

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL	2005 OCT 25 PM 3:53 RECEIVED C70 FARMINGTON NM	5. Lease Number SF-078972 Unit Reporting Number NMNM-78413A-MV NMNM-78413C-DK
1b. Type of Well GAS		6. If Indian, All. or Tribe
2. Operator ConocoPhillips		7. Unit Agreement Name San Juan 28-7 Unit
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700		8. Farm or Lease Name San Juan 28-7 Unit 9. Well Number #156G
4. Location of Well Surface -Unit B (NWNE), 1174' FNL & 1611' FEL BH -Unit H (SENE), 2350' FNL & 1000' FEL Latitude 36° 35.3411948'N Longitude 107° 26.16524'W		10. Field, Pool, Wildcat Blanco MV/Basin DK 11. Sec., Twn, Rge, Mer. (NMPM) B Sec. 10, T27N, R7W API # 30-039-3 0092
14. Distance in Miles from Nearest Town	12. County Rio Arriba	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 1000'		
16. Acres in Lease	17. Acres Assigned to Well MV/DK - 320 acres E/2	
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease		
19. Proposed Depth 7687'	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 6591' GL	22. Approx. Date Work will Start RCVD JUL 25/07 OIL CONS. DIV. DIST. 3	
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by: <u>Lancho Roland</u> Regulatory Assistant	Date <u>10/25/06</u>	

PERMIT NO. APPROVAL DATE
APPROVED BY [Signature] TITLE AFM DATE 7/20/07

Archaeological Report attached

Threatened and Endangered Species Report attached

NOTE: This format is issued in lieu of U.S. BLM Form 3160-3

Title 18 U.S.C. Section 1001, makes 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 presentations as to any matter within its jurisdiction.

HOLD ON FOR directions Survey

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

✓
NMOCB
\$

NOTIFY AZTEC OCD 24 HI
PRIOR TO CASING & CEME

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

District I

1625 N French Dr., Hobbs, NM 88240

District II

1301 W. Grand Avenue, Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Fee Lease - 3 Copies
State Lease - 7 Copies
Submit to Appropriate District Office
Revised June 10, 2003
Form C-102

RECEIVED

☐ AMENDED REPORT

070 FARMINGTON NM

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-30092		² Pool Code 71599 /72319	³ Pool Name DAKOTA / Mesaverde
⁴ Property Code 31739	⁵ Property Name SAN JUAN 28-7		⁶ Well Number 156G
⁷ OGRID No. 217817	⁸ Operator Name CONOCOPHILLIPS COMPANY		⁹ Elevation 6591.4'

¹⁰ SURFACE LOCATION

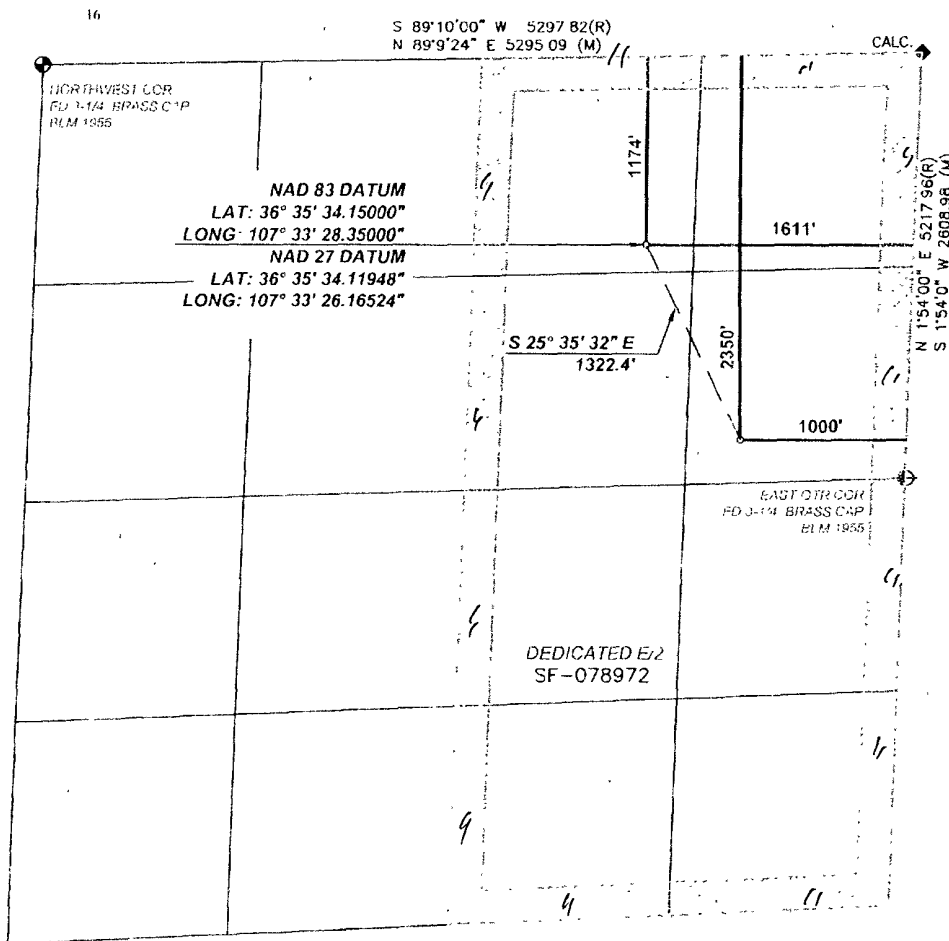
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	10	27-N	07-W		1174	NORTH	1611	EAST	RIO ARRIBA

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	10	27-N	07-W		2350	NORTH	1000	EAST	RIO ARRIBA

¹² Dedicated Acres 320.0 E/2	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN
CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

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 released mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Patsy Clugston

Signature

Patsy Clugston

Printed Name

Sr. Regulatory Specialist

Title and E-mail Address

7-12-06

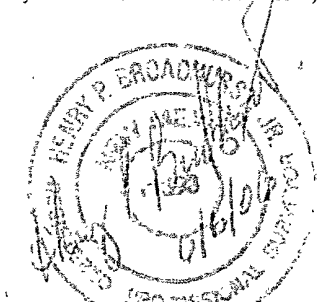
Date

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.

Date of Survey: 05/13/06

Signature and Seal of Professional Surveyor



Certificate Number: NM_11393

Office

Energy, Minerals and Natural Resources

May 27, 2004

District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W Grand Ave., Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

WELL API NO.	30-025-30092
5. Indicate Type of Lease	STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.	SF-078972
7. Lease Name or Unit Agreement Name	San Juan 28-7 Unit
8. Well Number	156G
9. OGRID Number	217817
10. Pool name or Wildcat	Basin Dakota/Blanco Mesaverde

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS)

1. Type of Well:

Oil Well ☐ Gas Well ☒ Other

2. Name of Operator

ConocoPhillips

3. Address of Operator

3401 E. 30TH STREET, FARMINGTON, NM 87402

4. Well Location

Unit Letter B : 1174 feet from the North line and 1611 feet from the East line
Section 10 Township 27N Rng 7W NMPM County Rio Arriba

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

6591'

Pit or Below-grade Tank Application

or Closure ☐

Pit type

New Drill

Depth to Groundwater

>100

Distance from nearest fresh water well

>1000

Distance from nearest surface water

>1000

Pit Liner Thickness:

12

mil

Below-Grade Tank:

Volume

bbls;

Construction Material

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐PLUG AND ABANDON ☐TEMPORARILY ABANDON ☐CHANGE PLANS ☐PULL OR ALTER CASING ☐MULTIPLE COMPL ☐

OTHER:

New Drill

☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ALTERING CASING ☐COMMENCE DRILLING OPNS. ☐P AND A ☐CASING/CEMENT JOB ☐OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

New Drill, Unlined:

ConocoPhillips proposes to construct a new drilling pit, an associated vent/flare pit and a pre-set mud pit (if required). Based on ConocoPhillips' interpretation of the Ecosphere's risk ranking criteria, the new drilling pit and pre-set mud pit will be unlined pits as detailed in ConocoPhillips' General Plan dated June 2005 on file at the NMOCDC office. A portion of the vent/flare pit will be designed to manage fluids and that portion will be unlined as per the risk ranking criteria. ConocoPhillips anticipates closing these pits according to the November 1, 2004 Guidelines.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCDC guidelines ☐, a general permit ☒ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE

Kandis Roland

TITLE

Regulatory Technician

DATE

10/28/2006

Type or print name Kandis Roland

E-mail address: burnskr@conocophillips.com

Telephone No.

505-326-9743

For State Use Only

APPROVED BY

[Signature]

TITLE

Deputy Oil & Gas Inspector

District #3

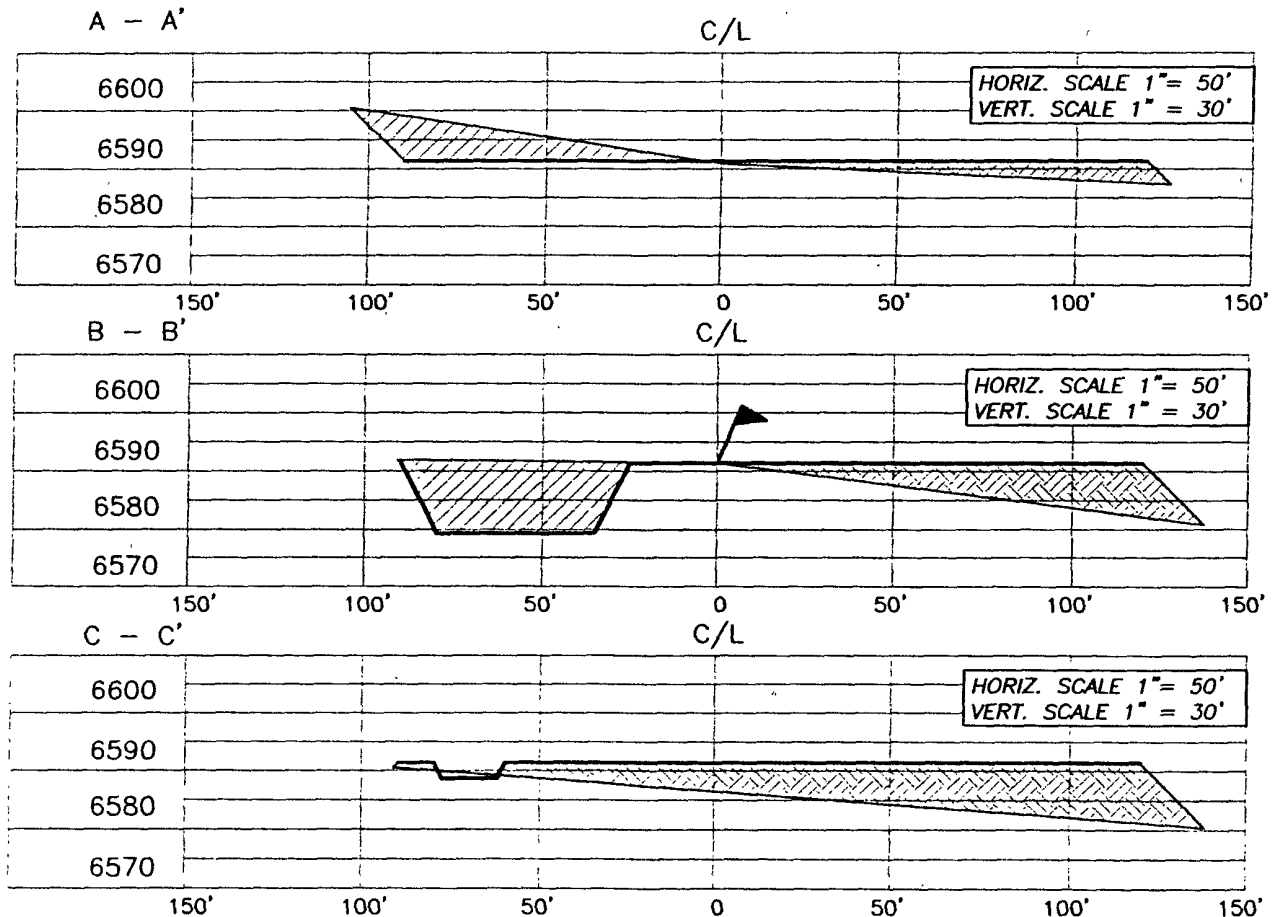
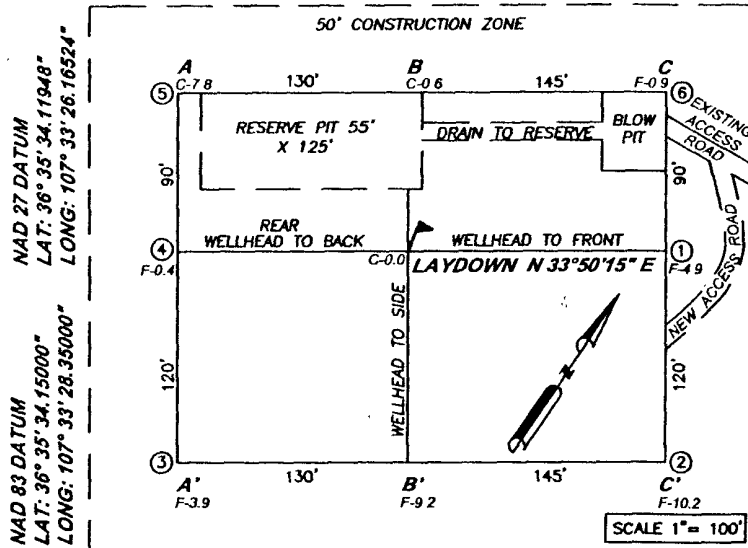
DATE

JUL 26 2007

Conditions of Approval (if any):

CONOCOPHILLIPS COMPANY

SAN JUAN 28-7 156G
1174' FNL, 1611' FEL
SECTION 10, T27N, R7W,
RIO ARRIBA, NEW MEXICO
ELEV.: 6591.4' NADV88



NOTE: CCI IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES.

CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED PIPELINES OR CABLES ON WELL PAD AND OR ACCESS ROAD PRIOR TO CONSTRUCTION

REVISIONS			
NO.	DESCRIPTION	REVISED BY	DATE

CCI
1300 W. BROADWAY
BLOOMFIELD, NM, 87413
PHONE: (505) 632-7777

CENHAULT CONSULTING INC.

Figure 4. Well pad plat

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 28-7 156G

Lease:		AFE #: WAN.CNV.7111		AFE \$:	
Field Name: 28-7		Rig: H&P 283 - DE Shon Robinson		State: NM	County: RIO ARRIBA
Geoscientist: Glaser, Terry J		Phone: (281) 293 - 6538		Prod. Engineer: Fontenot, Jessie C	
Res. Engineer: Johnson, Tom B.		Phone: (832)-486-2347		Phone: +1 832-486-3483	
		Proj. Field Lead: Fransen, Eric E.		Phone:	

Primary Objective (Zones):

Zone	Zone Name
R20002	MESAVERDE(R20002)
R20076	DAKOTA(R20076)

Location: Surface Datum Code: NAD 27 Deviated

Latitude: 36.592811	Longitude: -107.557268	X:	Y:	Section: 10	Range: 7W
Footage X: 1611 FEL	Footage Y: 1174 FNL	Elevation: 6591	(FT)	Township: 27N	

Tolerance:

Location: Bottom Hole Datum Code: NAD 27 Deviated

Latitude: 36.589422	Longitude: -107.555416	X:	Y:	Section: 10	Range: 7W
Footage X: 1000 FEL	Footage Y: 2350 FNL	Elevation:	(FT)	Township: 27N	

Tolerance:

Location Type: Year Round	Start Date (Est.):	Completion Date:	Date In Operation:
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Formation Data: Assume KB = 6607 Units = FT

Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Surface Casing	216	6391	<input type="checkbox"/>			12-1/4 hole. 9 5/8" 32.3 ppf, H-40, STC casing. Circulate cement to surface.
NCMT	1027	5580	<input type="checkbox"/>			
OJAM	2357	4250	<input type="checkbox"/>			Possible water flows.
KRLD	2487	4120	<input type="checkbox"/>			
FRLD	2917	3690	<input type="checkbox"/>			Possible gas.
PCCF	3167	3440	<input type="checkbox"/>			
LEWS	3367	3240	<input type="checkbox"/>			
Intermediate Casing	3467	3140	<input type="checkbox"/>			8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Circulate cement to surface.
CHRA	4132	2475	<input type="checkbox"/>			
CLFH	4847	1760	<input type="checkbox"/>			Gas; possibly wet
MENF	4937	1670	<input type="checkbox"/>			Gas.
PTLK	5427	1180	<input type="checkbox"/>			Gas.
GLLP	6657	-50	<input type="checkbox"/>			Gas. Possibly wet.
GRHN	7337	-730	<input type="checkbox"/>			Gas possible, highly fractured
TWLS	7432	-825	<input type="checkbox"/>			Gas
CBBO	7552	-945	<input type="checkbox"/>			Gas
TOTAL DEPTH DK	7687	-1080	<input type="checkbox"/>			4 1/2", 10.5 ppf, J-55, STC casing. Circulate cement a minimum of 100' inside the previous casing string. No open hole logs. Cased hole TDT with GR to surface.

Reference Wells:

Reference Type	Well Name	Comments
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PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 28-7 156G

Logging Program:

Intermediate Logs: ☐ Log only if show ☐ GR/ILD ☐ Triple Combo

TD Logs: ☐ Triple Combo ☐ Dipmeter ☐ RFT ☐ Sonic ☐ VSP ☒ TDT

Additional Information:

Log Type	Stage	From (Ft)	To (Ft)	Tool Type/Name	Remarks
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Comments: Location/Tops/Logging - See comments under the Zones tab

Zones - Try to get a loc south of the #156, get as far SE as you can and still get relief from ACEC delays. Originally requested surface location was 1900 FNL & 1500 FEL - Directional kick would have been ~700' - A #156 twin makes it 1,500.

HOLE 12 25 "
CSG OD 9 625 "
CSG ID 9 001 "
WGT. 32 3 ppf
GRADE H-40
EXCESS 125 %

DEPTH: 235'

HOLE 8 75 "
CSG OD 7 "
CSG ID 6 456 "
WGT. 23 ppf
GRADE J-55
EXCESS 150 %

TAIL 767 8'

DEPTH: 3839'

HOLE 6 25 "
CSG OD 4 5 "
CSG ID 4 "
WGT. 11 6/10 5 ppf
GRADE J-55
EXCESS 50 %

DEPTH: 8059'

SURFACE:

Option 1

148 sx Comp Strength
30 8 bbls 6 hrs 250 psi
172 9 cuft 8 hrs 500 psi
1 17 ft³/sx
15 8 ppg
4 973 gal/sx
Class G Cement
+ 3% S001 Calcium Chloride
+ 0 25 lb/sx D029 Cellophane Flakes

INTERMEDIATE LEAD:

Option 1

407 sx Comp Strength
197 2 bbls 9 hrs 300 psi
1107 4 cuft 48 hrs 525 psi
2 72 ft³/sx
11 7 ppg
15 74 gal/sx
Class G Cement
+ 3% D079 Extender
+ 0 20% D046 Antifoam
+ 10 lb/sx Phenoseal

INTERMEDIATE TAIL:

Option 1

228 sx Comp. Strength
53 1 bbls 3 53 500 psi
298 2 cuft 8 22 1000 psi
1 31 ft³/sx 24 hrs 3170 psi
13 5 ppg 48 hrs 5399 psi
5 317 gal/sx
50/50 Poz. Class G Cement
+ 0 25 lb/sx D029 Cellophane Flakes
+ 3% S001 Calcium Chloride
+ 2% D020 Bentonite
+ 1 5 lb/sx D024 Gilsonite Extender
+ 0 1% D046 Antifoamer
+ 6 lb/sx Phenoseal

PRODUCTION:

Option 1

467 sx Comp Strength
119 9 bbls 7 hrs 500 psi
673 1 cuft 24 hrs 2100 psi
1 44 ft³/sx
13 0 ppg
6 47 gal/sx
50/50 Poz. Class G Cement
+ 0 25 lb/sx D029 Cellophane Flakes
+ 3% D020 Bentonite
+ 1 0 lb/sx D024 Gilsonite Extender
+ 0 25% D167 Fluid Loss
+ 0 25% D065 Dispersant
+ 0 1% D800 Retarder
+ 0 1% D046 Antifoamer
+ 3 5 lb/sx Phenoseal

Option 2

143 sx Comp Strength
30 8 bbls 6 hrs 250 psi
172 9 cuft 8 hrs 500 psi
1 21 ft³/sx
15 6 ppg
5 29 gal/sx
Standard Cement
+ 3% Calcium Chloride
+ 0 25 lb/sx Flocele

Option 2

426 sx Comp Strength
197 2 bbls 1 47 hrs 50 psi
1107 4 cuft 12 hrs 350 psi
2 60 ft³/sx 24 hrs 450 psi
11 5 ppg
14 62 gal/sx
Type III Ashgrove Cement
+ 30 lb/sx San Juan Poz
+ 3% Bentonite
+ 5 0 lb/sx Phenoseal

Option 2

224 sx Comp. Strength
53 1 bbls 2 05 50 psi
298 2 cuft 4 06 500 psi
1 33 ft³/sx 12 hrs 1250 psi
13 5 ppg 24hrs 1819 psi
5 52 gal/sx
50/50 Poz. Standard Cement
+ 2% Bentonite
+ 6 0 lb/sx Phenoseal

Option 2

464 sx Comp Strength
119 9 bbls 9 32 50 psi
673 1 cuft 12 hrs 500 psi
1 45 ft³/sx 13 29 1026 psi
13 1 ppg 24 hrs 2300 psi
6 55 gal/sx
50/50 Poz. Standard Cement
+ 3% Bentonite
+ 0 2% CFR-3 Friction Reducer
+ 0 1% HR-5 Retarder
+ 0 8% Halad-9 Fluid Loss Additive
+ 3 5 lb/sx Phenoseal

Option 3

65 sx Comp Strength
18 6 bbls 8 hrs 475 psi
104 3 cuft 24 hrs 1375 psi
1 61 ft³/sx
14 5 ppg
7 41 gal/sx
Type I-II Ready Mix
+ 20% Fly Ash

Option 3

421 sx Comp Strength
197 2 bbls 3 hrs 100 psi
1107 4 cuft 24 hrs 443 psi
2 63 ft³/sx
11 7 ppg
15 92 gal/sx
Class G Cement
+ 3% D079 Extender
+ 0 20% D046 Antifoam
+ 1 0 lb/bbl CemNet

Option 3

233 sx Comp Strength
53 1 bbls 24 hrs 1850 psi
298 2 cuft 48 hrs 3411 psi
1 28 ft³/sx
13 5 ppg
5 255 gal/sx
50/50 Poz. Class G Cement
+ 2% D020 Bentonite
+ 5 0 lb/sx D024 Gilsonite Extender
+ 2% S001 Calcium Chloride
+ 0 1% D046 Antifoamer
+ 0 15% D065 Dispersant
+ 1 0 lb/bbl CemNet

82 DVL
10/5/06

San Juan 28-7 156G

HOLE 12 25 "
CSG OD 9 625 "
CSG ID 9 001 "
WGT 32 3 ppf
GRADE H-40
EXCESS 125 %

DEPTH: 235

SURFACE:

INTERMEDIATE LEAD:

Option 4

385 sx	Comp Strength
197 2 bbis	1 47 50 psi
1107 4 cuft	12 hrs 350 psi
2 88 ft ³ /sx	24 hrs 450 psi
11 5 ppg	
16 85 gal/sx	
Standard Cement	
+ 3% Econolite (Extender)	
+ 10 lb/sx Phenoseal	

Option 5

527 sx	Comp Strength
197 2 bbis	10 56 500 psi
1107 4 cuft	42 hrs 1012 psi
2 10 ft ³ /sx	
11 7 ppg	
11 724 gal/sx	
75% Type XI / 25% Class G Cement	
+ 0 25 lb/sx D029 Cellophane Flakes	
+ 3% D079 Extender	
+ 0 20% D046 Antifoam	

HOLE 8 75 "
CSG OD 7 "
CSG ID 6 456 "
WGT 23 ppf
GRADE J-55
EXCESS 150 %

TAIL 767 8

DEPTH: 3839

INTERMEDIATE TAIL:

HOLE 6 25 "
CSG OD 4 5 "
CSG ID 4 "
WGT 11 6/10 5 ppf
GRADE J-55
EXCESS 50 %

PRODUCTION:

DEPTH: 8059

TOPSET FRUITLAND COAL Wells: (topset casing above coal to prepare for cavitation/DO/UR)

Drilling Mud Program:

Surface: spud mud

Intermediate: fresh water mud with bentonite and polymer as needed

Below Intermediate: air/mist/nitrogen drilling media with foamer, polymer, & corrosion inhibitor as needed

Centralizer Program:

Surface: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2nd, 3rd, & 4th joints

Intermediate: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2nd, 4th, 6th, 8th, & 10th joints

Turbolizers placed one per joint from the top of the Ojo Alamo to the top of the Kirtland Shale

Below Intermediate: no centralizers used in air holes. In mud holes centralizers are spaced out appropriately

CASE & FRAC FRUITLAND COAL Wells: (casing set below coal to prepare for frac completion)

Drilling Mud Program:

Surface: spud mud

Production: fresh water mud with bentonite and polymer as needed

Centralizer Program:

Surface: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2nd, 3rd, & 4th joints

Production: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2nd, 4th, 6th, 8th, & 10th joints

Turbolizers placed one per joint from the top of the Ojo Alamo to the top of the Kirtland Shale

MESA VERDE Wells:

Drilling Mud Program:

Surface: spud mud

Intermediate: fresh water mud with bentonite and polymer as needed

Below Intermediate: air/mist drilling media with foamer, polymer, & corrosion inhibitor as needed

Centralizer Program:

Surface: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2nd, 3rd, & 4th joints

Intermediate: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2nd, 4th, 6th, 8th, & 10th joints

Turbolizers placed one per joint from the top of the Ojo Alamo to the top of the Kirtland Shale

Below Intermediate: no centralizers used in air holes. In mud holes centralizers are spaced out appropriately

DAKOTA Wells:

Drilling Mud Program:

Surface: spud mud

Intermediate: fresh water mud with bentonite and polymer as needed

Below Intermediate: air/mist/nitrogen drilling media with foamer, polymer, & corrosion inhibitor as needed

Centralizer Program:

Surface: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2nd, 3rd, & 4th joints

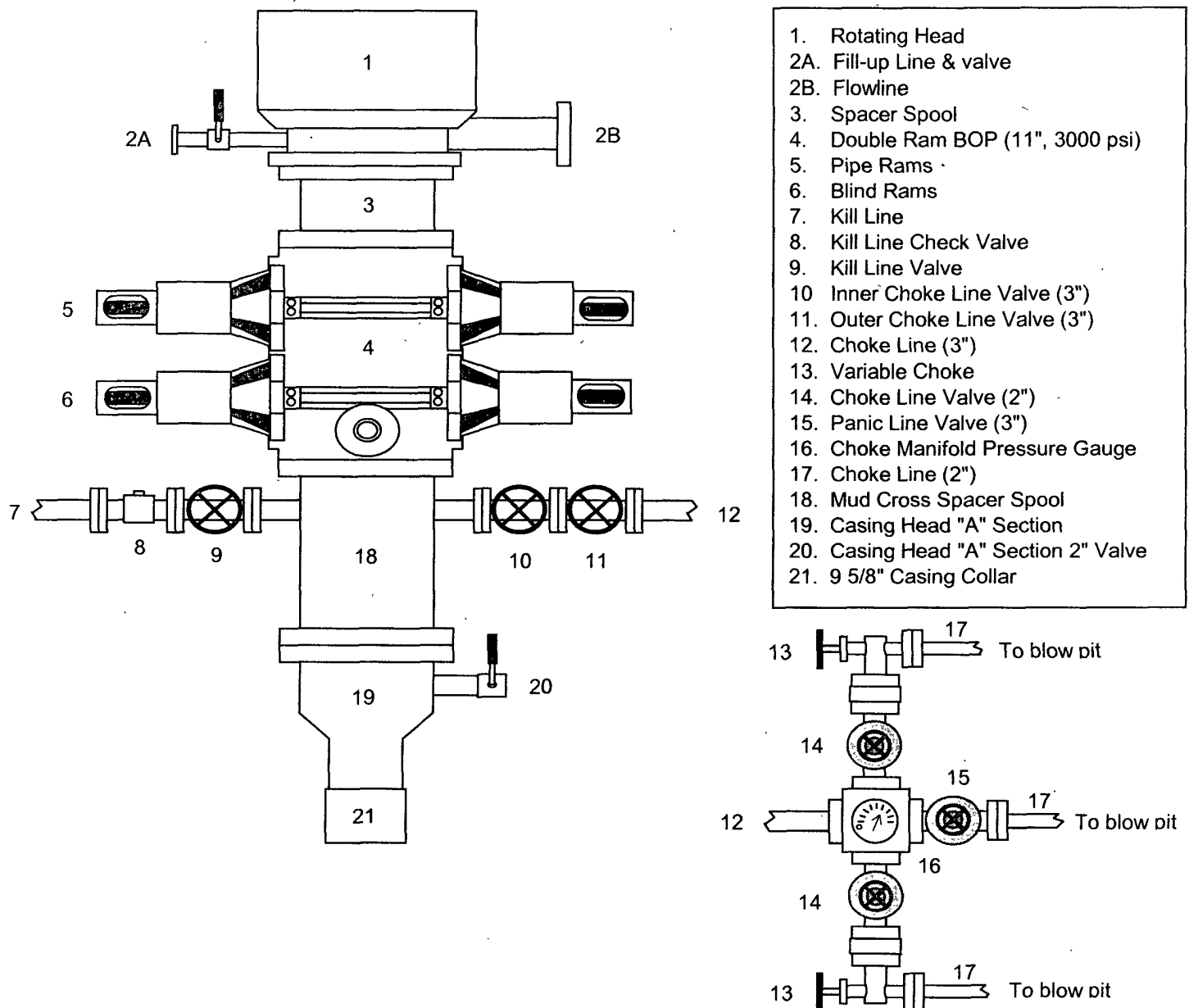
Intermediate: centralizers placed 10' above the shoe latched over a stop collar and at the top of the 2nd, 4th, 6th, 8th, & 10th joints

Turbolizers placed one per joint from the top of the Ojo Alamo to the top of the Kirtland Shale

Below Intermediate: no centralizers used in air holes. In mud holes centralizers are spaced out appropriately

BLOWOUT PREVENTER ARRANGEMENT & PROGRAM

For Drilling to Intermediate Casing Point & Setting 7" Intermediate Casing



A 12-1/4" hole will be drilled to approximately 220' and the 9-5/8" surface casing will be run and cemented. The Casing Head "A" Section will be screwed onto the 9-5/8" surface casing stub. The BOP will be installed on the Casing Head "A" Section. A test plug will be set in the wellhead and the pipe rams and choke manifold will be tested to 200 psi to 300 psi (low pressure test) for 10 minutes and to 1000 psi (high pressure test) for 10 minutes. Then the test plug will be removed, and the **9-5/8" casing will be pressure tested** against closed blind rams to 200 psi to 300 psi for 10 minutes and to **1000 psi for 30 minutes** (this value is one 44% of the minimum internal yield pressure of the 9-5/8" casing). (Note: per regulatory requirements we will wait on cement at least 8 hrs after placement before testing the 9-5/8" surface casing). Then an 8-3/4" hole will be drilled to intermediate casing point and 7" intermediate casing will be run and cemented.

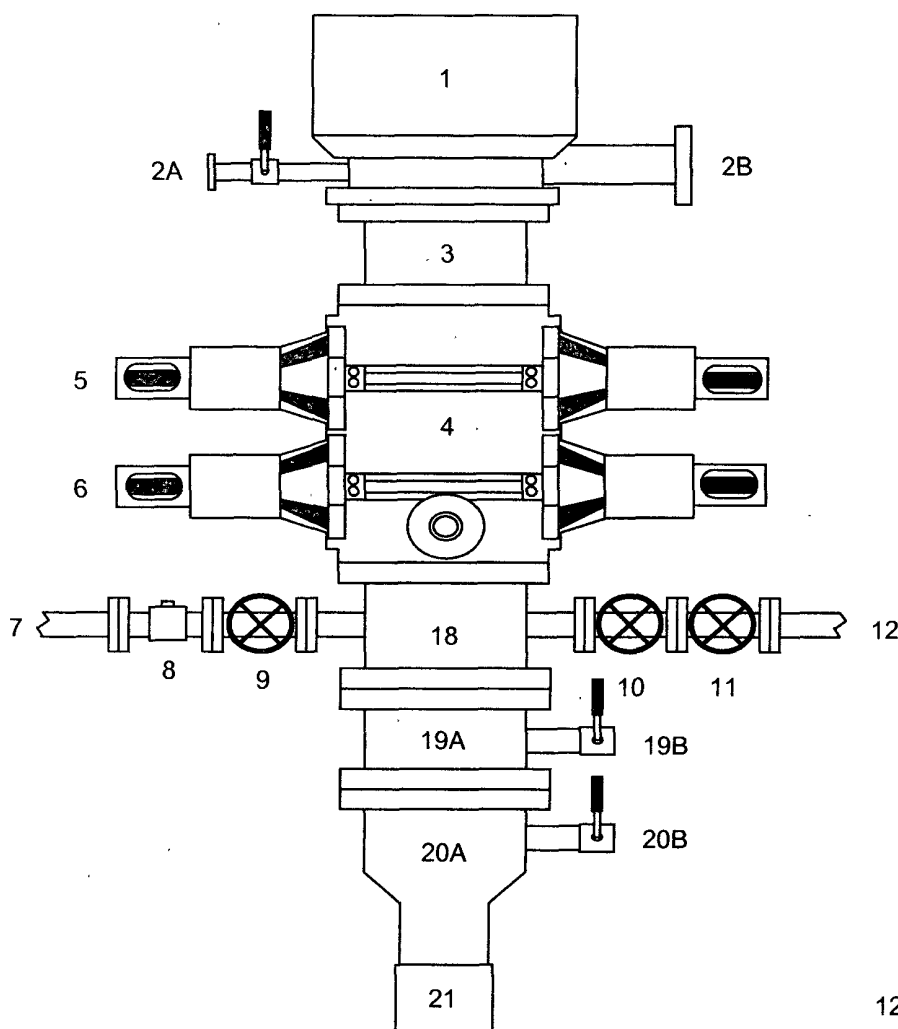
In addition to the equipment in the above diagram the following equipment will comprise the BOP system:

1. Upper Kelly cock Valve with handle
2. Stab-in TIW valve for all drillstrings in use

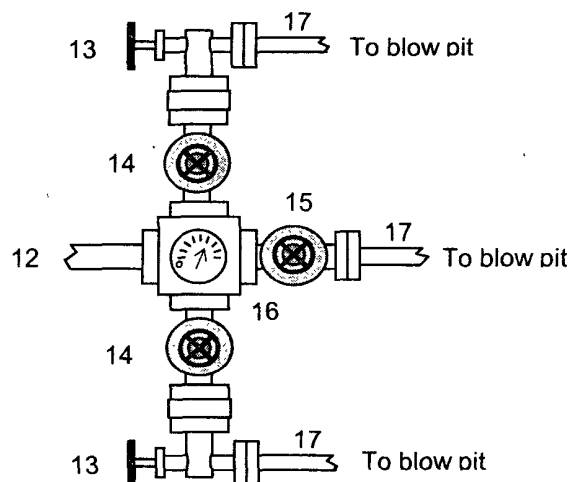
Revision Date: September 1, 2004

BLOWOUT PREVENTER ARRANGEMENT & PROGRAM

For Drilling to TD and Setting 4.5 inch Casing



1. Rotating Head
- 2A. Fill-up Line & valve
- 2B. Bloopie Line (for Air Drilling)
3. Spacer Spool
4. Double Ram BOP (11", 3000 psi)
5. Pipe Rams
6. Blind Rams
7. Kill Line
8. Kill Line Check Valve
9. Kill Line Valve
10. Inner Choke Line Valve (3")
11. Outer Choke Line Valve (3")
12. Choke Line (3")
13. Variable Choke
14. Choke Line Valve (2")
15. Panic Line Valve (3")
16. Choke Manifold Pressure Gauge
17. Choke Line (2")
18. Mud Cross Spacer Spool
- 19A Csg Spool "B" Section (11", 3M)
- 19B "B" Section Csg Valve (2", 3M)
- 20A Csg Head "A" Section (11", 3M)
- 20B "A" Section Csg Valve (2", 3M)
21. 9 5/8" Casing Collar



After the 7" intermediate casing has been run and cemented, the Casing Spool ("B" Section) will be installed on the wellhead ("A" Section) and the BOP will be installed on the Casing Spool. A test plug will be set in the wellhead and the pipe rams, blind rams, and choke manifold will be tested to 200 psi to 300 psi (low pressure test) for 10 minutes and to 3000 psi (high pressure test) for 10 minutes. Then the test plug will be removed and the 7" casing will be pressure tested against closed blind rams to 200 psi to 300 psi for 10 minutes and to 1800 psi for 30 minutes - this test pressure is 48% of the minimum internal yield strength of 3740 psi for the 7", 20#, J-55, STC casing. Then we will air drill the 6-1/4" hole to TD and run and cement the 4-1/2" casing.

In addition to the equipment in the above diagram the following equipment will comprise the BOP system:

1. Upper Kelly cock Valve with handle
2. Stab-in TIW valve for all drillstrings in use

Revision Date: September 1, 2004

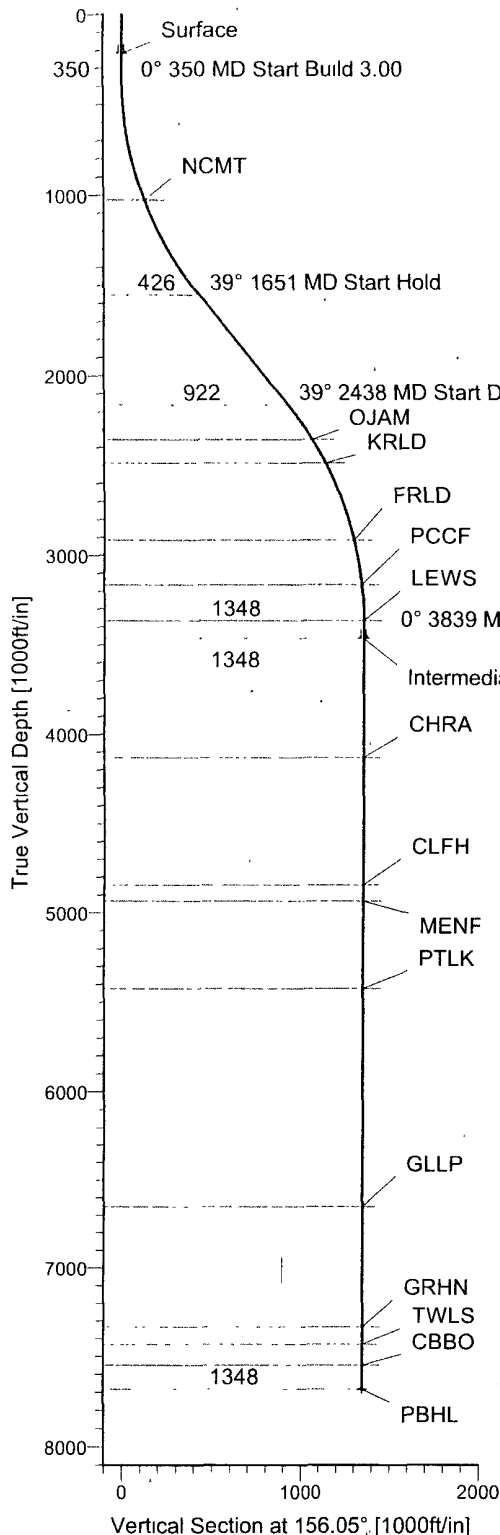
ConocoPhillips

ConocoPhillips

Field: Rio Arriba County, NM
Site: San Juan 28-7 Unit 156 G
Well: Well # 156G
Wellpath: Original Hole
Plan: Plan #1



Azimuths to Grid North
True North -0 16°
Magnetic North 10 20°
Magnetic Field
Strength 5120nT
Dip Angle 64 19°
Date 8/30/2005
Model igr2005



FIELD DETAILS

Rio Arriba County, NM
USA

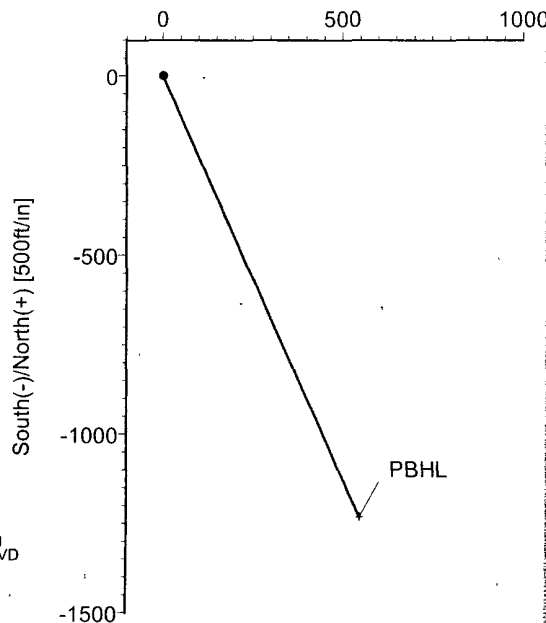
Geodetic System US State Plane Coordinate System 1983
Ellipsoid GRS 1980
Zone New Mexico, Western Zone
Magnetic Model igr2005
System Datum Mean Sea Level
Local North Grid North

SITE DETAILS

San Juan 28-7 Unit 156 G
Sec 10 1611 FEL, 1174 FNL
Rio Arriba County, NM

Site Centre Latitude 36°35'34 119N
Longitude 107°33'26 165W
Ground Level 6591 00
Positional Uncertainty 0 00
Convergence 0 16

West(-)/East(+) [500ft/in]



WELLPATH DETAILS

Original Hole

Ref	Rig Datum	Est RKB	6607 00ft
V Section Angle	Origin +N/-S	Origin +E/-W	Starting From TVD
156.05°	0.00	0.00	0.00

CASING DETAILS

No	TVD	MD	Name	Size
1	216 00	216 00	Surface	9 625
2	3467 00	3839 27	Intermediate	7 000

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
PBHL	7687 00	-1232 14	547 22	36°35'21 919N	107°33'19 498W	Point

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0 00	0 00	156 05	0 00	0 00	0 00	0 00	0 00	0 00	
2	350 00	0 00	156 05	350 00	0 00	0 00	0 00	0 00	0 00	
3	1650 79	39 02	156 05	1552 52	-389 44	172 96	3 00	156 05	426 11	
4	2438 48	39 02	156 05	2164 48	-842 71	374 27	0 00	0 00	922 08	
5	3739 27	0 00	156 05	3367 00	-1232 14	547 22	3 00	180 00	1348 20	
6	3839 27	0 00	156 05	3467 00	-1232 14	547 22	0 00	0 00	1348 20	
7	8059 27	0 00	156 05	7687 00	-1232 14	547 22	0 00	156 05	1348 20	PBHL

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UNDERGROUND INTELLIGENCE™

Plan: Plan #1 (Well # 156G Original Hole)

Created By Alexis Gonzalez Date 8/30/2006
Checked _____ Date _____
Reviewed _____ Date _____
Approved _____ Date _____