

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an
Abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.

SF - 81098

6. If Indian, Allottee or tribe Name

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

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well

☐ Oil Well

☒ Gas Well

☐ Other

8. Well Name and No.

ELLIOTT GAS COM X IE

2. Name of Operator

BP AMERICA PRODUCTION COMPANY

9. API Well No.

30-045-33020

3a. Address

PO BOX 3092 HOUSTON, TX 77253

3b. Phone No. (include area code)

281-366-4084

10. Field and Pool, or Exploratory Area

BASIN DAKOTA & BLANCO MESAVERDE

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

1535' FNL & 1090' FEL; SEC 09 T30N R09W SENE Mer NMP

11. County or Parish, State

SAN JUAN, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OR NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

☒ Notice of Intent

☐ Subsequent Report

☐ Final Abandonment Notice

TYPE OF ACTION

☐ Acidize

☐ Deepen

☐ Production (Start/Resume)

☐ Water shut-Off

☐ Alter Casing

☐ Fracture Treat

☐ Reclamation

☐ Well Integrity

☐ Casing Repair

☐ New Construction

☐ Recomplete

☐ Other Change to BH Location

☐ Change Plans

☐ Plug and Abandon

☐ Water Disposal

☐ Convert to Injection

☐ Plug Back

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.

The original APD was submitted on 04/14/2005 and approval was granted on 06/27/05.

BP America respectfully requests permission to change the Bottom Hole location.

From: 1200' FNL & 810' FEL

TO: 1850' FNL & 750' FEL

The surface location remains the same.

HOLD C104 FOR directional survey

The Intermediate and Production casing will change slightly. The cement for the production casing will change by 2 sacks.

Please see the attached documentation.

14. I hereby certify that the foregoing is true and correct

Name (Printed/typed)

Cherry Hlava

Title Regulatory Analyst

Signature

Cherry Hlava

Date 07/13/2005

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Adrian Brunley

Title

Reg. Eng

Date

7/18/05

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

Office

FFO

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.

NMCCD

BP AMERICA PRODUCTION COMPANY

DRILLING AND COMPLETION PROGRAM

4/13/2005 Revised 06/16/2005

Lease: Elliott GC	Well Name & No. Elliott GC X 1E	Field: Blanco Mesaverde/Basin Dakota
County: San Juan, New Mexico	Surface Location: 9-30N-9W : 1535' FNL, 1090' FEL	
Minerals:	Surface: Lat: 36.8286488 Long: -107.7802283	
Rlg : Aztec 184	BH Location: 1850' FNL, 750' FEL; Lat: 36.8277755 Long: -107.7790600	
OBJECTIVE: Drill 250' below the top of the Two Wells Mbr, set 4-1/2" production casing. Stimulate DK, MF, and PL intervals.		

METHOD OF DRILLING		APPROXIMATE DEPTHS OF GEOLOGICAL MARKER				
TYPE OF TOOLS	DEPTH OF DRILLING	Actual GL:	6192	Estimated KB:		6,206.0'
Rotary	0 - TD	Marker		SUBSEA	TVD	APPROX. MD
LOG PROGRAM		Ojo Alamo		4,558'	1,648'	1,665'
Type	Depth Interval	Kirtland		4,408'	1,798'	1,817'
Single Run		Fruitland	*	3,867'	2,339'	2,366'
		Fruitland Coal	*	3,483'	2,723'	2,755'
		Pictured Cliffs	*	3,224'	2,982'	3,017'
		Lewis	*	2,971'	3,235'	3,272'
Cased Hole		Cliff House	#	1,706'	4,500'	4,537'
TDT- CBL	TD to 7" shoe.	Menefee	#	1,398'	4,808'	4,845'
	Identify 4 ½" cement top	Point Lookout	#	1,009'	5,197'	5,234'

REMARKS: - Please report any flares (magnitude & duration).					

SPECIAL TESTS		DRILL CUTTING SAMPLES		DRILLING TIME	
TYPE		FREQUENCY	DEPTH	FREQUENCY	DEPTH
		30'/10' intervals	3,372' to TD	Geolograph	0 - TD
REMARKS:					

MUD PROGRAM:					
Interval	TypeMud	#/gal	Vis, sec/qt	/30 min	Other Specification
200'	Spud	8.8 - 9.0	Sufficient to clean hole.		
3,372'	Water/LSND	8.4 - 9.0		<9	Sweep hole while whilst water drilling, LCM onsite
7,609'	Air	1	1000 cfm for bit		Volume sufficient to maintain a stable and clean wellbore

CASING PROGRAM:							
CasingString	Depth	Size	Casing Size	Grade, Thread	Weight	Landing Point	Cement
Surface/Conductor	200'	13 1/2"	9-5/8"	H-40 ST&C	32#		cmt to surface
Intermediate 1	3,372'	8-3/4"	7"	J/K-55 ST&C	20#	100' Below Lewis	cmt to surface
Production	7,609'	6-1/4"	4-1/2"	P-110	11.6#	DKOT	150' inside Intermediate - TOC survey required

CORING PROGRAM:							
None							

COMPLETION PROGRAM:							
Rigless, 2-3 Stage Limited Entry Hydraulic Frac, FMC Unihead							

GENERAL REMARKS:							
Notify BLM/NMOCD 24 hours prior to Spud, BOP testing, and Casing and Cementing.							

BOP Pressure Testing Requirements			
Formation	Depth	Anticipated bottom hole pressure	Max anticipated surface pressure**
Cliffhouse	4,500'	500	0
Point Lookout	5,197'	600	0
Dakota	7,332'	2600	986.96

Requested BOP Pressure Test Exception = 1500 psi		** Note: Determined using the following formula: ABHP - (.22*TVD) = ASP		
Form 46 Reviewed by:		Logging program reviewed by:		
PREPARED BY:		APPROVED:		DATE:
HGJ	JMP/GGZ	13/2005 Revised 06/16/200		
Form 46 7-84bw		For Drilling Dept.		For Production Dept.

District I
PO Box 1980, Hobbs NM 88241-1980
District II
PO Drawer KK, Artesia, NM 87211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-1C
Revised February 21, 1995

Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-045-33020		2 Pool Code 71599/72319		3 Pool Name Basin Dakota Blanco Mesquerde	
4 Property Code 000457		5 Property Name Elliott Gas Com. X			6 Well Number #1E
7 OORID No. 000778		8 Operator Name BP AMERICA PRODUCTION COMPANY			9 Elevation 6192

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
H	9	30 N	9 W		1535	NORTH	1090	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
H	9	30	9 W		1850	NORTH	750	EAST	SAN JUAN

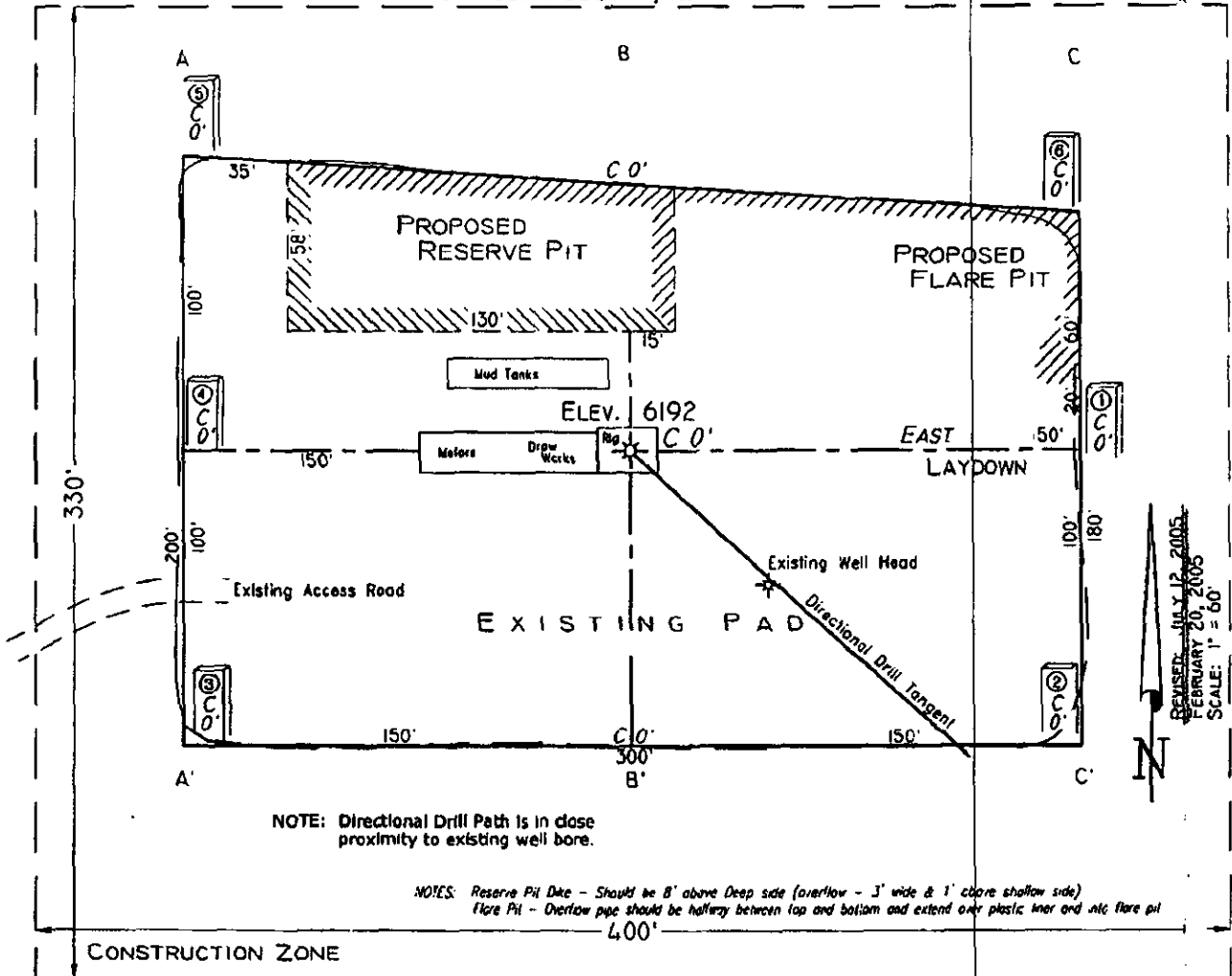
12 Dedicated Acres 320 D5 E/2 320 MV N/2	13 Joint or Infill	14 Consolidation Code	15 Order No.

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. <i>Cherry Hlava</i> Signature <i>Cherry Hlava</i> Printed Name <i>Regulatory Analyst</i> Title <i>7-13-05</i> Date	
	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. <i>February 20, 2005</i> Date of Survey Signature and Seal of Professional Surveyor 7016 Certificate Number	

PAD LAYOUT PLAN & PROFILE
 BP AMERICA PRODUCTION COMPANY
 Elliott Gas Com X #1E
 1535' F/NL 1090' F/EL
 SEC. 9, T30N, R9W, N.M.P.M.
 SAN JUAN COUNTY, NEW MEXICO

Lat: 36.8429°
 Long: 107.7808°
 Lat: 36°49'44"
 Long: 107°46'51"



Area of Construction Zone - 330'x400' or 3.03 acres, more or less.

SCALE: 1"=60'-HORIZ.
 1"=40'-VERT.

NOTE: Contractor should call One-Call for location of any marked or unmarked buried pipelines or cables on well pad and/or access road at least (2) working days prior to construction.

Cuts and fills shown are approximate - final finished elevation is to be adjusted so earthwork will balance. Corner stakes are approximate and do not include additional areas needed for sidesteps and drainages. Final Pad Dimensions are to be verified by Contractor.

WAIN SURVEYS
 P.O. Box 1306
 Farmington, NM

Cementing Program

Amended 7/13/05

Well Name: Elliott GC X 1E
 Location: 9-30N-9W : 1535' FNL, 1090' FEL
 County: San Juan
 State: New Mexico

Well Flac
 Formation: Blanco Mesaverde/Basin Dakota
 KB Elev (est) 6206
 GL Elev. (est) 6192

Casing Program:

Casing String	Est. Depth (ft.)	Hole Size (in.)	Casing Size (in.)	Thread	TOC (ft.)	Stage Tool Or TOL (ft.)	Cmt Cir. Out (bbl.)
Surface	200	13.5	9.625	ST&C	Surface	NA	
Intermediate	3372	8.75	7	LT&C	Surface	NA	
Production -	7609	6.25	4.5	ST&C	3272	NA	

Casing Properties:

(No Safety Factor Included)

Casing String	Size (in.)	Weight (lb/ft)	Grade	Burst (psi.)	Collapse (psi.)	Joint St. (1000 lbs.)	Capacity (bbl/ft.)	Drift (in.)
Surface		9.625	32 H-40	2270	1400	254	0.0787	8.845
Intermediate		7	20 K-55	3740	2270	234	0.0405	6.456
Production -		4.5	11.6 J-55	5350	4960	154	0.0155	3.875

Mud Program

Apx. Interval (ft.) Mud Type Mud Weight

Recommended Mud Properties Prio Cementing:

PV <20
 YP <10
 Fluid Loss <15

0 - SCP Water/Spud 8.6-9.2
 SCP - ICP Water/LSND 8.6-9.2
 ICP - ICP2 Gas/Air Mist NA
 ICP2 - TD LSND 8.6 - 9.2

Cementing Program:

	Surface	Intermediate	Production
Excess %, Lead	100	75	40
Excess %, Tail	NA	0	40
BHST (est deg. F)	75	120	183
Special Instructions	1,6,7	1,6,8	2,4,6

1. Do not wash pumps and lines.
2. Wash pumps and lines.
3. Reverse out
4. Run Blend Test on Cement
5. Record Rate, Pressure, and Density on 3.5" disk
6. Confirm densitometer with pressurized mud scales
7. 1" cement to surface if cement is not circulated.
8. If cement is not circulated to surface, run temp. survey 10-12 hr. after landing plug.

Notes:

*Do not wash up on top of plug. Wash lines before displacing production cement job to minimize drillout.

Surface:

Preflush 20 bbl. FreshWater
 Slurry 1 154 sx Class C Cement 195 cuft
 TOC@Surface + 2% CaCl2 (accelerator)
 0.4887 cuft/ft OH

Slurry Properties:

	Density (lb/gal)	Yield (ft3/sk)	Water (gal/sk)
Slurry 1	15.2	1.27	5.8

Casing Equipment:

9-5/8", 8R, ST&C
 1 Guide Shoe
 1 Top Wooden Plug
 1 Autofill insert float valve
 Centralizers, as needed
 1 Stop Ring
 1 Thread Lock Compound

Cementing Program

Intermediate:

Fresh Water 20 bbl fresh water

Lead Slurry 1 TOC@Surface	281 sx Class "G" Cement + 3% D79 extender + 1/4 #/sk. Cellophane Flake + 5 lb/sk Gilsonite	738 cuft
Tail Slurry 2 500 ft fill	59 sx 50/50 Class "G"/Poz + 2% gel (extender) + 1/4 #/sk. Cellophane Flake + 2% CaCl2 (accelerator) + 5 lb/sk Gilsonite	75 cuft 0.1503 cuft/ft OH 0.1746 cuft/ft csg ann

Slurry Properties:	Density (lb/gal)	Yield (ft3/sk)	Water (gal/sk)
Slurry 1	11.4	2.63	15.8
Slurry 2	13.5	1.27	5.72

Casing Equipment:

7", 8R, ST&C

1 Float Shoe (autofill with minimal LCM in mud)
1 Float Collar (autofill with minimal LCM in mud)
1 Stop Ring
Centralizers as needed
1 Top Rubber Plug
1 Thread Lock Compound

Production:

Fresh Water 10 bbl CW100

Lead Slurry 1 TOC, 400' above 7" shoe	180 LiteCrete D961 / D124 / D154 + 0.03 gps D47 antifoam + 0.5% D112 fluid loss + 0.11% D65 TIC	453 cuft
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Tail Slurry 2 1539 ft fill	154 sx 50/50 Class "G"/Poz + 5% D20 gel (extender) + 0.1% D46 antifoam + 1/4 #/sk. Cellophane Flake + 0.25% D167 Fluid Loss + 5 lb/sk Gilsonite + 0.1% d800, retarder + 0.15% D65, dispersant	221 cuft 0.1026 cuft/ft OH
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Slurry Properties:	Density (lb/gal)	Yield (ft3/sk)	Water (gal/sk)	
Slurry 1	9.5	2.52	6.38	0.1169 cuft/ft csg ann
Slurry 2	13	1.44	6.5	Top of Mancos 5570

Casing Equipment:

4-1/2", 8R, ST&C

1 Float Shoe (autofill with minimal LCM in mud)
1 Float Collar (autofill with minimal LCM in mud)
1 Stop Ring
Centralizers, as needed
1 Top Rubber Plug
1 Thread Lock Compound



Scientific Drilling
Directional Drilling Operations

Field: SAN JUAN, New Mexico
Site: SEC9-T30N-R9W
Well: Elliot GC X 1 E
Wellpath: OH
Plan: Plan #1



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	
3	624.97	9.75	132.81	623.40	-18.74	20.23	3.00	132.81	27.58	
4	2755.33	9.75	132.81	2723.00	-263.89	284.87	0.00	0.00	388.32	Fruitland coal
5	3371.79	3.58	132.81	3335.00	-312.50	337.35	1.00	180.00	459.85	csg. pt.
6	3491.27	0.00	0.00	3454.40	-315.04	340.09	3.00	180.00	463.59	
7	7608.87	0.00	0.00	7572.00	-315.04	340.09	0.00	0.00	463.59	PBHL

TARGET DETAILS

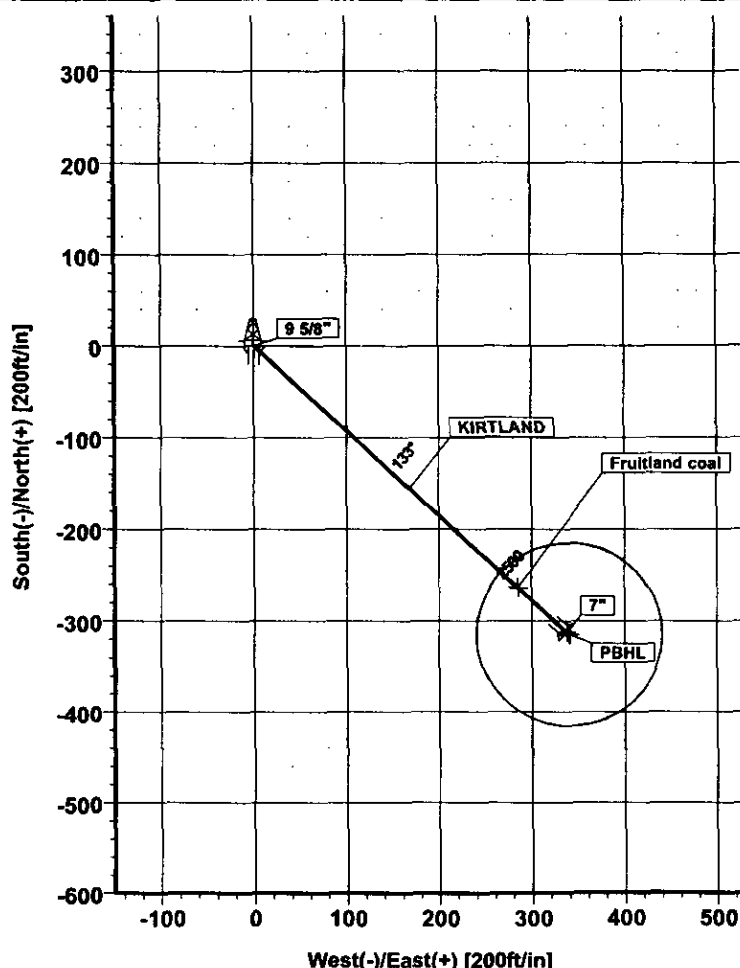
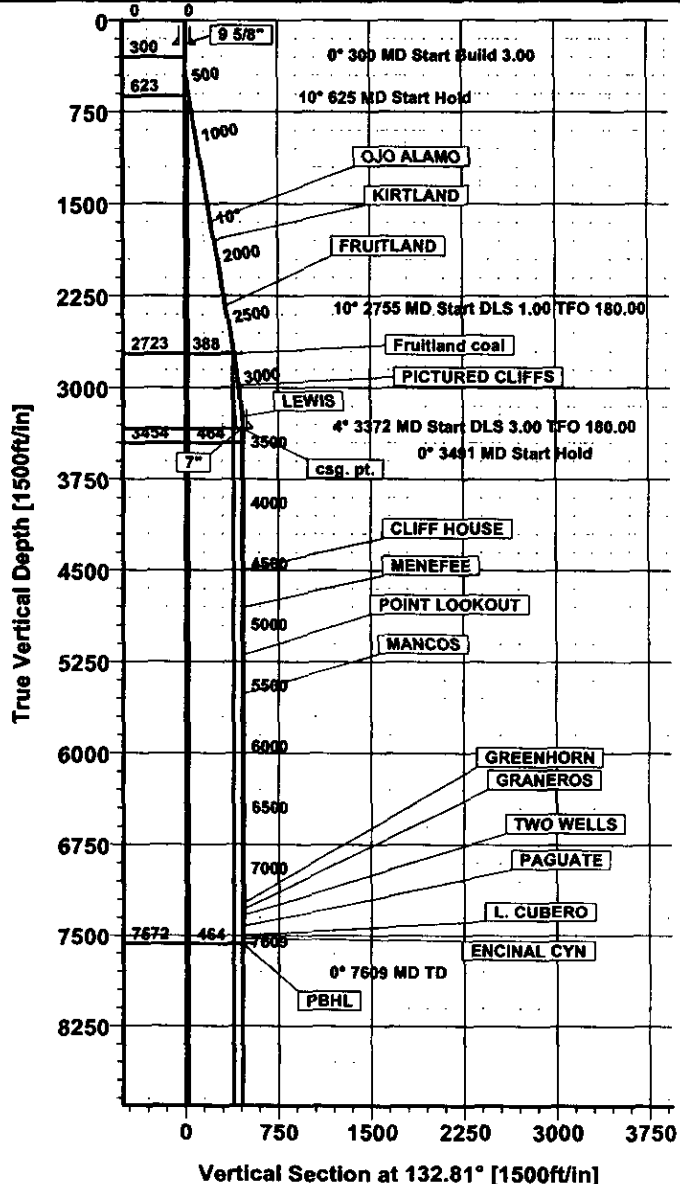
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Fruitland coal	2723.00	-263.89	284.87	2120694.263	2738923.810	Point
csg. pt.	3335.00	-312.50	337.35	2120645.657	2738976.286	Point
PBHL	7572.00	-315.00	340.00	2120643.157	2738978.936	Circle (Radius: 100)

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
Elliot GC X 1 E	0.00	0.00	2120958.131	2738638.964	36°49'43.130N	107°46'48.822W	N/A

SITE DETAILS

SEC9-T30N-R9W
SAN JUAN NEW MEXICO
Site Centre Latitude: 36°49'43.130N
Longitude: 107°46'48.822W
Ground Level: 6192.00
Positional Uncertainty: 0.00
Convergence: 0.03





Scientific Drilling Planning Report



Company: BP	Date: 6/16/2005	Time: 13:49:02	Page: 1
Field: SAN JUAN, New Mexico	Co-ordinate(NE) Reference: Well: Elliot GC X 1 E, Grid North		
Site: SEC9-T30N-R9W	Vertical (TVD) Reference: SITE 6206.0		
Well: Elliot GC X 1 E	Section (VS) Reference: Well (0.00N,0.00E,132.81Azi)		
Wellpath: OH	Plan: Plan #1		

Field: SAN JUAN, New Mexico SAN JUAN COUNTY, NEW MEXICO USA	Map Zone: New Mexico, Western Zone
Map System: US State Plane Coordinate System 1983	Coordinate System: Well Centre
Geo Datum: GRS 1980	Geomagnetic Model: igrf2005
Sys Datum: Mean Sea Level	

Site: SEC9-T30N-R9W

SAN JUAN NEW MEXICO

Site Position:	Northing: 2120958.131 ft	Latitude: 36 49 43.130 N
From: Geographic	Easting: 2738638.964 ft	Longitude: 107 46 48.822 W
Position Uncertainty: 0.00 ft		North Reference: Grid
Ground Level: 6192.00 ft		Grid Convergence: 0.03 deg

Well: Elliot GC X 1 E

Slot Name:

Well Position:	+N/-S 0.00 ft	Northing: 2120958.131 ft	Latitude: 36 49 43.130 N
	+E/-W 0.00 ft	Easting: 2738638.964 ft	Longitude: 107 46 48.822 W
Position Uncertainty: 0.00 ft			

Wellpath: OH

Current Datum: SITE	Height 6206.00 ft	Drilled From: Surface	
Magnetic Data: 6/16/2005		Tie-on Depth: 0.00 ft	
Field Strength: 51440 nT		Above System Datum: Mean Sea Level	
Vertical Section: Depth From (TVD)	+N/-S ft	Declination: 10.63 deg	
		Mag Dip Angle: 63.68 deg	
		+E/-W ft	
		Direction deg	
	0.00	0.00	132.81

Plan: Plan #1

Date Composed: 6/16/2005
Version: 3
Tied-to: From Surface

Principal: Yes

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	0.00	0.00	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	
624.97	9.75	132.81	623.40	-18.74	20.23	3.00	3.00	0.00	132.81	
2755.33	9.75	132.81	2723.00	-263.89	284.87	0.00	0.00	0.00	0.00	Fruitland coal
3371.79	3.58	132.81	3335.00	-312.50	337.35	1.00	-1.00	0.00	180.00	csg. pt.
3491.27	0.00	0.00	3454.40	-315.04	340.09	3.00	-3.00	-111.16	180.00	
7608.87	0.00	0.00	7572.00	-315.04	340.09	0.00	0.00	0.00	0.00	PBHL

Section 1 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
0.00	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	0.00
200.00	0.00	0.00	200.00	0.00	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	0.00

Section 2 : Start Build 3.00

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
400.00	3.00	132.81	399.95	-1.78	1.92	2.62	3.00	3.00	0.00	0.00
500.00	6.00	132.81	499.63	-7.11	7.68	10.46	3.00	3.00	0.00	0.00
600.00	9.00	132.81	598.77	-15.98	17.25	23.51	3.00	3.00	0.00	0.00
624.97	9.75	132.81	623.40	-18.74	20.23	27.58	3.00	3.00	0.00	0.00

Scientific Drilling Planning Report

Company: BP
 Field: SAN JUAN, New Mexico
 Site: SEC9-T30N-R9W
 Well: Elliot GC X 1 E
 Wellpath: OH

Date: 6/16/2005
 Co-ordinate(NE) Reference: Well: Elliot GC X 1 E, Grid North
 Vertical (TVD) Reference: SITE 6206.0
 Section (VS) Reference: Well (0.00N,0.00E,132.81Azi)
 Plan: Plan #1

Page: 2

Section 3 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
700.00	9.75	132.81	697.35	-27.38	29.55	40.29	0.00	0.00	0.00	0.00
800.00	9.75	132.81	795.91	-38.88	41.98	57.22	0.00	0.00	0.00	0.00
900.00	9.75	132.81	894.46	-50.39	54.40	74.15	0.00	0.00	0.00	0.00
1000.00	9.75	132.81	993.02	-61.90	66.82	91.09	0.00	0.00	0.00	0.00
1100.00	9.75	132.81	1091.57	-73.41	79.24	108.02	0.00	0.00	0.00	0.00
1200.00	9.75	132.81	1190.13	-84.91	91.67	124.95	0.00	0.00	0.00	0.00
1300.00	9.75	132.81	1288.69	-96.42	104.09	141.88	0.00	0.00	0.00	0.00
1400.00	9.75	132.81	1387.24	-107.93	116.51	158.82	0.00	0.00	0.00	0.00
1500.00	9.75	132.81	1485.80	-119.44	128.93	175.75	0.00	0.00	0.00	0.00
1600.00	9.75	132.81	1584.35	-130.94	141.36	192.68	0.00	0.00	0.00	0.00
1664.58	9.75	132.81	1648.00	-138.37	149.38	203.62	0.00	0.00	0.00	0.00
1700.00	9.75	132.81	1682.91	-142.45	153.78	209.62	0.00	0.00	0.00	0.00
1800.00	9.75	132.81	1781.47	-153.96	166.20	226.55	0.00	0.00	0.00	0.00
1816.78	9.75	132.81	1798.00	-155.89	168.28	229.39	0.00	0.00	0.00	0.00
1900.00	9.75	132.81	1880.02	-165.46	178.62	243.48	0.00	0.00	0.00	0.00
2000.00	9.75	132.81	1978.58	-176.97	191.04	260.42	0.00	0.00	0.00	0.00
2100.00	9.75	132.81	2077.13	-188.48	203.47	277.35	0.00	0.00	0.00	0.00
2200.00	9.75	132.81	2175.69	-199.99	215.89	294.28	0.00	0.00	0.00	0.00
2300.00	9.75	132.81	2274.25	-211.49	228.31	311.22	0.00	0.00	0.00	0.00
2365.70	9.75	132.81	2339.00	-219.05	236.47	322.34	0.00	0.00	0.00	0.00
2400.00	9.75	132.81	2372.80	-223.00	240.73	328.15	0.00	0.00	0.00	0.00
2500.00	9.75	132.81	2471.36	-234.51	253.16	345.08	0.00	0.00	0.00	0.00
2600.00	9.75	132.81	2569.91	-246.02	265.58	362.02	0.00	0.00	0.00	0.00
2700.00	9.75	132.81	2668.47	-257.52	278.00	378.95	0.00	0.00	0.00	0.00
2755.33	9.75	132.81	2723.00	-263.89	284.87	388.32	0.00	0.00	0.00	0.00

Section 4 : Start DLS 1.00 TFO 180.00

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
2800.00	9.30	132.81	2767.05	-268.91	290.30	395.71	1.00	-1.00	0.00	180.00
2900.00	8.30	132.81	2865.87	-279.31	301.52	411.01	1.00	-1.00	0.00	180.00
3000.00	7.30	132.81	2964.95	-288.54	311.48	424.59	1.00	-1.00	0.00	180.00
3017.19	7.13	132.81	2982.00	-290.00	313.07	426.75	1.00	-1.00	0.00	180.00
3100.00	6.30	132.81	3064.24	-296.59	320.17	436.43	1.00	-1.00	0.00	180.00
3200.00	5.30	132.81	3163.73	-303.46	327.59	446.54	1.00	-1.00	0.00	180.00
3271.54	4.59	132.81	3235.00	-307.65	332.11	452.71	1.00	-1.00	0.00	180.00
3300.00	4.30	132.81	3263.38	-309.15	333.73	454.91	1.00	-1.00	0.00	180.00
3371.79	3.58	132.81	3335.00	-312.50	337.35	459.85	1.00	-1.00	0.00	180.00

Section 5 : Start DLS 3.00 TFO 180.00

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
3400.00	2.74	132.81	3363.16	-313.56	338.49	461.41	3.00	-3.00	0.00	180.00
3491.27	0.00	0.00	3454.40	-315.04	340.09	463.59	3.00	-3.00	0.00	-180.00

Section 6 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
3500.00	0.00	0.00	3463.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
3600.00	0.00	0.00	3563.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
3700.00	0.00	0.00	3663.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
3800.00	0.00	0.00	3763.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
3900.00	0.00	0.00	3863.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
4000.00	0.00	0.00	3963.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
4100.00	0.00	0.00	4063.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
4200.00	0.00	0.00	4163.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
4300.00	0.00	0.00	4263.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
4400.00	0.00	0.00	4363.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
4500.00	0.00	0.00	4463.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
4536.87	0.00	0.00	4500.00	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
4600.00	0.00	0.00	4563.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00

Scientific Drilling Planning Report

Company: BP
 Field: SAN JUAN, New Mexico
 Site: SEC9-T30N-R9W
 Well: Elliot GC X 1 E
 Wellpath: OH

Date: 6/16/2005 Time: 13:49:02 Page: 3
 Co-ordinate(NE) Reference: Well: Elliot GC X 1 E, Grid North
 Vertical (TVD) Reference: SITE 6206.0
 Section (VS) Reference: Well (0.00N,0.00E,132.81Azi)
 Plan: Plan #1

Section 6 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
4700.00	0.00	0.00	4663.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
4800.00	0.00	0.00	4763.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
4844.87	0.00	0.00	4808.00	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
4900.00	0.00	0.00	4863.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
5000.00	0.00	0.00	4963.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
5100.00	0.00	0.00	5063.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
5200.00	0.00	0.00	5163.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
5233.87	0.00	0.00	5197.00	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
5300.00	0.00	0.00	5263.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
5400.00	0.00	0.00	5363.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
5500.00	0.00	0.00	5463.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
5552.87	0.00	0.00	5516.00	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
5600.00	0.00	0.00	5563.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
5700.00	0.00	0.00	5663.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
5800.00	0.00	0.00	5763.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
5900.00	0.00	0.00	5863.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
6000.00	0.00	0.00	5963.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
6100.00	0.00	0.00	6063.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
6200.00	0.00	0.00	6163.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
6300.00	0.00	0.00	6263.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
6400.00	0.00	0.00	6363.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
6500.00	0.00	0.00	6463.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
6600.00	0.00	0.00	6563.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
6700.00	0.00	0.00	6663.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
6800.00	0.00	0.00	6763.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
6900.00	0.00	0.00	6863.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
7000.00	0.00	0.00	6963.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
7100.00	0.00	0.00	7063.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
7200.00	0.00	0.00	7163.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
7267.87	0.00	0.00	7231.00	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
7300.00	0.00	0.00	7263.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
7319.87	0.00	0.00	7283.00	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
7368.87	0.00	0.00	7332.00	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
7400.00	0.00	0.00	7363.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
7462.87	0.00	0.00	7426.00	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
7500.00	0.00	0.00	7463.13	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
7507.87	0.00	0.00	7471.00	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
7532.87	0.00	0.00	7496.00	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
7565.87	0.00	0.00	7529.00	-315.04	340.09	463.59	0.00	0.00	0.00	0.00
7608.87	0.00	0.00	7572.00	-315.04	340.09	463.59	0.00	0.00	0.00	0.00

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
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	MWD ISCWSA
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	9 5/8"
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	MWD ISCWSA
400.00	3.00	132.81	399.95	-1.78	1.92	2.62	3.00	3.00	0.00	MWD ISCWSA
500.00	6.00	132.81	499.63	-7.11	7.68	10.46	3.00	3.00	0.00	MWD ISCWSA
600.00	9.00	132.81	598.77	-15.98	17.25	23.51	3.00	3.00	0.00	MWD ISCWSA
624.97	9.75	132.81	623.40	-18.74	20.23	27.58	3.00	3.00	0.00	MWD ISCWSA
700.00	9.75	132.81	697.35	-27.38	29.55	40.29	0.00	0.00	0.00	MWD ISCWSA
800.00	9.75	132.81	795.91	-38.88	41.98	57.22	0.00	0.00	0.00	MWD ISCWSA
900.00	9.75	132.81	894.46	-50.39	54.40	74.15	0.00	0.00	0.00	MWD ISCWSA
1000.00	9.75	132.81	993.02	-61.90	66.82	91.09	0.00	0.00	0.00	MWD ISCWSA
1100.00	9.75	132.81	1091.57	-73.41	79.24	108.02	0.00	0.00	0.00	MWD ISCWSA
1200.00	9.75	132.81	1190.13	-84.91	91.67	124.95	0.00	0.00	0.00	MWD ISCWSA
1300.00	9.75	132.81	1288.69	-96.42	104.09	141.88	0.00	0.00	0.00	MWD ISCWSA
1400.00	9.75	132.81	1387.24	-107.93	116.51	158.82	0.00	0.00	0.00	MWD ISCWSA



Scientific Drilling Planning Report



Company: BP
Field: SAN JUAN, New Mexico
Site: SEC9-T30N-R9W
Well: Elliot GC X 1 E
Wellpath: OH

Date: 6/16/2005 Time: 13:49:02 Page: 4
Co-ordinate(NE) Reference: Well: Elliot GC X 1 E, Grid North
Vertical (TVD) Reference: SITE 6206.0
Section (VS) Reference: Well (0.00N,0.00E,132.81Azi)
Plan: Plan #1

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
1500.00	9.75	132.81	1485.80	-119.44	128.93	175.75	0.00	0.00	0.00	MWD ISCWSA
1600.00	9.75	132.81	1584.35	-130.94	141.36	192.68	0.00	0.00	0.00	MWD ISCWSA
1664.58	9.75	132.81	1648.00	-138.37	149.38	203.62	0.00	0.00	0.00	OJO ALAMO
1700.00	9.75	132.81	1682.91	-142.45	153.78	209.62	0.00	0.00	0.00	MWD ISCWSA
1800.00	9.75	132.81	1781.47	-153.96	166.20	226.55	0.00	0.00	0.00	MWD ISCWSA
1816.78	9.75	132.81	1798.00	-155.89	168.28	229.39	0.00	0.00	0.00	KIRTLAND
1900.00	9.75	132.81	1880.02	-165.46	178.62	243.48	0.00	0.00	0.00	MWD ISCWSA
2000.00	9.75	132.81	1978.58	-176.97	191.04	260.42	0.00	0.00	0.00	MWD ISCWSA
2100.00	9.75	132.81	2077.13	-188.48	203.47	277.35	0.00	0.00	0.00	MWD ISCWSA
2200.00	9.75	132.81	2175.69	-199.99	215.89	294.28	0.00	0.00	0.00	MWD ISCWSA
2300.00	9.75	132.81	2274.25	-211.49	228.31	311.22	0.00	0.00	0.00	MWD ISCWSA
2365.70	9.75	132.81	2339.00	-219.05	236.47	322.34	0.00	0.00	0.00	FRUITLAND
2400.00	9.75	132.81	2372.80	-223.00	240.73	328.15	0.00	0.00	0.00	MWD ISCWSA
2500.00	9.75	132.81	2471.36	-234.51	253.16	345.08	0.00	0.00	0.00	MWD ISCWSA
2600.00	9.75	132.81	2569.91	-246.02	265.58	362.02	0.00	0.00	0.00	MWD ISCWSA
2700.00	9.75	132.81	2668.47	-257.52	278.00	378.95	0.00	0.00	0.00	MWD ISCWSA
2755.33	9.75	132.81	2723.00	-263.89	284.87	388.32	0.00	0.00	0.00	Fruitland coal
2800.00	9.30	132.81	2767.05	-268.91	290.30	395.71	1.00	-1.00	0.00	MWD ISCWSA
2900.00	8.30	132.81	2865.87	-279.31	301.52	411.01	1.00	-1.00	0.00	MWD ISCWSA
3000.00	7.30	132.81	2964.95	-288.54	311.48	424.59	1.00	-1.00	0.00	MWD ISCWSA
3017.19	7.13	132.81	2982.00	-290.00	313.07	426.75	1.00	-1.00	0.00	PICTURED CLIFFS
3100.00	6.30	132.81	3064.24	-296.59	320.17	436.43	1.00	-1.00	0.00	MWD ISCWSA
3200.00	5.30	132.81	3163.73	-303.46	327.59	446.54	1.00	-1.00	0.00	MWD ISCWSA
3271.54	4.59	132.81	3235.00	-307.65	332.11	452.71	1.00	-1.00	0.00	LEWIS
3300.00	4.30	132.81	3263.38	-309.15	333.73	454.91	1.00	-1.00	0.00	MWD ISCWSA
3371.79	3.58	132.81	3335.00	-312.50	337.35	459.85	1.00	-1.00	0.00	csg. pt.
3400.00	2.74	132.81	3363.16	-313.56	338.49	461.41	3.00	-3.00	0.00	MWD ISCWSA
3491.27	0.00	0.00	3454.40	-315.04	340.09	463.59	3.00	-3.00	0.00	MWD ISCWSA
3500.00	0.00	0.00	3463.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
3600.00	0.00	0.00	3563.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
3700.00	0.00	0.00	3663.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
3800.00	0.00	0.00	3763.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
3900.00	0.00	0.00	3863.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
4000.00	0.00	0.00	3963.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
4100.00	0.00	0.00	4063.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
4200.00	0.00	0.00	4163.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
4300.00	0.00	0.00	4263.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
4400.00	0.00	0.00	4363.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
4500.00	0.00	0.00	4463.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
4536.87	0.00	0.00	4500.00	-315.04	340.09	463.59	0.00	0.00	0.00	CLIFF HOUSE
4600.00	0.00	0.00	4563.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
4700.00	0.00	0.00	4663.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
4800.00	0.00	0.00	4763.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
4844.87	0.00	0.00	4808.00	-315.04	340.09	463.59	0.00	0.00	0.00	MENEFFEE
4900.00	0.00	0.00	4863.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
5000.00	0.00	0.00	4963.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
5100.00	0.00	0.00	5063.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
5200.00	0.00	0.00	5163.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
5233.87	0.00	0.00	5197.00	-315.04	340.09	463.59	0.00	0.00	0.00	POINT LOOKOUT
5300.00	0.00	0.00	5263.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
5400.00	0.00	0.00	5363.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
5500.00	0.00	0.00	5463.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
5552.87	0.00	0.00	5516.00	-315.04	340.09	463.59	0.00	0.00	0.00	MANCOS
5600.00	0.00	0.00	5563.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA

Company: BP	Date: 6/16/2005	Time: 13:49:02	Page: 5
Field: SAN JUAN, New Mexico	Co-ordinate(NE) Reference: Well: Elliot GC X 1 E, Grid North		
Site: SEC9-T30N-R9W	Vertical (TVD) Reference: SITE 6206.0		
Well: Elliot GC X 1 E	Section (VS) Reference: Well (0.00N,0.00E,132.81Azi)		
Wellpath: OH	Plan: Plan #1		

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
5700.00	0.00	0.00	5663.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
5800.00	0.00	0.00	5763.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
5900.00	0.00	0.00	5863.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
6000.00	0.00	0.00	5963.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
6100.00	0.00	0.00	6063.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
6200.00	0.00	0.00	6163.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
6300.00	0.00	0.00	6263.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
6400.00	0.00	0.00	6363.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
6500.00	0.00	0.00	6463.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
6600.00	0.00	0.00	6563.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
6700.00	0.00	0.00	6663.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
6800.00	0.00	0.00	6763.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
6900.00	0.00	0.00	6863.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
7000.00	0.00	0.00	6963.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
7100.00	0.00	0.00	7063.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
7200.00	0.00	0.00	7163.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
7267.87	0.00	0.00	7231.00	-315.04	340.09	463.59	0.00	0.00	0.00	GREENHORN
7300.00	0.00	0.00	7263.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
7319.87	0.00	0.00	7283.00	-315.04	340.09	463.59	0.00	0.00	0.00	GRANEROS
7368.87	0.00	0.00	7332.00	-315.04	340.09	463.59	0.00	0.00	0.00	TWO WELLS
7400.00	0.00	0.00	7363.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
7462.87	0.00	0.00	7426.00	-315.04	340.09	463.59	0.00	0.00	0.00	PAGUATE
7500.00	0.00	0.00	7463.13	-315.04	340.09	463.59	0.00	0.00	0.00	MWD ISCWSA
7507.87	0.00	0.00	7471.00	-315.04	340.09	463.59	0.00	0.00	0.00	CUBERO
7532.87	0.00	0.00	7496.00	-315.04	340.09	463.59	0.00	0.00	0.00	L. CUBERO
7565.87	0.00	0.00	7529.00	-315.04	340.09	463.59	0.00	0.00	0.00	ENCINAL CYN
7608.87	0.00	0.00	7572.00	-315.04	340.09	463.59	0.00	0.00	0.00	PBHL

Targets

Name	Description Dip. Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	Latitude Deg Min Sec	Longitude Deg Min Sec
Fruitland coal		2723.00	-263.89	284.87	2120694.263	738923.810	36 49 40.519 N	107 46 45.320 W
-Plan hit target								
csg. pt.		3335.00	-312.50	337.35	2120645.652	738976.286	36 49 40.038 N	107 46 44.675 W
-Plan hit target								
PBHL		7572.00	-315.00	340.00	2120643.152	738978.936	36 49 40.013 N	107 46 44.642 W
-Circle (Radius: 100)								
-Plan hit target								

Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
200.00	200.00	9.625	12.250	9 5/8"
3371.79	3335.00	7.000	8.500	7"

Formations

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
1664.58	1648.00	OJO ALAMO		0.00	0.00
1816.78	1798.00	KIRTLAND		0.00	0.00
2365.70	2339.00	FRUITLAND		0.00	0.00
2755.33	2723.00	FRUITLAND COAL		0.00	0.00
3017.19	2982.00	PICTURED CLIFFS		0.00	0.00
3271.54	3235.00	LEWIS		0.00	0.00

Company: BP Field: SAN JUAN, New Mexico Site: SEC9-T30N-R9W Well: Elliot GC X 1 E Wellpath: OH	Date: 6/16/2005 Co-ordinate(NE) Reference: Well: Elliot GC X 1 E, Grid North Vertical (TVD) Reference: SITE 6206.0 Section (VS) Reference: Well (0.00N,0.00E,132.81Azi) Plan: Plan #1	Time: 13:49:02 Page: 6
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Formations

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
4536.87	4500.00	CLIFF HOUSE		0.00	0.00
4844.87	4808.00	MENEFEE		0.00	0.00
5233.87	5197.00	POINT LOOKOUT		0.00	0.00
5552.87	5516.00	MANCOS		0.00	0.00
7267.87	7231.00	GREENHORN		0.00	0.00
7319.87	7283.00	GRANEROS		0.00	0.00
7368.87	7332.00	TWO WELLS		0.00	0.00
7462.87	7426.00	PAGUATE		0.00	0.00
7507.87	7471.00	CUBERO		0.00	0.00
7532.87	7496.00	L. CUBERO		0.00	0.00
7565.87	7529.00	ENCINAL CYN		0.00	0.00