33	2,082.48	93.85	23.189		
5,400.00	2,416.17	2,407.30	2,416.17	0.00	94.03	85.92	-125.04	-786.38	2,275.63	2,181.83	93.79	24.262		
5,500.00	2,415.33	2,406.46	2,415.33	0.00	94.00	85.69	-125.04	-786.38	2,374.98	2,281.25	93.73	25.338		
5,600.00	2,414.49	2,405.62	2,414.49	0.00	93.96	85.46	-125.04	-786.38	2,474.39	2,380.72	93.67	26.416		
5,700.00	2,413.63	2,404.76	2,413.63	0.00	93.93	85.23	-125.04	-786.38	2,573.83	2,480.23	93.61	27.497		
5,800.00	2,412.76	2,403.89	2,412.76	0.00	93.90	84.99	-125.04	-786.38	2,673.32	2,579.78	93.54	28.580		
5,900.00	2,411.89	2,403.02	2,411.89	0.00	93.86	84.75	-125.04	-786.38	2,772.84	2,679.37	93.47	29.666		
6,000.00	2,411.00	2,402.13	2,411.00	0.00	93.83	84.51	-125.04	-786.38	2,872.39	2,779.00	93.40	30.755		
6,100.00	2,410.10	2,401.23	2,410.10	0.00	93.79	84.27	-125.04	-786.38	2,971.97	2,878.65	93.32	31.847		
6,200.00	2,409.19	2,400.32	2,409.19	0.00	93.75	84.02	-125.04	-786.38	3,071.58	2,978.34	93.24	32.942		
6,300.00	2,408.27	2,399.40	2,408.27	0.00	93.72	83.77	-125.04	-786.38	3,171.20	3,078.04	93.16	34.040		
6,400.00	2,407.34	2,398.47	2,407.34	0.00	93.68	83.51	-125.04	-786.38	3,270.85	3,177.77	93.08	35.140		
6,500.00	2,406.39	2,397.52	2,406.39	0.00	93.64	83.26	-125.04	-786.38	3,370.52	3,277.53	92.99	36.245		
6,600.00	2,405.44	2,396.57	2,405.44	0.00	93.60	83.00	-125.04	-786.38	3,470.20	3,377.30	92.91	37.352		
6,645.86	2,405.00	2,396.13	2,405.00	0.00	93.59	82.88	-125.04	-786.38	3,515.93	3,423.06	92.86	37.861		



Anticollision Report



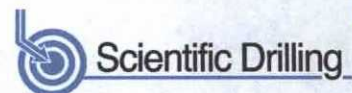
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1 ST1	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott B4 - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-UNKNOWN													Offset Well Error:	0.00 ft
Reference	Offset		Semi Major Axis		Distance		Minimum		Separation		Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	8.87	0.00	0.00	-99.03	-125.04	-786.38	796.31					
100.00	100.00	91.13	100.00	0.00	1.59	-99.03	-125.04	-786.38	796.26	794.67	1.59	502.099		
200.00	200.00	191.13	200.00	0.00	5.39	-99.03	-125.04	-786.38	796.26	790.88	5.39	147.855		
300.00	300.00	291.13	300.00	0.00	9.39	-99.03	-125.04	-786.38	796.26	786.88	9.39	84.840		
400.00	400.00	391.13	400.00	0.00	13.39	-99.03	-125.04	-786.38	796.26	782.88	13.39	59.487		
500.00	500.00	491.13	500.00	0.00	17.39	-99.03	-125.04	-786.38	796.26	778.88	17.39	45.801		
600.00	600.00	591.13	600.00	0.00	21.39	-99.03	-125.04	-786.38	796.26	774.88	21.39	37.234		
700.00	700.00	691.13	700.00	0.00	25.39	-99.03	-125.04	-786.38	796.26	770.88	25.39	31.367		
800.00	800.00	791.13	800.00	0.00	29.39	-99.03	-125.04	-786.38	796.26	766.88	29.39	27.097		
900.00	900.00	891.13	900.00	0.00	33.39	-99.03	-125.04	-786.38	796.26	762.88	33.39	23.851		
1,000.00	1,000.00	991.13	1,000.00	0.00	37.39	-99.03	-125.04	-786.38	796.26	758.88	37.39	21.299		
1,100.00	1,100.00	1,091.13	1,100.00	0.00	41.39	-99.03	-125.04	-786.38	796.26	754.88	41.39	19.240		
1,200.00	1,200.00	1,191.13	1,200.00	0.00	45.39	-99.03	-125.04	-786.38	796.26	750.88	45.39	17.544		
1,300.00	1,300.00	1,291.13	1,300.00	0.00	49.39	-99.03	-125.04	-786.38	796.26	746.88	49.39	16.123		
1,400.00	1,400.00	1,391.13	1,400.00	0.00	53.39	-99.03	-125.04	-786.38	796.26	742.88	53.39	14.915		
1,500.00	1,500.00	1,491.13	1,500.00	0.00	57.39	-99.03	-125.04	-786.38	796.26	738.88	57.39	13.876		
1,600.00	1,600.00	1,591.13	1,600.00	0.00	61.39	-99.03	-125.04	-786.38	796.26	734.88	61.39	12.971		
1,700.00	1,700.00	1,691.13	1,700.00	0.00	65.39	-99.03	-125.04	-786.38	796.26	730.88	65.39	12.178		
1,800.00	1,800.00	1,791.13	1,800.00	0.00	69.39	-99.03	-125.04	-786.38	796.26	726.88	69.39	11.476		
1,900.00	1,899.98	1,891.11	1,899.98	0.00	73.38	-20.43	-125.04	-786.38	795.26	722.00	73.26	10.855		
2,000.00	1,998.76	1,989.89	1,998.76	0.00	77.34	-21.31	-125.04	-786.38	791.45	705.96	75.49	10.352		
2,100.00	2,093.47	2,084.60	2,093.47	0.00	81.12	-23.38	-125.04	-786.38	751.91	676.41	75.50	9.959		
2,200.00	2,181.24	2,172.37	2,181.24	0.00	84.84	-27.03	-125.04	-786.38	707.83	634.13	73.70	9.804		
2,300.00	2,259.41	2,250.54	2,259.41	0.00	87.76	-32.96	-125.04	-786.38	651.09	579.44	71.65	9.088		
2,400.00	2,325.60	2,316.73	2,325.60	0.00	90.41	-42.16	-125.04	-786.38	584.27	511.66	72.61	8.047		
2,500.00	2,377.79	2,368.92	2,377.79	0.00	92.50	-55.34	-125.04	-786.38	510.90	431.28	79.63	6.416		
2,600.00	2,414.40	2,405.53	2,414.40	0.00	93.96	-70.98	-125.04	-786.38	435.76	346.51	89.25	4.882		
2,700.00	2,434.32	2,425.45	2,434.32	0.00	94.76	-84.43	-125.04	-786.38	365.57	271.25	94.32	3.876		
2,800.00	2,437.81	2,428.94	2,437.81	0.00	94.90	-90.17	-125.04	-786.38	309.82	214.92	94.90	3.265		
2,900.00	2,437.20	2,428.33	2,437.20	0.00	94.87	-90.06	-125.04	-786.38	279.27	184.40	94.87	2.944		
2,972.11	2,436.72	2,427.85	2,436.72	0.00	94.85	-90.00	-125.04	-786.38	272.97	178.11	94.85	2.878	CC, ES, SF	
3,000.00	2,436.53	2,427.86	2,436.53	0.00	94.85	-89.97	-125.04	-786.38	273.92	179.07	94.85	2.888		
3,100.00	2,435.77	2,426.90	2,435.77	0.00	94.82	-89.86	-125.04	-786.38	292.32	197.50	94.82	3.083		
3,200.00	2,434.95	2,426.08	2,434.95	0.00	94.78	-89.75	-125.04	-786.38	330.29	235.51	94.78	3.485		
3,300.00	2,434.06	2,425.19	2,434.06	0.00	94.75	-89.65	-125.04	-786.38	381.59	286.85	94.75	4.028		
3,400.00	2,433.14	2,424.27	2,433.14	0.00	94.71	-89.57	-125.04	-786.38	441.00	346.29	94.71	4.656		
3,500.00	2,432.18	2,423.31	2,432.18	0.00	94.67	-89.52	-125.04	-786.38	504.96	410.29	94.67	5.334		
3,600.00	2,431.20	2,422.33	2,431.20	0.00	94.63	-89.49	-125.04	-786.38	571.18	476.55	94.63	6.036		
3,700.00	2,430.22	2,421.35	2,430.22	0.00	94.59	-89.49	-125.04	-786.38	638.13	543.54	94.59	6.746		
3,800.00	2,429.24	2,420.37	2,429.24	0.00	94.55	-89.23	-125.04	-786.38	711.95	617.41	94.55	7.530		
3,900.00	2,428.26	2,419.39	2,428.26	0.00	94.52	-88.83	-125.04	-786.38	797.88	703.39	94.50	8.444		
4,000.00	2,427.30	2,418.43	2,427.30	0.00	94.48	-88.12	-125.04	-786.38	891.39	796.97	94.43	9.440		
4,100.00	2,426.38	2,417.51	2,426.38	0.00	94.44	-86.24	-125.04	-786.38	989.17	894.93	94.24	10.497		
4,200.00	2,425.50	2,416.63	2,425.50	0.00	94.41	-46.84	-125.04	-786.38	1,088.84	1,019.98	88.87	15.811		
4,300.00	2,424.67	2,415.80	2,424.67	0.00	94.37	85.82	-125.04	-786.38	1,188.66	1,094.54	94.12	12.629		
4,400.00	2,423.92	2,415.05	2,423.92	0.00	94.34	87.99	-125.04	-786.38	1,287.31	1,193.03	94.28	13.654		
4,500.00	2,423.20	2,414.33	2,423.20	0.00	94.31	87.80	-125.04	-786.38	1,385.41	1,291.17	94.24	14.700		
4,600.00	2,422.46	2,413.59	2,422.46	0.00	94.28	87.60	-125.04	-786.38	1,483.76	1,389.55	94.20	15.751		
4,700.00	2,421.71	2,412.84	2,421.71	0.00	94.25	87.41	-125.04	-786.38	1,582.31	1,488.15	94.16	16.805		
4,800.00	2,420.95	2,412.08	2,420.95	0.00	94.22	87.21	-125.04	-786.38	1,681.02	1,586.91	94.11	17.862		
4,900.00	2,420.18	2,411.31	2,420.18	0.00	94.19	87.00	-125.04	-786.38	1,779.88	1,685.82	94.06	18.922		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company: B.P.
 Project: San Juan County, NM NAD83
 Reference Site: AL Elliott
 Site Error: 0.00 ft
 Reference Well: AL Elliott B 8-1H
 Well Error: 0.00 ft
 Reference Wellbore: Lateral 1 ST1
 Reference Design: Plan #2

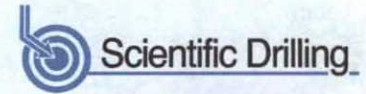
Local Co-ordinate Reference: Well AL Elliott B 8-1H
 TVD Reference: GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
 MD Reference: GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Output errors are at 2.00 sigma
 Database: Grand Junction District
 Offset TVD Reference: Reference Datum

Offset Design AL Elliott - AL Elliot B2B - OH - OH													Offset Site Error: 0.00 ft
Survey Program: 154-INCLINOMETER													Offset Well Error: 0.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,000.00	2,419.40	2,434.20	2,419.40	0.00	71.58	90.09	844.31	-2,878.54	1,222.43	1,150.84	71.58	17.077	CC, ES, SF
5,100.00	2,418.61	2,433.41	2,418.61	0.00	71.56	90.06	844.31	-2,878.54	1,206.24	1,134.68	71.56	16.856	
5,200.00	2,417.80	2,432.60	2,417.80	0.00	71.54	90.02	844.31	-2,878.54	1,198.18	1,126.64	71.54	16.749	
5,247.11	2,417.42	2,432.22	2,417.42	0.00	71.52	90.00	844.31	-2,878.54	1,197.26	1,125.73	71.52	16.739	
5,300.00	2,416.99	2,431.79	2,416.99	0.00	71.51	89.98	844.31	-2,878.54	1,198.42	1,126.91	71.51	16.759	
5,400.00	2,416.17	2,430.97	2,416.17	0.00	71.49	89.94	844.31	-2,878.54	1,206.95	1,135.47	71.49	16.884	
5,500.00	2,415.33	2,430.13	2,415.33	0.00	71.46	89.90	844.31	-2,878.54	1,223.60	1,152.14	71.46	17.123	
5,600.00	2,414.49	2,429.29	2,414.49	0.00	71.43	89.86	844.31	-2,878.54	1,248.05	1,176.61	71.43	17.471	
5,700.00	2,413.63	2,428.43	2,413.63	0.00	71.41	89.81	844.31	-2,878.54	1,279.84	1,208.43	71.41	17.923	
5,800.00	2,412.76	2,427.56	2,412.76	0.00	71.38	89.77	844.31	-2,878.54	1,318.45	1,247.06	71.38	18.470	
5,900.00	2,411.89	2,426.68	2,411.89	0.00	71.36	89.72	844.31	-2,878.54	1,363.29	1,291.93	71.35	19.106	
6,000.00	2,411.00	2,425.80	2,411.00	0.00	71.33	89.68	844.31	-2,878.54	1,413.78	1,342.45	71.33	19.821	
6,100.00	2,410.10	2,424.90	2,410.10	0.00	71.30	89.63	844.31	-2,878.54	1,469.33	1,398.03	71.30	20.608	
6,200.00	2,409.19	2,423.99	2,409.19	0.00	71.27	89.58	844.31	-2,878.54	1,529.38	1,458.11	71.27	21.458	
6,300.00	2,408.27	2,423.07	2,408.27	0.00	71.25	89.54	844.31	-2,878.54	1,593.44	1,522.20	71.24	22.366	
6,400.00	2,407.34	2,422.13	2,407.34	0.00	71.22	89.49	844.31	-2,878.54	1,661.04	1,589.83	71.21	23.324	
6,500.00	2,406.39	2,421.19	2,406.39	0.00	71.19	89.43	844.31	-2,878.54	1,731.76	1,660.57	71.19	24.327	
6,600.00	2,405.44	2,420.24	2,405.44	0.00	71.16	89.38	844.31	-2,878.54	1,805.24	1,734.08	71.16	25.370	
6,645.86	2,405.00	2,419.80	2,405.00	0.00	71.15	89.36	844.31	-2,878.54	1,839.77	1,768.63	71.14	25.860	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



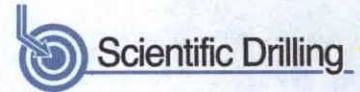
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1 ST1	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design													AL Elliott - AL Elliot B2B - OH - OH		Offset Site Error: 0.00 ft	
Survey Program: 154-INCLINOMETER													Offset Well Error: 0.00 ft			
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)						
0.00	0.00	14.74	0.00	0.00	0.22	-73.65	844.31	-2,878.54	2,999.81							
100.00	100.00	114.74	100.00	0.00	1.74	-73.65	844.31	-2,878.54	2,999.81	2,998.06	1.74	1,721.236				
200.00	200.00	214.74	200.00	0.00	4.18	-73.65	844.31	-2,878.54	2,999.81	2,995.62	4.18	717.046				
300.00	300.00	314.74	300.00	0.00	7.22	-73.65	844.31	-2,878.54	2,999.81	2,992.58	7.22	415.465				
400.00	400.00	414.74	400.00	0.00	10.26	-73.65	844.31	-2,878.54	2,999.81	2,989.55	10.26	292.460				
500.00	500.00	514.74	500.00	0.00	13.29	-73.65	844.31	-2,878.54	2,999.81	2,986.51	13.29	225.652				
600.00	600.00	614.74	600.00	0.00	16.33	-73.65	844.31	-2,878.54	2,999.81	2,983.47	16.33	183.691				
700.00	700.00	714.75	700.00	0.00	19.37	-73.65	844.31	-2,878.54	2,999.81	2,980.44	19.37	154.885				
800.00	800.00	814.75	800.00	0.00	22.40	-73.65	844.31	-2,878.54	2,999.81	2,977.40	22.40	133.892				
900.00	900.00	914.75	900.00	0.00	25.44	-73.65	844.31	-2,878.54	2,999.81	2,974.36	25.44	117.910				
1,000.00	1,000.00	1,014.75	1,000.00	0.00	28.48	-73.65	844.31	-2,878.54	2,999.81	2,971.33	28.48	105.337				
1,100.00	1,100.00	1,114.75	1,100.00	0.00	31.51	-73.65	844.31	-2,878.54	2,999.81	2,968.29	31.52	95.186				
1,200.00	1,200.00	1,214.76	1,200.00	0.00	34.55	-73.65	844.31	-2,878.54	2,999.81	2,965.25	34.55	86.820				
1,300.00	1,300.00	1,314.76	1,300.00	0.00	37.59	-73.65	844.31	-2,878.54	2,999.81	2,962.22	37.59	79.806				
1,400.00	1,400.00	1,414.76	1,400.00	0.00	40.63	-73.65	844.31	-2,878.54	2,999.81	2,959.18	40.63	73.840				
1,500.00	1,500.00	1,514.76	1,500.00	0.00	43.66	-73.65	844.31	-2,878.54	2,999.81	2,956.14	43.66	68.705				
1,564.61	1,564.61	1,579.37	1,564.61	0.00	45.62	-73.65	844.31	-2,878.54	2,999.81	2,954.18	45.62	65.750				
1,600.00	1,600.00	1,609.00	1,594.20	0.00	46.52	-73.65	844.31	-2,878.54	2,999.81	2,953.29	46.52	64.479				
1,700.00	1,700.00	1,714.80	1,700.00	0.00	49.74	-73.65	844.31	-2,878.54	2,999.81	2,950.07	49.74	60.313				
1,800.00	1,800.00	1,814.80	1,800.00	0.00	52.77	-73.65	844.31	-2,878.54	2,999.81	2,947.03	52.77	56.843				
1,900.00	1,899.98	1,914.78	1,899.98	0.00	55.81	5.03	844.31	-2,878.54	2,998.74	2,943.04	55.71	53.830				
2,000.00	1,998.76	2,013.55	1,998.76	0.00	58.81	5.19	844.31	-2,878.54	2,984.05	2,926.84	57.21	52.158				
2,100.00	2,093.47	2,108.27	2,093.47	0.00	61.69	5.56	844.31	-2,878.54	2,952.49	2,895.83	56.66	52.112				
2,200.00	2,181.24	2,196.04	2,181.24	0.00	64.35	6.21	844.31	-2,878.54	2,905.03	2,851.16	53.87	53.927				
2,300.00	2,259.41	2,274.21	2,259.41	0.00	66.73	7.28	844.31	-2,878.54	2,843.13	2,794.26	48.87	58.183				
2,400.00	2,325.60	2,340.40	2,325.60	0.00	68.74	9.09	844.31	-2,878.54	2,768.66	2,726.68	41.98	65.945				
2,500.00	2,377.79	2,392.59	2,377.79	0.00	70.32	12.41	844.31	-2,878.54	2,683.90	2,649.48	34.42	77.966				
2,600.00	2,414.40	2,429.20	2,414.40	0.00	71.43	19.70	844.31	-2,878.54	2,591.44	2,560.41	31.04	83.497				
2,700.00	2,434.32	2,449.12	2,434.32	0.00	72.04	43.03	844.31	-2,878.54	2,494.10	2,444.46	49.64	50.248				
2,800.00	2,437.81	2,452.61	2,437.81	0.00	72.14	93.13	844.31	-2,878.54	2,394.82	2,322.78	72.04	33.245				
2,900.00	2,437.20	2,452.00	2,437.20	0.00	72.12	92.39	844.31	-2,878.54	2,295.51	2,223.45	72.06	31.855				
3,000.00	2,436.53	2,451.33	2,436.53	0.00	72.10	91.43	844.31	-2,878.54	2,197.87	2,125.79	72.08	30.491				
3,100.00	2,435.77	2,450.57	2,435.77	0.00	72.08	91.02	844.31	-2,878.54	2,103.94	2,031.87	72.07	29.193				
3,200.00	2,434.95	2,449.75	2,434.95	0.00	72.06	90.78	844.31	-2,878.54	2,015.70	1,943.65	72.05	27.977				
3,300.00	2,434.06	2,448.86	2,434.06	0.00	72.03	90.60	844.31	-2,878.54	1,935.29	1,863.26	72.03	26.870				
3,400.00	2,433.14	2,447.93	2,433.14	0.00	72.00	90.46	844.31	-2,878.54	1,864.97	1,792.97	72.00	25.903				
3,500.00	2,432.18	2,446.97	2,432.18	0.00	71.97	90.33	844.31	-2,878.54	1,807.01	1,735.04	71.97	25.108				
3,600.00	2,431.20	2,446.00	2,431.20	0.00	71.94	90.21	844.31	-2,878.54	1,763.49	1,691.55	71.94	24.513				
3,700.00	2,430.22	2,445.01	2,430.22	0.00	71.91	90.11	844.31	-2,878.54	1,736.17	1,664.26	71.91	24.143				
3,800.00	2,429.24	2,444.03	2,429.24	0.00	71.88	90.14	844.31	-2,878.54	1,715.64	1,643.75	71.88	23.867				
3,900.00	2,428.26	2,443.06	2,428.26	0.00	71.85	90.17	844.31	-2,878.54	1,688.91	1,617.05	71.85	23.505				
4,000.00	2,427.30	2,442.10	2,427.30	0.00	71.82	90.21	844.31	-2,878.54	1,656.04	1,584.21	71.82	23.057				
4,100.00	2,426.38	2,441.18	2,426.38	0.00	71.80	90.24	844.31	-2,878.54	1,617.15	1,545.36	71.80	22.525				
4,200.00	2,425.50	2,440.30	2,425.50	0.00	71.77	90.26	844.31	-2,878.54	1,572.39	1,500.62	71.77	21.909				
4,300.00	2,424.67	2,439.47	2,424.67	0.00	71.74	90.28	844.31	-2,878.54	1,521.92	1,450.18	71.74	21.213				
4,400.00	2,423.92	2,438.72	2,423.92	0.00	71.72	90.29	844.31	-2,878.54	1,465.99	1,394.27	71.72	20.440				
4,500.00	2,423.20	2,437.99	2,423.20	0.00	71.70	90.26	844.31	-2,878.54	1,410.72	1,339.02	71.70	19.676				
4,600.00	2,422.46	2,437.26	2,422.46	0.00	71.68	90.23	844.31	-2,878.54	1,360.54	1,288.86	71.68	18.982				
4,700.00	2,421.71	2,436.51	2,421.71	0.00	71.65	90.20	844.31	-2,878.54	1,316.04	1,244.39	71.65	18.367				
4,800.00	2,420.95	2,435.75	2,420.95	0.00	71.63	90.16	844.31	-2,878.54	1,277.81	1,206.18	71.63	17.839				
4,900.00	2,420.18	2,434.98	2,420.18	0.00	71.61	90.13	844.31	-2,878.54	1,246.43	1,174.82	71.61	17.406				

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



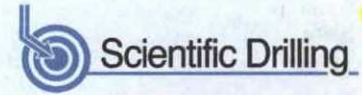
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1 ST1	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliot B2 (#2) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-UNKNOWN													Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
5,100.00	2,418.61	2,375.22	2,418.61	0.00	93.01	92.01	-46.20	-4,018.66	1,304.88	1,211.93	92.95	14.038		
5,200.00	2,417.80	2,374.41	2,417.80	0.00	92.98	91.88	-46.20	-4,018.66	1,207.56	1,114.63	92.93	12.995		
5,300.00	2,416.99	2,373.60	2,416.99	0.00	92.94	91.74	-46.20	-4,018.66	1,110.71	1,017.81	92.90	11.956		
5,400.00	2,416.17	2,372.78	2,416.17	0.00	92.91	91.60	-46.20	-4,018.66	1,014.47	921.59	92.87	10.923		
5,500.00	2,415.33	2,371.94	2,415.33	0.00	92.88	91.46	-46.20	-4,018.66	919.02	826.17	92.85	9.898		
5,600.00	2,414.49	2,371.10	2,414.49	0.00	92.84	91.31	-46.20	-4,018.66	824.65	731.83	92.82	8.884		
5,700.00	2,413.63	2,370.24	2,413.63	0.00	92.81	91.16	-46.20	-4,018.66	731.76	638.97	92.79	7.886		
5,800.00	2,412.76	2,369.37	2,412.76	0.00	92.77	91.00	-46.20	-4,018.66	641.00	548.24	92.76	6.910		
5,900.00	2,411.89	2,368.50	2,411.89	0.00	92.74	90.83	-46.20	-4,018.66	553.43	460.70	92.73	5.968		
6,000.00	2,411.00	2,367.61	2,411.00	0.00	92.70	90.67	-46.20	-4,018.66	470.82	378.12	92.70	5.079		
6,100.00	2,410.10	2,366.71	2,410.10	0.00	92.67	90.49	-46.20	-4,018.66	396.28	303.62	92.67	4.277		
6,200.00	2,409.19	2,365.80	2,409.19	0.00	92.63	90.32	-46.20	-4,018.66	335.26	242.63	92.63	3.619		
6,300.00	2,408.27	2,364.88	2,408.27	0.00	92.60	90.14	-46.20	-4,018.66	296.22	203.62	92.60	3.199		
6,373.37	2,407.59	2,364.20	2,407.59	0.00	92.57	90.00	-46.20	-4,018.66	286.99	194.42	92.57	3.100 CC, ES, SF		
6,400.00	2,407.34	2,363.95	2,407.34	0.00	92.56	89.95	-46.20	-4,018.66	288.22	195.67	92.56	3.114		
6,500.00	2,406.39	2,363.00	2,406.39	0.00	92.52	89.76	-46.20	-4,018.66	313.67	221.15	92.52	3.390		
6,600.00	2,405.44	2,362.05	2,405.44	0.00	92.48	89.57	-46.20	-4,018.66	365.64	273.16	92.48	3.954		
6,645.86	2,405.00	2,361.61	2,405.00	0.00	92.46	89.48	-46.20	-4,018.66	395.69	303.23	92.46	4.280		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



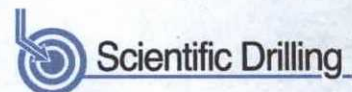
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1 ST1	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott B2 (#2) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-UNKNOWN													Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	43.39	0.00	0.00	-90.66	-46.20	-4,018.66	4,019.16					
100.00	100.00	56.61	100.00	0.00	1.13	-90.66	-46.20	-4,018.66	4,018.92	4,017.79	1.13	3,548.760		
200.00	200.00	156.61	200.00	0.00	4.26	-90.66	-46.20	-4,018.66	4,018.92	4,014.66	4.26	942.392		
300.00	300.00	256.61	300.00	0.00	8.26	-90.66	-46.20	-4,018.66	4,018.92	4,010.66	8.26	486.282		
400.00	400.00	356.61	400.00	0.00	12.26	-90.66	-46.20	-4,018.66	4,018.92	4,006.66	12.26	327.685		
500.00	500.00	456.61	500.00	0.00	16.26	-90.66	-46.20	-4,018.66	4,018.92	4,002.66	16.26	247.096		
600.00	600.00	556.61	600.00	0.00	20.26	-90.66	-46.20	-4,018.66	4,018.92	3,998.66	20.26	198.322		
700.00	700.00	656.61	700.00	0.00	24.26	-90.66	-46.20	-4,018.66	4,018.92	3,994.66	24.26	165.629		
800.00	800.00	756.61	800.00	0.00	28.26	-90.66	-46.20	-4,018.66	4,018.92	3,990.66	28.26	142.189		
900.00	900.00	856.61	900.00	0.00	32.26	-90.66	-46.20	-4,018.66	4,018.92	3,986.66	32.26	124.561		
1,000.00	1,000.00	956.61	1,000.00	0.00	36.26	-90.66	-46.20	-4,018.66	4,018.92	3,982.66	36.26	110.822		
1,100.00	1,100.00	1,056.61	1,100.00	0.00	40.26	-90.66	-46.20	-4,018.66	4,018.92	3,978.66	40.26	99.813		
1,200.00	1,200.00	1,156.61	1,200.00	0.00	44.26	-90.66	-46.20	-4,018.66	4,018.92	3,974.66	44.26	90.793		
1,300.00	1,300.00	1,256.61	1,300.00	0.00	48.26	-90.66	-46.20	-4,018.66	4,018.92	3,970.66	48.26	83.269		
1,400.00	1,400.00	1,356.61	1,400.00	0.00	52.26	-90.66	-46.20	-4,018.66	4,018.92	3,966.66	52.26	76.896		
1,500.00	1,500.00	1,456.61	1,500.00	0.00	56.26	-90.66	-46.20	-4,018.66	4,018.92	3,962.66	56.26	71.429		
1,600.00	1,600.00	1,556.61	1,600.00	0.00	60.26	-90.66	-46.20	-4,018.66	4,018.92	3,958.66	60.26	66.688		
1,700.00	1,700.00	1,656.61	1,700.00	0.00	64.26	-90.66	-46.20	-4,018.66	4,018.92	3,954.66	64.26	62.537		
1,800.00	1,800.00	1,756.61	1,800.00	0.00	68.26	-90.66	-46.20	-4,018.66	4,018.92	3,950.66	68.26	58.873		
1,900.00	1,899.98	1,856.59	1,899.98	0.00	72.26	-12.01	-46.20	-4,018.66	4,017.88	3,945.75	72.14	55.699		
2,000.00	1,998.76	1,955.37	1,998.76	0.00	76.21	-12.37	-46.20	-4,018.66	4,003.45	3,929.24	74.21	53.949		
2,100.00	2,093.47	2,050.08	2,093.47	0.00	80.00	-13.19	-46.20	-4,018.66	3,972.47	3,898.74	73.73	53.878		
2,200.00	2,181.24	2,137.85	2,181.24	0.00	83.51	-14.63	-46.20	-4,018.66	3,925.90	3,855.29	70.61	55.599		
2,300.00	2,259.41	2,216.02	2,259.41	0.00	86.64	-16.96	-46.20	-4,018.66	3,865.18	3,799.96	65.21	59.268		
2,400.00	2,325.60	2,282.21	2,325.60	0.00	89.29	-20.77	-46.20	-4,018.66	3,792.18	3,733.28	58.90	64.381		
2,500.00	2,377.79	2,334.40	2,377.79	0.00	91.38	-27.37	-46.20	-4,018.66	3,709.17	3,653.71	55.46	66.879		
2,600.00	2,414.40	2,371.01	2,414.40	0.00	92.84	-39.85	-46.20	-4,018.66	3,618.69	3,555.85	62.84	57.587		
2,700.00	2,434.32	2,390.93	2,434.32	0.00	93.64	-65.08	-46.20	-4,018.66	3,523.54	3,438.50	85.04	41.434		
2,800.00	2,437.81	2,394.42	2,437.81	0.00	93.78	-91.37	-46.20	-4,018.66	3,426.60	3,332.85	93.75	36.550		
2,900.00	2,437.20	2,393.81	2,437.20	0.00	93.75	-91.63	-46.20	-4,018.66	3,329.59	3,235.87	93.71	35.529		
3,000.00	2,436.53	2,393.14	2,436.53	0.00	93.73	-93.99	-46.20	-4,018.66	3,230.93	3,137.43	93.50	34.556		
3,100.00	2,435.77	2,392.38	2,435.77	0.00	93.70	114.63	-46.20	-4,018.66	3,131.08	3,045.91	85.17	36.761		
3,200.00	2,434.95	2,391.56	2,434.95	0.00	93.66	93.46	-46.20	-4,018.66	3,031.46	2,937.97	93.49	32.425		
3,300.00	2,434.06	2,390.67	2,434.06	0.00	93.63	91.89	-46.20	-4,018.66	2,933.61	2,840.03	93.58	31.350		
3,400.00	2,433.14	2,389.75	2,433.14	0.00	93.59	91.28	-46.20	-4,018.66	2,839.21	2,745.64	93.57	30.344		
3,500.00	2,432.18	2,388.79	2,432.18	0.00	93.55	90.93	-46.20	-4,018.66	2,750.06	2,656.52	93.54	29.400		
3,600.00	2,431.20	2,387.81	2,431.20	0.00	93.51	90.70	-46.20	-4,018.66	2,668.07	2,574.56	93.51	28.534		
3,700.00	2,430.22	2,386.83	2,430.22	0.00	93.47	90.52	-46.20	-4,018.66	2,595.14	2,501.67	93.47	27.765		
3,800.00	2,429.24	2,385.85	2,429.24	0.00	93.43	90.61	-46.20	-4,018.66	2,525.08	2,431.65	93.43	27.027		
3,900.00	2,428.26	2,384.87	2,428.26	0.00	93.39	90.73	-46.20	-4,018.66	2,448.66	2,355.28	93.39	26.220		
4,000.00	2,427.30	2,383.91	2,427.30	0.00	93.36	90.87	-46.20	-4,018.66	2,366.42	2,273.08	93.35	25.351		
4,100.00	2,426.38	2,382.99	2,426.38	0.00	93.32	91.06	-46.20	-4,018.66	2,278.99	2,185.69	93.30	24.426		
4,200.00	2,425.50	2,382.11	2,425.50	0.00	93.28	91.33	-46.20	-4,018.66	2,187.10	2,093.84	93.26	23.452		
4,300.00	2,424.67	2,381.28	2,424.67	0.00	93.25	91.80	-46.20	-4,018.66	2,091.59	1,998.39	93.21	22.441		
4,400.00	2,423.92	2,380.53	2,423.92	0.00	93.22	92.80	-46.20	-4,018.66	1,993.45	1,900.34	93.11	21.410		
4,500.00	2,423.20	2,379.81	2,423.20	0.00	93.19	92.70	-46.20	-4,018.66	1,894.58	1,801.50	93.09	20.352		
4,600.00	2,422.46	2,379.07	2,422.46	0.00	93.16	92.60	-46.20	-4,018.66	1,795.84	1,702.77	93.07	19.296		
4,700.00	2,421.71	2,378.32	2,421.71	0.00	93.13	92.49	-46.20	-4,018.66	1,697.23	1,604.18	93.05	18.241		
4,800.00	2,420.95	2,377.56	2,420.95	0.00	93.10	92.38	-46.20	-4,018.66	1,598.79	1,505.77	93.02	17.187		
4,900.00	2,420.18	2,376.79	2,420.18	0.00	93.07	92.26	-46.20	-4,018.66	1,500.56	1,407.56	93.00	16.135		
5,000.00	2,419.40	2,376.01	2,419.40	0.00	93.04	92.14	-46.20	-4,018.66	1,402.57	1,309.59	92.98	15.085		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report

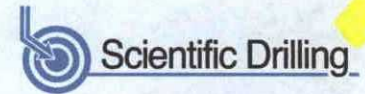


Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1 ST1	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliot B2 - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 808-INCLINOMETER													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
6,400.00	2,407.34	2,385.54	2,407.34	0.00	60.17	83.54	-158.50	-1,324.48	2,731.71	2,671.92	59.79	45.685		
6,500.00	2,406.39	2,384.60	2,406.39	0.00	60.15	83.24	-158.50	-1,324.48	2,831.38	2,771.65	59.73	47.403		
6,600.00	2,405.44	2,383.64	2,405.44	0.00	60.12	82.95	-158.50	-1,324.48	2,931.07	2,871.40	59.66	49.126		
6,645.86	2,405.00	2,383.20	2,405.00	0.00	60.10	82.81	-158.50	-1,324.48	2,976.79	2,917.16	59.63	49.918		



Anticollision Report



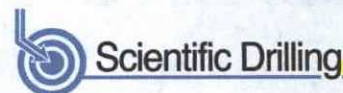
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1 ST1	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliot B2 - OH - OH														Offset Site Error:	0.00 ft
Survey Program: 808-INCLINOMETER														Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)							
1,400.00	1,400.00	1,378.13	1,400.00	0.00	29.58	-96.82	-158.50	-1,324.48	1,333.93	1,304.35	29.58	45.082			
1,500.00	1,500.00	1,478.13	1,500.00	0.00	32.62	-96.82	-158.50	-1,324.48	1,333.93	1,301.31	32.62	40.894			
1,600.00	1,600.00	1,578.13	1,600.00	0.00	35.66	-96.82	-158.50	-1,324.48	1,333.93	1,298.28	35.66	37.411			
1,700.00	1,700.00	1,678.13	1,700.00	0.00	38.69	-96.82	-158.50	-1,324.48	1,333.93	1,295.24	38.69	34.475			
1,800.00	1,800.00	1,778.13	1,800.00	0.00	41.73	-96.82	-158.50	-1,324.48	1,333.93	1,292.20	41.73	31.966			
1,900.00	1,899.98	1,878.11	1,899.98	0.00	44.77	-18.20	-158.50	-1,324.48	1,332.92	1,288.23	44.69	29.825			
2,000.00	1,998.76	1,976.89	1,998.76	0.00	47.76	-18.85	-158.50	-1,324.48	1,318.91	1,272.31	46.60	28.303			
2,100.00	2,093.47	2,071.60	2,093.47	0.00	50.64	-20.38	-158.50	-1,324.48	1,288.88	1,241.87	47.01	27.418			
2,200.00	2,181.24	2,159.45	2,181.24	0.00	53.31	-23.03	-158.50	-1,324.48	1,243.87	1,197.89	45.99	27.047			
2,300.00	2,259.41	2,237.62	2,259.41	0.00	55.68	-27.30	-158.50	-1,324.48	1,185.46	1,141.31	44.15	26.850			
2,400.00	2,325.60	2,303.80	2,325.60	0.00	57.69	-34.01	-158.50	-1,324.48	1,115.72	1,072.59	43.14	25.865			
2,500.00	2,377.79	2,355.99	2,377.79	0.00	59.28	-44.42	-158.50	-1,324.48	1,037.19	991.50	45.69	22.701			
2,600.00	2,414.40	2,392.60	2,414.40	0.00	60.39	-59.63	-158.50	-1,324.48	952.78	899.91	52.87	18.022			
2,700.00	2,434.32	2,412.52	2,434.32	0.00	60.99	-78.30	-158.50	-1,324.48	865.77	806.02	59.75	14.490			
2,800.00	2,437.81	2,416.01	2,437.81	0.00	61.10	-90.55	-158.50	-1,324.48	779.65	718.55	61.10	12.761			
2,900.00	2,437.20	2,415.40	2,437.20	0.00	61.08	-90.52	-158.50	-1,324.48	696.78	635.71	61.08	11.408			
3,000.00	2,436.53	2,414.73	2,436.53	0.00	61.06	-90.64	-158.50	-1,324.48	613.39	552.33	61.06	10.046			
3,100.00	2,435.77	2,413.98	2,435.77	0.00	61.04	-90.76	-158.50	-1,324.48	528.21	467.17	61.03	8.654			
3,200.00	2,434.95	2,413.15	2,434.95	0.00	61.01	-90.86	-158.50	-1,324.48	441.82	380.82	61.01	7.242			
3,300.00	2,434.06	2,412.27	2,434.06	0.00	60.99	-90.90	-158.50	-1,324.48	355.08	294.10	60.98	5.823			
3,400.00	2,433.14	2,411.34	2,433.14	0.00	60.96	-90.84	-158.50	-1,324.48	269.50	208.55	60.95	4.422			
3,500.00	2,432.18	2,410.38	2,432.18	0.00	60.93	-90.64	-158.50	-1,324.48	188.77	127.84	60.92	3.098			
3,600.00	2,431.20	2,409.40	2,431.20	0.00	60.90	-90.29	-158.50	-1,324.48	125.03	64.13	60.90	2.053			
3,665.64	2,430.55	2,408.76	2,430.55	0.00	60.88	-90.00	-158.50	-1,324.48	109.06	48.18	60.88	1.791 CC, ES, SF			
3,700.00	2,430.22	2,408.42	2,430.22	0.00	60.87	-89.85	-158.50	-1,324.48	113.66	52.79	60.87	1.867			
3,800.00	2,429.24	2,407.44	2,429.24	0.00	60.84	-89.21	-158.50	-1,324.48	172.84	112.00	60.83	2.841			
3,900.00	2,428.26	2,406.46	2,428.26	0.00	60.81	-88.16	-158.50	-1,324.48	263.07	202.29	60.78	4.328			
4,000.00	2,427.30	2,405.51	2,427.30	0.00	60.78	-85.06	-158.50	-1,324.48	361.04	300.48	60.56	5.962			
4,100.00	2,426.38	2,404.58	2,426.38	0.00	60.75	-88.15	-158.50	-1,324.48	460.88	404.46	58.42	8.169			
4,200.00	2,425.50	2,403.70	2,425.50	0.00	60.73	-86.23	-158.50	-1,324.48	560.53	499.94	60.60	9.250			
4,300.00	2,424.67	2,402.88	2,424.67	0.00	60.70	-87.99	-158.50	-1,324.48	658.95	598.29	60.66	10.862			
4,400.00	2,423.92	2,402.13	2,423.92	0.00	60.68	-88.63	-158.50	-1,324.48	755.49	694.83	60.66	12.454			
4,500.00	2,423.20	2,401.40	2,423.20	0.00	60.66	-88.41	-158.50	-1,324.48	851.73	791.10	60.63	14.047			
4,600.00	2,422.46	2,400.66	2,422.46	0.00	60.63	-88.20	-158.50	-1,324.48	948.74	888.14	60.60	15.655			
4,700.00	2,421.71	2,399.91	2,421.71	0.00	60.61	-87.98	-158.50	-1,324.48	1,046.31	985.74	60.57	17.273			
4,800.00	2,420.95	2,399.15	2,420.95	0.00	60.59	-87.75	-158.50	-1,324.48	1,144.30	1,083.76	60.54	18.901			
4,900.00	2,420.18	2,398.38	2,420.18	0.00	60.56	-87.52	-158.50	-1,324.48	1,242.60	1,182.09	60.51	20.536			
5,000.00	2,419.40	2,397.60	2,419.40	0.00	60.54	-87.28	-158.50	-1,324.48	1,341.15	1,280.67	60.47	22.178			
5,100.00	2,418.61	2,396.81	2,418.61	0.00	60.52	-87.04	-158.50	-1,324.48	1,439.89	1,379.46	60.44	23.825			
5,200.00	2,417.80	2,396.01	2,417.80	0.00	60.49	-86.79	-158.50	-1,324.48	1,538.80	1,478.40	60.40	25.477			
5,300.00	2,416.99	2,395.19	2,416.99	0.00	60.47	-86.54	-158.50	-1,324.48	1,637.83	1,577.47	60.36	27.135			
5,400.00	2,416.17	2,394.37	2,416.17	0.00	60.44	-86.29	-158.50	-1,324.48	1,736.97	1,676.65	60.32	28.798			
5,500.00	2,415.33	2,393.54	2,415.33	0.00	60.42	-86.03	-158.50	-1,324.48	1,836.20	1,775.93	60.27	30.465			
5,600.00	2,414.49	2,392.69	2,414.49	0.00	60.39	-85.77	-158.50	-1,324.48	1,935.51	1,875.28	60.23	32.136			
5,700.00	2,413.63	2,391.83	2,413.63	0.00	60.37	-85.50	-158.50	-1,324.48	2,034.88	1,974.70	60.18	33.813			
5,800.00	2,412.76	2,390.97	2,412.76	0.00	60.34	-85.23	-158.50	-1,324.48	2,134.31	2,074.18	60.13	35.494			
5,900.00	2,411.89	2,390.09	2,411.89	0.00	60.31	-84.96	-158.50	-1,324.48	2,233.79	2,173.71	60.08	37.180			
6,000.00	2,411.00	2,389.20	2,411.00	0.00	60.29	-84.68	-158.50	-1,324.48	2,333.31	2,273.28	60.03	38.871			
6,100.00	2,410.10	2,388.30	2,410.10	0.00	60.26	-84.40	-158.50	-1,324.48	2,432.86	2,372.89	59.97	40.566			
6,200.00	2,409.19	2,387.39	2,409.19	0.00	60.23	-84.11	-158.50	-1,324.48	2,532.45	2,472.54	59.92	42.267			
6,300.00	2,408.27	2,386.47	2,408.27	0.00	60.20	-83.83	-158.50	-1,324.48	2,632.07	2,572.21	59.86	43.974			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1 ST1	Database:	Grand Junction District
Reference Design:	Plan #2	Offset TVD Reference:	Reference Datum

Reference	Plan #2		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.00ft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 30,000.06 ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date 9/25/2015			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	2,871.00	Plan 2 (Lateral 1)	Gyro	
2,871.00	6,645.86	Plan #2 (Lateral 1 ST1)	Gyro	

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
AL Elliott						
AL Elliot B2 - OH - OH	3,665.64	2,408.76	1,109.06	48.18	1.791	CC, ES, SF
AL Elliot B2 (#2) - OH - OH	6,373.37	2,364.20	286.99	194.42	3.100	CC, ES, SF
AL Elliot B2B - OH - OH	5,247.11	2,432.22	1,197.26	1,125.73	16.739	CC, ES, SF
AL Elliot B4 - OH - OH	2,972.11	2,427.85	272.97	178.11	2.878	CC, ES, SF
AL Elliot B5 - OH - OH	5,884.36	2,357.41	111.67	44.72	1.668	CC, ES, SF
AL Elliot B5E - OH - OH	2,752.55	2,438.36	258.86	185.92	3.549	CC, ES, SF
AL Elliot B7 - OH - OH	6,484.52	2,362.34	803.99	735.39	11.720	CC, ES, SF
AL Elliot J1 - OH - OH	2,732.80	2,425.75	290.50	219.60	4.097	CC, ES, SF
AL Elliott B 8-1H - Lateral 1 - Plan 2						Out of range
AL Elliott B 8-1H - Lateral 1 - Plan 2	2,900.00	2,899.99	0.51	0.51	10,000.000	CC, ES
AL Elliott B 8-1H - Lateral 2 - Plan #1	1,761.05	1,761.05	0.00	0.00	0.000	Stop Drilling, CC, ES, SF

Offset Design AL Elliott - AL Elliott B2 - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 808-INCLINOMETER												Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	21.87	0.00	0.00	-96.82	-158.50	-1,324.48	1,334.11				
100.00	100.00	78.13	100.00	0.00	1.19	-96.82	-158.50	-1,324.48	1,333.93	1,332.75	1.19	1,124.035	
200.00	200.00	178.13	200.00	0.00	2.70	-96.82	-158.50	-1,324.48	1,333.93	1,331.23	2.71	493.109	
300.00	300.00	278.13	300.00	0.00	4.22	-96.82	-158.50	-1,324.48	1,333.93	1,329.71	4.22	315.831	
400.00	400.00	378.13	400.00	0.00	5.74	-96.82	-158.50	-1,324.48	1,333.93	1,328.19	5.74	232.313	
500.00	500.00	478.13	500.00	0.00	7.26	-96.82	-158.50	-1,324.48	1,333.93	1,326.67	7.26	183.728	
600.00	600.00	578.13	600.00	0.00	8.78	-96.82	-158.50	-1,324.48	1,333.93	1,325.15	8.78	151.949	
700.00	700.00	678.13	700.00	0.00	10.30	-96.82	-158.50	-1,324.48	1,333.93	1,323.64	10.30	129.543	
800.00	800.00	778.13	800.00	0.00	11.82	-96.82	-158.50	-1,324.48	1,333.93	1,322.12	11.82	112.896	
900.00	900.00	878.13	900.00	0.00	14.40	-96.82	-158.50	-1,324.48	1,333.93	1,319.53	14.40	92.642	
1,000.00	1,000.00	978.13	1,000.00	0.00	17.44	-96.82	-158.50	-1,324.48	1,333.93	1,316.50	17.44	76.507	
1,100.00	1,100.00	1,078.13	1,100.00	0.00	20.47	-96.82	-158.50	-1,324.48	1,333.93	1,313.46	20.47	65.158	
1,200.00	1,200.00	1,178.13	1,200.00	0.00	23.51	-96.82	-158.50	-1,324.48	1,333.93	1,310.42	23.51	56.742	
1,300.00	1,300.00	1,278.13	1,300.00	0.00	26.55	-96.82	-158.50	-1,324.48	1,333.93	1,307.39	26.55	50.250	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



B.P.

**San Juan County, NM NAD83
AL Elliott
AL Elliott B 8-1H**

**Lateral 1 ST1
Plan #2**

Anticollision Report

25 September, 2015



www.scientificdrilling.com



Database:	Grand Junction District	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Company:	B.P.	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Project:	San Juan County, NM NAD83	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site:	AL Elliott	North Reference:	Grid
Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral 1 ST1		
Design:	Plan #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
6,600.01	90.55	271.10	2,405.44	-328.86	-4,250.61	4,263.31	0.01	0.01	0.01
6,645.86	90.55	271.10	2,405.00	-327.98	-4,296.45	4,308.95	0.01	0.01	0.01
Elliott Lat 1 ST1 PBHL									

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Elliott Lat 1 ST1 PBHL	0.00	0.00	2,405.00	-327.98	-4,296.45	2,086,565.48	2,740,883.37	36.7341843	-107.7726153
- plan hits target center									
- Point									
Elliott Lat 1 ST1 PB3	0.00	0.01	2,424.00	-365.92	-2,040.33	2,086,527.54	2,743,139.49	36.7340759	-107.7649159
- plan hits target center									
- Point									



Database:	Grand Junction District	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Company:	B.P.	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Project:	San Juan County, NM NAD83	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site:	AL Elliott	North Reference:	Grid
Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral 1 ST1		
Design:	Plan #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
2,871.00	90.35	281.33	2,437.38	133.38	-665.67	653.59	0.00	0.00	0.00
2,900.01	90.36	279.32	2,437.20	138.58	-694.21	681.65	6.92	0.05	-6.92
3,000.01	90.41	272.40	2,436.53	148.78	-793.62	780.00	6.92	0.05	-6.92
3,100.01	90.45	265.47	2,435.77	146.93	-893.54	879.77	6.92	0.04	-6.92
3,200.01	90.49	258.55	2,434.95	133.04	-992.51	979.50	6.92	0.04	-6.92
3,300.01	90.52	251.63	2,434.06	107.32	-1,089.08	1,077.75	6.92	0.03	-6.92
3,302.51	90.52	251.45	2,434.04	106.53	-1,091.45	1,080.18	6.92	0.03	-6.92
Elliott Lat 1 ST2 PA									
3,400.01	90.54	244.70	2,433.14	70.15	-1,181.84	1,173.07	6.92	0.02	-6.92
3,500.01	90.56	237.78	2,432.18	22.06	-1,269.45	1,264.09	6.92	0.01	-6.92
3,600.01	90.56	230.85	2,431.20	-36.23	-1,350.62	1,349.46	6.92	0.01	-6.92
3,700.01	90.56	223.93	2,430.22	-103.89	-1,424.17	1,427.94	6.92	0.00	-6.92
3,706.04	90.56	223.51	2,430.16	-108.25	-1,428.33	1,432.43	6.93	-0.01	-6.93
3,800.01	90.56	230.02	2,429.24	-172.58	-1,496.75	1,505.55	6.92	0.00	6.92
3,900.01	90.56	236.94	2,428.26	-232.06	-1,577.06	1,590.15	6.92	-0.01	6.92
3,916.84	90.55	238.11	2,428.10	-241.09	-1,591.26	1,605.00	6.92	-0.01	6.92
Elliott Lat 1 ST2 PB2									
4,000.01	90.54	243.87	2,427.30	-281.41	-1,663.96	1,680.55	6.92	-0.02	6.92
4,100.01	90.52	250.79	2,426.38	-319.93	-1,756.17	1,775.43	6.92	-0.02	6.92
4,183.94	90.49	256.60	2,425.63	-343.49	-1,836.69	1,857.50	6.92	-0.03	6.92
Elliott Lat 1 ST1 PB									
4,200.01	90.49	257.71	2,425.50	-347.06	-1,852.36	1,873.40	6.92	-0.03	6.92
4,300.01	90.45	264.64	2,424.67	-362.39	-1,951.11	1,973.03	6.92	-0.04	6.92
4,389.34	90.41	270.82	2,424.00	-365.92	-2,040.33	2,062.26	6.92	-0.04	6.92
Elliott Lat 1 ST1 PB3									
4,400.01	90.41	270.83	2,423.92	-365.77	-2,050.99	2,072.88	0.01	0.01	0.01
4,500.01	90.42	270.84	2,423.20	-364.31	-2,150.98	2,172.47	0.01	0.01	0.01
4,600.01	90.43	270.85	2,422.46	-362.84	-2,250.97	2,272.05	0.01	0.01	0.01
4,700.01	90.43	270.86	2,421.71	-361.35	-2,350.95	2,371.64	0.01	0.01	0.01
4,800.01	90.44	270.88	2,420.95	-359.83	-2,450.94	2,471.22	0.01	0.01	0.01
4,892.73	90.44	270.89	2,420.24	-358.40	-2,543.65	2,563.55	0.01	0.01	0.01
Elliott Lat 1 ST2 PD									
4,900.01	90.44	270.89	2,420.18	-358.29	-2,550.92	2,570.80	0.01	0.01	0.01
5,000.01	90.45	270.90	2,419.40	-356.73	-2,650.91	2,670.37	0.01	0.01	0.01
5,100.01	90.46	270.91	2,418.61	-355.15	-2,750.89	2,769.95	0.01	0.01	0.01
5,200.01	90.46	270.92	2,417.80	-353.55	-2,850.88	2,869.52	0.01	0.01	0.01
5,300.01	90.47	270.94	2,416.99	-351.92	-2,950.86	2,969.09	0.01	0.01	0.01
5,400.01	90.48	270.95	2,416.17	-350.28	-3,050.84	3,068.66	0.01	0.01	0.01
5,500.01	90.48	270.96	2,415.33	-348.61	-3,150.83	3,168.22	0.01	0.01	0.01
5,600.01	90.49	270.97	2,414.49	-346.92	-3,250.81	3,267.79	0.01	0.01	0.01
5,700.01	90.49	270.99	2,413.63	-345.21	-3,350.79	3,367.35	0.01	0.01	0.01
5,800.01	90.50	271.00	2,412.76	-343.48	-3,450.77	3,466.91	0.01	0.01	0.01
5,831.10	90.50	271.00	2,412.49	-342.94	-3,481.86	3,497.86	0.01	0.01	0.01
Elliott Lat 1 ST2 PC									
5,900.01	90.51	271.01	2,411.89	-341.73	-3,550.75	3,566.46	0.01	0.01	0.01
6,000.01	90.51	271.02	2,411.00	-339.96	-3,650.74	3,666.02	0.01	0.01	0.01
6,100.01	90.52	271.04	2,410.10	-338.16	-3,750.72	3,765.57	0.01	0.01	0.01
6,200.01	90.52	271.05	2,409.19	-336.34	-3,850.69	3,865.12	0.01	0.01	0.01
6,300.01	90.53	271.06	2,408.27	-334.51	-3,950.67	3,964.67	0.01	0.01	0.01
6,400.01	90.54	271.07	2,407.34	-332.64	-4,050.65	4,064.22	0.01	0.01	0.01
6,500.01	90.54	271.08	2,406.39	-330.76	-4,150.63	4,163.77	0.01	0.01	0.01



Database:	Grand Junction District	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Company:	B.P.	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Project:	San Juan County, NM NAD83	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site:	AL Elliott	North Reference:	Grid
Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral 1 ST1		
Design:	Plan #2		

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 ft	Slot Radius:	13.200 in	Grid Convergence:	0.04 °

Well	AL Elliott B 8-1H					
Well Position	+N/-S	-75.03 ft	Northing:	2,086,893.46 usft	Latitude:	36.7350768
	+E/-W	93.44 ft	Easting:	2,745,179.81 usft	Longitude:	-107.7579519
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	5,864.23 ft

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

Design	Plan #2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	2,871.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	265.63

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
2,871.00	90.35	281.33	2,437.38	133.38	-665.67	0.00	0.00	0.00	0.00	
3,706.04	90.56	223.51	2,430.16	-108.25	-1,428.33	6.92	0.03	-6.92	-89.56	
4,389.34	90.41	270.82	2,424.00	-365.92	-2,040.33	6.92	-0.02	6.92	89.96	Elliott Lat 1 ST1 PB3
6,645.86	90.55	271.10	2,405.00	-327.98	-4,296.45	0.01	0.01	0.01	63.40	Elliott Lat 1 ST1 PBH1



B.P.

San Juan County, NM NAD83

AL Elliott

AL Elliott B 8-1H

Lateral 1 ST1

Plan: Plan #2

Standard Planning Report

25 September, 2015



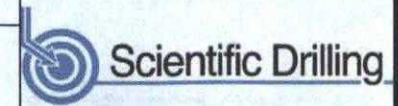
www.scientificdrilling.com



Company: B.P.
Project: San Juan County, NM NAD83
Site: AL Elliott
Well: AL Elliott B 8-1H
Wellbore: Lateral 1 ST1
Design: Plan #2

PROJECT DETAILS: San Juan County, NM NAD83

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Western Zone
System Datum: Mean Sea Level
Local North: Grid



Azimuths to Grid North
True North: -0.04°
Magnetic North: 9.41°

Magnetic Field
Strength: 50243.5nT
Dip Angle: 63.36°
Date: 7/13/2015
Model: IGRF2015

WELL DETAILS: AL Elliott B 8-1H

GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	2086893.46	2745179.81	36.7350768	-107.7579518

Plan: Plan #2 (AL Elliott B 8-1H/Lateral 1 ST1)

Created By: Janie Collins Date: 11:17, September 25 2015

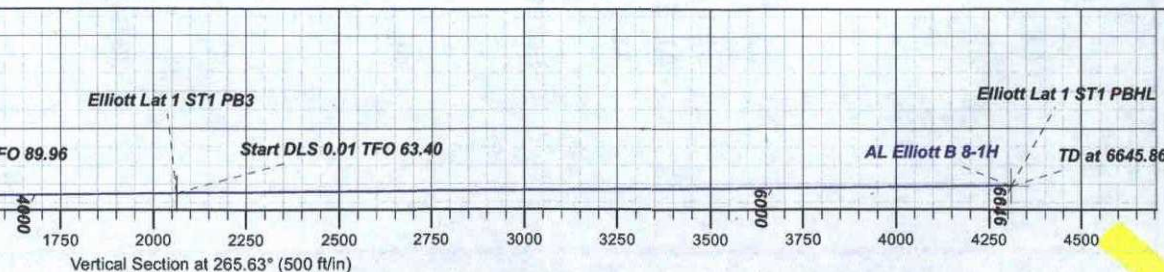
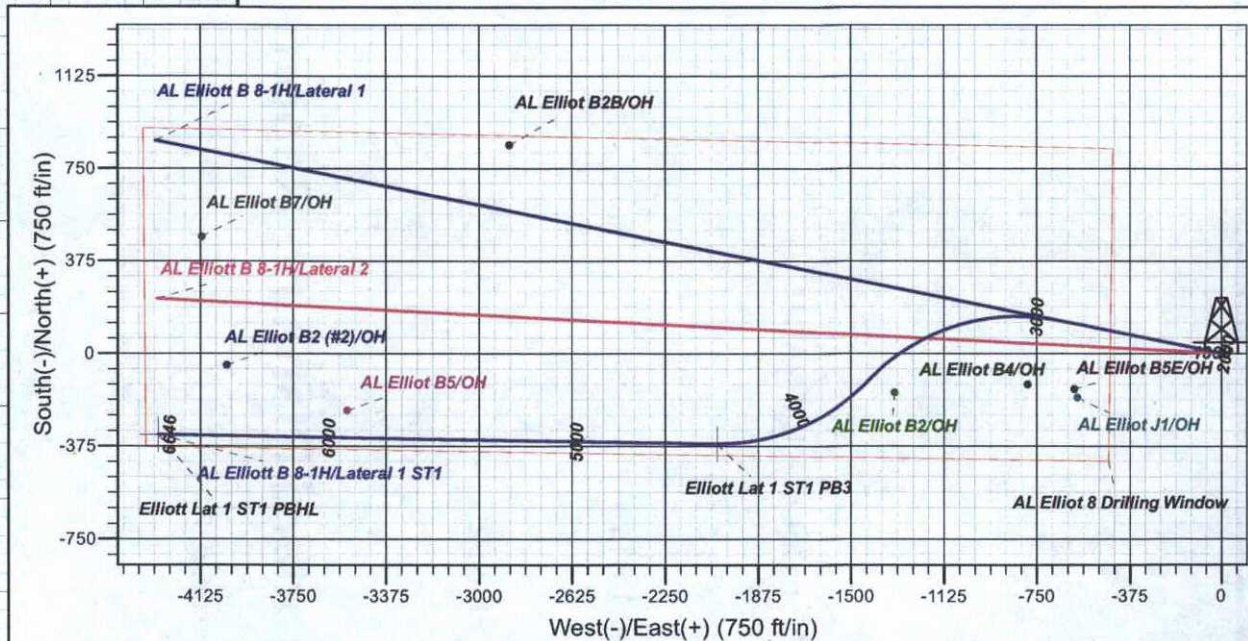
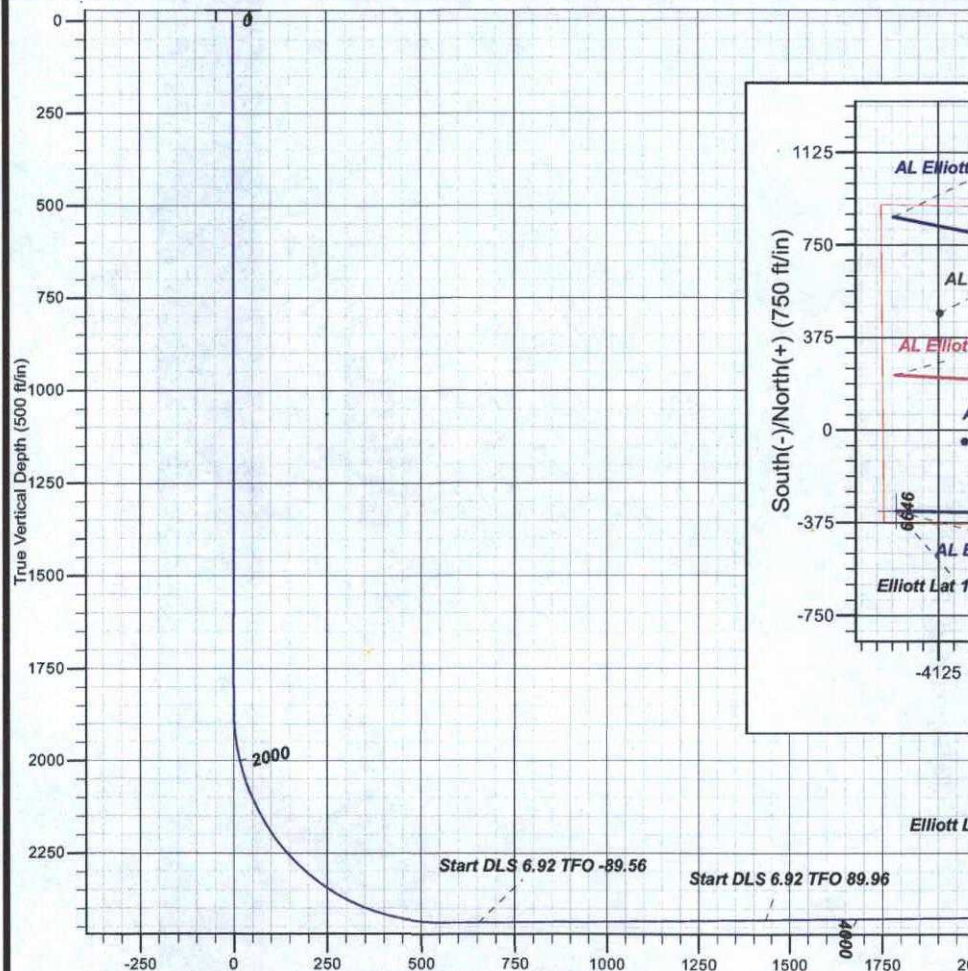
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Elliott Lat 1 ST1 PB3	2424.00	-365.92	-2040.33	2086527.54	2743139.48	36.7340759	-107.7649159
Elliott Lat 1 ST1 PBHL	2405.00	-327.98	-4296.45	2086565.48	2740883.37	36.7341843	-107.7726152

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target	Annotation
2871.00	90.35	281.33	2437.38	133.38	-565.67	0.00	0.00	653.59		
3706.04	90.56	223.51	2430.16	-108.25	-1428.33	6.92	-89.56	1432.43		
4389.34	90.41	270.82	2424.00	-365.92	-2040.33	6.92	89.96	2062.26		
6645.86	90.55	271.10	2405.00	-327.98	-4296.45	0.01	63.40	4308.95		

Elliott Lat 1 ST1 PB3
Elliott Lat 1 ST1 PBHL





Anticollision Report



Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Reference Depths are relative to GL 5864.23' & RKB 11' @ 5875.23ft (A

Offset Depths are relative to Offset Datum

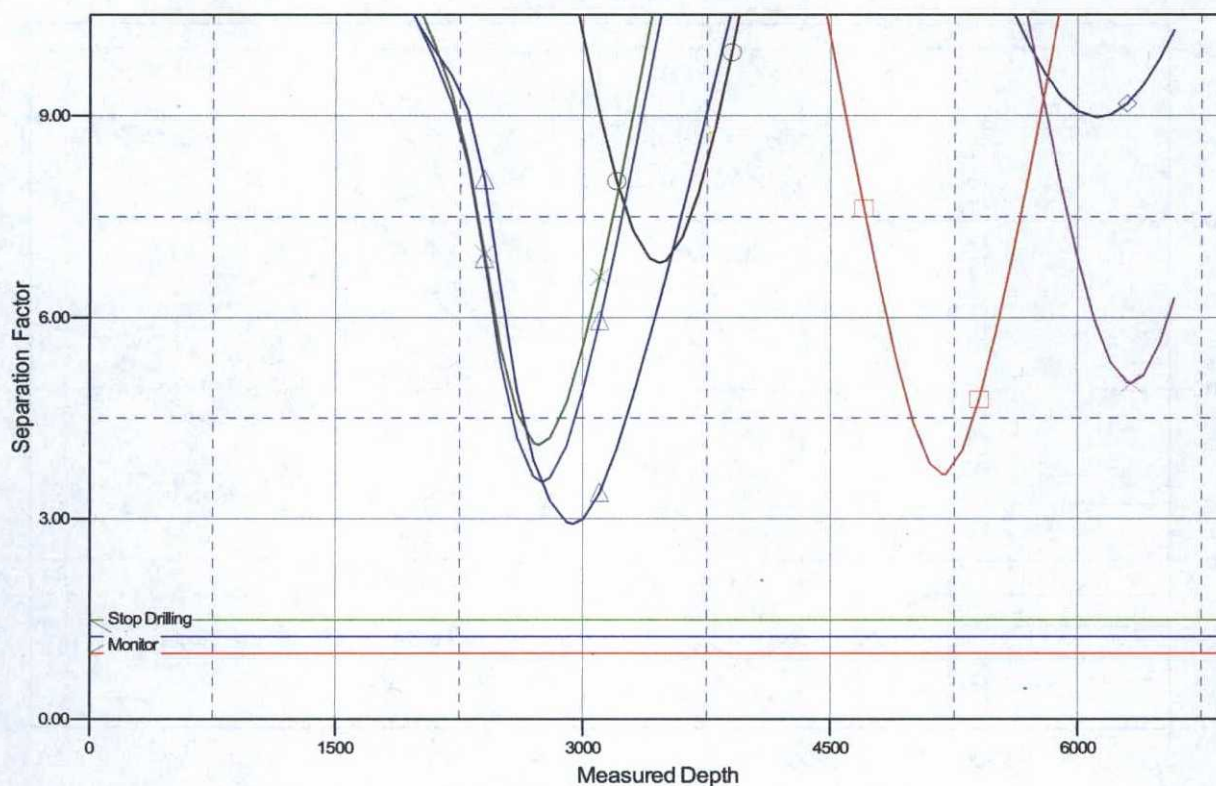
Central Meridian is -107.8333334

Coordinates are relative to: AL Elliott B 8-1H

Coordinate System is US State Plane 1983, New Mexico Western Zone

Grid Convergence at Surface is: 0.05°

Separation Factor Plot



LEGEND

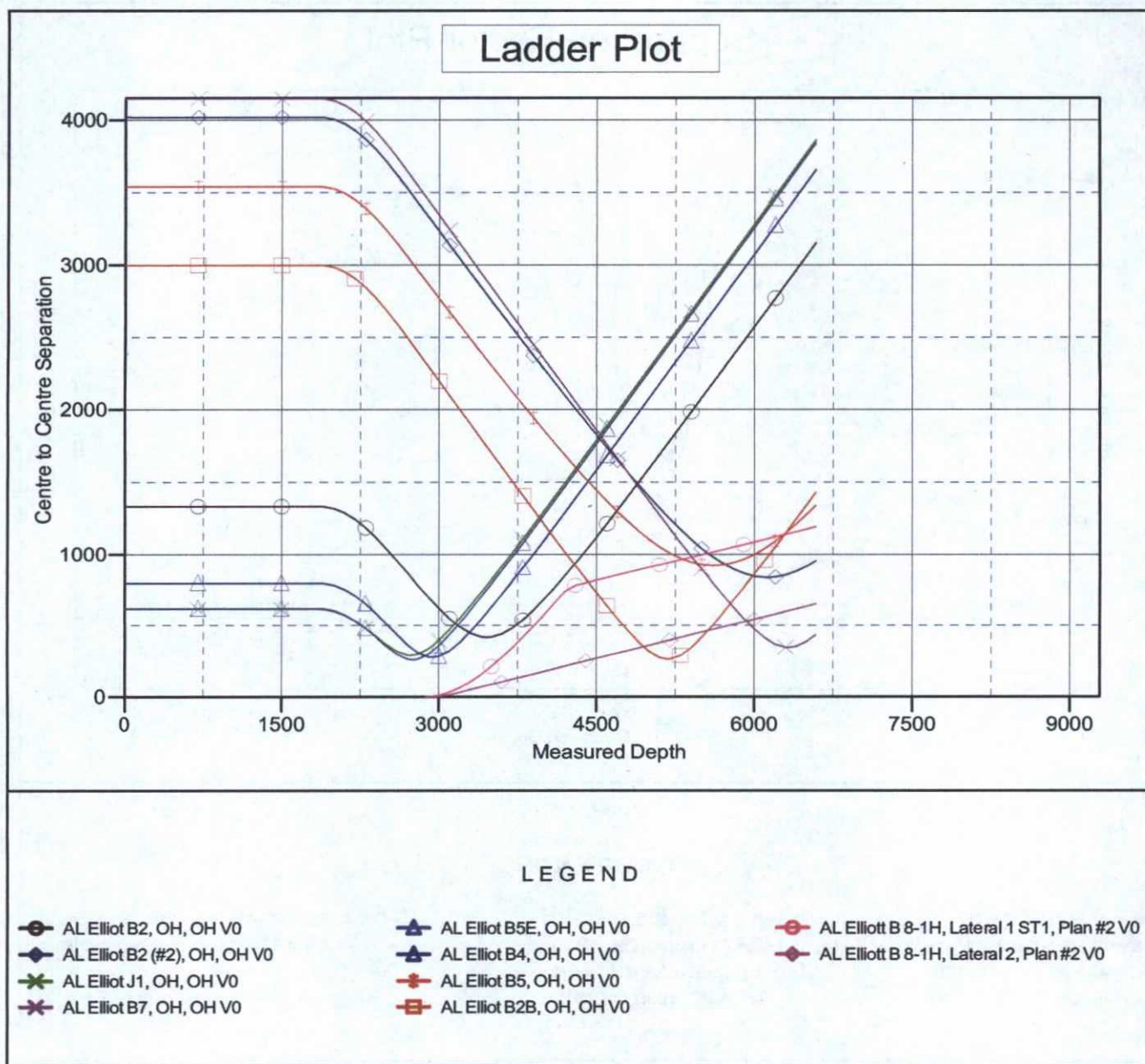
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|-------------------------------|---------------------------|--|
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| AL Elliott B2 (#2), OH, OH V0 | AL Elliott B4, OH, OH V0 | AL Elliott B 8-1H, Lateral 2, Plan #2 V0 |
| AL Elliott J1, OH, OH V0 | AL Elliott B5, OH, OH V0 | |
| AL Elliott B7, OH, OH V0 | AL Elliott B2B, OH, OH V0 | |



Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

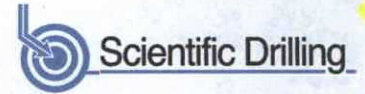
Reference Depths are relative to GL 5864.23' & RKB 11' @ 5875.23ft (A)
Offset Depths are relative to Offset Datum
Central Meridian is -107.8333334

Coordinates are relative to: AL Elliott B 8-1H
Coordinate System is US State Plane 1983, New Mexico Western Zone
Grid Convergence at Surface is: 0.05"





Anticollision Report



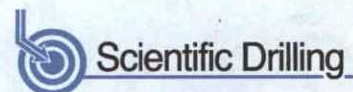
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott B 8-1H - Lateral 2 - Plan #2													Offset Site Error:	0.00 ft
Survey Program: 0-Gyro, 2920-Gyro													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
2,920.00	2,437.08	2,920.00	2,437.08	0.00	0.00	0.00	143.01	-713.72	0.00	0.00	0.00	N/A	CC, ES	
3,000.00	2,436.60	2,999.87	2,436.14	0.00	0.00	-80.42	156.00	-792.50	2.79	2.79	0.00	N/A		
3,100.00	2,436.00	3,098.54	2,433.70	0.00	0.00	-80.42	164.52	-890.75	14.05	14.05	0.00	N/A		
3,200.00	2,435.40	3,196.48	2,430.22	0.00	0.00	-80.42	166.60	-988.60	31.85	31.85	0.00	N/A		
3,300.00	2,434.79	3,294.80	2,426.66	0.00	0.00	-80.42	168.25	-1,086.84	50.08	50.08	0.00	N/A		
3,400.00	2,434.19	3,393.13	2,423.09	0.00	0.00	-80.42	169.90	-1,185.09	68.32	68.32	0.00	N/A		
3,500.00	2,433.59	3,491.45	2,419.52	0.00	0.00	-80.42	171.55	-1,283.33	86.56	86.56	0.00	N/A		
3,600.00	2,432.99	3,589.77	2,415.96	0.00	0.00	-80.42	173.21	-1,381.58	104.79	104.79	0.00	N/A		
3,700.00	2,432.38	3,688.10	2,412.39	0.00	0.00	-80.42	174.86	-1,479.82	123.03	123.03	0.00	N/A		
3,800.00	2,431.78	3,786.42	2,408.83	0.00	0.00	-80.42	176.51	-1,578.06	141.27	141.27	0.00	N/A		
3,900.00	2,431.18	3,884.74	2,405.26	0.00	0.00	-80.42	178.16	-1,676.31	159.51	159.51	0.00	N/A		
4,000.00	2,430.57	3,983.06	2,401.70	0.00	0.00	-80.42	179.82	-1,774.55	177.74	177.74	0.00	N/A		
4,100.00	2,429.97	4,081.39	2,398.13	0.00	0.00	-80.42	181.47	-1,872.80	195.98	195.98	0.00	N/A		
4,200.00	2,429.37	4,179.71	2,394.56	0.00	0.00	-80.42	183.12	-1,971.04	214.22	214.22	0.00	N/A		
4,300.00	2,428.77	4,278.03	2,391.00	0.00	0.00	-80.42	184.77	-2,069.29	232.45	232.45	0.00	N/A		
4,400.00	2,428.16	4,376.36	2,387.43	0.00	0.00	-80.42	186.43	-2,167.53	250.69	250.69	0.00	N/A		
4,500.00	2,427.56	4,474.68	2,383.87	0.00	0.00	-80.42	188.08	-2,265.77	268.93	268.93	0.00	N/A		
4,600.00	2,426.96	4,573.00	2,380.30	0.00	0.00	-80.42	189.73	-2,364.02	287.17	287.17	0.00	N/A		
4,700.00	2,426.36	4,671.33	2,376.74	0.00	0.00	-80.42	191.38	-2,462.26	305.40	305.40	0.00	N/A		
4,800.00	2,425.75	4,769.65	2,373.17	0.00	0.00	-80.42	193.04	-2,560.51	323.64	323.64	0.00	N/A		
4,900.00	2,425.15	4,867.97	2,369.60	0.00	0.00	-80.42	194.69	-2,658.75	341.88	341.88	0.00	N/A		
5,000.00	2,424.55	4,966.29	2,366.04	0.00	0.00	-80.42	196.34	-2,757.00	360.11	360.11	0.00	N/A		
5,100.00	2,423.94	5,064.62	2,362.47	0.00	0.00	-80.42	197.99	-2,855.24	378.35	378.35	0.00	N/A		
5,200.00	2,423.34	5,162.94	2,358.91	0.00	0.00	-80.42	199.65	-2,953.49	396.59	396.59	0.00	N/A		
5,300.00	2,422.74	5,261.26	2,355.34	0.00	0.00	-80.42	201.30	-3,051.73	414.83	414.83	0.00	N/A		
5,400.00	2,422.14	5,359.59	2,351.77	0.00	0.00	-80.42	202.95	-3,149.97	433.06	433.06	0.00	N/A		
5,500.00	2,421.53	5,457.91	2,348.21	0.00	0.00	-80.42	204.60	-3,248.22	451.30	451.30	0.00	N/A		
5,600.00	2,420.93	5,556.23	2,344.64	0.00	0.00	-80.42	206.26	-3,346.46	469.54	469.54	0.00	N/A		
5,700.00	2,420.33	5,654.56	2,341.08	0.00	0.00	-80.42	207.91	-3,444.71	487.77	487.77	0.00	N/A		
5,800.00	2,419.73	5,752.88	2,337.51	0.00	0.00	-80.42	209.56	-3,542.95	506.01	506.01	0.00	N/A		
5,900.00	2,419.12	5,851.20	2,333.95	0.00	0.00	-80.42	211.21	-3,641.20	524.25	524.25	0.00	N/A		
6,000.00	2,418.52	5,949.52	2,330.38	0.00	0.00	-80.42	212.87	-3,739.44	542.48	542.48	0.00	N/A		
6,100.00	2,417.92	6,047.85	2,326.81	0.00	0.00	-80.42	214.52	-3,837.69	560.72	560.72	0.00	N/A		
6,200.00	2,417.31	6,146.17	2,323.25	0.00	0.00	-80.42	216.17	-3,935.93	578.96	578.96	0.00	N/A		
6,300.00	2,416.71	6,244.49	2,319.68	0.00	0.00	-80.42	217.82	-4,034.17	597.20	597.20	0.00	N/A		
6,400.00	2,416.11	6,342.82	2,316.12	0.00	0.00	-80.42	219.48	-4,132.42	615.43	615.43	0.00	N/A		
6,500.00	2,415.51	6,441.14	2,312.55	0.00	0.00	-80.42	221.13	-4,230.66	633.67	633.67	0.00	N/A		
6,584.89	2,415.00	6,511.48	2,310.00	0.00	0.00	-80.42	222.31	-4,300.95	649.24	649.24	0.00	N/A		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



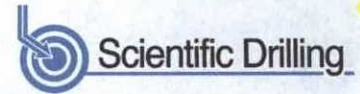
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott B 8-1H - Lateral 1 ST1 - Plan #2														Offset Site Error:	0.00 ft
Survey Program: 0-Gyro, 2871-Gyro														Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)					
2,871.00	2,437.38	2,871.00	2,437.38	0.00	0.00	0.00	133.38	-665.67	0.00	0.00	0.00	N/A	CC, ES		
2,900.00	2,437.20	2,899.99	2,437.20	0.00	0.00	-89.56	138.58	-694.19	0.51	0.51	0.00	N/A			
3,000.00	2,436.60	2,998.97	2,436.53	0.00	0.00	-89.56	148.74	-792.59	9.99	9.99	0.00	N/A			
3,100.00	2,436.00	3,094.41	2,435.82	0.00	0.00	-89.56	147.35	-887.96	31.10	31.10	0.00	N/A			
3,200.00	2,435.40	3,184.14	2,435.08	0.00	0.00	-89.56	136.04	-976.93	63.01	63.01	0.00	N/A			
3,300.00	2,434.79	3,266.78	2,434.36	0.00	0.00	-89.56	117.16	-1,057.34	104.60	104.60	0.00	N/A			
3,400.00	2,434.19	3,341.68	2,433.68	0.00	0.00	-89.56	93.19	-1,128.28	154.64	154.64	0.00	N/A			
3,500.00	2,433.59	3,408.83	2,433.05	0.00	0.00	-89.56	66.34	-1,189.80	211.93	211.93	0.00	N/A			
3,600.00	2,432.99	3,468.61	2,432.48	0.00	0.00	-89.56	38.29	-1,242.58	275.32	275.32	0.00	N/A			
3,700.00	2,432.38	3,521.66	2,431.96	0.00	0.00	-89.56	10.28	-1,287.61	343.83	343.83	0.00	N/A			
3,800.00	2,431.78	3,568.67	2,431.50	0.00	0.00	-89.56	-16.92	-1,325.95	416.61	416.61	0.00	N/A			
3,900.00	2,431.18	3,610.37	2,431.10	0.00	0.00	-89.56	-42.83	-1,358.61	482.96	482.96	0.00	N/A			
4,000.00	2,430.57	3,650.00	2,430.71	0.00	0.00	-89.56	-68.95	-1,388.41	572.30	572.30	0.00	N/A			
4,100.00	2,429.97	3,680.45	2,430.41	0.00	0.00	-89.56	-89.97	-1,410.44	654.13	654.13	0.00	N/A			
4,200.00	2,429.37	3,774.94	2,429.48	0.00	0.00	-89.56	-156.19	-1,477.79	737.75	737.75	0.00	N/A			
4,300.00	2,428.77	4,427.06	2,423.73	0.00	0.00	-89.56	-365.38	-2,078.04	779.60	779.60	0.00	N/A			
4,400.00	2,428.16	4,525.56	2,423.01	0.00	0.00	-89.56	-363.94	-2,176.52	797.81	797.81	0.00	N/A			
4,500.00	2,427.56	4,624.06	2,422.28	0.00	0.00	-89.56	-362.48	-2,275.01	816.01	816.01	0.00	N/A			
4,600.00	2,426.96	4,722.57	2,421.54	0.00	0.00	-89.56	-361.01	-2,373.51	834.18	834.18	0.00	N/A			
4,700.00	2,426.36	4,821.08	2,420.79	0.00	0.00	-89.56	-359.51	-2,472.01	852.34	852.34	0.00	N/A			
4,800.00	2,425.75	4,919.61	2,420.03	0.00	0.00	-89.55	-357.99	-2,570.52	870.47	870.47	0.00	N/A			
4,900.00	2,425.15	5,018.14	2,419.26	0.00	0.00	-89.55	-356.45	-2,669.04	888.58	888.58	0.00	N/A			
5,000.00	2,424.55	5,116.68	2,418.47	0.00	0.00	-89.55	-354.89	-2,767.56	906.67	906.67	0.00	N/A			
5,100.00	2,423.94	5,215.23	2,417.68	0.00	0.00	-89.54	-353.30	-2,866.09	924.74	924.74	0.00	N/A			
5,200.00	2,423.34	5,313.78	2,416.88	0.00	0.00	-89.54	-351.70	-2,964.63	942.79	942.79	0.00	N/A			
5,300.00	2,422.74	5,412.34	2,416.06	0.00	0.00	-89.53	-350.07	-3,063.17	960.82	960.82	0.00	N/A			
5,400.00	2,422.14	5,510.91	2,415.24	0.00	0.00	-89.53	-348.43	-3,161.73	978.83	978.83	0.00	N/A			
5,500.00	2,421.53	5,609.49	2,414.41	0.00	0.00	-89.52	-346.76	-3,260.29	996.81	996.81	0.00	N/A			
5,600.00	2,420.93	5,708.07	2,413.56	0.00	0.00	-89.51	-345.08	-3,358.85	1,014.78	1,014.78	0.00	N/A			
5,700.00	2,420.33	5,806.67	2,412.71	0.00	0.00	-89.51	-343.37	-3,457.43	1,032.72	1,032.72	0.00	N/A			
5,800.00	2,419.73	5,905.27	2,411.84	0.00	0.00	-89.50	-341.64	-3,556.01	1,050.65	1,050.65	0.00	N/A			
5,900.00	2,419.12	6,003.87	2,410.96	0.00	0.00	-89.49	-339.89	-3,654.60	1,068.55	1,068.55	0.00	N/A			
6,000.00	2,418.52	6,102.49	2,410.08	0.00	0.00	-89.48	-338.12	-3,753.19	1,086.44	1,086.44	0.00	N/A			
6,100.00	2,417.92	6,201.11	2,409.18	0.00	0.00	-89.48	-336.32	-3,851.79	1,104.30	1,104.30	0.00	N/A			
6,200.00	2,417.31	6,299.74	2,408.27	0.00	0.00	-89.47	-334.51	-3,950.40	1,122.14	1,122.14	0.00	N/A			
6,300.00	2,416.71	6,398.38	2,407.35	0.00	0.00	-89.46	-332.68	-4,049.02	1,139.96	1,139.96	0.00	N/A			
6,400.00	2,416.11	6,497.03	2,406.42	0.00	0.00	-89.45	-330.82	-4,147.64	1,157.76	1,157.76	0.00	N/A			
6,500.00	2,415.51	6,595.68	2,405.48	0.00	0.00	-89.44	-328.94	-4,246.27	1,175.54	1,175.54	0.00	N/A			
6,584.89	2,415.00	6,645.86	2,405.00	0.00	0.00	-89.44	-327.98	-4,296.45	1,191.05	1,191.05	0.00	N/A			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report

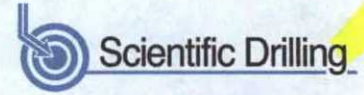


Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliot J1 - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 182-INCLINOMETER													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,000.00	2,424.55	2,412.90	2,424.55	0.00	70.51	-87.31	-178.61	-587.24	2,285.70	2,215.26	70.44	32.451		
5,100.00	2,423.94	2,412.29	2,423.94	0.00	70.49	-87.19	-178.61	-587.24	2,384.92	2,314.51	70.41	33.872		
5,200.00	2,423.34	2,411.69	2,423.34	0.00	70.48	-87.07	-178.61	-587.24	2,484.20	2,413.82	70.38	35.295		
5,300.00	2,422.74	2,411.09	2,422.74	0.00	70.46	-86.95	-178.61	-587.24	2,583.54	2,513.18	70.36	36.720		
5,400.00	2,422.14	2,410.49	2,422.14	0.00	70.44	-86.83	-178.61	-587.24	2,682.93	2,612.60	70.33	38.146		
5,500.00	2,421.53	2,409.88	2,421.53	0.00	70.42	-86.71	-178.61	-587.24	2,782.36	2,712.05	70.31	39.575		
5,600.00	2,420.93	2,409.28	2,420.93	0.00	70.40	-86.60	-178.61	-587.24	2,881.83	2,811.55	70.28	41.005		
5,700.00	2,420.33	2,408.68	2,420.33	0.00	70.38	-86.48	-178.61	-587.24	2,981.34	2,911.08	70.25	42.438		
5,800.00	2,419.73	2,408.07	2,419.73	0.00	70.37	-86.36	-178.61	-587.24	3,080.87	3,010.65	70.23	43.871		
5,900.00	2,419.12	2,407.47	2,419.12	0.00	70.35	-86.24	-178.61	-587.24	3,180.44	3,110.24	70.20	45.307		
6,000.00	2,418.52	2,406.87	2,418.52	0.00	70.33	-86.12	-178.61	-587.24	3,280.03	3,209.86	70.17	46.744		
6,100.00	2,417.92	2,406.27	2,417.92	0.00	70.31	-86.00	-178.61	-587.24	3,379.65	3,309.51	70.14	48.183		
6,200.00	2,417.31	2,405.66	2,417.31	0.00	70.29	-85.89	-178.61	-587.24	3,479.29	3,409.18	70.11	49.624		
6,300.00	2,416.71	2,405.06	2,416.71	0.00	70.27	-85.77	-178.61	-587.24	3,578.95	3,508.86	70.08	51.066		
6,400.00	2,416.11	2,404.46	2,416.11	0.00	70.26	-85.65	-178.61	-587.24	3,678.62	3,608.57	70.06	52.510		
6,500.00	2,415.51	2,403.86	2,415.51	0.00	70.24	-85.53	-178.61	-587.24	3,778.32	3,708.29	70.03	53.956		
6,584.69	2,415.00	2,403.35	2,415.00	0.00	70.22	-85.43	-178.61	-587.24	3,862.76	3,792.76	70.00	55.182		



Anticollision Report



Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott J1 - OH - OH														Offset Site Error:	0.00 ft
Survey Program: 182-INCLINOMETER														Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (ft)	Separation Factor	Warning				
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)							
0.00	0.00	0.00	11.69	0.00	0.00	-106.92	-178.61	-587.24	613.91						
100.00	100.00	88.31	100.00	0.00	1.34	-106.92	-178.61	-587.24	613.80	612.46	1.34	457.635			
200.00	200.00	188.31	200.00	0.00	2.96	-106.92	-178.61	-587.24	613.80	610.85	2.96	207.888			
300.00	300.00	288.31	300.00	0.00	5.99	-106.92	-178.61	-587.24	613.80	607.81	5.99	102.432			
400.00	400.00	388.31	400.00	0.00	9.03	-106.92	-178.61	-587.24	613.80	604.77	9.03	67.980			
500.00	500.00	488.31	500.00	0.00	12.07	-106.92	-178.61	-587.24	613.80	601.74	12.07	50.870			
600.00	600.00	588.31	600.00	0.00	15.10	-106.92	-178.61	-587.24	613.80	598.70	15.10	40.642			
700.00	700.00	688.31	700.00	0.00	18.14	-106.92	-178.61	-587.24	613.80	595.66	18.14	33.838			
800.00	800.00	788.31	800.00	0.00	21.18	-106.92	-178.61	-587.24	613.80	592.63	21.18	28.985			
900.00	900.00	888.31	900.00	0.00	24.21	-106.92	-178.61	-587.24	613.80	589.59	24.21	25.350			
1,000.00	1,000.00	988.31	1,000.00	0.00	27.25	-106.92	-178.61	-587.24	613.80	586.55	27.25	22.525			
1,100.00	1,100.00	1,088.31	1,100.00	0.00	30.29	-106.92	-178.61	-587.24	613.80	583.52	30.29	20.266			
1,200.00	1,200.00	1,188.31	1,200.00	0.00	33.32	-106.92	-178.61	-587.24	613.80	580.48	33.32	18.419			
1,300.00	1,300.00	1,288.32	1,300.00	0.00	36.36	-106.92	-178.61	-587.24	613.80	577.44	36.36	16.881			
1,400.00	1,400.00	1,388.32	1,400.00	0.00	39.40	-106.92	-178.61	-587.24	613.80	574.40	39.40	15.580			
1,500.00	1,500.00	1,488.32	1,500.00	0.00	42.43	-106.92	-178.61	-587.24	613.80	571.37	42.43	14.465			
1,600.00	1,600.00	1,588.32	1,600.00	0.00	45.47	-106.92	-178.61	-587.24	613.80	568.33	45.47	13.499			
1,700.00	1,700.00	1,688.32	1,700.00	0.00	48.51	-106.92	-178.61	-587.24	613.80	565.29	48.51	12.654			
1,800.00	1,800.00	1,788.33	1,800.00	0.00	51.55	-106.92	-178.61	-587.24	613.80	562.26	51.55	11.908			
1,900.00	1,899.98	1,888.31	1,899.98	0.00	54.58	-28.34	-178.61	-587.24	612.86	558.36	54.50	11.244			
2,000.00	1,998.76	1,987.09	1,998.76	0.00	57.58	-29.65	-178.61	-587.24	599.91	543.52	56.39	10.638			
2,100.00	2,093.47	2,081.80	2,093.47	0.00	60.46	-32.71	-178.61	-587.24	572.40	515.42	56.98	10.046			
2,200.00	2,181.24	2,169.58	2,181.24	0.00	63.12	-38.02	-178.61	-587.24	531.89	475.01	56.89	9.350			
2,300.00	2,259.41	2,247.74	2,259.41	0.00	65.50	-46.25	-178.61	-587.24	481.02	423.37	57.65	8.344			
2,400.00	2,325.80	2,313.93	2,325.80	0.00	67.51	-57.71	-178.61	-587.24	423.82	362.82	61.00	6.948			
2,500.00	2,377.79	2,366.14	2,377.79	0.00	69.09	-71.05	-178.61	-587.24	366.50	300.37	66.13	5.542			
2,600.00	2,414.40	2,402.75	2,414.40	0.00	70.20	-82.73	-178.61	-587.24	318.48	248.79	69.69	4.570			
2,700.00	2,434.32	2,422.67	2,434.32	0.00	70.81	-89.27	-178.61	-587.24	292.33	221.53	70.80	4.129			
2,732.80	2,437.40	2,425.75	2,437.40	0.00	70.90	-90.00	-178.61	-587.24	290.50	219.60	70.90	4.097	CC, ES, SF		
2,800.00	2,437.81	2,426.16	2,437.81	0.00	70.92	-89.92	-178.61	-587.24	298.17	227.26	70.92	4.205			
2,900.00	2,437.20	2,425.55	2,437.20	0.00	70.90	-89.80	-178.61	-587.24	335.18	264.29	70.90	4.728			
3,000.00	2,436.80	2,424.95	2,436.80	0.00	70.88	-89.68	-178.61	-587.24	394.70	323.82	70.88	5.569			
3,100.00	2,436.00	2,424.35	2,436.00	0.00	70.86	-89.56	-178.61	-587.24	468.21	397.36	70.86	6.608			
3,200.00	2,435.40	2,423.75	2,435.40	0.00	70.84	-89.44	-178.61	-587.24	550.15	479.31	70.84	7.766			
3,300.00	2,434.79	2,423.14	2,434.79	0.00	70.82	-89.33	-178.61	-587.24	637.26	566.44	70.82	8.998			
3,400.00	2,434.19	2,422.54	2,434.19	0.00	70.81	-89.21	-178.61	-587.24	727.69	656.89	70.80	10.278			
3,500.00	2,433.59	2,421.94	2,433.59	0.00	70.79	-89.09	-178.61	-587.24	820.35	749.57	70.78	11.590			
3,600.00	2,432.99	2,421.34	2,432.99	0.00	70.77	-88.97	-178.61	-587.24	914.55	843.79	70.76	12.925			
3,700.00	2,432.38	2,420.73	2,432.38	0.00	70.75	-88.85	-178.61	-587.24	1,009.87	939.13	70.74	14.276			
3,800.00	2,431.78	2,420.13	2,431.78	0.00	70.73	-88.73	-178.61	-587.24	1,106.02	1,035.30	70.72	15.640			
3,900.00	2,431.18	2,419.53	2,431.18	0.00	70.71	-88.61	-178.61	-587.24	1,202.79	1,132.10	70.69	17.014			
4,000.00	2,430.57	2,418.92	2,430.57	0.00	70.70	-88.49	-178.61	-587.24	1,300.05	1,229.38	70.67	18.396			
4,100.00	2,429.97	2,418.32	2,429.97	0.00	70.68	-88.38	-178.61	-587.24	1,397.70	1,327.05	70.65	19.784			
4,200.00	2,429.37	2,417.72	2,429.37	0.00	70.66	-88.26	-178.61	-587.24	1,495.66	1,425.03	70.63	21.177			
4,300.00	2,428.77	2,417.12	2,428.77	0.00	70.64	-88.14	-178.61	-587.24	1,593.87	1,523.27	70.60	22.575			
4,400.00	2,428.16	2,416.51	2,428.16	0.00	70.62	-88.02	-178.61	-587.24	1,692.29	1,621.71	70.58	23.977			
4,500.00	2,427.56	2,415.91	2,427.56	0.00	70.60	-87.90	-178.61	-587.24	1,790.89	1,720.33	70.56	25.382			
4,600.00	2,426.96	2,415.31	2,426.96	0.00	70.59	-87.78	-178.61	-587.24	1,889.63	1,819.10	70.53	26.791			
4,700.00	2,426.36	2,414.70	2,426.36	0.00	70.57	-87.66	-178.61	-587.24	1,988.50	1,917.99	70.51	28.202			
4,800.00	2,425.75	2,414.10	2,425.75	0.00	70.55	-87.54	-178.61	-587.24	2,087.48	2,016.99	70.48	29.616			
4,900.00	2,425.15	2,413.50	2,425.15	0.00	70.53	-87.43	-178.61	-587.24	2,186.55	2,116.09	70.46	31.032			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



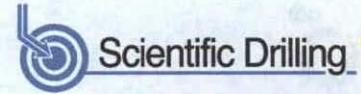
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliot B7 - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 207-INCLINOMETER													Offset Well Error:	0.00 ft
Reference	Offset		Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
5,100.00	2,423.94	2,379.75	2,423.94	0.00	69.13	-91.22	472.79	-4,119.96	1,272.58	1,203.47	69.11	18.414		
5,200.00	2,423.34	2,379.15	2,423.34	0.00	69.11	-91.12	472.79	-4,119.96	1,176.66	1,107.57	69.09	17.030		
5,300.00	2,422.74	2,378.54	2,422.74	0.00	69.09	-91.02	472.79	-4,119.96	1,081.48	1,012.40	69.08	15.656		
5,400.00	2,422.14	2,377.94	2,422.14	0.00	69.07	-90.92	472.79	-4,119.96	987.25	918.19	69.06	14.295		
5,500.00	2,421.53	2,377.34	2,421.53	0.00	69.05	-90.82	472.79	-4,119.96	894.28	825.23	69.05	12.952		
5,600.00	2,420.93	2,376.73	2,420.93	0.00	69.03	-90.72	472.79	-4,119.96	802.99	733.96	69.03	11.633		
5,700.00	2,420.33	2,376.13	2,420.33	0.00	69.02	-90.62	472.79	-4,119.96	714.04	645.03	69.01	10.347		
5,800.00	2,419.73	2,375.53	2,419.73	0.00	69.00	-90.52	472.79	-4,119.96	628.43	559.43	69.00	9.108		
5,900.00	2,419.12	2,374.93	2,419.12	0.00	68.98	-90.42	472.79	-4,119.96	547.71	478.73	68.98	7.940		
6,000.00	2,418.52	2,374.32	2,418.52	0.00	68.96	-90.32	472.79	-4,119.96	474.39	405.43	68.96	6.879		
6,100.00	2,417.92	2,373.72	2,417.92	0.00	68.94	-90.22	472.79	-4,119.96	412.44	343.50	68.94	5.982		
6,200.00	2,417.31	2,373.12	2,417.31	0.00	68.92	-90.12	472.79	-4,119.96	367.65	298.72	68.92	5.334		
6,300.00	2,416.71	2,372.52	2,416.71	0.00	68.91	-90.02	472.79	-4,119.96	346.73	277.83	68.91	5.032		
6,324.71	2,416.56	2,372.37	2,416.56	0.00	68.90	-90.00	472.79	-4,119.96	345.85	276.95	68.90	5.019	CC, ES, SF	
6,400.00	2,416.11	2,371.91	2,416.11	0.00	68.89	-89.92	472.79	-4,119.96	353.95	285.07	68.89	5.138		
6,500.00	2,415.51	2,371.31	2,415.51	0.00	68.87	-89.82	472.79	-4,119.96	387.74	318.87	68.87	5.630		
6,584.69	2,415.00	2,370.80	2,415.00	0.00	68.85	-89.74	472.79	-4,119.96	432.67	363.81	68.85	6.284		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



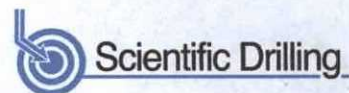
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott B7 - OH - OH														Offset Site Error:	0.00 ft
Survey Program: 207-INCLINOMETER														Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)					
0.00	0.00	0.00	44.23	0.00	0.00	-83.45	472.79	-4,119.96	4,147.23						
100.00	100.00	55.77	100.00	0.00	0.85	-83.45	472.79	-4,119.96	4,147.00	4,146.15	0.85	4,894.597			
200.00	200.00	155.77	200.00	0.00	2.37	-83.45	472.79	-4,119.96	4,147.00	4,144.63	2.37	1,752.934			
300.00	300.00	255.77	300.00	0.00	4.62	-83.45	472.79	-4,119.96	4,147.00	4,142.37	4.62	896.705			
400.00	400.00	355.77	400.00	0.00	7.66	-83.45	472.79	-4,119.96	4,147.00	4,139.34	7.66	541.278			
500.00	500.00	455.77	500.00	0.00	10.70	-83.45	472.79	-4,119.96	4,147.00	4,136.30	10.70	387.632			
600.00	600.00	555.77	600.00	0.00	13.73	-83.45	472.79	-4,119.96	4,147.00	4,133.26	13.74	301.928			
700.00	700.00	655.77	700.00	0.00	16.77	-83.45	472.79	-4,119.96	4,147.00	4,130.23	16.77	247.259			
800.00	800.00	755.78	800.00	0.00	19.81	-83.45	472.79	-4,119.96	4,147.00	4,127.19	19.81	209.348			
900.00	900.00	855.78	900.00	0.00	22.85	-83.45	472.79	-4,119.96	4,147.00	4,124.15	22.85	181.520			
1,000.00	1,000.00	955.78	1,000.00	0.00	25.88	-83.45	472.79	-4,119.96	4,147.00	4,121.11	25.88	160.222			
1,100.00	1,100.00	1,055.78	1,100.00	0.00	28.92	-83.45	472.79	-4,119.96	4,147.00	4,118.08	28.92	143.397			
1,200.00	1,200.00	1,155.78	1,200.00	0.00	31.96	-83.45	472.79	-4,119.96	4,147.00	4,115.04	31.96	129.770			
1,300.00	1,300.00	1,255.78	1,300.00	0.00	34.99	-83.45	472.79	-4,119.96	4,147.00	4,112.00	34.99	118.508			
1,400.00	1,400.00	1,355.78	1,400.00	0.00	38.03	-83.45	472.79	-4,119.96	4,147.00	4,108.97	38.03	109.045			
1,500.00	1,500.00	1,455.79	1,500.00	0.00	41.07	-83.45	472.79	-4,119.96	4,147.00	4,105.93	41.07	100.981			
1,600.00	1,600.00	1,555.79	1,600.00	0.00	44.10	-83.45	472.79	-4,119.96	4,147.00	4,102.89	44.10	94.028			
1,700.00	1,700.00	1,655.79	1,700.00	0.00	47.14	-83.45	472.79	-4,119.96	4,147.00	4,099.86	47.14	87.971			
1,800.00	1,800.00	1,755.80	1,800.00	0.00	50.18	-83.45	472.79	-4,119.96	4,147.00	4,096.82	50.18	82.646			
1,900.00	1,899.98	1,855.78	1,899.98	0.00	53.21	-4.79	472.79	-4,119.96	4,145.94	4,092.82	53.12	78.053			
2,000.00	1,998.76	1,954.56	1,998.76	0.00	56.21	-4.94	472.79	-4,119.96	4,131.23	4,076.55	54.69	75.544			
2,100.00	2,093.47	2,049.27	2,093.47	0.00	59.09	-5.27	472.79	-4,119.96	4,099.66	4,045.39	54.27	75.541			
2,200.00	2,181.24	2,137.05	2,181.24	0.00	61.76	-5.86	472.79	-4,119.96	4,052.19	4,000.50	51.69	78.398			
2,300.00	2,259.41	2,215.22	2,259.41	0.00	64.13	-6.84	472.79	-4,119.96	3,990.25	3,943.32	46.93	85.019			
2,400.00	2,325.60	2,281.40	2,325.60	0.00	66.14	-8.48	472.79	-4,119.96	3,915.74	3,875.45	40.30	97.172			
2,500.00	2,377.79	2,333.59	2,377.79	0.00	67.72	-11.48	472.79	-4,119.96	3,830.93	3,798.13	32.80	116.782			
2,600.00	2,414.40	2,370.20	2,414.40	0.00	68.84	-18.11	472.79	-4,119.96	3,738.40	3,709.74	28.66	130.426			
2,700.00	2,434.32	2,390.12	2,434.32	0.00	69.44	-40.11	472.79	-4,119.96	3,640.97	3,595.69	45.28	80.414			
2,800.00	2,437.81	2,393.61	2,437.81	0.00	69.55	-93.52	472.79	-4,119.96	3,541.57	3,472.15	69.42	51.019			
2,900.00	2,437.20	2,393.01	2,437.20	0.00	69.53	-93.42	472.79	-4,119.96	3,442.06	3,372.66	69.41	49.593			
3,000.00	2,436.60	2,392.41	2,436.60	0.00	69.51	-93.32	472.79	-4,119.96	3,342.59	3,273.19	69.39	48.168			
3,100.00	2,436.00	2,391.80	2,436.00	0.00	69.49	-93.22	472.79	-4,119.96	3,243.14	3,173.76	69.38	46.742			
3,200.00	2,435.40	2,391.20	2,435.40	0.00	69.47	-93.12	472.79	-4,119.96	3,143.73	3,074.36	69.37	45.317			
3,300.00	2,434.79	2,390.60	2,434.79	0.00	69.46	-93.02	472.79	-4,119.96	3,044.36	2,975.00	69.36	43.892			
3,400.00	2,434.19	2,390.00	2,434.19	0.00	69.44	-92.92	472.79	-4,119.96	2,945.03	2,875.68	69.35	42.468			
3,500.00	2,433.59	2,389.39	2,433.59	0.00	69.42	-92.82	472.79	-4,119.96	2,845.75	2,776.41	69.34	41.043			
3,600.00	2,432.99	2,388.79	2,432.99	0.00	69.40	-92.72	472.79	-4,119.96	2,746.52	2,677.20	69.32	39.619			
3,700.00	2,432.38	2,388.19	2,432.38	0.00	69.38	-92.62	472.79	-4,119.96	2,647.35	2,578.04	69.31	38.196			
3,800.00	2,431.78	2,387.58	2,431.78	0.00	69.36	-92.52	472.79	-4,119.96	2,548.24	2,478.94	69.30	36.772			
3,900.00	2,431.18	2,386.98	2,431.18	0.00	69.35	-92.42	472.79	-4,119.96	2,449.21	2,379.92	69.28	35.350			
4,000.00	2,430.57	2,386.38	2,430.57	0.00	69.33	-92.32	472.79	-4,119.96	2,350.25	2,280.98	69.27	33.928			
4,100.00	2,429.97	2,385.78	2,429.97	0.00	69.31	-92.22	472.79	-4,119.96	2,251.39	2,182.13	69.26	32.507			
4,200.00	2,429.37	2,385.17	2,429.37	0.00	69.29	-92.12	472.79	-4,119.96	2,152.63	2,083.39	69.24	31.088			
4,300.00	2,428.77	2,384.57	2,428.77	0.00	69.27	-92.02	472.79	-4,119.96	2,054.00	1,984.77	69.23	29.669			
4,400.00	2,428.16	2,383.97	2,428.16	0.00	69.25	-91.92	472.79	-4,119.96	1,955.50	1,886.28	69.22	28.252			
4,500.00	2,427.56	2,383.37	2,427.56	0.00	69.24	-91.82	472.79	-4,119.96	1,857.16	1,787.96	69.20	26.837			
4,600.00	2,426.96	2,382.76	2,426.96	0.00	69.22	-91.72	472.79	-4,119.96	1,759.01	1,689.82	69.19	25.424			
4,700.00	2,426.36	2,382.16	2,426.36	0.00	69.20	-91.62	472.79	-4,119.96	1,661.08	1,591.91	69.17	24.014			
4,800.00	2,425.75	2,381.56	2,425.75	0.00	69.18	-91.52	472.79	-4,119.96	1,563.41	1,494.26	69.16	22.607			
4,900.00	2,425.15	2,380.95	2,425.15	0.00	69.16	-91.42	472.79	-4,119.96	1,466.06	1,396.92	69.14	21.204			
5,000.00	2,424.55	2,380.35	2,424.55	0.00	69.14	-91.32	472.79	-4,119.96	1,369.09	1,299.96	69.13	19.806			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report

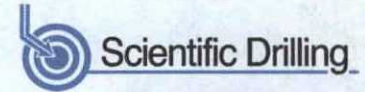


Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliot B5E - OH - OH												Offset Site Error:	0.00 ft
Survey Program: 60-INCLINOMETER												Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,000.00	2,424.55	2,424.27	2,424.55	0.00	72.51	-87.00	-143.71	-600.34	2,262.32	2,189.90	72.41	31.241	
5,100.00	2,423.94	2,423.67	2,423.94	0.00	72.49	-86.87	-143.71	-600.34	2,361.69	2,289.30	72.39	32.626	
5,200.00	2,423.34	2,423.07	2,423.34	0.00	72.48	-86.74	-143.71	-600.34	2,461.11	2,388.75	72.36	34.012	
5,300.00	2,422.74	2,422.47	2,422.74	0.00	72.46	-86.61	-143.71	-600.34	2,560.57	2,488.24	72.33	35.401	
5,400.00	2,422.14	2,421.86	2,422.14	0.00	72.44	-86.47	-143.71	-600.34	2,660.08	2,587.77	72.30	36.791	
5,500.00	2,421.53	2,421.26	2,421.53	0.00	72.42	-86.34	-143.71	-600.34	2,759.62	2,687.34	72.27	38.183	
5,600.00	2,420.93	2,420.66	2,420.93	0.00	72.40	-86.21	-143.71	-600.34	2,859.19	2,786.95	72.25	39.576	
5,700.00	2,420.33	2,420.05	2,420.33	0.00	72.38	-86.07	-143.71	-600.34	2,958.79	2,886.58	72.22	40.972	
5,800.00	2,419.73	2,419.45	2,419.73	0.00	72.37	-85.94	-143.71	-600.34	3,058.42	2,986.23	72.19	42.369	
5,900.00	2,419.12	2,418.85	2,419.12	0.00	72.35	-85.81	-143.71	-600.34	3,158.07	3,085.92	72.16	43.768	
6,000.00	2,418.52	2,418.25	2,418.52	0.00	72.33	-85.68	-143.71	-600.34	3,257.74	3,185.62	72.12	45.168	
6,100.00	2,417.92	2,417.64	2,417.92	0.00	72.31	-85.54	-143.71	-600.34	3,357.43	3,285.34	72.09	46.570	
6,200.00	2,417.31	2,417.04	2,417.31	0.00	72.29	-85.41	-143.71	-600.34	3,457.14	3,385.08	72.06	47.974	
6,300.00	2,416.71	2,416.44	2,416.71	0.00	72.27	-85.28	-143.71	-600.34	3,556.87	3,484.84	72.03	49.380	
6,400.00	2,416.11	2,415.84	2,416.11	0.00	72.26	-85.15	-143.71	-600.34	3,656.61	3,584.61	72.00	50.787	
6,500.00	2,415.51	2,415.23	2,415.51	0.00	72.24	-85.01	-143.71	-600.34	3,756.36	3,684.40	71.97	52.196	
6,584.69	2,415.00	2,414.72	2,415.00	0.00	72.22	-84.90	-143.71	-600.34	3,840.85	3,768.91	71.94	53.391	



Anticollision Report



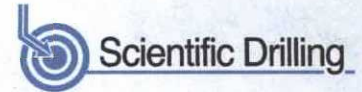
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliot B5E - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 50-INCLINOMETER													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (ft)	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)				Between Centres (ft)	Between Ellipses (ft)	
0.00	0.00	0.00	0.30	0.00	0.00	-103.46	-143.71	-600.34	617.30					
100.00	100.00	99.70	100.00	0.00	1.92	-103.46	-143.71	-600.34	617.30	615.38	1.92	321.292		
200.00	200.00	199.70	200.00	0.00	4.96	-103.46	-143.71	-600.34	617.30	612.34	4.96	124.520		
300.00	300.00	299.70	300.00	0.00	7.99	-103.46	-143.71	-600.34	617.30	609.31	7.99	77.224		
400.00	400.00	399.70	400.00	0.00	11.03	-103.46	-143.71	-600.34	617.30	606.27	11.03	55.964		
500.00	500.00	499.70	500.00	0.00	14.07	-103.46	-143.71	-600.34	617.30	603.24	14.07	43.882		
600.00	600.00	599.70	600.00	0.00	17.10	-103.46	-143.71	-600.34	617.30	600.20	17.10	36.091		
700.00	700.00	699.70	700.00	0.00	20.14	-103.46	-143.71	-600.34	617.30	597.16	20.14	30.649		
800.00	800.00	799.70	800.00	0.00	23.18	-103.46	-143.71	-600.34	617.30	594.12	23.18	26.634		
900.00	900.00	899.71	900.00	0.00	26.21	-103.46	-143.71	-600.34	617.30	591.09	26.21	23.548		
1,000.00	1,000.00	999.71	1,000.00	0.00	29.25	-103.46	-143.71	-600.34	617.30	588.05	29.25	21.103		
1,100.00	1,100.00	1,099.71	1,100.00	0.00	32.29	-103.46	-143.71	-600.34	617.30	585.01	32.29	19.118		
1,200.00	1,200.00	1,199.71	1,200.00	0.00	35.32	-103.46	-143.71	-600.34	617.30	581.98	35.33	17.475		
1,300.00	1,300.00	1,299.73	1,300.00	0.00	38.36	-103.46	-143.71	-600.34	617.30	578.94	38.36	16.091		
1,400.00	1,400.00	1,399.73	1,400.00	0.00	41.40	-103.46	-143.71	-600.34	617.30	575.90	41.40	14.911		
1,500.00	1,500.00	1,499.73	1,500.00	0.00	44.44	-103.46	-143.71	-600.34	617.30	572.87	44.44	13.892		
1,600.00	1,600.00	1,599.73	1,600.00	0.00	47.47	-103.46	-143.71	-600.34	617.30	569.83	47.47	13.003		
1,700.00	1,700.00	1,699.73	1,700.00	0.00	50.51	-103.46	-143.71	-600.34	617.30	566.79	50.51	12.221		
1,800.00	1,800.00	1,799.73	1,800.00	0.00	53.55	-103.46	-143.71	-600.34	617.30	563.76	53.55	11.528		
1,900.00	1,899.98	1,899.71	1,899.98	0.00	56.58	-24.87	-143.71	-600.34	616.34	559.84	56.50	10.909		
2,000.00	1,998.76	1,998.48	1,998.76	0.00	59.58	-26.05	-143.71	-600.34	602.98	544.71	58.27	10.348		
2,100.00	2,093.47	2,093.20	2,093.47	0.00	62.46	-28.82	-143.71	-600.34	574.52	515.97	58.55	9.812		
2,200.00	2,181.24	2,180.97	2,181.24	0.00	65.12	-33.71	-143.71	-600.34	532.42	474.52	57.90	9.195		
2,300.00	2,259.41	2,259.14	2,259.41	0.00	67.50	-41.52	-143.71	-600.34	479.05	421.15	57.90	8.274		
2,400.00	2,325.60	2,325.32	2,325.60	0.00	69.51	-52.97	-143.71	-600.34	418.07	357.21	60.86	6.869		
2,500.00	2,377.79	2,377.51	2,377.79	0.00	71.09	-67.26	-143.71	-600.34	355.14	288.42	66.72	5.323		
2,600.00	2,414.40	2,414.13	2,414.40	0.00	72.20	-80.64	-143.71	-600.34	299.29	227.96	71.33	4.196		
2,700.00	2,434.32	2,434.05	2,434.32	0.00	72.81	-88.69	-143.71	-600.34	264.10	191.31	72.79	3.628		
2,752.55	2,438.63	2,438.36	2,438.63	0.00	72.94	-90.00	-143.71	-600.34	258.86	185.92	72.94	3.549 CC, ES, SF		
2,800.00	2,437.81	2,437.53	2,437.81	0.00	72.92	-89.94	-143.71	-600.34	263.18	190.26	72.92	3.609		
2,900.00	2,437.20	2,436.93	2,437.20	0.00	72.90	-89.80	-143.71	-600.34	297.93	225.03	72.90	4.087		
3,000.00	2,436.60	2,436.33	2,436.60	0.00	72.88	-89.67	-143.71	-600.34	358.14	285.26	72.88	4.914		
3,100.00	2,436.00	2,435.73	2,436.00	0.00	72.86	-89.54	-143.71	-600.34	433.31	360.45	72.86	5.947		
3,200.00	2,435.40	2,435.12	2,435.40	0.00	72.84	-89.40	-143.71	-600.34	516.97	444.13	72.84	7.097		
3,300.00	2,434.79	2,434.52	2,434.79	0.00	72.82	-89.27	-143.71	-600.34	605.60	532.78	72.82	8.317		
3,400.00	2,434.19	2,433.92	2,434.19	0.00	72.81	-89.14	-143.71	-600.34	697.32	624.52	72.80	9.579		
3,500.00	2,433.59	2,433.32	2,433.59	0.00	72.79	-89.00	-143.71	-600.34	791.04	718.26	72.78	10.869		
3,600.00	2,432.99	2,432.71	2,432.99	0.00	72.77	-88.87	-143.71	-600.34	886.14	813.38	72.76	12.180		
3,700.00	2,432.38	2,432.11	2,432.38	0.00	72.75	-88.74	-143.71	-600.34	982.21	909.47	72.73	13.504		
3,800.00	2,431.78	2,431.51	2,431.78	0.00	72.73	-88.60	-143.71	-600.34	1,078.99	1,006.28	72.71	14.839		
3,900.00	2,431.18	2,430.90	2,431.18	0.00	72.71	-88.47	-143.71	-600.34	1,176.32	1,103.63	72.69	16.183		
4,000.00	2,430.57	2,430.30	2,430.57	0.00	72.70	-88.34	-143.71	-600.34	1,274.05	1,201.39	72.67	17.533		
4,100.00	2,429.97	2,429.70	2,429.97	0.00	72.68	-88.20	-143.71	-600.34	1,372.12	1,299.47	72.64	18.889		
4,200.00	2,429.37	2,429.10	2,429.37	0.00	72.66	-88.07	-143.71	-600.34	1,470.44	1,397.82	72.62	20.249		
4,300.00	2,428.77	2,428.49	2,428.77	0.00	72.64	-87.94	-143.71	-600.34	1,568.97	1,496.38	72.59	21.613		
4,400.00	2,428.16	2,427.89	2,428.16	0.00	72.62	-87.80	-143.71	-600.34	1,667.68	1,595.11	72.57	22.980		
4,500.00	2,427.56	2,427.29	2,427.56	0.00	72.60	-87.67	-143.71	-600.34	1,766.54	1,693.99	72.54	24.351		
4,600.00	2,426.96	2,426.69	2,426.96	0.00	72.59	-87.54	-143.71	-600.34	1,865.51	1,792.99	72.52	25.724		
4,700.00	2,426.36	2,426.08	2,426.36	0.00	72.57	-87.40	-143.71	-600.34	1,964.59	1,892.10	72.49	27.100		
4,800.00	2,425.75	2,425.48	2,425.75	0.00	72.55	-87.27	-143.71	-600.34	2,063.76	1,991.29	72.47	28.478		
4,900.00	2,425.15	2,424.88	2,425.15	0.00	72.53	-87.14	-143.71	-600.34	2,163.01	2,090.57	72.44	29.859		

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



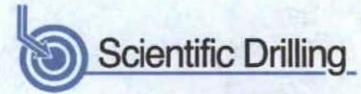
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott B5 - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 305-INCLINOMETER													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,100.00	2,423.94	2,369.33	2,423.94	0.00	67.32	-90.19	-230.35	-3,533.14	1,052.47	985.15	67.32	15.634		
5,200.00	2,423.34	2,368.73	2,423.34	0.00	67.30	-90.15	-230.35	-3,533.14	1,007.70	940.40	67.30	14.973		
5,300.00	2,422.74	2,368.13	2,422.74	0.00	67.28	-90.12	-230.35	-3,533.14	971.20	903.91	67.28	14.434		
5,400.00	2,422.14	2,367.53	2,422.14	0.00	67.26	-90.08	-230.35	-3,533.14	943.92	876.66	67.27	14.033		
5,500.00	2,421.53	2,366.92	2,421.53	0.00	67.25	-90.04	-230.35	-3,533.14	926.69	859.45	67.25	13.780		
5,600.00	2,420.93	2,366.32	2,420.93	0.00	67.23	-90.00	-230.35	-3,533.14	920.07	852.84	67.23	13.686		
5,611.17	2,420.86	2,366.25	2,420.86	0.00	67.23	-90.00	-230.35	-3,533.14	920.00	852.77	67.23	13.685 CC, ES, SF		
5,700.00	2,420.33	2,365.72	2,420.33	0.00	67.21	-89.97	-230.35	-3,533.14	924.28	857.07	67.21	13.752		
5,800.00	2,419.73	2,365.12	2,419.73	0.00	67.19	-89.93	-230.35	-3,533.14	939.18	871.99	67.19	13.978		
5,900.00	2,419.12	2,364.51	2,419.12	0.00	67.17	-89.89	-230.35	-3,533.14	964.27	897.10	67.17	14.355		
6,000.00	2,418.52	2,363.91	2,418.52	0.00	67.16	-89.85	-230.35	-3,533.14	998.79	931.64	67.16	14.873		
6,100.00	2,417.92	2,363.31	2,417.92	0.00	67.14	-89.82	-230.35	-3,533.14	1,041.80	974.67	67.14	15.518		
6,200.00	2,417.31	2,362.70	2,417.31	0.00	67.12	-89.78	-230.35	-3,533.14	1,092.30	1,025.18	67.12	16.274		
6,300.00	2,416.71	2,362.10	2,416.71	0.00	67.10	-89.74	-230.35	-3,533.14	1,149.29	1,082.19	67.10	17.128		
6,400.00	2,416.11	2,361.50	2,416.11	0.00	67.08	-89.70	-230.35	-3,533.14	1,211.87	1,144.79	67.08	18.066		
6,500.00	2,415.51	2,360.90	2,415.51	0.00	67.06	-89.67	-230.35	-3,533.14	1,279.22	1,212.15	67.06	19.075		
6,584.69	2,415.00	2,360.39	2,415.00	0.00	67.05	-89.63	-230.35	-3,533.14	1,339.44	1,272.40	67.05	19.978		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



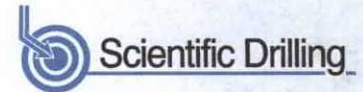
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliot B5 - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 305-INCLINOMETER													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (ft)	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)				Between Centres (ft)	Between Ellipses (ft)	
0.00	0.00	0.00	54.71	0.00	0.00	-93.73	-230.35	-3,533.14	3,541.06					
100.00	100.00	45.29	100.00	0.00	0.69	-93.73	-230.35	-3,533.14	3,540.64	3,539.95	0.69	5,145.659		
200.00	200.00	145.29	200.00	0.00	2.21	-93.73	-230.35	-3,533.14	3,540.64	3,538.43	2.21	1,604.654		
300.00	300.00	245.29	300.00	0.00	3.72	-93.73	-230.35	-3,533.14	3,540.64	3,536.91	3.72	950.538		
400.00	400.00	345.29	400.00	0.00	5.85	-93.73	-230.35	-3,533.14	3,540.64	3,534.78	5.86	604.714		
500.00	500.00	445.29	500.00	0.00	8.89	-93.73	-230.35	-3,533.14	3,540.64	3,531.75	8.89	398.186		
600.00	600.00	545.29	600.00	0.00	11.93	-93.73	-230.35	-3,533.14	3,540.64	3,528.71	11.93	296.815		
700.00	700.00	645.29	700.00	0.00	14.97	-93.73	-230.35	-3,533.14	3,540.64	3,525.67	14.97	236.585		
800.00	800.00	745.30	800.00	0.00	18.00	-93.73	-230.35	-3,533.14	3,540.64	3,522.64	18.00	196.673		
900.00	900.00	845.30	900.00	0.00	21.04	-93.73	-230.35	-3,533.14	3,540.64	3,519.60	21.04	168.285		
1,000.00	1,000.00	945.30	1,000.00	0.00	24.08	-93.73	-230.35	-3,533.14	3,540.64	3,516.56	24.08	147.059		
1,100.00	1,100.00	1,045.30	1,100.00	0.00	27.11	-93.73	-230.35	-3,533.14	3,540.64	3,513.53	27.11	130.587		
1,200.00	1,200.00	1,145.31	1,200.00	0.00	30.15	-93.73	-230.35	-3,533.14	3,540.64	3,510.49	30.15	117.433		
1,300.00	1,300.00	1,245.31	1,300.00	0.00	33.19	-93.73	-230.35	-3,533.14	3,540.64	3,507.45	33.19	106.687		
1,400.00	1,400.00	1,345.31	1,400.00	0.00	36.22	-93.73	-230.35	-3,533.14	3,540.64	3,504.41	36.22	97.743		
1,500.00	1,500.00	1,445.31	1,500.00	0.00	39.26	-93.73	-230.35	-3,533.14	3,540.64	3,501.38	39.26	90.183		
1,600.00	1,600.00	1,545.31	1,600.00	0.00	42.30	-93.73	-230.35	-3,533.14	3,540.64	3,498.34	42.30	83.708		
1,700.00	1,700.00	1,645.31	1,700.00	0.00	45.33	-93.73	-230.35	-3,533.14	3,540.64	3,495.30	45.33	78.101		
1,800.00	1,800.00	1,745.36	1,800.00	0.00	48.37	-93.73	-230.35	-3,533.14	3,540.64	3,492.27	48.37	73.195		
1,900.00	1,899.98	1,845.34	1,899.98	0.00	51.41	-15.09	-230.35	-3,533.14	3,539.61	3,488.29	51.32	68.971		
2,000.00	1,998.76	1,944.11	1,998.76	0.00	54.41	-15.54	-230.35	-3,533.14	3,525.36	3,472.34	53.03	66.482		
2,100.00	2,093.47	2,038.83	2,093.47	0.00	57.28	-16.57	-230.35	-3,533.14	3,494.79	3,441.82	52.97	65.975		
2,200.00	2,181.24	2,126.60	2,181.24	0.00	59.95	-18.36	-230.35	-3,533.14	3,448.85	3,397.71	51.13	67.448		
2,300.00	2,259.41	2,204.80	2,259.41	0.00	62.32	-21.25	-230.35	-3,533.14	3,388.97	3,341.06	47.91	70.736		
2,400.00	2,325.60	2,270.99	2,325.60	0.00	64.33	-25.89	-230.35	-3,533.14	3,317.05	3,272.48	44.57	74.427		
2,500.00	2,377.79	2,323.18	2,377.79	0.00	65.92	-33.61	-230.35	-3,533.14	3,235.33	3,191.24	44.09	73.379		
2,600.00	2,414.40	2,359.79	2,414.40	0.00	67.03	-47.10	-230.35	-3,533.14	3,146.35	3,095.47	50.88	61.839		
2,700.00	2,434.32	2,379.71	2,434.32	0.00	67.63	-70.28	-230.35	-3,533.14	3,052.90	2,989.16	63.74	47.896		
2,800.00	2,437.81	2,383.20	2,437.81	0.00	67.74	-91.06	-230.35	-3,533.14	2,957.83	2,890.10	67.73	43.671		
2,900.00	2,437.20	2,382.60	2,437.20	0.00	67.72	-91.02	-230.35	-3,533.14	2,862.96	2,795.25	67.71	42.281		
3,000.00	2,436.60	2,381.99	2,436.60	0.00	67.70	-90.98	-230.35	-3,533.14	2,768.46	2,700.76	67.69	40.896		
3,100.00	2,436.00	2,381.39	2,436.00	0.00	67.69	-90.94	-230.35	-3,533.14	2,674.35	2,606.67	67.68	39.516		
3,200.00	2,435.40	2,380.79	2,435.40	0.00	67.67	-90.91	-230.35	-3,533.14	2,580.68	2,513.02	67.66	38.142		
3,300.00	2,434.79	2,380.18	2,434.79	0.00	67.65	-90.87	-230.35	-3,533.14	2,487.51	2,419.87	67.64	36.775		
3,400.00	2,434.19	2,379.58	2,434.19	0.00	67.63	-90.83	-230.35	-3,533.14	2,394.89	2,327.26	67.62	35.415		
3,500.00	2,433.59	2,378.98	2,433.59	0.00	67.61	-90.79	-230.35	-3,533.14	2,302.88	2,235.28	67.61	34.063		
3,600.00	2,432.99	2,378.38	2,432.99	0.00	67.59	-90.75	-230.35	-3,533.14	2,211.57	2,143.98	67.59	32.721		
3,700.00	2,432.38	2,377.77	2,432.38	0.00	67.58	-90.72	-230.35	-3,533.14	2,121.04	2,053.47	67.57	31.390		
3,800.00	2,431.78	2,377.17	2,431.78	0.00	67.56	-90.68	-230.35	-3,533.14	2,031.41	1,963.85	67.55	30.071		
3,900.00	2,431.18	2,376.57	2,431.18	0.00	67.54	-90.64	-230.35	-3,533.14	1,942.78	1,875.24	67.54	28.767		
4,000.00	2,430.57	2,375.97	2,430.57	0.00	67.52	-90.60	-230.35	-3,533.14	1,855.31	1,787.79	67.52	27.479		
4,100.00	2,429.97	2,375.36	2,429.97	0.00	67.50	-90.57	-230.35	-3,533.14	1,769.16	1,701.66	67.50	26.210		
4,200.00	2,429.37	2,374.76	2,429.37	0.00	67.48	-90.53	-230.35	-3,533.14	1,684.55	1,617.07	67.48	24.963		
4,300.00	2,428.77	2,374.16	2,428.77	0.00	67.47	-90.49	-230.35	-3,533.14	1,601.72	1,534.25	67.46	23.742		
4,400.00	2,428.16	2,373.55	2,428.16	0.00	67.45	-90.45	-230.35	-3,533.14	1,520.94	1,453.50	67.45	22.551		
4,500.00	2,427.56	2,372.95	2,427.56	0.00	67.43	-90.42	-230.35	-3,533.14	1,442.58	1,375.16	67.43	21.394		
4,600.00	2,426.96	2,372.35	2,426.96	0.00	67.41	-90.38	-230.35	-3,533.14	1,367.05	1,299.64	67.41	20.280		
4,700.00	2,426.36	2,371.75	2,426.36	0.00	67.39	-90.34	-230.35	-3,533.14	1,294.83	1,227.44	67.39	19.213		
4,800.00	2,425.75	2,371.14	2,425.75	0.00	67.37	-90.30	-230.35	-3,533.14	1,226.53	1,159.15	67.37	18.205		
4,900.00	2,425.15	2,370.54	2,425.15	0.00	67.36	-90.27	-230.35	-3,533.14	1,162.82	1,095.46	67.36	17.264		
5,000.00	2,424.55	2,369.94	2,424.55	0.00	67.34	-90.23	-230.35	-3,533.14	1,104.50	1,037.16	67.34	16.402		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report

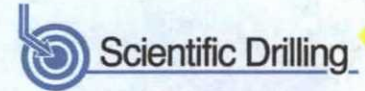


Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliot B4 - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-UNKNOWN													Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning	
				Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,000.00	2,424.55	2,415.68	2,424.55	0.00	94.37	-87.43	-125.04	-786.38	2,079.92	1,985.65	94.27	22.063		
5,100.00	2,423.94	2,415.07	2,423.94	0.00	94.34	-87.31	-125.04	-786.38	2,179.07	2,084.83	94.24	23.123		
5,200.00	2,423.34	2,414.47	2,423.34	0.00	94.32	-87.18	-125.04	-786.38	2,278.29	2,184.08	94.21	24.184		
5,300.00	2,422.74	2,413.87	2,422.74	0.00	94.29	-87.06	-125.04	-786.38	2,377.58	2,283.40	94.17	25.247		
5,400.00	2,422.14	2,413.27	2,422.14	0.00	94.27	-86.94	-125.04	-786.38	2,476.92	2,382.78	94.14	26.312		
5,500.00	2,421.53	2,412.66	2,421.53	0.00	94.25	-86.81	-125.04	-786.38	2,576.31	2,482.21	94.10	27.378		
5,600.00	2,420.93	2,412.06	2,420.93	0.00	94.22	-86.69	-125.04	-786.38	2,675.75	2,581.69	94.07	28.446		
5,700.00	2,420.33	2,411.46	2,420.33	0.00	94.20	-86.56	-125.04	-786.38	2,775.23	2,681.20	94.03	29.515		
5,800.00	2,419.73	2,410.86	2,419.73	0.00	94.17	-86.44	-125.04	-786.38	2,874.75	2,780.76	93.99	30.585		
5,900.00	2,419.12	2,410.25	2,419.12	0.00	94.15	-86.31	-125.04	-786.38	2,974.30	2,880.34	93.96	31.656		
6,000.00	2,418.52	2,409.65	2,418.52	0.00	94.13	-86.19	-125.04	-786.38	3,073.88	2,979.96	93.92	32.729		
6,100.00	2,417.92	2,409.05	2,417.92	0.00	94.10	-86.07	-125.04	-786.38	3,173.48	3,079.60	93.88	33.803		
6,200.00	2,417.31	2,408.44	2,417.31	0.00	94.08	-85.94	-125.04	-786.38	3,273.11	3,179.26	93.84	34.879		
6,300.00	2,416.71	2,407.84	2,416.71	0.00	94.05	-85.82	-125.04	-786.38	3,372.76	3,278.95	93.80	35.956		
6,400.00	2,416.11	2,407.24	2,416.11	0.00	94.03	-85.69	-125.04	-786.38	3,472.43	3,378.66	93.76	37.034		
6,500.00	2,415.51	2,406.64	2,415.51	0.00	94.01	-85.57	-125.04	-786.38	3,572.11	3,478.39	93.72	38.113		
6,584.69	2,415.00	2,406.13	2,415.00	0.00	93.99	-85.47	-125.04	-786.38	3,656.55	3,562.86	93.69	39.028		



Anticollision Report



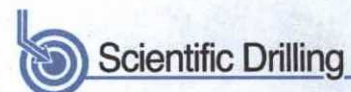
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliot B4 - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-UNKNOWN													Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Distance		Warning								
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	8.87	0.00	0.00	-99.03	-125.04	-786.38	796.31					
100.00	100.00	91.13	100.00	0.00	1.59	-99.03	-125.04	-786.38	796.26	794.67	1.59	502.099		
200.00	200.00	191.13	200.00	0.00	5.39	-99.03	-125.04	-786.38	796.26	790.88	5.39	147.855		
300.00	300.00	291.13	300.00	0.00	9.39	-99.03	-125.04	-786.38	796.26	786.88	9.39	84.840		
400.00	400.00	391.13	400.00	0.00	13.39	-99.03	-125.04	-786.38	796.26	782.88	13.39	59.487		
500.00	500.00	491.13	500.00	0.00	17.39	-99.03	-125.04	-786.38	796.26	778.88	17.39	45.801		
600.00	600.00	591.13	600.00	0.00	21.39	-99.03	-125.04	-786.38	796.26	774.88	21.39	37.234		
700.00	700.00	691.13	700.00	0.00	25.39	-99.03	-125.04	-786.38	796.26	770.88	25.39	31.367		
800.00	800.00	791.13	800.00	0.00	29.39	-99.03	-125.04	-786.38	796.26	766.88	29.39	27.097		
900.00	900.00	891.13	900.00	0.00	33.39	-99.03	-125.04	-786.38	796.26	762.88	33.39	23.851		
1,000.00	1,000.00	991.13	1,000.00	0.00	37.39	-99.03	-125.04	-786.38	796.26	758.88	37.39	21.299		
1,100.00	1,100.00	1,091.13	1,100.00	0.00	41.39	-99.03	-125.04	-786.38	796.26	754.88	41.39	19.240		
1,200.00	1,200.00	1,191.13	1,200.00	0.00	45.39	-99.03	-125.04	-786.38	796.26	750.88	45.39	17.544		
1,300.00	1,300.00	1,291.13	1,300.00	0.00	49.39	-99.03	-125.04	-786.38	796.26	746.88	49.39	16.123		
1,400.00	1,400.00	1,391.13	1,400.00	0.00	53.39	-99.03	-125.04	-786.38	796.26	742.88	53.39	14.915		
1,500.00	1,500.00	1,491.13	1,500.00	0.00	57.39	-99.03	-125.04	-786.38	796.26	738.88	57.39	13.876		
1,600.00	1,600.00	1,591.13	1,600.00	0.00	61.39	-99.03	-125.04	-786.38	796.26	734.88	61.39	12.971		
1,700.00	1,700.00	1,691.13	1,700.00	0.00	65.39	-99.03	-125.04	-786.38	796.26	730.88	65.39	12.178		
1,800.00	1,800.00	1,791.13	1,800.00	0.00	69.39	-99.03	-125.04	-786.38	796.26	726.88	69.39	11.476		
1,900.00	1,899.98	1,891.11	1,899.98	0.00	73.38	-20.43	-125.04	-786.38	795.26	722.00	73.26	10.855		
2,000.00	1,998.76	1,989.89	1,998.76	0.00	77.34	-21.31	-125.04	-786.38	781.45	705.96	75.49	10.352		
2,100.00	2,093.47	2,084.60	2,093.47	0.00	81.12	-23.38	-125.04	-786.38	751.91	676.41	75.50	9.959		
2,200.00	2,181.24	2,172.37	2,181.24	0.00	84.64	-27.03	-125.04	-786.38	707.83	634.13	73.70	9.604		
2,300.00	2,259.41	2,250.54	2,259.41	0.00	87.76	-32.96	-125.04	-786.38	651.09	579.44	71.65	9.088		
2,400.00	2,325.60	2,316.73	2,325.60	0.00	90.41	-42.16	-125.04	-786.38	584.27	511.66	72.61	8.047		
2,500.00	2,377.79	2,368.92	2,377.79	0.00	92.50	-55.34	-125.04	-786.38	510.90	431.28	79.63	6.416		
2,600.00	2,414.40	2,405.53	2,414.40	0.00	93.96	-70.98	-125.04	-786.38	435.76	346.51	89.25	4.882		
2,700.00	2,434.32	2,425.45	2,434.32	0.00	94.76	-84.43	-125.04	-786.38	365.57	271.25	94.32	3.876		
2,800.00	2,437.81	2,428.94	2,437.81	0.00	94.90	-90.17	-125.04	-786.38	309.82	214.92	94.90	3.265		
2,900.00	2,437.20	2,428.33	2,437.20	0.00	94.87	-90.05	-125.04	-786.38	279.77	184.90	94.87	2.949		
2,938.58	2,436.97	2,428.10	2,436.97	0.00	94.86	-90.00	-125.04	-786.38	277.10	182.24	94.86	2.921 CC, ES, SF		
3,000.00	2,436.60	2,427.73	2,436.60	0.00	94.85	-89.92	-125.04	-786.38	283.82	188.97	94.85	2.992		
3,100.00	2,436.00	2,427.13	2,436.00	0.00	94.83	-89.80	-125.04	-786.38	320.68	225.86	94.82	3.382		
3,200.00	2,435.40	2,426.53	2,435.40	0.00	94.80	-89.67	-125.04	-786.38	380.95	286.15	94.80	4.018		
3,300.00	2,434.79	2,425.92	2,434.79	0.00	94.78	-89.55	-125.04	-786.38	455.41	360.64	94.77	4.805		
3,400.00	2,434.19	2,425.32	2,434.19	0.00	94.75	-89.42	-125.04	-786.38	538.22	443.47	94.75	5.681		
3,500.00	2,433.59	2,424.72	2,433.59	0.00	94.73	-89.30	-125.04	-786.38	626.07	531.35	94.72	6.610		
3,600.00	2,432.99	2,424.12	2,432.99	0.00	94.70	-89.18	-125.04	-786.38	717.10	622.41	94.70	7.573		
3,700.00	2,432.38	2,423.51	2,432.38	0.00	94.68	-89.05	-125.04	-786.38	810.26	715.59	94.67	8.559		
3,800.00	2,431.78	2,422.91	2,431.78	0.00	94.66	-88.93	-125.04	-786.38	904.87	810.23	94.64	9.561		
3,900.00	2,431.18	2,422.31	2,431.18	0.00	94.63	-88.80	-125.04	-786.38	1,000.53	905.92	94.61	10.575		
4,000.00	2,430.57	2,421.70	2,430.57	0.00	94.61	-88.68	-125.04	-786.38	1,096.97	1,002.39	94.58	11.598		
4,100.00	2,429.97	2,421.10	2,429.97	0.00	94.58	-88.55	-125.04	-786.38	1,193.99	1,099.44	94.55	12.628		
4,200.00	2,429.37	2,420.50	2,429.37	0.00	94.56	-88.43	-125.04	-786.38	1,291.47	1,196.95	94.52	13.663		
4,300.00	2,428.77	2,419.90	2,428.77	0.00	94.54	-88.30	-125.04	-786.38	1,389.31	1,294.81	94.49	14.702		
4,400.00	2,428.16	2,419.29	2,428.16	0.00	94.51	-88.18	-125.04	-786.38	1,487.43	1,392.96	94.46	15.746		
4,500.00	2,427.56	2,418.69	2,427.56	0.00	94.49	-88.05	-125.04	-786.38	1,585.78	1,491.35	94.43	16.793		
4,600.00	2,426.96	2,418.09	2,426.96	0.00	94.46	-87.93	-125.04	-786.38	1,684.34	1,589.93	94.40	17.842		
4,700.00	2,426.36	2,417.49	2,426.36	0.00	94.44	-87.81	-125.04	-786.38	1,783.05	1,688.68	94.37	18.894		
4,800.00	2,425.75	2,416.88	2,425.75	0.00	94.42	-87.68	-125.04	-786.38	1,881.89	1,787.56	94.34	19.948		
4,900.00	2,425.15	2,416.28	2,425.15	0.00	94.39	-87.56	-125.04	-786.38	1,980.86	1,886.55	94.31	21.005		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



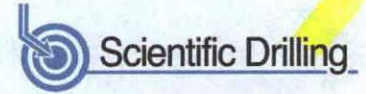
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott B2B - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 154-INCLINOMETER													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,000.00	2,424.55	2,439.35	2,424.55	0.00	71.74	90.24	844.31	-2,878.54	318.39	246.65	71.74	4.438		
5,100.00	2,423.94	2,438.74	2,423.94	0.00	71.72	90.11	844.31	-2,878.54	274.38	202.66	71.72	3.826		
5,180.45	2,423.46	2,438.26	2,423.46	0.00	71.71	90.00	844.31	-2,878.54	262.32	190.62	71.71	3.658	CC, ES, SF	
5,200.00	2,423.34	2,438.14	2,423.34	0.00	71.70	89.97	844.31	-2,878.54	263.05	191.35	71.70	3.669		
5,300.00	2,422.74	2,437.54	2,422.74	0.00	71.69	89.84	844.31	-2,878.54	288.28	216.60	71.69	4.021		
5,400.00	2,422.14	2,436.93	2,422.14	0.00	71.67	89.71	844.31	-2,878.54	342.07	270.41	71.67	4.773		
5,500.00	2,421.53	2,436.33	2,421.53	0.00	71.65	89.58	844.31	-2,878.54	413.43	341.78	71.65	5.770		
5,600.00	2,420.93	2,435.73	2,420.93	0.00	71.63	89.45	844.31	-2,878.54	494.80	423.18	71.63	6.908		
5,700.00	2,420.33	2,435.13	2,420.33	0.00	71.61	89.32	844.31	-2,878.54	582.01	510.40	71.61	8.128		
5,800.00	2,419.73	2,434.52	2,419.73	0.00	71.59	89.18	844.31	-2,878.54	672.79	601.20	71.59	9.398		
5,900.00	2,419.12	2,433.92	2,419.12	0.00	71.58	89.05	844.31	-2,878.54	765.86	694.30	71.57	10.702		
6,000.00	2,418.52	2,433.32	2,418.52	0.00	71.56	88.92	844.31	-2,878.54	860.50	788.95	71.54	12.027		
6,100.00	2,417.92	2,432.72	2,417.92	0.00	71.54	88.79	844.31	-2,878.54	956.22	884.70	71.52	13.369		
6,200.00	2,417.31	2,432.11	2,417.31	0.00	71.52	88.66	844.31	-2,878.54	1,052.74	981.24	71.50	14.723		
6,300.00	2,416.71	2,431.51	2,416.71	0.00	71.50	88.53	844.31	-2,878.54	1,149.85	1,078.37	71.48	16.087		
6,400.00	2,416.11	2,430.91	2,416.11	0.00	71.48	88.39	844.31	-2,878.54	1,247.42	1,175.97	71.46	17.457		
6,500.00	2,415.51	2,430.30	2,415.51	0.00	71.47	88.26	844.31	-2,878.54	1,345.35	1,273.92	71.43	18.834		
6,584.69	2,415.00	2,429.79	2,415.00	0.00	71.45	88.15	844.31	-2,878.54	1,428.50	1,357.09	71.41	20.003		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



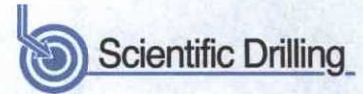
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliot B2B - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 154-INCLINOMETER													Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.00	0.00	14.74	0.00	0.00	0.22	-73.65	844.31	-2,878.54	2,999.81					
100.00	100.00	114.74	100.00	0.00	1.74	-73.65	844.31	-2,878.54	2,999.81	2,998.06	1.74	1,721.236		
200.00	200.00	214.74	200.00	0.00	4.18	-73.65	844.31	-2,878.54	2,999.81	2,995.62	4.18	717.046		
300.00	300.00	314.74	300.00	0.00	7.22	-73.65	844.31	-2,878.54	2,999.81	2,992.58	7.22	415.465		
400.00	400.00	414.74	400.00	0.00	10.26	-73.65	844.31	-2,878.54	2,999.81	2,989.55	10.26	292.460		
500.00	500.00	514.74	500.00	0.00	13.29	-73.65	844.31	-2,878.54	2,999.81	2,986.51	13.29	225.652		
600.00	600.00	614.74	600.00	0.00	16.33	-73.65	844.31	-2,878.54	2,999.81	2,983.47	16.33	183.691		
700.00	700.00	714.75	700.00	0.00	19.37	-73.65	844.31	-2,878.54	2,999.81	2,980.44	19.37	154.885		
800.00	800.00	814.75	800.00	0.00	22.40	-73.65	844.31	-2,878.54	2,999.81	2,977.40	22.40	133.892		
900.00	900.00	914.75	900.00	0.00	25.44	-73.65	844.31	-2,878.54	2,999.81	2,974.36	25.44	117.910		
1,000.00	1,000.00	1,014.75	1,000.00	0.00	28.48	-73.65	844.31	-2,878.54	2,999.81	2,971.33	28.48	105.337		
1,100.00	1,100.00	1,114.75	1,100.00	0.00	31.51	-73.65	844.31	-2,878.54	2,999.81	2,968.29	31.52	95.186		
1,200.00	1,200.00	1,214.76	1,200.00	0.00	34.55	-73.65	844.31	-2,878.54	2,999.81	2,965.25	34.55	86.820		
1,300.00	1,300.00	1,314.76	1,300.00	0.00	37.59	-73.65	844.31	-2,878.54	2,999.81	2,962.22	37.59	79.806		
1,400.00	1,400.00	1,414.76	1,400.00	0.00	40.63	-73.65	844.31	-2,878.54	2,999.81	2,959.18	40.63	73.840		
1,500.00	1,500.00	1,514.76	1,500.00	0.00	43.66	-73.65	844.31	-2,878.54	2,999.81	2,956.14	43.66	68.705		
1,564.61	1,564.61	1,579.37	1,564.61	0.00	45.62	-73.65	844.31	-2,878.54	2,999.81	2,954.18	45.62	65.750		
1,600.00	1,600.00	1,609.00	1,594.20	0.00	46.52	-73.65	844.31	-2,878.54	2,999.81	2,953.29	46.52	64.479		
1,700.00	1,700.00	1,714.80	1,700.00	0.00	49.74	-73.65	844.31	-2,878.54	2,999.81	2,950.07	49.74	60.313		
1,800.00	1,800.00	1,814.80	1,800.00	0.00	52.77	-73.65	844.31	-2,878.54	2,999.81	2,947.03	52.77	56.843		
1,900.00	1,899.98	1,914.78	1,899.98	0.00	55.81	5.03	844.31	-2,878.54	2,998.74	2,943.04	55.71	53.830		
2,000.00	1,998.76	2,013.55	1,998.76	0.00	58.81	5.19	844.31	-2,878.54	2,984.05	2,926.84	57.21	52.158		
2,100.00	2,093.47	2,108.27	2,093.47	0.00	61.69	5.56	844.31	-2,878.54	2,952.49	2,895.83	56.66	52.112		
2,200.00	2,181.24	2,196.04	2,181.24	0.00	64.35	6.21	844.31	-2,878.54	2,905.03	2,851.16	53.87	53.927		
2,300.00	2,259.41	2,274.21	2,259.41	0.00	66.73	7.28	844.31	-2,878.54	2,843.13	2,794.26	48.87	58.183		
2,400.00	2,325.60	2,340.40	2,325.60	0.00	68.74	9.09	844.31	-2,878.54	2,768.66	2,726.68	41.98	65.945		
2,500.00	2,377.79	2,392.59	2,377.79	0.00	70.32	12.41	844.31	-2,878.54	2,683.90	2,649.48	34.42	77.966		
2,600.00	2,414.40	2,429.20	2,414.40	0.00	71.43	19.70	844.31	-2,878.54	2,591.44	2,560.41	31.04	83.497		
2,700.00	2,434.32	2,449.12	2,434.32	0.00	72.04	43.03	844.31	-2,878.54	2,494.10	2,444.46	49.64	50.248		
2,800.00	2,437.81	2,452.61	2,437.81	0.00	72.14	93.13	844.31	-2,878.54	2,394.82	2,322.78	72.04	33.245		
2,900.00	2,437.20	2,452.00	2,437.20	0.00	72.12	93.00	844.31	-2,878.54	2,295.45	2,223.42	72.03	31.870		
3,000.00	2,436.60	2,451.40	2,436.60	0.00	72.11	92.87	844.31	-2,878.54	2,196.13	2,124.12	72.02	30.495		
3,100.00	2,436.00	2,450.80	2,436.00	0.00	72.09	92.74	844.31	-2,878.54	2,096.88	2,024.88	72.01	29.121		
3,200.00	2,435.40	2,450.20	2,435.40	0.00	72.07	92.61	844.31	-2,878.54	1,997.71	1,925.72	72.00	27.748		
3,300.00	2,434.79	2,449.59	2,434.79	0.00	72.05	92.47	844.31	-2,878.54	1,898.62	1,826.64	71.98	26.375		
3,400.00	2,434.19	2,448.99	2,434.19	0.00	72.03	92.34	844.31	-2,878.54	1,799.64	1,727.67	71.97	25.004		
3,500.00	2,433.59	2,448.39	2,433.59	0.00	72.01	92.21	844.31	-2,878.54	1,700.77	1,628.81	71.96	23.634		
3,600.00	2,432.99	2,447.78	2,432.99	0.00	72.00	92.08	844.31	-2,878.54	1,602.04	1,530.09	71.95	22.266		
3,700.00	2,432.38	2,447.18	2,432.38	0.00	71.98	91.95	844.31	-2,878.54	1,503.48	1,431.55	71.94	20.900		
3,800.00	2,431.78	2,446.58	2,431.78	0.00	71.96	91.82	844.31	-2,878.54	1,405.13	1,333.20	71.92	19.536		
3,900.00	2,431.18	2,445.98	2,431.18	0.00	71.94	91.69	844.31	-2,878.54	1,307.02	1,235.11	71.91	18.176		
4,000.00	2,430.57	2,445.37	2,430.57	0.00	71.92	91.55	844.31	-2,878.54	1,209.22	1,137.33	71.90	16.819		
4,100.00	2,429.97	2,444.77	2,429.97	0.00	71.90	91.42	844.31	-2,878.54	1,111.82	1,039.94	71.88	15.467		
4,200.00	2,429.37	2,444.17	2,429.37	0.00	71.89	91.29	844.31	-2,878.54	1,014.92	943.05	71.87	14.122		
4,300.00	2,428.77	2,443.57	2,428.77	0.00	71.87	91.16	844.31	-2,878.54	918.68	846.83	71.85	12.785		
4,400.00	2,428.16	2,442.96	2,428.16	0.00	71.85	91.03	844.31	-2,878.54	823.34	751.50	71.84	11.461		
4,500.00	2,427.56	2,442.36	2,427.56	0.00	71.83	90.90	844.31	-2,878.54	729.25	657.43	71.82	10.153		
4,600.00	2,426.96	2,441.76	2,426.96	0.00	71.81	90.76	844.31	-2,878.54	636.96	565.16	71.81	8.870		
4,700.00	2,426.36	2,441.15	2,426.36	0.00	71.79	90.63	844.31	-2,878.54	547.39	475.60	71.79	7.625		
4,800.00	2,425.75	2,440.55	2,425.75	0.00	71.78	90.50	844.31	-2,878.54	462.11	390.34	71.77	6.438		
4,900.00	2,425.15	2,439.95	2,425.15	0.00	71.76	90.37	844.31	-2,878.54	384.01	312.25	71.76	5.352		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



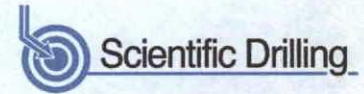
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliott B2 (#2) - OH - OH													Offset Site Error:	0.00 ft
Survey Program: 100-UNKNOWN													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface ('')	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	2,423.94	2,380.55	2,423.94	0.00	93.22	-90.42	-46.20	-4,018.66	1,320.71	1,227.49	93.22	14.168		
5,200.00	2,423.34	2,379.95	2,423.34	0.00	93.20	-90.38	-46.20	-4,018.66	1,244.83	1,151.63	93.20	13.357		
5,300.00	2,422.74	2,379.35	2,422.74	0.00	93.17	-90.34	-46.20	-4,018.66	1,172.57	1,079.40	93.17	12.585		
5,400.00	2,422.14	2,378.75	2,422.14	0.00	93.15	-90.30	-46.20	-4,018.66	1,104.65	1,011.50	93.15	11.859		
5,500.00	2,421.53	2,378.14	2,421.53	0.00	93.13	-90.26	-46.20	-4,018.66	1,041.91	948.78	93.12	11.188		
5,600.00	2,420.93	2,377.54	2,420.93	0.00	93.10	-90.22	-46.20	-4,018.66	985.34	892.24	93.10	10.584		
5,700.00	2,420.33	2,376.94	2,420.33	0.00	93.08	-90.18	-46.20	-4,018.66	936.06	842.98	93.08	10.057		
5,800.00	2,419.73	2,376.34	2,419.73	0.00	93.05	-90.13	-46.20	-4,018.66	896.28	802.23	93.05	9.621		
5,900.00	2,419.12	2,375.73	2,419.12	0.00	93.03	-90.09	-46.20	-4,018.66	864.20	771.17	93.03	9.290		
6,000.00	2,418.52	2,375.13	2,418.52	0.00	93.01	-90.05	-46.20	-4,018.66	843.90	750.89	93.01	9.074		
6,100.00	2,417.92	2,374.53	2,417.92	0.00	92.98	-90.01	-46.20	-4,018.66	835.16	742.17	92.98	8.982		
6,123.41	2,417.78	2,374.39	2,417.78	0.00	92.98	-90.00	-46.20	-4,018.66	834.83	741.85	92.98	8.979	CC, ES, SF	
6,200.00	2,417.31	2,373.92	2,417.31	0.00	92.96	-89.97	-46.20	-4,018.66	838.33	745.38	92.96	9.018		
6,300.00	2,416.71	2,373.32	2,416.71	0.00	92.93	-89.93	-46.20	-4,018.66	853.30	760.37	92.93	9.182		
6,400.00	2,416.11	2,372.72	2,416.11	0.00	92.91	-89.89	-46.20	-4,018.66	879.45	786.54	92.91	9.466		
6,500.00	2,415.51	2,372.12	2,415.51	0.00	92.88	-89.84	-46.20	-4,018.66	915.83	822.95	92.88	9.860		
6,584.69	2,415.00	2,371.61	2,415.00	0.00	92.86	-89.81	-46.20	-4,018.66	953.78	860.92	92.86	10.271		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



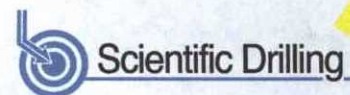
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design AL Elliott - AL Elliot B2 (#2) - OH - OH													Offset Site Error: 0.00 ft	
Survey Program: 100-UNKNOWN													Offset Well Error: 0.00 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
0.00	0.00	0.00	43.39	0.00	0.00	-90.66	-46.20	-4,018.66	4,019.16					
100.00	100.00	56.61	100.00	0.00	1.13	-90.66	-46.20	-4,018.66	4,018.92	4,017.79	1.13	3,548.760		
200.00	200.00	156.61	200.00	0.00	4.26	-90.66	-46.20	-4,018.66	4,018.92	4,014.66	4.26	942.392		
300.00	300.00	256.61	300.00	0.00	8.26	-90.66	-46.20	-4,018.66	4,018.92	4,010.66	8.26	486.282		
400.00	400.00	356.61	400.00	0.00	12.26	-90.66	-46.20	-4,018.66	4,018.92	4,006.66	12.26	327.685		
500.00	500.00	456.61	500.00	0.00	16.26	-90.66	-46.20	-4,018.66	4,018.92	4,002.66	16.26	247.096		
600.00	600.00	556.61	600.00	0.00	20.26	-90.66	-46.20	-4,018.66	4,018.92	3,998.66	20.26	198.322		
700.00	700.00	656.61	700.00	0.00	24.26	-90.66	-46.20	-4,018.66	4,018.92	3,994.66	24.26	165.629		
800.00	800.00	756.61	800.00	0.00	28.26	-90.66	-46.20	-4,018.66	4,018.92	3,990.66	28.26	142.189		
900.00	900.00	856.61	900.00	0.00	32.26	-90.66	-46.20	-4,018.66	4,018.92	3,986.66	32.26	124.561		
1,000.00	1,000.00	956.61	1,000.00	0.00	36.26	-90.66	-46.20	-4,018.66	4,018.92	3,982.66	36.26	110.822		
1,100.00	1,100.00	1,056.61	1,100.00	0.00	40.26	-90.66	-46.20	-4,018.66	4,018.92	3,978.66	40.26	99.813		
1,200.00	1,200.00	1,156.61	1,200.00	0.00	44.26	-90.66	-46.20	-4,018.66	4,018.92	3,974.66	44.26	90.793		
1,300.00	1,300.00	1,256.61	1,300.00	0.00	48.26	-90.66	-46.20	-4,018.66	4,018.92	3,970.66	48.26	83.269		
1,400.00	1,400.00	1,356.61	1,400.00	0.00	52.26	-90.66	-46.20	-4,018.66	4,018.92	3,966.66	52.26	76.896		
1,500.00	1,500.00	1,456.61	1,500.00	0.00	56.26	-90.66	-46.20	-4,018.66	4,018.92	3,962.66	56.26	71.429		
1,600.00	1,600.00	1,556.61	1,600.00	0.00	60.26	-90.66	-46.20	-4,018.66	4,018.92	3,958.66	60.26	66.688		
1,700.00	1,700.00	1,656.61	1,700.00	0.00	64.26	-90.66	-46.20	-4,018.66	4,018.92	3,954.66	64.26	62.537		
1,800.00	1,800.00	1,756.61	1,800.00	0.00	68.26	-90.66	-46.20	-4,018.66	4,018.92	3,950.66	68.26	58.873		
1,900.00	1,899.98	1,856.59	1,899.98	0.00	72.26	-12.01	-46.20	-4,018.66	4,017.88	3,945.75	72.14	55.699		
2,000.00	1,998.76	1,955.37	1,998.76	0.00	76.21	-12.37	-46.20	-4,018.66	4,003.45	3,929.24	74.21	53.949		
2,100.00	2,093.47	2,050.08	2,093.47	0.00	80.00	-13.19	-46.20	-4,018.66	3,972.47	3,898.74	73.73	53.878		
2,200.00	2,181.24	2,137.85	2,181.24	0.00	83.51	-14.63	-46.20	-4,018.66	3,925.90	3,855.29	70.61	55.599		
2,300.00	2,259.41	2,216.02	2,259.41	0.00	86.64	-16.96	-46.20	-4,018.66	3,865.18	3,799.96	65.21	59.268		
2,400.00	2,325.60	2,282.21	2,325.60	0.00	89.29	-20.77	-46.20	-4,018.66	3,792.18	3,733.28	58.90	64.381		
2,500.00	2,377.79	2,334.40	2,377.79	0.00	91.38	-27.37	-46.20	-4,018.66	3,709.17	3,653.71	55.46	66.879		
2,600.00	2,414.40	2,371.01	2,414.40	0.00	92.84	-39.85	-46.20	-4,018.66	3,618.69	3,555.85	62.84	57.587		
2,700.00	2,434.32	2,390.93	2,434.32	0.00	93.64	-65.08	-46.20	-4,018.66	3,523.54	3,438.50	85.04	41.434		
2,800.00	2,437.81	2,394.42	2,437.81	0.00	93.78	-91.37	-46.20	-4,018.66	3,426.60	3,332.85	93.75	36.550		
2,900.00	2,437.20	2,393.81	2,437.20	0.00	93.75	-91.33	-46.20	-4,018.66	3,329.71	3,235.98	93.73	35.525		
3,000.00	2,436.60	2,393.21	2,436.60	0.00	93.73	-91.29	-46.20	-4,018.66	3,233.00	3,139.30	93.70	34.502		
3,100.00	2,436.00	2,392.61	2,436.00	0.00	93.70	-91.25	-46.20	-4,018.66	3,136.50	3,042.82	93.68	33.480		
3,200.00	2,435.40	2,392.01	2,435.40	0.00	93.68	-91.21	-46.20	-4,018.66	3,040.23	2,946.57	93.66	32.460		
3,300.00	2,434.79	2,391.40	2,434.79	0.00	93.66	-91.17	-46.20	-4,018.66	2,944.20	2,850.56	93.64	31.443		
3,400.00	2,434.19	2,390.80	2,434.19	0.00	93.63	-91.13	-46.20	-4,018.66	2,848.45	2,754.83	93.61	30.428		
3,500.00	2,433.59	2,390.20	2,433.59	0.00	93.61	-91.09	-46.20	-4,018.66	2,753.00	2,659.40	93.59	29.415		
3,600.00	2,432.99	2,389.60	2,432.99	0.00	93.58	-91.04	-46.20	-4,018.66	2,657.88	2,564.31	93.57	28.406		
3,700.00	2,432.38	2,388.99	2,432.38	0.00	93.56	-91.00	-46.20	-4,018.66	2,563.13	2,469.59	93.55	27.400		
3,800.00	2,431.78	2,388.39	2,431.78	0.00	93.54	-90.96	-46.20	-4,018.66	2,468.80	2,375.28	93.52	26.398		
3,900.00	2,431.18	2,387.79	2,431.18	0.00	93.51	-90.92	-46.20	-4,018.66	2,374.94	2,281.44	93.50	25.400		
4,000.00	2,430.57	2,387.18	2,430.57	0.00	93.49	-90.88	-46.20	-4,018.66	2,281.59	2,188.11	93.48	24.408		
4,100.00	2,429.97	2,386.58	2,429.97	0.00	93.46	-90.84	-46.20	-4,018.66	2,188.83	2,095.38	93.45	23.422		
4,200.00	2,429.37	2,385.98	2,429.37	0.00	93.44	-90.80	-46.20	-4,018.66	2,096.74	2,003.31	93.43	22.442		
4,300.00	2,428.77	2,385.38	2,428.77	0.00	93.42	-90.75	-46.20	-4,018.66	2,005.41	1,912.00	93.41	21.470		
4,400.00	2,428.16	2,384.77	2,428.16	0.00	93.39	-90.71	-46.20	-4,018.66	1,914.94	1,821.55	93.38	20.506		
4,500.00	2,427.56	2,384.17	2,427.56	0.00	93.37	-90.67	-46.20	-4,018.66	1,825.46	1,732.10	93.36	19.553		
4,600.00	2,426.96	2,383.57	2,426.96	0.00	93.34	-90.63	-46.20	-4,018.66	1,737.14	1,643.80	93.34	18.611		
4,700.00	2,426.36	2,382.97	2,426.36	0.00	93.32	-90.59	-46.20	-4,018.66	1,650.14	1,556.83	93.31	17.684		
4,800.00	2,425.75	2,382.36	2,425.75	0.00	93.29	-90.55	-46.20	-4,018.66	1,564.70	1,471.41	93.29	16.772		
4,900.00	2,425.15	2,381.76	2,425.15	0.00	93.27	-90.51	-46.20	-4,018.66	1,481.09	1,387.82	93.27	15.880		
5,000.00	2,424.55	2,381.16	2,424.55	0.00	93.25	-90.46	-46.20	-4,018.66	1,399.62	1,306.38	93.24	15.010		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design													AL Elliott - AL Elliot B2 - OH - OH		Offset Site Error:		0.00 ft	
Survey Program:													808-INCLINOMETER		Offset Well Error:		0.00 ft	
Reference		Offset		Semi Major Axis			Distance							Warning				
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor						
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)							
6,400.00	2,416.11	2,394.31	2,416.11	0.00	60.44	-87.56	-158.50	-1,324.48	2,969.54	2,909.16	60.39	49.176						
6,500.00	2,415.51	2,393.71	2,415.51	0.00	60.42	-87.48	-158.50	-1,324.48	3,068.59	3,008.22	60.36	50.834						
6,584.69	2,415.00	2,393.20	2,415.00	0.00	60.41	-87.41	-158.50	-1,324.48	3,152.51	3,092.17	60.35	52.241						



Anticollision Report



Scientific Drilling

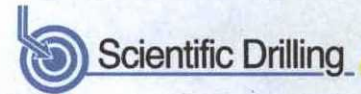
Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Offset Design													AL Elliott - AL Elliott B2 - OH - OH		Offset Site Error: 0.00 ft	
Survey Program: 808-INCLINOMETER													Offset Well Error: 0.00 ft			
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)					
1,400.00	1,400.00	1,378.13	1,400.00	0.00	29.58	-96.82	-158.50	-1,324.48	1,333.93	1,304.35	29.58	45.092				
1,500.00	1,500.00	1,478.13	1,500.00	0.00	32.62	-96.82	-158.50	-1,324.48	1,333.93	1,301.31	32.62	40.894				
1,600.00	1,600.00	1,578.13	1,600.00	0.00	35.66	-96.82	-158.50	-1,324.48	1,333.93	1,298.28	35.66	37.411				
1,700.00	1,700.00	1,678.13	1,700.00	0.00	38.69	-96.82	-158.50	-1,324.48	1,333.93	1,295.24	38.69	34.475				
1,800.00	1,800.00	1,778.13	1,800.00	0.00	41.73	-96.82	-158.50	-1,324.48	1,333.93	1,292.20	41.73	31.966				
1,900.00	1,899.98	1,878.11	1,899.98	0.00	44.77	-18.20	-158.50	-1,324.48	1,332.92	1,288.23	44.69	29.825				
2,000.00	1,998.76	1,976.89	1,998.76	0.00	47.76	-18.85	-158.50	-1,324.48	1,318.91	1,272.31	46.60	28.303				
2,100.00	2,093.47	2,071.60	2,093.47	0.00	50.64	-20.38	-158.50	-1,324.48	1,288.88	1,241.87	47.01	27.418				
2,200.00	2,181.24	2,159.45	2,181.24	0.00	53.31	-23.03	-158.50	-1,324.48	1,243.87	1,197.89	45.99	27.047				
2,300.00	2,259.41	2,237.62	2,259.41	0.00	55.68	-27.30	-158.50	-1,324.48	1,185.46	1,141.31	44.15	26.850				
2,400.00	2,325.60	2,303.80	2,325.60	0.00	57.69	-34.01	-158.50	-1,324.48	1,115.72	1,072.59	43.14	25.865				
2,500.00	2,377.79	2,355.99	2,377.79	0.00	59.28	-44.42	-158.50	-1,324.48	1,037.19	991.50	45.69	22.701				
2,600.00	2,414.40	2,392.60	2,414.40	0.00	60.39	-59.63	-158.50	-1,324.48	952.78	899.91	52.87	18.022				
2,700.00	2,434.32	2,412.52	2,434.32	0.00	60.99	-78.30	-158.50	-1,324.48	865.77	806.02	59.75	14.490				
2,800.00	2,437.81	2,416.01	2,437.81	0.00	61.10	-90.55	-158.50	-1,324.48	779.65	718.55	61.10	12.761				
2,900.00	2,437.20	2,415.41	2,437.20	0.00	61.08	-90.46	-158.50	-1,324.48	697.08	636.00	61.08	11.413				
3,000.00	2,436.60	2,414.81	2,436.60	0.00	61.06	-90.38	-158.50	-1,324.48	619.68	558.62	61.06	10.148				
3,100.00	2,436.00	2,414.20	2,436.00	0.00	61.04	-90.30	-158.50	-1,324.48	549.62	488.57	61.04	9.004				
3,200.00	2,435.40	2,413.60	2,435.40	0.00	61.03	-90.22	-158.50	-1,324.48	490.05	429.03	61.03	8.030				
3,300.00	2,434.79	2,413.00	2,434.79	0.00	61.01	-90.13	-158.50	-1,324.48	445.23	384.22	61.01	7.298				
3,400.00	2,434.19	2,412.39	2,434.19	0.00	60.99	-90.05	-158.50	-1,324.48	419.88	358.89	60.99	6.884				
3,459.63	2,433.83	2,412.04	2,433.83	0.00	60.98	-90.00	-158.50	-1,324.48	415.63	354.65	60.98	6.816	CC, ES, SF			
3,500.00	2,433.59	2,411.79	2,433.59	0.00	60.97	-89.97	-158.50	-1,324.48	417.58	356.61	60.97	6.849				
3,600.00	2,432.99	2,411.19	2,432.99	0.00	60.95	-89.88	-158.50	-1,324.48	438.69	377.73	60.95	7.197				
3,700.00	2,432.38	2,410.59	2,432.38	0.00	60.93	-89.80	-158.50	-1,324.48	480.12	419.19	60.93	7.879				
3,800.00	2,431.78	2,409.98	2,431.78	0.00	60.92	-89.72	-158.50	-1,324.48	537.21	476.29	60.92	8.819				
3,900.00	2,431.18	2,409.38	2,431.18	0.00	60.90	-89.63	-158.50	-1,324.48	605.52	544.63	60.90	9.943				
4,000.00	2,430.57	2,408.78	2,430.57	0.00	60.88	-89.55	-158.50	-1,324.48	681.71	620.83	60.88	11.198				
4,100.00	2,429.97	2,408.18	2,429.97	0.00	60.86	-89.47	-158.50	-1,324.48	763.41	702.55	60.86	12.544				
4,200.00	2,429.37	2,407.57	2,429.37	0.00	60.84	-89.38	-158.50	-1,324.48	849.04	788.20	60.84	13.955				
4,300.00	2,428.77	2,406.97	2,428.77	0.00	60.83	-89.30	-158.50	-1,324.48	937.51	876.69	60.82	15.414				
4,400.00	2,428.16	2,406.37	2,428.16	0.00	60.81	-89.22	-158.50	-1,324.48	1,028.11	967.30	60.80	16.909				
4,500.00	2,427.56	2,405.76	2,427.56	0.00	60.79	-89.14	-158.50	-1,324.48	1,120.30	1,059.52	60.78	18.431				
4,600.00	2,426.96	2,405.16	2,426.96	0.00	60.77	-89.05	-158.50	-1,324.48	1,213.73	1,152.96	60.76	19.975				
4,700.00	2,426.36	2,404.56	2,426.36	0.00	60.75	-88.97	-158.50	-1,324.48	1,308.13	1,247.38	60.74	21.536				
4,800.00	2,425.75	2,403.96	2,425.75	0.00	60.73	-88.89	-158.50	-1,324.48	1,403.30	1,342.58	60.72	23.110				
4,900.00	2,425.15	2,403.35	2,425.15	0.00	60.72	-88.80	-158.50	-1,324.48	1,499.11	1,438.41	60.70	24.696				
5,000.00	2,424.55	2,402.75	2,424.55	0.00	60.70	-88.72	-158.50	-1,324.48	1,595.43	1,534.74	60.68	26.292				
5,100.00	2,423.94	2,402.15	2,423.94	0.00	60.68	-88.64	-158.50	-1,324.48	1,692.17	1,631.51	60.66	27.895				
5,200.00	2,423.34	2,401.55	2,423.34	0.00	60.66	-88.55	-158.50	-1,324.48	1,789.28	1,728.63	60.64	29.506				
5,300.00	2,422.74	2,400.94	2,422.74	0.00	60.64	-88.47	-158.50	-1,324.48	1,886.68	1,826.06	60.62	31.123				
5,400.00	2,422.14	2,400.34	2,422.14	0.00	60.62	-88.39	-158.50	-1,324.48	1,984.35	1,923.75	60.60	32.745				
5,500.00	2,421.53	2,399.74	2,421.53	0.00	60.61	-88.31	-158.50	-1,324.48	2,082.23	2,021.65	60.58	34.372				
5,600.00	2,420.93	2,399.13	2,420.93	0.00	60.59	-88.22	-158.50	-1,324.48	2,180.31	2,119.75	60.56	36.003				
5,700.00	2,420.33	2,398.53	2,420.33	0.00	60.57	-88.14	-158.50	-1,324.48	2,278.55	2,218.02	60.54	37.639				
5,800.00	2,419.73	2,397.93	2,419.73	0.00	60.55	-88.06	-158.50	-1,324.48	2,376.94	2,316.43	60.52	39.278				
5,900.00	2,419.12	2,397.33	2,419.12	0.00	60.53	-87.97	-158.50	-1,324.48	2,475.46	2,414.97	60.49	40.920				
6,000.00	2,418.52	2,396.72	2,418.52	0.00	60.51	-87.89	-158.50	-1,324.48	2,574.10	2,513.62	60.47	42.566				
6,100.00	2,417.92	2,396.12	2,417.92	0.00	60.50	-87.81	-158.50	-1,324.48	2,672.83	2,612.38	60.45	44.214				
6,200.00	2,417.31	2,395.52	2,417.31	0.00	60.48	-87.72	-158.50	-1,324.48	2,771.66	2,711.23	60.43	45.865				
6,300.00	2,416.71	2,394.91	2,416.71	0.00	60.46	-87.64	-158.50	-1,324.48	2,870.56	2,810.15	60.41	47.519				

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	B.P.	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Project:	San Juan County, NM NAD83	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Reference Site:	AL Elliott	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Lateral 1	Database:	Grand Junction District
Reference Design:	Plan 2	Offset TVD Reference:	Reference Datum

Reference	Plan 2		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.00ft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 30,000.06 ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date 9/23/2015		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name
0.00	6,583.93	Plan 2 (Lateral 1)	Gyro

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
AL Elliott						
AL Elliott B2 - OH - OH	3,459.63	2,412.04	415.63	354.65	6.816	CC, ES, SF
AL Elliott B2 (#2) - OH - OH	6,123.41	2,374.39	834.83	741.85	8.979	CC, ES, SF
AL Elliott B2B - OH - OH	5,180.45	2,438.26	262.32	190.62	3.658	CC, ES, SF
AL Elliott B4 - OH - OH	2,938.58	2,428.10	277.10	182.24	2.921	CC, ES, SF
AL Elliott B5 - OH - OH	5,611.17	2,366.25	920.00	852.77	13.685	CC, ES, SF
AL Elliott B5E - OH - OH	2,752.55	2,438.36	258.86	185.92	3.549	CC, ES, SF
AL Elliott B7 - OH - OH	6,324.71	2,372.37	345.85	276.95	5.019	CC, ES, SF
AL Elliott J1 - OH - OH	2,732.80	2,425.75	290.50	219.60	4.097	CC, ES, SF
AL Elliott B 8-1H - Lateral 1 ST1 - Plan #2						Out of range
AL Elliott B 8-1H - Lateral 1 ST1 - Plan #2	2,871.00	2,871.00	0.00	0.00	10,000.000	CC, ES
AL Elliott B 8-1H - Lateral 2 - Plan #2						Out of range
AL Elliott B 8-1H - Lateral 2 - Plan #2	2,920.00	2,920.00	0.00	0.00	10,000.000	CC, ES

Offset Design AL Elliott - AL Elliott B2 - OH - OH													Offset Site Error:
Survey Program: 808-INCLINOMETER													0.00 ft
Reference	Offset	Semi Major Axis			Distance								Offset Well Error:
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	21.87	0.00	0.00	-96.82	-158.50	-1,324.48	1,334.11				
100.00	100.00	78.13	100.00	0.00	1.19	-96.82	-158.50	-1,324.48	1,333.93	1,332.75	1.19	1,124.035	
200.00	200.00	178.13	200.00	0.00	2.70	-96.82	-158.50	-1,324.48	1,333.93	1,331.23	2.71	493.109	
300.00	300.00	278.13	300.00	0.00	4.22	-96.82	-158.50	-1,324.48	1,333.93	1,329.71	4.22	315.831	
400.00	400.00	378.13	400.00	0.00	5.74	-96.82	-158.50	-1,324.48	1,333.93	1,328.19	5.74	232.313	
500.00	500.00	478.13	500.00	0.00	7.26	-96.82	-158.50	-1,324.48	1,333.93	1,326.67	7.26	183.728	
600.00	600.00	578.13	600.00	0.00	8.78	-96.82	-158.50	-1,324.48	1,333.93	1,325.15	8.78	151.949	
700.00	700.00	678.13	700.00	0.00	10.30	-96.82	-158.50	-1,324.48	1,333.93	1,323.64	10.30	129.543	
800.00	800.00	778.13	800.00	0.00	11.82	-96.82	-158.50	-1,324.48	1,333.93	1,322.12	11.82	112.896	
900.00	900.00	878.13	900.00	0.00	14.40	-96.82	-158.50	-1,324.48	1,333.93	1,319.53	14.40	92.642	
1,000.00	1,000.00	978.13	1,000.00	0.00	17.44	-96.82	-158.50	-1,324.48	1,333.93	1,316.50	17.44	76.507	
1,100.00	1,100.00	1,078.13	1,100.00	0.00	20.47	-96.82	-158.50	-1,324.48	1,333.93	1,313.46	20.47	65.158	
1,200.00	1,200.00	1,178.13	1,200.00	0.00	23.51	-96.82	-158.50	-1,324.48	1,333.93	1,310.42	23.51	56.742	
1,300.00	1,300.00	1,278.13	1,300.00	0.00	26.55	-96.82	-158.50	-1,324.48	1,333.93	1,307.39	26.55	50.250	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



B.P.

San Juan County, NM NAD83

AL Elliott

AL Elliott B 8-1H

Lateral 1

Plan 2

Anticollision Report

25 September, 2015



Scientific Drilling

www.scientificdrilling.com





Database:	Grand Junction District	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Company:	B.P.	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Project:	San Juan County, NM NAD83	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site:	AL Elliott	North Reference:	Grid
Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral 1		
Design:	Plan 2		

Planned Survey

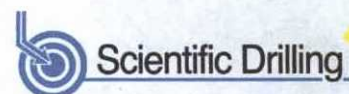
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,000.01	90.35	281.33	2,424.55	551.65	-2,753.15	2,807.88	0.00	0.00	0.00
5,100.01	90.35	281.33	2,423.94	571.30	-2,851.20	2,907.88	0.00	0.00	0.00
5,200.01	90.35	281.33	2,423.34	590.94	-2,949.25	3,007.87	0.00	0.00	0.00
5,300.01	90.35	281.33	2,422.74	610.59	-3,047.30	3,107.87	0.00	0.00	0.00
5,400.01	90.35	281.33	2,422.14	630.24	-3,145.35	3,207.87	0.00	0.00	0.00
5,500.01	90.35	281.33	2,421.53	649.88	-3,243.40	3,307.87	0.00	0.00	0.00
5,600.01	90.35	281.33	2,420.93	669.53	-3,341.45	3,407.87	0.00	0.00	0.00
5,700.01	90.35	281.33	2,420.33	689.17	-3,439.50	3,507.87	0.00	0.00	0.00
5,800.01	90.35	281.33	2,419.73	708.82	-3,537.55	3,607.86	0.00	0.00	0.00
5,900.01	90.35	281.33	2,419.12	728.47	-3,635.60	3,707.86	0.00	0.00	0.00
6,000.01	90.35	281.33	2,418.52	748.11	-3,733.65	3,807.86	0.00	0.00	0.00
6,100.01	90.35	281.33	2,417.92	767.76	-3,831.70	3,907.86	0.00	0.00	0.00
6,200.01	90.35	281.33	2,417.31	787.41	-3,929.75	4,007.86	0.00	0.00	0.00
6,300.01	90.35	281.33	2,416.71	807.05	-4,027.80	4,107.86	0.00	0.00	0.00
6,400.01	90.35	281.33	2,416.11	826.70	-4,125.85	4,207.85	0.00	0.00	0.00
6,500.01	90.35	281.33	2,415.51	846.34	-4,223.90	4,307.85	0.00	0.00	0.00
6,583.93	90.35	281.33	2,415.00	862.83	-4,306.18	4,391.77	0.00	0.00	0.00
Elliott Lat 1 PBHL REV									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Elliott Lat 1 PBHL REV - plan hits target center - Point	0.00	0.00	2,415.00	862.83	-4,306.18	2,087,756.29	2,740,873.64	36.7374553	-107.7726459



Planning Report



Database:	Grand Junction District	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Company:	B.P.	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Project:	San Juan County, NM NAD83	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site:	AL Elliott	North Reference:	Grid
Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral 1		
Design:	Plan 2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,865.05	0.00	0.00	1,865.05	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	3.50	281.33	1,899.98	0.21	-1.05	1.07	10.00	10.00	0.00
2,000.00	13.50	281.33	1,998.76	3.11	-15.51	15.82	10.00	10.00	0.00
2,100.00	23.50	281.33	2,093.47	9.33	-46.58	47.50	10.00	10.00	0.00
2,200.00	33.50	281.33	2,181.25	18.69	-93.30	95.15	10.00	10.00	0.00
2,300.00	43.50	281.33	2,259.42	30.91	-154.25	157.32	10.00	10.00	0.00
2,400.00	53.50	281.33	2,325.60	45.60	-227.59	232.11	10.00	10.00	0.00
2,500.01	63.50	281.33	2,377.79	62.33	-311.08	317.27	10.00	10.00	0.00
2,600.01	73.50	281.33	2,414.40	80.59	-402.19	410.19	10.00	10.00	0.00
2,700.01	83.50	281.33	2,434.32	99.81	-498.15	508.05	10.00	10.00	0.00
2,768.50	90.35	281.33	2,438.00	113.24	-565.18	576.41	10.00	10.00	0.00
2,800.01	90.35	281.33	2,437.81	119.43	-596.07	607.91	0.00	0.00	0.00
2,900.01	90.35	281.33	2,437.20	139.08	-694.11	707.91	0.00	0.00	0.00
3,000.01	90.35	281.33	2,436.60	158.73	-792.16	807.91	0.00	0.00	0.00
3,100.01	90.35	281.33	2,436.00	178.37	-890.21	907.91	0.00	0.00	0.00
3,200.01	90.35	281.33	2,435.40	198.02	-988.26	1,007.91	0.00	0.00	0.00
3,300.01	90.35	281.33	2,434.79	217.67	-1,086.31	1,107.90	0.00	0.00	0.00
3,400.01	90.35	281.33	2,434.19	237.31	-1,184.36	1,207.90	0.00	0.00	0.00
3,500.01	90.35	281.33	2,433.59	256.96	-1,282.41	1,307.90	0.00	0.00	0.00
3,600.01	90.35	281.33	2,432.99	276.60	-1,380.46	1,407.90	0.00	0.00	0.00
3,700.01	90.35	281.33	2,432.38	296.25	-1,478.51	1,507.90	0.00	0.00	0.00
3,800.01	90.35	281.33	2,431.78	315.90	-1,576.56	1,607.90	0.00	0.00	0.00
3,900.01	90.35	281.33	2,431.18	335.54	-1,674.61	1,707.90	0.00	0.00	0.00
4,000.01	90.35	281.33	2,430.57	355.19	-1,772.66	1,807.89	0.00	0.00	0.00
4,100.01	90.35	281.33	2,429.97	374.84	-1,870.71	1,907.89	0.00	0.00	0.00
4,200.01	90.35	281.33	2,429.37	394.48	-1,968.76	2,007.89	0.00	0.00	0.00
4,300.01	90.35	281.33	2,428.77	414.13	-2,066.81	2,107.89	0.00	0.00	0.00
4,400.01	90.35	281.33	2,428.16	433.77	-2,164.86	2,207.89	0.00	0.00	0.00
4,500.01	90.35	281.33	2,427.56	453.42	-2,262.91	2,307.89	0.00	0.00	0.00
4,600.01	90.35	281.33	2,426.96	473.07	-2,360.96	2,407.88	0.00	0.00	0.00
4,700.01	90.35	281.33	2,426.36	492.71	-2,459.01	2,507.88	0.00	0.00	0.00
4,800.01	90.35	281.33	2,425.75	512.36	-2,557.05	2,607.88	0.00	0.00	0.00
4,900.01	90.35	281.33	2,425.15	532.00	-2,655.10	2,707.88	0.00	0.00	0.00



Database:	Grand Junction District	Local Co-ordinate Reference:	Well AL Elliott B 8-1H
Company:	B.P.	TVD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Project:	San Juan County, NM NAD83	MD Reference:	GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)
Site:	AL Elliott	North Reference:	Grid
Well:	AL Elliott B 8-1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral 1		
Design:	Plan 2		

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 ft	Slot Radius:	13.200 in	Grid Convergence:	0.04 °

Well	AL Elliott B 8-1H				
Well Position	+N/-S	-75.03 ft	Northing:	2,086,893.46 usft	Latitude: 36.7350768
	+E/-W	93.44 ft	Easting:	2,745,179.81 usft	Longitude: -107.7579519
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level: 5,864.23 ft

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

Design	Plan 2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	281.33

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,865.05	0.00	0.00	1,865.05	0.00	0.00	0.00	0.00	0.00	0.00	
2,768.50	90.35	281.33	2,438.00	113.24	-565.18	10.00	10.00	-8.71	281.33	
6,583.93	90.35	281.33	2,415.00	862.83	-4,306.18	0.00	0.00	0.00	0.00	Elliott Lat 1 PBHL RE'



B.P.

San Juan County, NM NAD83

AL Elliott

AL Elliott B 8-1H

Lateral 1

Plan: Plan 2

Standard Planning Report

25 September, 2015



Scientific Drilling

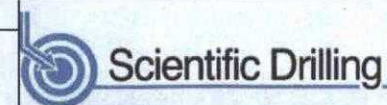
www.scientificdrilling.com



Company: B.P.
Project: San Juan County, NM NAD83
Site: AL Elliott
Well: AL Elliott B 8-1H
Wellbore: Lateral 1
Design: Plan 2

PROJECT DETAILS: San Juan County, NM NAD83

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Western Zone
System Datum: Mean Sea Level
Local North: Grid



Azimuths to Grid North
True North: -0.04°
Magnetic North: 9.41°

Magnetic Field
Strength: 50243.5enT
Dip Angle: 63.36°
Date: 7/13/2015
Model: IGRF2015

WELL DETAILS: AL Elliott B 8-1H

GL 5864.23' & RKB 11' @ 5875.23ft (Aztec 507)

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	2086893.46	2745179.81	36.7350768	-107.7579518

Plan: Plan 2 (AL Elliott B 8-1H/Lateral 1)

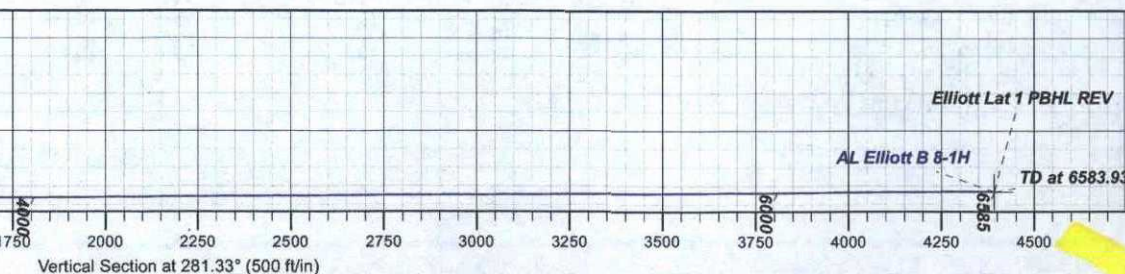
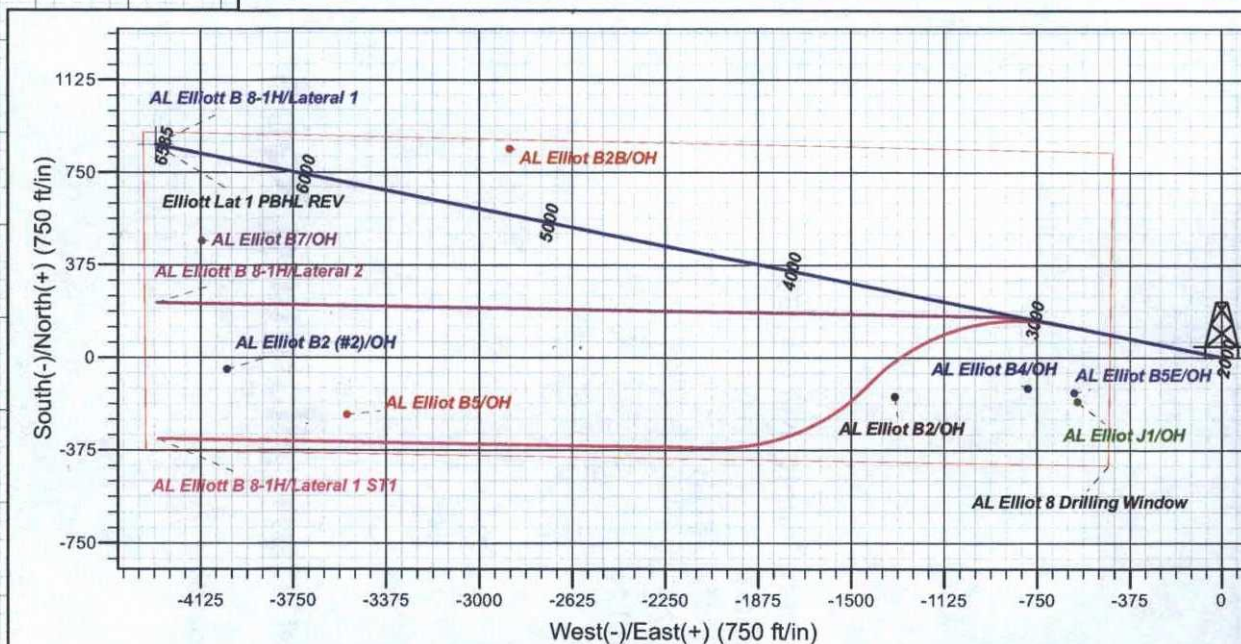
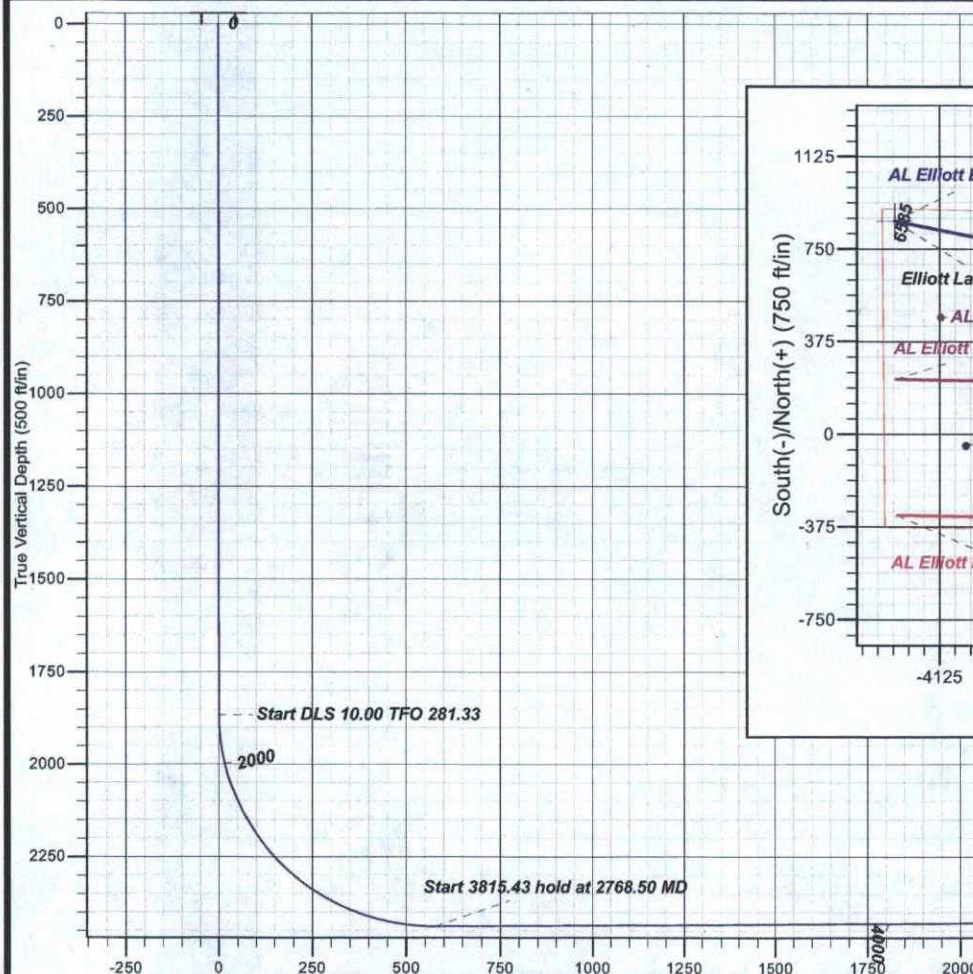
Created By: Jania Collins Date: 11:07, September 25 2015

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Elliott Lat 1 PBHL REV	2415.00	862.83	-4306.18	2087756.29	2740873.64	36.7374553	-107.7726459

SECTION DETAILS

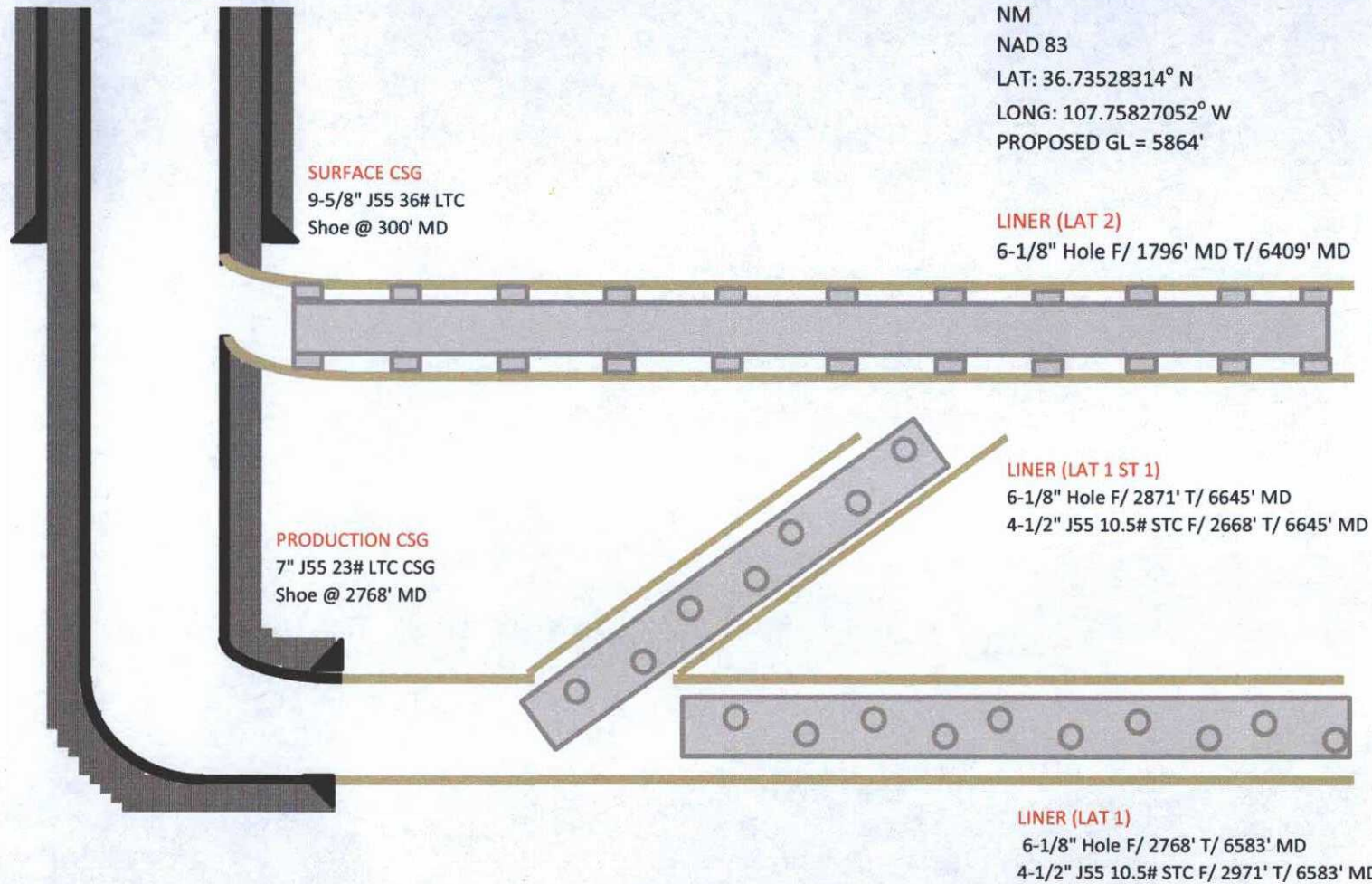
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSecl	Target	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
1865.05	0.00	0.00	1865.05	0.00	0.00	0.00	0.00	0.00		
2768.50	90.35	281.33	2438.00	113.24	-565.18	10.00	281.33	576.41		
6583.93	90.35	281.33	2415.00	862.83	-4306.18	0.00	0.00	4391.77	Elliott Lat 1 PBHL REV	



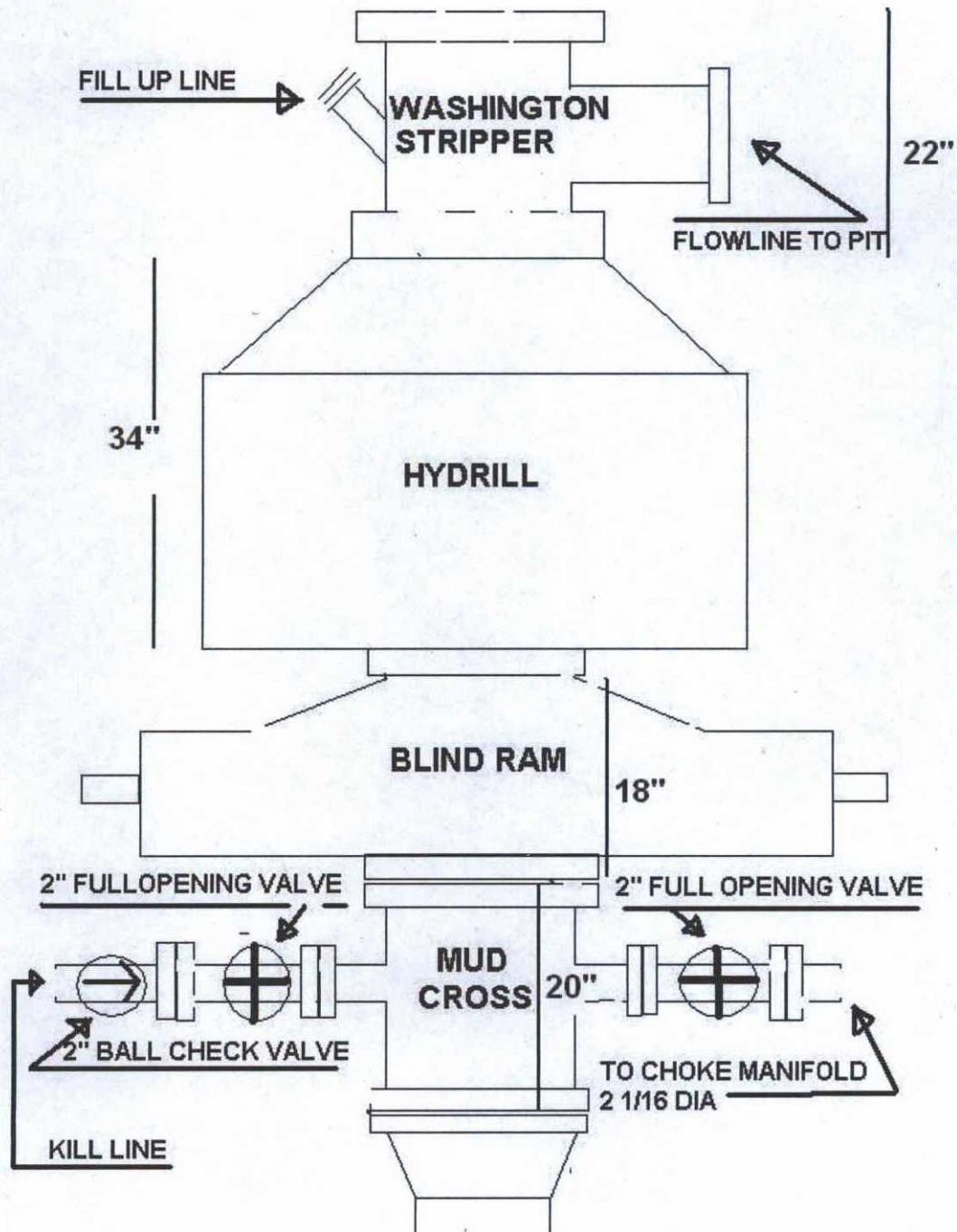
PROPOSED WELLBORE DIAGRAM

REVISED: 9/28/2015

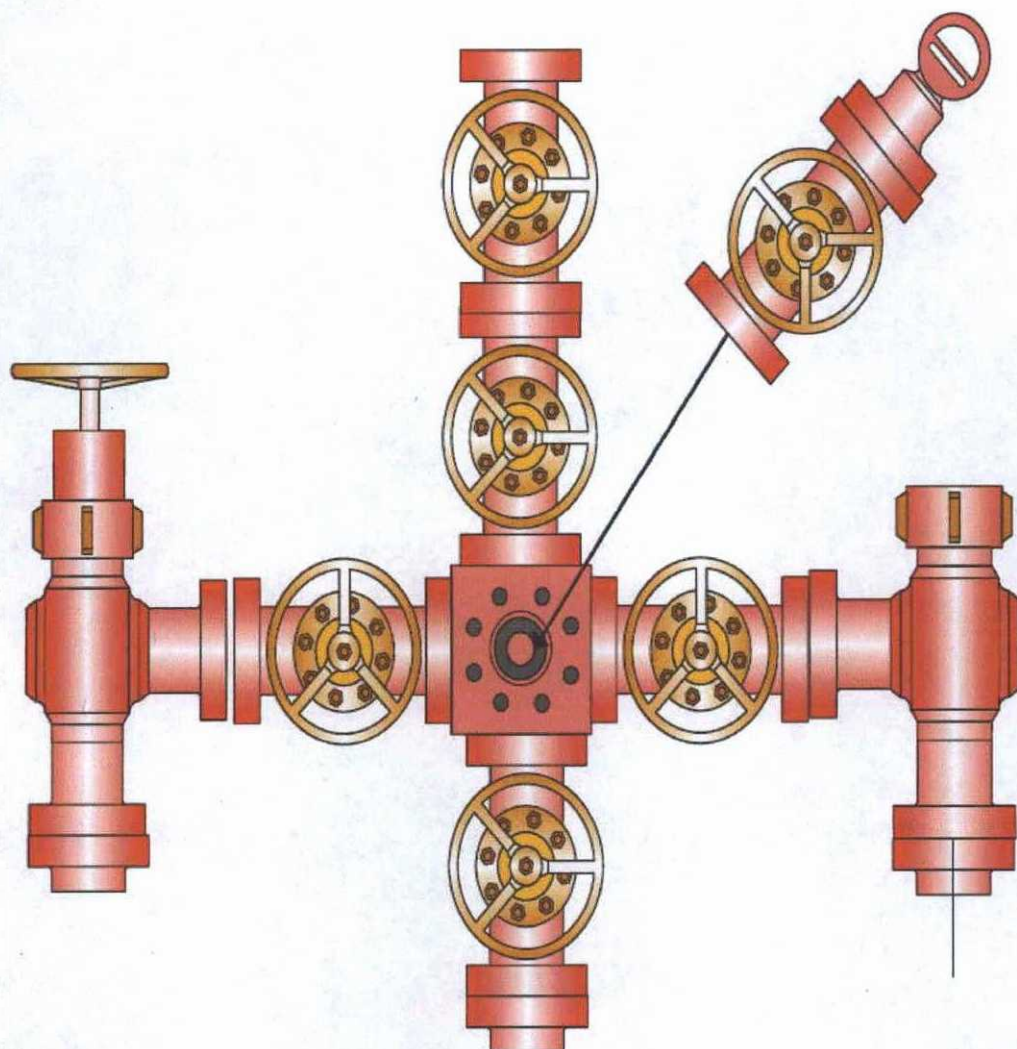
WELL NAME: AL ELLIOTT B 8-1H
SURFACE LOCATION: SEC 10 / T29N / R9W
1178' FSL & 299' FEL / SAN JUAN COUNTY,
NM
NAD 83
LAT: 36.73528314° N
LONG: 107.75827052° W
PROPOSED GL = 5864'



92" overall height



Proposed 2,000 psi BOP Stack



(Minimum 2")

Proposed 2,000 psi Choke Manifold Stack